## The Hittite Inherited Lexicon

Kloekhorst, A.

## Citation

Kloekhorst, A. (2007, May 31). The Hittite Inherited Lexicon. Retrieved from https://hdl.handle.net/1887/11996

Version: Not Applicable (or Unknown)
License:
Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden
Downloaded from: https://hdl.handle.net/1887/11996

Note: To cite this publication please use the final published version (if applicable).

## Part Two

# An Etymological Dictionary OF THE Hittite Inherited Lexicon 

## INTRODUCTION

In this part I will treat the following Hittite words: (a) words that in my view have a good IE etymology; (b) words that formally look as if they could well be of IE origin but for which no IE cognates are known; (c) words for which an IE etymology has been proposed that in my view cannot be correct; ${ }^{283}$ and (d) words of which I found it important to show that they must be of a foreign origin. ${ }^{284}$

Of each word I have cited all spellings of the forms as attested, giving attestation place if necessary and a dating. If a certain form is attested in multiple texts, I have only indicated the oldest dating. Whenever needed, I have ordered the forms and spellings chronologically, in order to describe the most original state of affairs. On the basis of this material, I have treated the etymology of each word. Apart from words, I have also included in this dictionary the nominal and verbal endings, as well as most of the verbal and some nominal suffixes. Of these I have especially concentrated on morphological changes, as well as on their etymology.

An etymological dictionary can only be written on the basis of good philological descriptions of the words in question. In the case of Hittite, such descriptions are not available for the whole lexicon. The only dictionary that comprises the whole Hittite vocabulary ${ }^{285}$ is Friedrich's Hethitisches Wörterbuch (HW) that dates from 1952-1954, to which three Ergänzungshefte (1957, 1961, 1966) were added. Although this dictionary must be regarded as a milestone in

[^0]Hittitology, it is nowadays outdated in some respects: it does not give examples of contexts to illustrate a word's meaning, it cites forms in bound transcription, often disregarding plene spellings, and it does not give attestation places to all forms cited. Moreover, many more Hittite texts have been published since it appeared, which means that the dictionary is not exhaustive. Fortunately, other dictionary-projects have been started in more recent times that do meet up to the expectations of modern-day Hittitologists. Yet, these are all unfinished. Friedrich - Kammenhuber's Hethitisches Wörterbuch. Zweite, völlig neubearbeitete Auflage auf der Grundlage der edierten hethitischen Texte ( $\mathrm{HW}^{2}$ ), which was initiated in 1975, sofar comprises $a$ - till haššu- and gives a complete overview of attestations and an extensive semantic treatment (but note that its dating of texts does not follow the communis opinio). In preparation to this work Kammenhuber has published Materialen zu einem hethitischen Thesaurus (1973-1989) that treats the lemmas $\bar{a} k{ }^{-} / a k k$ - 'to die', $\check{s} u$ (conjunction), ta (conjunction), $-a$ - (encl. pers. pron.), eku- ${ }^{z i} / a k u-$ 'to drink', $d \bar{a}^{-}{ }^{i} / d-$ 'to take', šākk- ${ }^{i} / s \check{a} a k k-$ 'to know' and handae- ${ }^{z i}$ 'to arrange'. It contains many attestation places and a detailed semantic description. The Hittite Dictionary of the Oriental Institute of the University of Chicago (CHD), edited by Güterbock, Hoffner and Van den Hout, first appeared in 1989 and thus far treats $l \bar{a}_{-}^{i} / l$ - till $=\check{s} s \check{s} e$. It gives many attestation places and a full semantic treatment, too. Two other works, which are not primarily meant as synchronic dictionaries, do provide philological information as well. Puhvel's Hittite Etymological Dictionary (HED) first appeared in 1984, and up to now has been finished for the letters $A-M$. It gives many (often all) attestation places and examples of contexts to illustrate the semantics of a word. Tischler's Hethitisches etymologisch Glossar (HEG) falls into two parts. The first part (1977-1983), dealing with the letters $A-K$, is a mere bibliographical work giving references to etymological treatments of the words cited. The second part (1990-), for which Tischler has received the help of Neumann and Neu, thus far treats the letters $L$, $M, N, P, S \check{S} a$ and $T$, and gives more philological information (although still not extensively), including forms that are attested on unpublished tablets. A small contribution was Otten's Materialen zum hethitischen Lexikon (1971b = StBoT 15), in which he extensively treats the words beginning with $z u$-.

All in all, good up-to-date philological treatments exist of the following part of the Hittite lexicon: $A, E, H, I, K, L, M, N, P, \stackrel{S}{S} a, T$ (but not as extensive as desired) and $Z u$. This means that the words beginning with $\check{S} e-\check{S} u, U, U$ and $Z a$ $Z i$ often still lack an extensive synchronic description. In my etymological treatment of the Hittite inherited lexicon, this means that for the words of the first category I often only refer to the works cited above for the synchronic treatment
(unless I disagree, of course), whereas for words of the second category I will give much more synchronic philological information, including attestation places, contexts and semantics. Because I do not have a card-tray system at my disposal that covers all published Hittite texts, I cannot claim exhaustiveness for these treatments. Nevertheless, on the basis of many treatments of texts and words in the secondary literature and using a collection of computerized transliterations of some 3300 Hittite texts (containing ca 280.000 words) ${ }^{286}$, which has greatly enhanced the search for forms, attestation places and contexts, I have tried to be as inclusive as possible.

Each lemma is accompanied by grammatical information (the classification of the verbal system is elaborately treated in chapter 2.2), a translation, its corresponding sumerogram and/or akkadogram (if applicable), all attested spellings known to me (which are dated when relevant: note that if a certain form is attested in texts from different periods, usually only the oldest dating is mentioned), inner-Hittite derivatives and cognates, cognates in the other Anatolian languages, a Proto-Anatolian reconstruction (if possible), cognates in the non-Anatolian Indo-European languages, a Proto-Indo-European reconstruction (if possible), and, finally, an elaborate philological and etymological discussion.

In the treatment of cognates from the other Anatolian languages, I have tried to include all attested forms, for which I have used the following sources: for Palaic, the vocabulary in Carruba 1970; for CLuwian Melchert's Cuneiform Luvian Lexicon (1993a); for HLuwian I have cited words as transliterated in Hawkins’ Corpus of Hieroglyphic Luwian Inscriptions (2000); for Lycian I have used Melchert's A Dictionary of the Lycian Language (2004a); and for Lydian Gusmani's Lydisches Wörterbuch (1964).

Note that in alphabetization the sequence -uua- is regarded as $-u-+-u-+-a-$, so e.g. duuarni- ${ }^{z i}$ / duuarn- follows ${ }^{\text {MUNUS }}$ duttariiata/i- and precedes tuzzi-.

[^1]
## A

a-: see aši / uni / ini
$-\boldsymbol{a},-\overline{\boldsymbol{a}}$ (all.sg.-ending)
PIE *-o
The allative answers the question 'to where' and is a living case in the OH and MH period only. Its ending is either $-a$ or $-\bar{a}$. The difference between the two is clearly a matter of accentuation, compare $a$ - $a s ̌$-ka /Rắska/ 'gate', ha-me-eš-ha-anda /HmésHanta/, lu-li-įa /lúlia/ 'pond’, ne-e-pí-ša /nébisa/ 'heaven', šu-uh-ha /sóHa/ 'roof' vs. iš-ša-a /ìSáá/ 'mouth', ki-iš-ra-a /kiSráa/ 'hand', ta-ak-na-a /tgnà́/ 'earth' (all OS attestations). On the basis of the fact that pa-ra-a /prà́/, an original allative of the paradigm to which peran and parza belong as well, can be compared directly to Gr. $\pi \rho$ ó, Skt. prá-, Lat. prŏ- and Goth. fra-, which all point to *pró, I assume that the allative-ending has to be reconstructed as *-o.

```
-a(nom.-acc.pl.n.-ending)
    PIE *-eh2
```

The nom.-acc.pl.-form of neuter nouns and adjectives can be formed in several ways (cf. Gertz 1982: 270ff.). First, we encounter the ending $-a$, which seems to originally belong in $a$-stem nouns (e.g. ša- $a-k u-u{ }_{c}(\mathrm{OS})$ from šākuũa- 'eye'), stems in -tt- (a-ni-ia-at-ta (OS) from aniizatt- 'work, task'), stems in -nt- (e.g. a-mi-ịa-an-ta (OH/MS) from amiizant- 'small', hu-u-ma-an-ta (OS) from hūmant'all') and $i$ - and $u$-stem adjectives (e.g. $a$ - $a \check{s ̌-s ̌ a-u-u-u ~ f r o m ~} \bar{s} \check{s} s ̌ u-/ ~ a ̄ s ̌ s ̌ a u-' g o o d ’, ~$ har-ga<*harkaia from harki- / harkai- 'white', šu-up-pa (OS) < *šuppaia from
šuppi- / šuppai- 'clean'). In stems in resonants, we see introduction of the lengthened grade (e.g. har-ša-a-ar (OS) from haršar / haršn- 'head', hu-i-ta-a-ar (OS) from hुuitar / huitn- 'game, wild animals', ha-aš-ta-a-i from haštai- / haš̌ti'bone', ú-i-ta-a-ar (OS) from ūātar / uitēn- 'water'). In stems in $-r$ and $-l$ we occasionally find an ending $-i$, for which see its own lemma. In the $u$-stem noun $\bar{a} s \check{s}^{s} u$ - 'goods, possessions', we find a nom.-acc.pl. $a-a \check{s}-\check{s} u-u$ which must stand for /RáSo/, showing $/-\mathrm{Co} /<*_{-C u h_{2}}$ (cf. § 1.4.8.2.b). Note that in other neuter $u$-stem nouns, we find the ending $-a$, e.g. ge-en-zu-u-üa (OH/NS) from genzu- 'lap', which clearly must be an innovation. If my interpretation of the pronominal nom.-acc.pl.n.-forms $=e$, $a-p e ́-e, k e-e$ and $k u-e$ as reflecting $*-i h_{2}$, showing a lowering of $*_{-} \mathrm{Cih}_{2}$ to $/-\mathrm{Ce} /$ comparable to the lowering visible in $*_{-} C u h_{2}>/-\mathrm{Co} /$, is correct, we would expect that in neuter $i$-stem nouns the nom.-acc.pl.n.-ending is $-e$ as well. Unfortunately, no nom.-acc.pl.-forms of neuter $i$-stem nouns are to my knowledge attested in OS or MS texts. We do find a nom.-acc.pl.n.-form par-ku-e (MH/MS), however, from the $i$-stem adjective parkui- / parkuuai- 'clean' (instead of expected parkuua < parkuuaia, which is attested as well), which may show the reality of the ending $-e<*-i h_{2}$.

As we already saw, I reconstruct the ending ${ }^{\circ} \mathrm{Cu}$ - $u$ in neuter $u$-stem nouns as $*_{-} \mathrm{Cu}-\mathrm{h}_{2}$ and the ending ${ }^{\circ} \mathrm{Ce}$-e in pronominal stems and possibly in parkue as $*_{-C i-h}^{2}$, both showing the neuter nom.-acc.pl.-ending $*-h_{2}$ as attested in the other IE languages as well (e.g. Skt. -i, Gr. -a, Lat. - $\breve{a}$ ). The Hittite ending - $a$ must go back to $*$-e $h_{2}$, however, because in word-final position after consonant $*-h_{2}$ would regularly drop, cf. *még' $h_{2}>$ Hitt. mēk 'much, many'. This *-eh is also visible in Lyc. $-a$, Skt. $-\bar{a}$, OCS $-a$ and Goth. $-a$. See Prins (1997: 221f.) for a treatment of this *-eh ${ }_{2}$.

```
-a (3sg.pres.midd.-ending): see -a(ri)
```

$=\boldsymbol{a}$ 'and, too': see $=(i) a$
$=\boldsymbol{a}$ 'but': see $=(m) a$
$=\boldsymbol{a}$ - (enclitic pronoun) 'he, she, it': nom.sg.c. $=a \check{s}$ (e.g. $n=a-a \check{s}$ (OS), $t=a$ - $a \check{s}$ (OS), $\check{s}=a-a \check{s} \quad(\mathrm{OS}), n a-a \check{s}-m=a-a \check{s} \quad(\mathrm{OS}), k u-i t-m a-a-n=a-a \check{s} \quad(\mathrm{OS}), \quad a-k i=a \check{s} \quad(\mathrm{OS})$ ), acc.sg.c. $=a n$ (e.g. $n=a-a n(\mathrm{OS}), t=a-a n(\mathrm{OS}), \check{s}=a-a n(\mathrm{OS}), n a-a t-t=a-a n(\mathrm{OS})$, tar-na-a-i=m=a-an (OS), har-ga-nu-mi=an(NH)), nom.-acc.sg.n. =at (e.g. $n=a-$ at (OS), $\left.t=a-a t(\mathrm{OS}), k u-i-s \check{s}=a-a t(\mathrm{OS}), \mathrm{SIG}_{5}-a n-t a-r i=a t(\mathrm{OS})\right)$, dat.sg. $=$ šše, $=\check{s ̌ s} i$ (e.g. $n u-u=\check{s}$-še (OS), ta- $a=\check{s}-s \check{e}$ (OS), $a n-d a=m a-a=\check{s}-\check{s} e$ (OS), nu-u=̌̌=̌̌i
$(\mathrm{MH} / \mathrm{MS})$ ), nom.pl.c. $=e$ (e.g. $n=e(\mathrm{OS}), t=e(\mathrm{OS}), \check{s}=e(\mathrm{OS}), t=e-e=t-t a(\mathrm{OS})$ ), $=a t(n=a-a t(\mathrm{OH} / \mathrm{MS}))$, acc.pl.c. $=u \check{s}(n=u-u \check{s}(\mathrm{OS}), t=u-u \check{s}(\mathrm{OS}), \check{s}=u-u s ̌$ (OS), par-ta-ú-ni-t=u-uš (OS), na-ah-mi=uš (MH/NS)), =aš (NS), nom.-acc.pl.n. =e $(n=e(\mathrm{OS})),=a t$ (young), dat.pl. =šmaš (nu-u=̌̌-ma-aš (OS), ta- $a=\check{s}-m a-a \check{s}$ (OS), $\mathrm{GU}_{4}-n=a-a=\check{s}-m a-a \check{s}(\mathrm{OS}), m a-a-a n=\check{s} a-m a-a \check{s}(\mathrm{OS}), n a m-m a=m a-a=\check{s}-\check{s} a-m a-a \check{s}$ (OS), na-at-ta=ša-ma-aš (OS), hal-ki-iš=(̌̌)ma-aš (MH/MS)).

Anat. cognates: Pal. =a-'id.' (nom.sg.c. $=a \check{s}$, acc.sg.c. $=a n$, nom.-acc.sg.n. $=a t$, dat.sg. $=s ̌ i$, nom.pl.c. $=a \check{s}$, nom.-acc.pl.n. $=e$ ); CLuw. $=a-$ 'id.' (nom.sg.c. $=a \check{s}$, acc.sg.c. $=a n$, nom.-acc.sg.n. $=a t a$, dat.sg. $=d u$, $=t u$, nom.pl.c. $=a t a$, acc.pl.c. $=a s ̌, ~ n o m .-a c c . p l . n .=a t a$, dat.pl. =(m)maš); HLuw. =a- 'id.' (nom.sg.c. /=as/, acc.sg.c. $/=\mathrm{an} /$, nom.-acc.n. $/=a d a /$, dat.sg. $/=\mathrm{du} /$, nom.pl.c. $/=a d a /$, acc.pl.c. $/=\mathrm{ada} /$, nom.-acc.pl.n. /=ada/, dat.pl. /=mant's/); Lyd. $=\boldsymbol{a}-$ 'id.' (nom.sg.c. $=a \dot{s},=\dot{s}$, acc.sg.c. $=a v,=v$, nom.-acc.sg.n. $=a d,=a t$, dat.sg. $=a \lambda$ ', $=\lambda$ ); Lyc. $=\boldsymbol{e}$ - 'id.' (nom.sg.c. $=e$ ? (see Garret 1992: 204), acc.sg.c. $=\tilde{e},=e,=\tilde{e} n,=\tilde{e} n e,=e n,=e n e$, nom.-acc.sg.n. $=e d,=e d e$, dat.sg. $=i,=i j e$, nom.-acc.pl.n. $=e,=e d,=e d e$, dat.pl. $=\tilde{n} n-,=$ ñne (see Melchert 1992a: 197-9)).

This enclitic pronoun is part of the sentence initial particle chain and occupies the penultimate slot therein, just before the locatival enclitic particles $(=(a) n$, $=(a) p(a),=(a) \check{s} t a,=k k a n$ and =$\check{s} \check{s} a n)$. It is only attested in the cases nominative, accusative and dative. It is clear that nom.sg.c. $=a \check{s}$, acc.sg.c. $=a n$ and nom.acc.sg.n. $=a t$ must reflect $*$-os, $*$ om and $*$-od respectively, whereas nom.pl.c. $=e$, acc.pl.c. $=u s ̌$ and nom.-acc.pl.n. $=e$ must reflect $*_{-o i,} *_{-o m s}$ and $*_{-i h_{2}}$ (for which see at $k \bar{a}-/ k \bar{u}-/ k i-)$. Therewith it clearly reflects the pronominal endings as also found in $a p \bar{a}-/ a p \bar{u}$-. The dative-forms stand somewhat apart since they do not seem to go back to pronominal endings. Dat.sg. = šše probably reflects ${ }^{*}$-soi which must be compared to the enclitic pers.pronouns *moi 'to me' and *toi 'to thee'. Already within the OH period it is replaced by =$\check{s} \check{s} i$ in analogy to the nominal dat.-loc.sg.-ending -i. The analysis of dat.pl. =šmaš is less clear. It seems to show the dat.-loc.pl.-ending -aš attached to an element -šm- that is also visible in the enclitic possessive $=\check{s} m i-/=$ šma- / =šme-
Note that alleged nom.pl.c. $=i$ in $m a-a-n=i=z a(K B o 6.2$ iii 7 (OS)) is not necessarily linguistically real. This particle chain may have to be read ma-a$n=\dot{e}=z a$ (so reading the sign NI as né), with the normal nom.pl.c.-form $=e$.

According to Puhvel (HED 1/2: 6), there are some OH contexts in which we find acc.sg.c. $=u n$ instead of normal $=a n$. As examples he cites $u$-ku-un (KBo 8.42 obv. 7) 'I ... him' and nu-un-na-pa[ (KBo 12.63 ii 5). These forms are problematic, however. The first form is damaged and actually reads =
$u$ u-ku-x-za, where of the damaged sign only one head of a wedge is visible. Apparently, Puhvel reads $u ́-k u-[u] n=u k=u n$, but a reading $u ́-k u-\left[u s^{\prime}\right]-z a=$ $u k=u \check{s}=z a$ is equally possible.

The context of the second form is quite broken:

KBo 12.63 ii (with additions from KBo 12.18 i 5-9)
(1) $k\left[\left(u^{? ?}-u a-a-p i ́-i t\right.\right.$ UD-at $\left.)\right]$
(2) LUGAL-ez-[zi? -i $\left.a^{?}-\mathrm{x}-\mathrm{x}-\mathrm{x}\right]$
(3) $\check{s}=a-a n=z=a-p[(a a-a \check{s}-\check{s} u)]$
(4) šu-u-ua-a[t-te-en? ${ }^{?}$
(5) $n u-u[n-n] a-p\left[a^{?}(a-a \check{s}-\check{s} u)\right]$
(6) šu-u-ua-at-t[(e)-en?]
(7) $h u-u h-h a-a \check{s}=m[(i-i s ̌ a-i \check{s})]$
(8) ${ }^{\mathrm{URU}} Z a-[(a)] l-[p a ?(-) \mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}]$
(9) $n=a-[(a n k e-e r=t e-e t ~ t u-u s ̌-g a-) \mathrm{x}-\mathrm{x}-\mathrm{x}]$
'On the day that [he] be[comes] king, you (pl.) must fill him up with goods. You (pl.) must fill nunnap $[a]$ up with goods. My grandfather [...] the mouth [..] the city Z[a]l[pa..]. Your (sg.) heart [will] please him'.

If $\check{s} a-a n-z a-p a$ in line 3 is to be analysed as a sentence initial chain $\check{s}=a n=z=a p a$, then it is possible that we should interpret $n u-u n-n a-p\left[a^{?}\right]$ as containing $=a p a$ as well. Whether nunn $=$ then is to be analysed as $n=u n n$ remains unclear to me. Note that geminate -nn- would then be unexpected. All in all, I would at this point not dare to postulate a variant $=u n$ besides acc.sg.c. $=a n$.
$\overline{\boldsymbol{a}}^{\boldsymbol{a}\left({ }^{(r i)}\right.}$ 'to be hot': see $\bar{a}(i)-{ }^{-\quad(r i)} / i-$
-ahh- ${ }^{\boldsymbol{i}}$ ('factitive'-suffix)
Verbs that display the suffix -ahh- are often called 'factitive' since they denote 'to make x ' in which $\mathrm{x}=$ the noun from which they are derived. For instance, šuppi- 'pure' and šuppiïahh ${ }^{i}$ 'to make pure', neua- 'new' and neuahh ${ }^{-}$' to make new', dašuuant- 'blind' and dašuuahh- 'to make blind', etc. It should be noted that -ahh- is a denominal suffix only: we never find verbs in -ahh- that are derived from a verbal stem. In the oldest texts, verbs in -ahh-inflect according to the $h i$-conjugation (3sg.pres.act. -ah-hi (OS)), but in NH times, we find miinflected forms like 1 sg.pres.act. -ah-mi, 3 sg .pres.act. -ah-zi, etc. In 1 sg. pres.act.,
the combination of the suffix -ahh- with the ending -hhi is predominantly spelled -ahhi. A spelling -ahhahhi occurs twice only, namely [...]x-ah-ha-ah-hi (KBo 17.25 rev. 5 (OS)) and ha-ap-pí-na-ah-ha-ah-hi (KUB 41.32 rev. 10 (OH/NS)). The 1 sg.pret.act.-form to my knowledge is always spelled -ah-hu-un: I do not know of any spellings **-ah-ha-ah-hu-un.

On the basis of the word equation neuahh- ${ }^{\text {i }}$ 'to renew' with Lat. novāre 'to renew' and Gr. veá $\omega$ 'to plough up', it is generally thought that the suffix -ahhmust be of PIE origin and reflects *-eh2-. So, neuahh- < *néueh $h_{2}$. Why the factitives in -ahh- ended up in the hi-conjugation is unclear to me. Note that they differ from normal hi-conjugating verbs in -ahh- in the sense that these show an alternation - $h-/-h h-\left(n \bar{a} h-^{i} / n a h h-, z \bar{a} h-^{i} / z a h h-\right)$, whereas factitives in -ahh- have geminate -hh- throughout, also in 3sg.pres.act. -ahhi. This is due to the fact that normal $h i$-verbs have *ó in the singular, which lenites the following $* h_{2}$, whereas the factitives have $*$-eh $h_{2}$.
-ai (dat.-loc.sg.-ending): see $-i$
$\overline{\boldsymbol{a}}(\boldsymbol{i})$ - $^{\text {ari }} / \boldsymbol{i}$ - (IIIa $>\mathrm{IIIb}$ ) 'to be hot': 3sg.pres.midd. $a$-a-ri (KUB 20.88 rev. 21 ( $\mathrm{OH} / \mathrm{MS}$ )), a-ri (KBo 5.1 iii 52 (MH/NS), KBo 13.167 ii 8, iii 7 (NS), KUB 17.28 iv 39 (MH/NS), ABoT 7+ iii 42 (MH/NS), HT 1 i 49 (MH/NS), KBo 29.70 obv. 13 (MS), KBo 24.95 rev.? 7 (NS)), 3pl.pres.midd. a-a-an-ta (VBoT 58 i 24 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pret.midd. a-i-it-ta-at (KBo 42.6 obv.? 6 (NS)); part. a-a-an-t(OS), $a-a n-t$ - (OS).
Derivatives: inu- ${ }^{z i}$ (Ib2) 'to make hot, to fry' (3sg.pres.act. i-nu-uz-zi, 3pl.pres.act. i-nu-an-zi, i-nu-ua-an-zi, 2pl.imp.act. i-nu-ut-te-en (OS); impf. i-nu$u \check{s}-k e / a-$ ), aidě̌̌̌s- ${ }^{-i}$ (Ib2) 'to become hot (?)' (3pl.pres.act. a-i-iš-ša-an-zi (KUB 29.55 ii 2 , KUB 29.44 ii 6 , iii 5)).

PIE * $h_{1} e h_{3} i-o-r i, * h_{1} h_{3} i-n e u-$ ??
See $\mathrm{HW}^{2}$ A: 44f. for attestations. For a good interpretation of this verb, we should first look at its causative, inu- ${ }^{z i}$. This causative often is cited as $e n u^{z i}$ as well (e.g. Puhvel HED $1 / 2: 11 ; \mathrm{HW}^{2}$ E: 42f.), which is done only on the basis of two attestation showing a spelling e-nu-. As I show at the lemma enu- ${ }^{z i}$, these forms are unclear regarding their interpretation and cannot be used as an argument in favour of the view that originally the causative of this verb was enu-, with inubeing a reduced spelling of it. All secure forms of the causative show a spelling with $i$ - only, including the OS attestation i-nu-ut-te-en. Similarly, the alleged
connection with and meaning 'to become hot' of the once attested verb enuma(q.v.) should be abandoned.

The verb shows interesting spellings with hyper-plene from OS texts onwards (3sg.pres.midd. $a-a-r i, 3$ pl.pres.midd. $a-a-a n-t a$ and part. $a-a-a n-t$-), which in the course of time are replaced by 'normal' plene spellings (3sg. a-ri and part. a-an-$t$-). This could indicate that the original forms used to contain a hiatus, $\mathrm{OH} /$ Ráari/, /Ráanta/, /Ráant-/, which was lost in the younger period, yielding /ắri/, /Rắnta/ and $/$ aánt-/. The fact that the causative of this verb shows a stem $i$ - (which must be zero-grade) highly indicates that $a-a-r i$ reflects $* \bar{a} i-o-r i$ vel sim., in which form the loss of intervocalic ${ }^{i}$ i yielded hiatus. The assumption of a stem $* \bar{a} i$ - makes way to a connection with the scarcely attested verb aiiušs- that then could be interpreted as a fientive $a i-\bar{e}-{ }_{S} \check{s} \check{S}^{z i}$ 'to become hot'. Another form that shows a stem ai- may be 3sg.pret.midd. $a-i-i t-t a-a t$ in KBo 42.6 obv.? (6) [...]x $=m u$ A-tar $=m e-$ et $a$-i-it-ta-at, if this means 'my water was warm'. Because of this aieešš-zi and ailittat (=/?áitat/?), I have decide to cite the basic verb as $\bar{a}(i)-{ }^{\text {ari }} / i$ - here.
The stem $\bar{a}(i)-/ i$ - often is connected with Gr. aï $\theta \omega$, aï $\theta$ o $\mu \alpha$ and Skt. inddhé 'entzundet'. These forms clearly derive from *heid ${ }^{h}$-, however, which cannot be cognate to the Hittite forms.
In principle, Hittite middle verbs either show zero-grade in the root (e.g. tukkāri $<* t u k-o ́)$ or $e$-grade (e.g. ešari $<{ }^{*} h_{l} e ́ h_{l} s-o$ ). In this case, āi- must reflect fullgrade because inu- shows the zero-grade stem. The stem $\bar{a} i$ - can only go back to a form with $e$-grade if it contained either $* h_{2}$ or $* h_{3}$. As $* h_{2}$ would have remained in initial as well as intervocalic position (or, when in $* V h_{2} i V$ would have given $V i V$, like täaiezzi < *teh $2_{2}$ ieti), the root must contain $* h_{3}$. As $* h_{3}$ yields Hitt. $h$ - in initial position when preceding $* e$, the only possible root structure is $* h_{1} e h_{3} i-$. This would mean that $a-a-r i=/$ Rá?ari/ reflects $* h_{1} e ́ h_{3} i-o-r i$, and inu- $<* h_{1} h_{3} i-n e u$ Note that the first form shows that $* V h_{3} i V>\mathrm{OH} / \mathrm{V} P V /$, and not $* * / V i V /$ and that the second form shows that $* h_{1} h_{3} i->$ Hitt. $i$ - and not $* * h i$-. Unfortunately, this reconstruction is based on internal evidence only. To my knowledge there are no other IE languages that show reflexes of a root $* h_{1} e h_{3} i-$.
aikauartanna (adv.) 'for one turn': a-i-ka-ua-ar-ta-an-na (KBo 3.5 i 17, 22).
This word is a loan through Hurrian from Pre-Indic *aika- 'one' and *uartana'turn', compare Skt. éka- and vártana-.
aiš / išš- (n.) 'mouth' (Sum. KAxU, Akk. P ̂́): nom.-acc.sg.n. a-i-iš (OS), a-iš, acc.sg.c.(?) KAxU-an (KBo 5.1 iv 4 (MH/NS)), gen.sg. iš-ša-aš (KUB 24.13 ii 5,

25 (MH/NS)), dat.-loc.sg. $i s ̌-s ̌ i-i, ~ i s ̌-s ̌ i-i=s ̌-s ̌ i, ~ a-i-i s ̌-s ̌ i ~(K B o ~ 8.75, ~ 6(M H / N S)), ~$ all.sg. $i s ̌-s ̌ a-a-a=s ̌-m a(\mathrm{OS}), i s ̌-s ̌ a(\mathrm{KBo} 3.38$ obv. 4 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 13.100, 7 (NS)), instr. iš-ši-it (KUB 31.135 obv. 11 (OH/MS), KBo 9.106 iii 3 (MH/NS)), abl. $i s ̌-s ̌ a-a z(\mathrm{OS}), i \check{s}-s \check{a} a-a-a z$, acc.pl.c. KAxU ${ }^{\mathrm{HILA}}-u \check{s}(\mathrm{KUB} 14.4$ ii $10(\mathrm{NH})$ ), dat.loc.pl. iš-ša-aš (KUB 43.68 rev. 9 (NS)).
Derivatives: ǐššalli- (n.) 'spittle’ (nom.-acc.sg. iš-ša-al-li, erg.sg.? iš-ša-al-la$a n-z a$ (KBo 13.1 iv 3 )).

Anat. cognates: CLuw. $\bar{a} a s ̌-~(n) ~ ' m o u t h ' ~.(n o m .-a c c . s g . ~ a-a-a s ̌-s ̌ a, ~-a n t-d e r . ~$ nom.-acc.pl.n. $a$ - $a-a \check{s}-\check{s} \check{a}-a n-t a$ (cf. Starke 1990: 100)), $\bar{a} s ̌ \check{s} a-$ 'to speak (?)' (3sg.pret.act. $a-a \check{s ̌-s ̌ a-a t-t a) ; ~ H L u w . ~ a ́ s a z a-~ ' t o ~ s p e a k ' ~(3 s g . p r e s . a c t . ~ a ́-s a ~}{ }_{5}$-za-ia (KARATEPE $1 \S 42, \S 48) ~ a ́-s a_{5}-z a-i$ (MARAŞ $14 \S 11$, SULTANHAN §34), 3sg.pret.act. $\dot{a}-s a_{5}-z a-t a$ (TELL AHMAR $5 \S 11$, KAYSERİ §20), 2sg.imp.act. á$s a_{5}-z a(\operatorname{ASSUR}$ letter $a \S 1, b \S 1, c \S 1, d \S 1, e \S 1, f+g \S 1)$; part.nom.sg.c. $a^{-}$-sa $a_{5}-$ $z a-m i-i-s a ́ ~(K A R K A M I S ̌ ~ A 7 a ~ § 14)) . ~$
IE cognates: Skt. $\bar{a} s-$, Av. $\bar{a} h-$, Lat. $\bar{o} s$, OIr. $\dot{a}$ 'mouth'.

$$
\text { PIE } * h_{1} e h_{3} \text {-es- }
$$

See $\mathrm{HW}^{2}$ A: 48f. for attestations. Although already since the beginning of Hittitology (e.g. Pedersen 1938: 47) this word is connected with Skt. $\bar{a} s-$, Av. āh-, Lat. ōs, etc. 'mouth', its exact formal interpretation is unclear. It is generally assumed that aiš/ǐ̌š- originally was an $s$-stem and therewith would be, together with nēpiš 'heaven', one of the two neuter $s$-stems that are attested in Hittite. It is generally thought that in early PIE, neuter $s$-stems inflected proterodynamically and show the inflection nom.-acc.sg. *CéC-s, gen.sg. *CC-és-s, which possibly already in PIE was modified to *CéC-os, *C(e)C-és-os (cf. Schindler 1975b: 2647). Such a paradigm would indeed fit the Hittite word for 'heaven': nom.-acc.sg. nēpiš, gen.sg. nēpišaš then would show generalization of the suffix-syllable *-es of the oblique cases into the nominative (replacing *-os) and generalization of the accentuation of the nominative into the oblique cases (for a detailed treatment, see at the lemma nēpiš). For 'mouth', it is much more difficult to trace the attested forms back to the reconstructed paradigms.
It is commonly assumed that the word for 'mouth' must be reconstructed as *HeH-es-. Because of the $o$ in Lat. $\bar{o} s$, it is likely that at least one of the laryngeals is $* h_{3}$. Since initial $* h_{3}$ in front of $* e$ would yield Hitt. $h$ - (cf. Kloekhorst fthc.c), we have to reconstruct * $h_{1} e h_{3}$-es-. From a PIE point of view, we would expect this word to show an inflection $* h_{1} e ́ h_{3}-s$, $* h_{1} h_{3}$-és-s, later replaced by $* h_{1}$ é $h_{3}$-os, * $h_{l}(e) h_{3}$-és-os.

The regular outcome of nom.-acc.sg. *hiéh $h_{3}$ os would be Hitt. ** $\bar{a} s{ }^{s}$. The fact that instead we find Hitt. aiš could easily be explained by assuming a secondary generalization of the suffix-syllable *-es- out of the oblique stems, just as has happened in *néb ${ }^{h}$-os >> *néb ${ }^{h}$-es $>$ Hitt. nēpiš 'heaven'. It should be noted that this generalization must have taken place after the colouration of $* e$ to $* o$ due to an adjacent $* h_{3}$. This scenario would only work if the oblique cases show the form $* h_{l} h_{3}$-és-, but although this is the situation as expected from PIE, it is not what we find in Hittite. Forms like dat.-loc.sg. iššī, all.sg. iššā, abl. ičšāz all seem to show a hysterodynamic inflection with accentuation of the ending. Some scholars, e.g. Rieken (1999a: 186), just simply assume that the preform *HH-és-V regularly yields pre-Hitt. *és- $V$ which then with a secondary shift of accentuation becomes $*_{e s-V} V$, in which unaccentuated $* e$ becomes Hitt. $i$, but this does not explain the presence of geminate -šš- in išš-'. This geminate can only be explained as the product of assimilation, and in this case only $*$ - $H s$ - is thinkable (cf. Melchert 1994a: 116). So the oblique cases $i \check{s} s^{-}{ }^{\prime}$ can only be explained by a reconstruction * $h_{1} h_{3}-s^{-}$, which points to a hysterodynamic paradigm.

So the situation is as follows. Of the paradigm aiš/ǐ̌š- the nom.-acc.sg. can only be explained if we reconstruct a proterodynamic paradigm $* h_{l} e^{2} h_{3}$ (o)s, * $h_{1} h_{3}$-és-(o)s, whereas the oblique cases ǐ̌š- can only be explained from a hysterodynamic paradigm $* h_{1} e ́ h_{3}-S, * h_{1} h_{3}-s$-ós. It therefore may be best to quote Melchert (1994a: 115), who states that "no historical account [of aiš / išš-] satisfying to everyone yet seems possible".
$\overline{\boldsymbol{a}} \boldsymbol{k} \boldsymbol{}^{\boldsymbol{i}} / \boldsymbol{a} \boldsymbol{k} \boldsymbol{k}$ - (IIa2) 'to die, to be killed; to be eclipsed (of sun and moon: Sum. $\left.\mathrm{UG}_{6}\right)^{\prime}: 1$ sg.pres.act. $a$ - $a k$-mi (KUB 40.33 obv. 23 (NS)), ak-mi (KUB $24.5+9.13$ obv. 16 (NS)), 2sg.pres.act. $a-a k-t i($ KBo $7.14+$ ii 6 (OS)), $a k-t i$ (KUB 8.63 i 3 (NS), KUB 23.1 ii 36 (NH), KUB 36.57 iii 8 (MH/NS)), 3sg.pres.act. a-ki (OS, often), 1pl.pres.act. ak-ku-e-ni (KUB 17.1 ii 18 (NS)), ak-ku-u-e-ni (KUB 17.1 ii 24 (NS)), 2pl.pres.act. a-ak-te-ni KBo 3.23 rev. 4 (OH/NS)), 3pl.pres.act. ak-kán$z i$ (OS), 3sg.pret.act. $a-a k-k i-i s ̌$ (KBo 6.2 iv 3 (OS)), $a$-ak-ki[-iš] (KBo 3.46 obv. 34 ( $\mathrm{OH} / \mathrm{NS}$ )), ak-ki-iš (KBo 3.46 obv. 48 ( $\mathrm{OH} / \mathrm{NS}$ )), a-ki-iš (KBo 3.34 ii 12 (OH/NS), KBo 3.36 obv. 18 (OH/NS)), ak-ta (KUB 5.9 obv. 26 (NS), KUB 13.3 iii 35 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 31.121a ii $11(\mathrm{NH})$ ), ag-ga-aš (VBoT 1, $24(\mathrm{MH} / \mathrm{MS})$ ), 2pl.pret.act. $a$-ak-te-en (KUB 14.14 obv. 36 (NH)), 3pl.pret.act. a-ker (OS), a-keer (KBo 3.38 rev. 22 ( $\mathrm{OH} / \mathrm{NS}$ )), e-ker (NH), e-ke-er (NH), 1sg.imp.act. ak-kal-lu (KUB 14.1 rev. 94 (MH/MS)), 2sg.imp.act. $a-a k$, 3sg.imp.act. $a-k u$, $a k-d u$, 2pl.imp.act. $a$ - $a k$-te-en (KUB $14.1+$ KBo 19.38 obv. 40 (MH/MS)), 3pl.imp.act.
$a k-k a ́ n-d u$; part. $a k-k a ́ n-t-, a g-g a-a n-t-, a k-k a_{4}-a n-t-, a-a g-g a-a n-t-;$ impf. $a k-k i-$ iš-ke/a-, ak-kiš-ke/a-, ak-ke-eš-ke/a-.

Derivatives: akkātar / akkann- (n.) 'death' (nom.-acc.sg. ag-ga-tar, ak-kat-atar, gen.sg. ag-ga-an-na-aš, ak-kán-[na-]aš, dat.-loc.sg. ak-kán-ni, abl. ag-ga-an-na-az, ak-kán-na-za).

Anat. cognates: Lyd. akta- 'of the dead'?? (Melchert 1994a: 332).
PIE *h $h_{1 / 3}$ $k$-ei, $* h_{1 / 3} k$-énti
See $\mathrm{HW}^{2}$ A: 51f. for attestations. The original paradigm must have been $* \bar{a} k h i$, ākti, aki, akkueni, *akteni, akkanzi, standing for /Rá́kHi, २ắkti, २ắgi, ?kuéni, ?kténi, ?kánt ${ }^{\mathrm{i}} \mathrm{i}$ /. A stem $e k$ - is only found in 3pl.pret.act. eker, which is attested in NH texts only. This form is secondarily created besides 3pl.pres. akkanzi on the basis of analogy to 3pl.pres. ašanzi : 3pl.pret. ešer.

The alternation $-k$ - vs. $-k k$ - in 3sg. aki : 3pl. akkanzi must be due to lenition of an original intervocalic voiceless velar due to *ó in the singular form. This points to a reconstruction $*^{*} \dot{o}^{\prime} k^{\prime}-e i$, * $H^{\prime} k^{\prime}$-énti. Although all three laryngeals would be neutralized to $/ \mathrm{R} /$ in front of $* o$, a reconstruction with $* h_{2}$ - is not likely as this phoneme would have been preserved in the weak stem ( $>$ **hakkanzi), on the basis of which the $h$ - probably would have been reintroduced in the strong stem (but compare $a u^{-}{ }^{i} / u-$-). As both $* h_{l}$ and $* h_{3}$ would be neutralized in front of $*_{o}$ and would get lost before consonant (see Kloekhorst fthc.c), after which the neutralized laryngeal would be reintroduced in the weak stem yielding /2k-/, we can set up a reconstruction $* h_{1 / 3} e^{(k)}$ - for this root. The only possible cognate I have been able to find is Skt. áka- 'pain', Av. aka- (adj.) 'bad, evil', (m.) 'suffering'. If this is correct, we are dealing with a root $* h_{1 / 3} e k$-. Eichner (1973: 83) unconvincingly suggests a connection with Skt. āśú-, Gr. $\omega \kappa$ ćc 'fast, quickly' through an intermediate meaning 'dahingeschwunden sein'.
${ }^{\left.\left({ }^{(N A}\right)_{4}\right)} \boldsymbol{a} \boldsymbol{k} \boldsymbol{u}$ - (c.) 'sea-shell': nom.sg. $a$ - $k u$-uš (KUB 21.19+ iii 14), acc.sg. $a-k u-u n$ (KUB 21.19 ii 16, KUB 36.12 ii 6), acc.pl. $a-k u-u\left[\check{s}^{?}\right]$ (VBoT 134,2).
Derivatives: ${ }^{\mathrm{NA}_{4} \boldsymbol{a k}} \boldsymbol{k}$ uant- (adj.) 'covered with sea-shells' (acc.pl.c. a-ku-ua-an$d u-u s ̌$ (KUB 35.84 ii 4)).

See $\mathrm{HW}^{2}$ A: 53 for attestations. Since Laroche (1957a: 25-6) this word is usually translated 'stone' (HW ': "Stein"; Puhvel (HED 1/2: 24): "stone"), but Hoffner (1978: 245) convincingly argues for a meaning 'sea-shell'. On the basis of the translation 'stone', Laroche had suggested an etymological connection with the

PIE root * $h_{2} e k$ '- 'sharp', but, apart from the formal difficulties, this proposal has now become semantically implausible.
The OS attestation $a-k u-u-u \check{s}-s ̌[a(-) .$.$] (KBo 19.156$ obv. 17) sometimes is interpreted as acc.pl. $a k \bar{u} \check{s} \check{s}=[a(-) .$.$] (e.g. Puhvel l.c.), but since the context in$ which it occurs is quite broken, its meaning or function cannot be independently determined.
akutalla- (gender unclear) 'container of water': instr. a-ku-ta-al-li-it (KUB 9.20, 5), $a$ - $k u$-ga-al-li-it (with GA for TA, KUB 2.13 i 8).

PIE * $h_{1} g^{w h}-d^{h} l o-$
This word is attested only twice in duplicate texts:
KUB 2.13 i
(8) ${ }^{\text {LÚÚ.UUÚB }}$ a-ku-ga-al-li-it KÙ.BABBAR ua-a-tar
(9) pé-e-da-i LUGAL-uš=za $Q A-T I=S ̌ U a-a r-r i$
'The deaf man brings water in a silver $a$. The king washes his hands',
whereas KUB 9.20, 5 has $a$-ku-ta-al-li-it. It is likely that the form with GA is incorrect since the sign GA (he sign TA (through omission of the vertical wedge. If akutalla- is the correct form, it could reflect $* h_{l} g^{w h}-d^{h} l o-$, containing the root $* h_{l} e g^{w h}$ - 'to drink' (see eku- ${ }^{z i} /$ $a k u-)$ and the PIE instrument-suffix *-tlo- / *-d $d^{h} l o-$.

GIŠallantaru- (n.) ‘oak’ (Sum. GIš allan-GIŠ-ru-): nom.-acc.sg. GIŠ al-la-an-da-ru (KUB 39.290 iii 13), dat.-loc.sg. ${ }^{\text {GIŠ }}$ al-la-an-GIŠ-ru-i (KUB 39.7 ii 35), nom.acc.pl.n. ${ }^{\text {GIŠ }}$ al-la-an-ta-ru (KUB 39.8 i 48), [ $\left.{ }^{\mathrm{GI}}\right]^{\text {Šal-la-an-GIŠ-r }[u] \text { (KUB } 39.24 ~}$ obv. 2).

According to Puhvel (HED 1/2: 29) the word is a compound of Sem. allan- (Akk. allānu, Hebr. 'allōn 'oak') and Hitt. tāru- 'wood' (q.v.).
alpa- (c.) 'cloud' (Akk. URPU): nom.sg. al-pa-aš, al-pa-a-aš (KUB 59.54 obv. 7), acc.sg. al-pa-an, instr. al-pí-it (Bo 69/753, 3 (Puhvel HED 1/2: 37)), nom.pl.c. al-pa-aš (KUB 40.42 rev. 9 (NH)), al-pu-uš, acc.pl.c. al-pu-uš, al-pu-ú-uš (KUB 28.5 rev. 7), coll. $a l-p a^{\text {HI.A }}$ (KUB 36.14, 5), gen.pl. al-pa-aš.

Derivatives: alparama- 'cloudiness, clouddeck' (instr. al-pa-ra-mi-it (KBo 3.21 ii 20)).

See $\mathrm{HW}^{2}$ A: 60 for attestations. All attestations of this word are in NS texts. Often, this word is connected with Lat. albus 'white' and Gr. à $\lambda \varphi$ ós 'dull white leprosy' as first proposed by Mudge (1931: 252). Not only formally this connection is difficult $\left({ }^{*} h_{2}\right.$ elb ${ }^{h} O$ - should have given Hitt. **halpa-), semantically it is as well, as was pointed out by Puhvel (HED 1/2:38): alpa- is predominantly associated with rain and thunder, and therefore an original meaning 'whiteness' is unlikely. The formal difficulty is resolved by some scholars through the assumption of a PIE phoneme $* h_{4}$, which would be $a$-colouring, but not giving $h$ in Hittite: * $h_{4} e l b^{h} o-$. Yet, to my mind, the connection is semantically too weak to base a new PIE phoneme on. Unfortunately, I have no better IE etymlogy for this word. The form alpa ${ }^{\text {HI.A }}$ is regarded by some as a 'collective' in $*$-eh $h_{2}$ besides the normal plural in *-es, which is unattested for this word.
alpant- (adj.) '?’: nom.sg.c. al-pa-an-za (KUB 7.1 i 1, 39), a-al-pa-a-an-za (KUB $30.48,3$ ), nom.-acc.sg.n. al-pa-a-an (KBo 24.40 obv. 8, KBo 25.163 v 11).

See $\mathrm{HW}^{2}$ A: 60f. for attestations. This adjective is used to describe a 'child' in KUB 7.1 i (1) ma-a-an DUMU-la-aš (2) al-pa-an-za na-aš-ma-a=š-ši=kán ga-ra-a-ti-eš $a$-da-an-te-eš 'if a child is $a$. or his innards are eaten'; ibid. (39) nu kuiš DUMU-aš al-pa-an-za na-aš-ma-a=š-ši=kán ga-ra-a-te-eš $a$-da-an-te-eš (40) $n=a-a n t u-i-i k-k u-u s ̌ i s ̌-g a-a h-h i$ 'Whatever child is $a$. or his innards are eaten, I will salve his limbs'. Twice it is used describing 'cheese': KBo 25.163 v (11) ... 10 GA.KIN.AG al-pa- $a-a[n]$ (11) 10 GA.KIN.AG TUR 'ten $a$. cheeses and ten small cheeses'; KBo 24.40 obv.? (7) ... I GA[.KIN.AG] (8) al-pa-a-an ${ }^{\text {GIŠ }} \mathrm{PE}$ Š $t a$ $a n-h a-r i-i \check{s}-\check{s}[=a]$ '... one $a$. cheese, a fig and $t$ '. On the basis of these contexts it is not possible to determine what alpant- denotes exactly. In the case of the child, it seems to refer to the illness of the child, but such a connotation would not fit the cases where the word refers to cheese. We may have consider the possibility that we are dealing with two separate words.
If we disregard the use with 'cheese', Götze's (1928: 112) assumption that alpant- is a mere variant of aluant- 'bewitched' seems to make sense semantically (followed in e.g. HW ${ }^{2}$ (l.c.): "behext"). Formally, this is difficult, however, as the stem for 'bewitched' is not aluant-, but aluanz- (q.v.).
Puhvel (HED 1/2: 39) proposes a meaning 'swooned; weak, mild', which he predominantly seems to have chosen on the basis of a presumed etymological tiein with Lith. alpti 'to swoon', alpùs 'weak' etc. Although a meaning 'swooned' would fit the first contexts, a development to a meaning 'mild' (of cheese) seems far-fetched to me.

All in all, I would rather wait for more attestations of this word before speculating what its meaning could be.
alpu- (adj.) 'pointed': nom.-acc.sg. al-pu.
Derivatives: alpuemar (n.) 'point, tip' (nom.-acc.sg. al-pu-e-mar, al-pu-i-mar), alpuēšš- ${ }^{z i}$ (Ib2) 'to be sharp, to be acute' (3sg.pres.act. [a]l-pu-e-eš-zi).

See $\mathrm{HW}^{2}$ A: 61 for attestations. The semantics of this word are in debate. It occurs together with dampu- and it is clear that as a pair the words must denote 'blunt' and 'pointed', but it is not generally accepted which one is which. Güterbock (1988: 170), claims, after a long discussion in which the derivatives alpuemar and alpuēšš- are treated as well, that alpu- must mean 'pointed' (and dатри- therefore 'blunt', q.v.). This view is followed by Hamp (1989), as well, who states that $u$-adjectives always show zero-grade and that alpu-therefore must be reconstructed as *lpu, which he connects with Welsh llym, Breton lemm 'sharp' < *lp-s-mo-. Although Hamp's claim that $u$-stem adjectives have zerograde would fit for e.g. parku- 'high' $<* b^{h} r g^{h}-u$-, it does not for e.g. tēpu- 'little' $<* d^{h} e^{h}-u$-, and therefore a reconstruction $* l p-u$ - is, though possible, not obligatory.
Puhvel's proposal to connect alpu- with Lith. alpùs 'weak' (1975: 61) is based on a translation 'blunt' (following Riemschneider 1961: 25-6), and therefore cannot be maintained anymore (despite its recent revival by Rieken 1999a: 373).

The exact formation of alpuemar is unclear to me.
-allu (1sg.imp.act.-ending): see -llu
aluanz- (stem) 'being bewitched, affected by sorcery' (Sum. $\mathrm{UH}_{7}$ ).
Derivatives: aluanzätar / aluanzann- (n.) 'witchcraft, sorcery, spell' (nom.acc.sg. a-lu[(-ua)-an-za-tar] (OS), al-ua-an-za-tar, al-ua-a-za-tar, al-ua-za-a-tar, al-ua-an-za-ta, dat.-loc.sg. al-una-an-za-an-ni), *aluanzeššar / aluanzešn- (n.) 'witchcraft' (dat.-loc.sg. al-ûa-an-zé-iš-ni, abl. al-ûa-an-zé-eš-na-za, al-ua-an-ze-eš-na-za), aluanzena- (adj. / c.) 'practising sorcery, sorcerous; sorceror' (nom.sg.c. al-ûa-an-zé-na-aš, al-ūa-zé-na-aš, acc.sg. UH్ ${ }_{7}-a n$, gen.sg. al-ua-an-zé-na-aš, al-ua-an-ze-na-aš, dat.-loc.sg. al-ua-an-zé-ni, al-ua-zé-ni, al-ua-an-ze$n i$, al-úa-ze-ni, abl. al-una-zé-na-az, nom.pl.c. al-ua-an-zé-ni-eš, al-úa-an-ze-ni-eš, al-ua-an-zi-in-ni-eš, acc.pl. al-úa-zé-nu-uš, al-ua-an-zi-in-nu-uš), aluanzahh- ${ }^{i}$ (IIb) 'to bewitch' (3sg.pres.act. al-ua-an-za-ah[-hi], 3sg.pret.act. al-ua-an-za-ah-hi-i-it; part. al-ua-an-za-ah-ha-an-t-; impf. al-ua-an-za-ah-hi-iš-ke/a-, al-ua-an-
za-ah-hi-eš-ke/a-), aluanzahha- (gender unclear) 'sorcery' (abl. al-una-an-za-ah-ha-az, instr. al-ua-an-za-ah-hi[-it]).

See $\mathrm{HW}^{2}$ A: 63 f . for attestations. The stem of all these words seems to be aluanz-, which is problematic because of its $-z-$. All etymologies that try to explain aluanzas a word of IE origin, treat it as if it were a participle aluant-, but such a stem is never found (then we would expect e.g. **aluantahh- (like maiandahh-, miiahuuantahh-) or **aluantātar (like maiandatar, miiahuuandatar). The -zreally is inherent to the stem. It therefore is unlikely that the stem is of IE origin.
amiiant- (adj.) 'small': nom.sg.c. a-mi-ia-an-za (KUB 17.10 i 38 (OH/MS)), am-mi-ia-an-za (KUB 30.16(+) i 3 (OH/NS), KUB 45.20 ii 15 (NS)), am-mi-an-za (KUB 28.6 obv. 16b (NS)), acc.sg.c. am-me-ia-an-ta-an (KUB 45.20 ii 10 (NS)), nom.-acc.sg.n. am-mi-i̇a-an (KUB 43.59 i 9 (MH/NS)), am-mi-an (KBo 14.109, 5 (NH)), gen.sg.c. a-mi-an-ta-aš (Bo 2689 iii 27 (NS)), nom.pl.c. a-mi-ia-an-te-eš (KUB 33.66 iii 13 (OH?/MS)), am-mi-ía-an-te-eš (KBo 20.82 iii 15 (MH?/NS)), acc.pl.c. a-mi-ịa-an-du-uš (KBo 12.89 iii 12 (MS)), a-am-mi-ía-an-tu-uš (KBo 3.34 ii 28 ( $\mathrm{OH} / \mathrm{NS}$ )), am-me-ía-an-du-uš (KBo 12.112 obv. 16 (NS)), nom.acc.pl.n. a-mi-ia-an-ta (KUB 17.10 i 38 (OH/MS)), am-me-ia-an[-ta (KUB 33.23 ii 6 (OH/NS)), dat.-loc.pl. a-mi-ía-an-ta-aš (KUB 32.123 iii 24 (NS)), a-am-mi-ia-an-da-aš (KBo 8.107, 7 (NS)).

Derivatives: ${ }^{\text {NINDA }} \boldsymbol{a m i i a n t e s ̌ s ̌ a r}$ (n.) 'miniature bread' (a-mi-an-te-eš-šar (KBo 45.106 rev. 9 (MS)), a-mi-an-te-eš-šar (KBo 47.100a obv. 5 (MS)), a-mi-ia_an-te-eš-šar (KBo 22.193 iv 7 (NS)), am-mi-ía-an-te-eš-šar (KBo 22.186 v 8 (NS)), am-me-ì $a-a n-t[e-e s ̌-s ̌ a r]$ (KUB 30.32 iv 3 (NS?)).

PIE *n-mh ${ }_{2}$ i-ent-
See $\mathrm{HW}^{2}$ A: 66f. for attestations. The word is spelled with single $-m$ - as well as geminate -mm-. As all attestations with geminate -mm- are from NS texts only, whereas all MS texts have single $-m$ - it is clear that amiiant- is the original form of this word. Apparently, $-m$ - fortited to $-m m$ - after the MH period (cf. $\S$ 1.4.7.1.c). The occasional spelling with $a$-am-mi- probably is a mixture of the two and does not necessarily imply length of the first $a$-. The spelling am-me-ia$a n$ - is NS only as well and therefore does not have to be phonologically archaic.
The word is generally seen as the negated form of the participle of the verb $m a i-{ }^{-} / m i$ - 'to grow' (q.v.) (first suggested by Laroche 1967: 174 and Čop 196668: 60), which I have explained as reflecting $* m h_{2}$-oi- $/ * m h_{2}-i-$, so amiiant- goes back to virtual $*_{0}$-mHi-ent-. It is remarkable, however, that this is the only known
case of the alpha privans in Hittite. Note that the NH spelling ammeiant- cannot be used to reconstruct an e-grade formation *-meHi-ent-, on the basis of which it has been claimed that the root underlying mai- / mi- should be *meh $i$ i-.
ammuk: see $\bar{u} k$ / amm-
-an (acc.sg.c.-ending): see -n

```
-an (nom.-acc.sg.n.-ending of }a\mathrm{ -stems)
```

PIE *-om

The ending of the nom.-acc.sg. of neuter $a$-stems is $-a n$, which is generally seen as the regular outcome of *-om. Compare for instance Hitt. iugan 'joke' that directly corresponds to Skt. yugám, Gr. そuүóv, Lat. iugum, OCS igo, Goth. juk, etc. <*iugom.

```
-an (gen.pl.-ending)
```

PIE *-om
The Hittite gen.pl.-ending -an occurs predominantly in OH texts. From MH times onwards, it is replaced by -ǎ̌, and subsequently fell together with the dat.-loc.pl.ending -ǎ̌. The ending -an clearly must be compared to gen.pl.-endings like Skt. $-\bar{a} m, ~ G r . ~-\omega v$, Lat. $-u m$, Lith. $-u$ ũ, OCS $-ъ$, Goth. $-e$. Especially on the basis of Skt. $-\bar{a} m$ and Gr. $-\omega \nu$, this ending often is reconstructed as *-ōm. Kortlandt (1978) convincingly shows that OCS $-b$, Lith. $-\tilde{u}$ as well as OIr. gen.pl. $\mathrm{fer}^{\mathrm{N}}$ all must reflect *-om, and cannot go back to *-ōm. He therefore concludes that the PIE gen.pl.-ending was $*_{-o m}$ and that Skt. - $\bar{a} m$ and Gr. $-\omega v$ must reflect the generalized $o$-stem-variant $*$-o-om. This $*$-om is the direct predecessor of Hitt. -an.
$=(\boldsymbol{a}) \boldsymbol{n}$ (encl. locatival sentence particle)
The locative sentence particle $=a n$ is found in OH and MH texts only and is quite rare. Because of its rareness, it is not totally clear whether $=a n$ behaves like $=(a) s ̌ t a$ and $=(a) p(a)$ in the sense that its $-a$-drops after a preceding $e$ or $i$. The forms $[n]=e-e=n$ (KBo 17.1 +25.3 i 20 (OS)) and $[n=e-e=] n$ (StBoT 25.4 i 15 (OS)) seem to show that $-a$ - indeed drops after $e$, but the form $n u-u=\check{s}-\breve{s} e=a n$ (KBo 6.2 iv 10 ( OS ), with duplicate $n u-u=s ̌-s ̌ i=k a ́ n ~(K B o ~ 6.3$ iv $3(\mathrm{OH} / \mathrm{NS})$ )) shows an $-a$ - that is preserved after $e$. If however, the particle $=a n$ behaves
parallel to $=(a) \check{s t} a$ and $=(a) p(a)$, then it is in complementary distribution with the enclitic pronoun $=a n$ 'him', the $-a$ - of which remains after $e / i$ (cf. e.g. har-ga-nu$m i=a n$ 'I destroy him' (KUB 5.1 iii 56)). Despite the uncertainty I will here cite the particle as $=(a) n$. When the reflexive particle $=z=$ precedes we cannot see the difference between $=(a) n$ and $=\check{s} \check{s} a n . \mathrm{HW}^{2}$ A: 70 even states that all cases of MH $-z a$-an have to be interpreted as $=z=s \check{a} a n$ and not as $=z=a n$.
Besides the unclearness of the formal side, the semantic side of the particle is not very clear either. $\mathrm{HW}^{2} \mathrm{~A}: 69 \mathrm{f}$. suggests that $=(a) n$ has a connotation 'inwards' ("von außen nach innen").
If the semantical range of $=(a) n$ indeed is 'inwards', a connection with PIE * $h_{1}$ en 'in, to' is likely. We may also have to compare the $-n$ in Skt. loc.sg. tásmin (p.c. prof. Kortlandt).
anna- (stem) 'former, old'
Derivatives: anni- (dem.pron.) 'that, the already mentioned one' (nom.sg.c. an$n i-i s ̌$ (KBo 1.42 iii $33(\mathrm{NH}))$ ), annaz (adv.) 'formerly, once upon a time' (an-na$a z(\mathrm{NH})$, an-na-za (MS)), annal(l)a/i- (adj.) 'former, earlier, old' (nom.sg.c. an-na-al-li-iš, an-na-al-liš, an-na-li $i_{x}-i s ̌, ~ a n-n a-a l-l a-a s ̌, ~ a c c . s g . c . ~ a n-n a-a l-l i-i n ~$ (MH/MS), an-na-li-en, an-na-al-la-an, nom.-acc.sg.n. an-na-al-li, an-na-al-laan, an-na-la-an, gen.sg. an-na-al-la-aš, an-na-la-aš, dat.-loc.sg. an-na-al-li, an$n a-l i$, abl. an-na-ak-la-az, an-na-la-az, an-na-la-za, nom.pl.c. an-na-al-li-eš or an-na-al-le-eš, an-na-al-li-iš, acc.pl.c. an-na-al-li-uš, nom.-acc.pl.c. an-na-al-la, gen.pl. an-na-al-la-aš, dat.-loc.pl. an-na-al-la-aš), annišan (adv.) 'formerly, before; once; at the time' (an-ni-ša-an (NH)).

In the vocabulary KBo 1.42 iii 33, we find a form an-ni-iš that glosses Akk. [IŠ$T U A N-N I-I] \check{S}$ and Sum. GÚ.R[I.TA] 'that one, the already mentioned one'. Since this form is only attested here, its Sprachwirklichkeit is in debate. For instance, $\mathrm{HW}^{2}$ A: 81 suggests that anniš is a "[g]host word, durch akkad. anniš und heth. annišan ausgelöst". The words annaz, annal(l)a/i- and annišan are real words, however. Apart from an occasional MS attestation, these words occur in NH texts only. According to $\mathrm{HW}^{2} \mathrm{~A}: 74$ and 81, annaz and annišan replace older karu 'formerly', and annal(l)a/i- has taken over the function of karuili- 'former, older'. It is rightly remarked that "die unregelmäßige Flexion von $a[n n a l(l) a / i$ - $]$ spricht am ehesten fur ein L[ehn]w[ort]" (1.c.).
Melchert (1994a: 74) incorrectly connects the stem anna- with anišiuat 'today' (see under šiuatt-), and states that anna-must reflect *éno- (with "Čop's Law") whereas ani- goes back to *óno-. Since anna- clearly denotes 'formerly' and
anišiuat means 'today', it is in my view impossible that anna- and ani- are etymologically connected (they have an almost opposite meaning!). See at šiuattfor a treatment of anišiuat.
anna- (c.) 'mother' (Sum. AMA, Akk. UMMU): nom.sg. an-na-aš (OS), acc.sg. $a n-n a-a n(\mathrm{OS})$, gen.sg. an-na-aš, dat.-loc.sg. an-ni, all.sg. an-na, abl. an-na-az, $a n-n a-z a$, nom.pl. an-ni-iš, acc.pl. an-nu-uš (OS), an-ni-uš (KBo 22.5 obv. 8 (OH/NS)).
Derivatives: anniiatar / anniiann- (n.) 'motherhood' (nom.-acc.sg. an-ni-ia-tar, dat.-loc.sg. AMA-an-ni).

Anat. cognates: Pal. anna- (c.) 'mother' (nom.sg. an-na-aš, $a-a n-n a-a z=k u-u a-$ $a r$ ); CLuw. $\overline{\boldsymbol{a}} \mathbf{n n a / i -}$ (c.) 'mother' (nom.sg. a-an-ni-iš, an-ni-iš, a-an-ni-eš, acc.sg. $a-a n-n i-i n$, dat.-loc.sg. [a-a]n-ni, MUNUS AMA-ni), annalla/i- (adj.) 'maternal' (nom.-acc.pl.n. an-na-al-la), ānnauann(i)- (c.) 'stepmother' (nom.sg. a-an-na-ua-an-n[i-iš]), (LÚ/MUNUS) ${ }^{\text {änninniiami- (c.) 'cousin' (nom.sg. a-a-an-ni-in-ni-ía- }}$ mi-iš, an-ni-in-ni-i्1a-mi-iš, acc.sg. a-an-ni-in-ni-i्1a-mi-in, a-a-an-ni-in-ni-i्2a-miin), $\overline{\boldsymbol{a}} n \boldsymbol{n}(\underset{\text { İ }}{ } \boldsymbol{a})$ - (adj.) 'maternal' (nom.sg.c. AMA-i-iš, AMA-iš, acc.sg.c. AMA-iin, nom.-acc.sg.n. [a-]an-ni-ia-an, AMA-ía-an, dat.-loc.sg. $a-a n-n i$, abl.-instr. an$n i-i a-t i$, nom.pl.c. AMA-in-zi); HLuw. MATER-nata/i- (c.) 'mother' (acc.sg. MATER-na-tí-na (KARATEPE 1 §3, see discussion below)); Lyd. ẽna- 'mother' (nom.sg. ẽna-k taada-k 'mother and father', ẽnaś, dat.-loc.sg. ẽna入); Lyc. êne/i(c.) 'mother' (nom.sg. ẽni 'mother'); Mil. ẽne/i- (c.) 'mother' (gen. adj. ẽnesi-).

PAnat. *Honno-
See $\mathrm{HW}^{2}$ A: 70f. for attestations. Sporadically, we find a stem anni- in Hittite: acc.pl. anniuš (KBo 22.5 obv. 8) and the derivative anniiatar (KUB $15.35+\mathrm{KBo}$ 2.9 i 31). Perhaps these are Luwianized forms.

The interpretation of the HLuwian form is in dispute. It is hapax in the following context: KARATEPE 1 §3 wa-mu-u ${ }^{\text {DEUS }}$ TONITRUS-hu-za-sa Á-TANA-wa/i-ia URBS MATER-na-tí-na tá-ti-ha i-zi-i-tà [wa=mū Tarhunzas Adanauaia MATER-natin tatin=ha izīta] 'Tarhunt made me mother and father over Adanaua'. We see that, although the translation 'mother' is assured, the phonetic interpretation is uncertain. Do we have to assume that the word was anata/i-, an analogic reshaping of older $* a n a / i$ - on the basis of tata/i- 'father'?

Nevertheless, the other Anatolian languages clearly point to a PAnat. *Honno-. It is quite likely that this word is of onomatopoetic origin.

```
-änna (inf.II-suffix)
    PIE *-ótn-o
```

Despite the fact that this suffix is often spelled without plene $-a$-, there are enough forms with plene spelling (including MS $a$ - $d a-a-a n-n a$ 'to eat', $a-\check{s} a-a$ - $a n-$ $n a$ 'to sit', ua-ga-a-an-na 'to bite') to suggest that its form was -ānna originally. The suffix - $\bar{n} n n a$ forms an infinitive that is usually called infinitive II in order to distinguish it from infinitive I , which is formed with the suffix -uanzi. Nevertheless, to my knowledge there is no semantic difference between inf.I and inf.II. Just as the suffix -uanzi is a petrified case out of the paradigm of the verbal noun in -uar / -uan-, the suffix -ānna clearly originally must have belonged to the paradigm of the verbal noun in -ātar / -ānn- (q.v.). Formally, it can hardly be anything else than an original allative. This means that -ānna must reflect *-ótn-o (see at -ātar / -ānn- and -a for further etymology).
-anna- ${ }^{i}$ /-anni- (imperfective-suffix)
PIE *CC-otn-ói-ei $/ * C C$-otn-i-énti
In the older literature, this suffix is usually called "durative", but this should be abandoned. According to Melchert (1998b), stems in -anna/i- ${ }^{i}$ are used to express progressive, iterative, durative, distributive and ingressive meaning, "all of which share the feature imperfectivity" (o.c.: 414), and therefore I label this suffix as an "imperfective-suffix". Melchert has also shown that the stems in -anna/i- are functionally equivalent to stems in $-\check{s} k e / a_{-}^{z i}$ and $-\check{s} \check{s}(a)-^{i}$, and even that "synchronically they function effectively as suppletive allomorphs of a single morphem" (1998b: 414). About the distribution between the three suffixes, Melchert writes that "[a] survey shows that of stems in anni/a- seven are complementary to -ške/a-, while another ten occur only sporadically (once or twice each) beside regular, productive -ške/a-. There are only two cases of genuine competing stems, in both of which the -anni/a-stem has become lexicalized: nanni/a- 'to drive' beside naiške/a-, the imperfective to nai- 'turn, guide; send' and walhanni/a- 'beat' (frequentative) beside walhiške/aimperfective to walh- 'strike'" (o.c.: 416). The latter statement is not true: nanna- ${ }^{i}$ / nanni- must be regarded as a reduplicated formation of nai- ${ }^{i} / * n i-\left(\right.$ see at $n \bar{e}^{-{ }^{-a(r i)}}$ ) and not as a stem in -anna/i-, because then we should expect $* *$ niianna/i-; the imperfective ualhiške/a- ${ }^{z i}$ to my knowledge only occurs in NS texts and therewith likely is a secondary creation, which means that ualhanna/i- is the original imperfective to ualh- ${ }^{-2 i}$. This means that we indeed must reckon with an original
complementary distribution between the suffixes -anna/i-, -ške/a- and -šš(a)-. For the scope of this book it would go too far to elaborate on the question why a certain verb chose a particular one of these three suffixes to express an imperfective meaning, but I can imagine that the answer to it would give us much more insight into the prehistory of the Hittite aspectual system.
The suffix -anna/i- originally inflects according to the mema/i-class, which means that it shows a strong stem in -anna- besides a weak stem in -anni-, e.g.
 -anna/i- are in younger times on the one hand taken over into the tarn(a)-class (iiiannai, iijannanzi), and on the other into the -ie/a-class (iiianniidazzi). Because $m \bar{e} m a / i$-verbs are polysyllabic verbs that in pre-Hittite times belonged to the dāi/tiiianzi-class, we must assume that verbs in -anna/i- originally belonged to that class as well and that the suffix therefore in fact was *-annai- ${ }^{i} /$-anni-. This is an important establishment for the etymology of this suffix.
Jasanoff (1983: 74f. and 2003: 122f.) claims that the Hittite suffix -anna/ishould be compared to the Skt. grbhāyáti-type and verbs in -anyá-, the Tocharian present suffix - $\tilde{n} \tilde{n}$ - and the Greek verbs in $-\alpha \iota v \omega$, for which he reconstructs a special PIE type with a stem *CC-nh2-i-. He nevertheless needs many analogical changes to account for the attested forms, which makes his theoretical juggling incredible. Oettinger (1992b) also connected Hitt. -anna/i- with Skt. -anyá-, reconstructing a suffix -enié-. This is problematic because to my knowledge -enié- would not yield Hitt. -anniįa- (with geminate!), let alone end up in the mēma/i-inflection.

As I have stated, the suffix -anna/i- must go back to a pre-Hittite suffix *-annai- ${ }^{i}$ / -anni- that inflects according to the dāi/tiiianzi-class. As I have shown in Kloekhorst fthc.a, this class reflects a structure $*$ CC-oi- $/ * C C-i-$. In the case of *-annai- / -anni-, this means that we must analyse it as -ann-ai- / -ann-i-. In my view it is very likely that the element -ann- must be compared to the oblique form of the nominal suffix -ātar / -ānn-, which forms deverbal abstract nouns and from which the inf.II-suffix - $\bar{a} n n a$ has been derived as well. Note that the plene spelling of e.g. píd-da-a-an-ni-ua-an (KUB 14.1 obv .74 (MH/MS)) supports this (and is inexplicable in both Jasanoff's and Oettinger's views). Although opinions on the preform of the suffix -ātar / -ānn- differ (q.v. for discussion), I reconstruct *-ótr / *-ótn-, which means that the suffix *-annai- / -anni- goes back to *-otn-oi/ *-otn-i-.

Note that semantically, a verbal derivation from a deverbal abstract noun fits the imperfective meaning of -anna/i- perfectly. Consider the following line of derivation: the verb iškār- ${ }^{i} / i s ̌ k a r-$ 'to stab' (*skor- / *skr-) is the source of the
abstract noun iškarātar / iškarānn- '(the act of) stabbing' (*skr-ótr / *skr-ótn-), from which iškaranna- ${ }^{i}$ / iškaranni- 'to be (in the act of) stabbing' (*skr-otn-oi- / *skr-otn-i-) has been derived. Similarly: the verb lahhiie/a- ${ }^{z i}$ 'to go on an expedition' (itself a denominal derivative of lāhh-'expedition') is the basis for an abstract noun lahhiīātar / lahhiiānn- 'campaign' on the basis of which the derivative lahhiizanna- ${ }^{\text {i }}$ / lahhiiianni- 'to be on a campaign' is made. Effectively, lahhiianna/i- serves as the imperfective of lahhiie/a-. Not of all verbs that use the imperfective-suffix -anna/i- a corresponding abstract noun in -ātar / -ānn- is attested, but this does not invalidate the reconstruction given here.
${ }^{\text {(MUNUS) }} \boldsymbol{a n n a n e k a}$ - (c.) 'sister by the same mother': acc.pl. an-na-ne-ku-uš (OS), an-na-ni-ku-uš.

Clearly a compound of anna- 'mother' (q.v.) and neka- 'sister' (q.v.).
$\boldsymbol{a n n a n u}$ - $^{\text {i }}$ (Ib2) 'to train, to educate': 3pl.pres.act. an-na-nu-ua-an-zi (KUB 30.42 i 2), 3sg.pret.act. an-na-nu-ut (KBo 3.34 ii 29, 30 (OH/NS), KUB 23.108 rev. 8); part. an-na-nu-ua-an-t- (KBo 1.30 obv. 20, KBo 6.26 ii 27); verb.noun gen.sg. an-na-nu-ma-aš (KUB 31.53+ obv. 9), an-na-nu-um-ma-aš (KUB 26.64 i 4, KUB 13.16, 3 (fr.) (OH/NS)); inf.I an-na-nu-ma-an-zi (KUB 13.16, 1 (OH/NS)); impf. an-na-nu-uš-ke/a- (KUB 40.80 obv. 4).
Derivatives: annanuhha- (adj.) 'trained(?)' (acc.sg.c. an-na-nu-uhb-ha-an (OS)), ${ }^{\text {(KUŠ) } \boldsymbol{a n n a n u z z i - ~ ( c . ) ~ ' h a l t e r ( ? ) ' ~ ( a c c . s g . ~ a n - n a - n u - u z [ - z i - i n ] ~ ( K B o ~ 6 . 1 0 + ~ i i ~}}$ 26), acc.pl. an-na-nu-uz-zi-uš (KBo 17.15 rev. 7)), annanuzziiant- (adj.) 'haltered’ (nom.sg.c. an-na-nu-[uz-zi-ia]-an-za (KBo 17.40 iv 5 (OH/MS)), nom.pl.c. an-na-nu-uz-zi-i_ia-an-te-e[š] (KBo 17.15 rev. 9 (OS))).

PIE * $h_{3}$ n-neu- ?
See $\mathrm{HW}^{2}$ A: 77f. for attestations. The verb and its derivatives are all spelled an$n a-n u$ - and are found from OS texts onwards already.

The adjective annanuhha-, if it really means 'trained', shows a suffix -hhawhich is quite unique in Hittite (the only other possible instance that I know of is parštuhha-, an earthenware cup(?) (q.v.), if this word really is derived from ${ }^{\text {(GIŠ) }}$ parštu- 'leaf, foliage'). The noun ${ }^{\text {(KUŠ) }}$ annanuzzi- 'halter(?)' probably is a normal instrumental noun in -uzzi- derived from annanu-.

It is quite likely that annanu- originally was a causative in -nu-. At first sight it seems to be derived from a verb anna-, but such a verb is unknown in Hittite. Semantically, a connection with the verb aniie/a- ${ }^{z i}$ 'to work, to perform' (q.v.) is
possible (*'to make work' > 'to train, to educate'), but the formal side of this connection is difficult: how do we have to interpret the geminate -nn- and the vowel -a- in annanu-?
Although the verb aniie/a- $<* h_{3} n$-ie/o- is consistently spelled with a single $-n$-, its imperfective anniške/a- always shows geminate -nn-. In my view, this is due to the fact that an original *h3n-skéeo- gave Hitt **aške/a-, after which the $-n-$ was reintroduced with a geminate to prevent it from dropping (a single -n- would synchronically drop in front of any consonant cluster). The causative annanu- in my view is phonologically to be interpreted as /?Nnu-/ and therewith comparable to e.g. $a \check{s}-s \check{a} a-n u-/ 2 S n u-/ ~ ' t o ~ t a k e ~ c a r e ~ o f ' ~ a n d ~ s ̌ a-a \check{s c s} \breve{s}^{a} a-n u-/$ sSnu-/ 'to make sleep' in the sense that it shows fortition of the root-final consonant due to the following $-n$-. The reason that annanu- consistently is spelled with an at first sight superfluous - $a$ - (whereas $a s ̌ s ̌ a n u-~ a n d ~ s ̌ a s ̌ s ̌ a n u-~ a r e ~ r e s p e c t i v e l y ~ s p e l l e d ~ a \check{s ̌-n u-~ a n d ~}$ $\check{s} a$ - $a \check{\text { š-}} n u$ - as well) lies in the fact that a spelling **an-nu- would be too intransparent (it would point to $/ \mathrm{RaNu}-/$ ).

If TochAB en- 'to instruct' would indeed go back to a causative formation from the root * $h_{3}$ en-, it would show a similar semantic development as annanu-.
(4) $\bar{a} n n a r i-: ~ s e e ~ a t ~ i n a r ~ a ~-~-~$
$\boldsymbol{a n a s ̌ s ̌ ( a ) - ~ ( g e n d e r ~ u n c l e a r ) , ~ l o w e r ~ p a r t ~ o f ~ t h e ~ b a c k : ~ g e n . s g . ~} a-n a-a \check{s}-\check{s} a-a \check{s}=\check{s} a-a \check{s}$ (KUB 35.148 iii 24).

This word occurs only once:
KUB 35.148 iii
(20) $n=a-a n=\check{s} i$ EGIR-pa iš-ki-ša-az ḩu-i-nu-mi [ ]
(21) $n u$ UR.TUR SAG.DU- $i=\check{s}-s ̌ i ~ a n-d a ~ e-e p-m i ~ U[R . T U R ~ S A G . D U-a \check{]}]$
(22) i-na-an li-ip-du me-li-i-i $a-[a \check{s}=\check{s} a-a s ̌]$
(23) i-na-an KI.MIN ${ }^{\text {UZU }}$ ZAG.UDU- $a s ̌ i s ̌-k i-s ̌ a-a\left[s^{?}=\check{s} a-a \check{s}(?)\right]$
(24) $i$-na-an KI.MIN $a$-na-aš-ša-aš=ša-aš i-n[a-an KI.MIN]
(25) $a r$-ra- $a \check{s}=\check{s} a-a s ̌ i-n a-a n \mathrm{KI} . \mathrm{MIN}^{\mathrm{UZU}}{ }_{\mathrm{X}}[\ldots$-. $i$-na-an KI.MIN]
(26) ge-e-nu-ua-aš=ša-aš i-na-an KI.MIN ${ }^{\mathrm{U}}$ [ ${ }^{\mathrm{ZU} ?} \mathrm{x}$ i-na-an KI.MIN]
(27) pár-aš-na-aš=ša-aš i-na-an li-i[p-du]
'I make it run from his back. I take in a puppy for his head and the puppy must lick away the disease of the head, the disease [of his] meli- likewise, the disease of the shoulders (and) [his] back likewise, the dis[ease] of his anašša- [likewise], the disease of his arse likewise, [the disease of his] x[.. likewise], the disease of
his knees likewise, [the disease of his] x[.. likewise] and let it li[ck away] the disease of his paršna-'.

We see that $a n a \check{s} \check{s} a s ̌=s ̌ a s ̌$ is mentioned between ${ }^{\text {UZU }}$ ZAG.UDU- $a \check{s}$ iškiša $[\check{s}=\check{s} a \check{s}]$ 'shoulders (and) his back' and arraš=šǎ̌ 'his arse', which would indicate that it denotes the lower part of the back.
Formally, the word anaššaš=šaš must be regarded as a gen. of either a stem $a n a s ̌ s ̌-$ or a stem anašša-. Note that the spelling $a-n a-a \check{s}-\check{s} a$ - (and not e.g. **an-aš$\check{s} a$-) indicates that the second $-a$ - is a real vowel, so /?anaSa-/ or /?naSa-/.
Puhvel (HED 1/2: 63f.) states that "the likely etymon is IE *omso- 'shoulder'", but this is problematic for a few reasons. First, anašša-does not mean 'shoulder' but clearly refers to the lower part of the back. Secondly, the formal aspects of the etymology are quite problematic. The word for 'shoulder' probably was an $s$-stem originally (compare Skt. ám̆́sa- to Lat. umerus), so $* h_{2} e m$-es- ( ${ }^{*} h_{2}$ - because of TochA es, TochB ātse). If Hittite would display a preform $* h_{2} o m-s$ - (thus Puhvel (HED 1/2: 63): "Hitt. anassa- showing anaptyctic resolution of the -mscluster"), we would expect Hitt. **ašš- (compare Hitt. haššu- 'king' < *h $h_{2}$ ems-$u$-). If Hittite would reflect a preform $* h_{2} o m-o s-$, then we cannot explain why Hittite shows an $-n$ - where the other languages display * $m$. As the Hittite spelling with $a-n a-a \check{s}-s \check{s} a$ - points to a real vowel - $a$ - in /RanaSa-/ or /?naSa-/, an etymology involving the word $* h_{2}$ em-es- is impossible.
annaššar / annašn- (n.) 'pillar?': nom.-acc.sg. an-na-aš-šar (KUB 43.75 i 12, 20 ( $\mathrm{OH} / \mathrm{NS}$ )), erg.sg. an-na-aš-na-an-za (KUB 17.10 iv 9 (OH/MS)).

See Puhvel HED 1/2: 64 for attestations and discussion. He proposes to interpret this word as a derivative of aniie/a- ${ }^{z i}$ 'to work, to carry out' (lit. 'creation' > 'establishment'), but the geminate -nn- in annaššar / annašn- vs. the single -n- in aniie/a- is not favourable to this etymology.
${ }^{\text {(MUNUS) }}$ annauanna- (c.) 'stepmother': gen.sg. an-na-ua-an-na-aš (KUB 29.34+ iv 12); broken ${ }^{\text {MUNUS }}$ an-na-u[a-...] (621/f, 10).

Anat. cognates: CLuw. ānnauann(i)- (c.) 'stepmother' (nom.sg. a-an-na-ua-an-$n[i-i s ̌]$, acc.sg. an-na-ua-an-ni-in, an-na-u-ua-an-ni-in).

See Puhvel HED 1/2: 65 for attestations. Note that $a n-n a-u a^{-} a n-n a-a \check{s}=\check{s} a-a \check{s}$ (KUB 29.34+ iv $12=$ Hitt. Laws §196) is duplicated by ${ }^{\text {MUNUS }}$ an-na-ua-at ${ }^{?}-t^{2} l^{?}$ $a \check{s}$-ša in KBo 6.26 iii 30. The connection with CLuw. annnauann(i)- suggests, however, that annauanna- is the correct Hittite reading of this word.

The word clearly is a derivative in -uanna- of anna- 'mother' (q.v.), which view is supported by CLuw. tātauann(i)- 'stepfather' besides tāta/i- 'father'. The origin and meaning of this suffix is unclear. Compare perhaps ${ }^{\text {(GIŠ) }}$ mariiauanna-, a part of the house (q.v.).
anni- 'that, the already mentioned one': see anna- 'former, old'
-anni- (imperfective-suffix): see -anna- ${ }^{i}$ / -anni-
aniie/a- ${ }^{z i}$ (Ic1 > Ic2) 'to work; to carry out, to produce, to treat' (Sum. KIN): 1sg.pres.act. $a-n i-e-m i$ (OS), a-ni-íla-mi, 2sg.pres.act. a-ni-ia-ši (MH/MS), 3sg.pres.act. a-ni-e-ez-zi (OS), a-ni-ez-zi (OS), a-ni-ía-az-zi, a-ni-ina-zi, a-ni-ia-e$e z-z i(K U B 41.15$ obv. 13), an-ni-ia-az-zi (KUB 44.61 iv 6), 1pl.pres.act. a-ni-ía-u-e-ni (KBo 14.111, 16), 2pl.pres.act. a-ni-ia-at-te-(e-)ni, 3pl.pres.act. a-ni-ia-an$z i$ (MH/MS), a-ni-an-zi, an-ni-an-zi (IBoT 3.148 i 70 (MH/NS)), 1sg.pret.act. a-ni-e-[nu-un] (OS), a-ni-ia-nu-un, 3.sg.pret.act. a-ni-i-e-et (KUB 7.41 i 16 (MH/NS), a-ni-ía-at, a-ni-at, 1pl.pret.act. a-ni-ia-u-(e-)en, 3pl.pret.act. a-ni-i-e$e[r]$ (KUB 23.54 rev. 6 (NS)), a-ni-i-er (HKM 54, 17 (MH/MS), KUB 5.6 iii 17), a-ni-er (KUB 33.34 obv. 8), a-ni-i_ia-er (KBo 12.3 iii 10 ( $\mathrm{OH} / \mathrm{NS}$ )), 2sg.imp.act.
 ni-ia-at-ta-at; part. a-ni-i ia-an-t- (MH/MS), a-ni-an-t-; verb.noun. a-ni-ia-u-ua-ar; inf.I $a$-ni-i̇a-u-una-an-zi (MH/MS); impf. an-ni-iš-ke/a- (OS), an-ni-eš-ke/a-, a-an-ni-eš-ke/a- (HKM 55 rev. 26 (MH/MS)), a-ni-iš-ke/a-.
Derivatives: aniiatt- (c.) 'work, task; ritual gear or garments; message' (nom.sg.c. a-ni-ía-az (KUB 13.20 i 20, KUB 13.8 obv. 18), acc.sg.c. a-ni-ia-at-ta-an (KBo 30.39 iii 14 (OH/MS), KUB 7.41 iv 13 (MH/NS)), gen.sg. a-ni-ia-at-ta-aš, dat.-loc.sg. KIN-ti, abl. a-ni-i_ia-at-ta-az, coll.pl. a-ni-ia-at-ta (OS), a-ni-į्a$a t-t e(\mathrm{KBo} 30.80$ rev. 5 (MH/MS)), a-ni-ia-at-ti (OH/NS), acc.pl.c. a-ni-ia-ad-duuš (KUB 10.45 iv 45 (OH/NS)), dat.-loc.pl. a-ni-ia-at-ta-aš); aniūr (n.) 'prestation, ritual' (nom.-acc.sg. a-ni-u-ur (KBo 15.19 i 18 (NS), KBo 15.29 obv. 6 (NS), KBo 19.144 i 25 (NS), KBo 20.87 i 7 (NS), KUB 9.15 iii 20 (NS), KUB 12.58 ii 31 (NS), KUB 22.40 iii 29 (NS), KUB 29.4 i 7, 15 (NH), KUB 32.123 ii 33, 47, iii 11 (NS)), a-ni-ur (KUB 46.38 ii 6 (NS), KUB 46.42 ii 12 (NS)), a-ni-úúr (KBo 19.92, 4 (OH/NS), KUB 5.6 ii 52, 59 (NS)), gen.sg. a-ni-u-ra-aš (KUB 35.18 i 9 (MS), KBo 21.1 iv 3 (MH/NS)), a-ni-ur-aš (KBo 12.126+ ii 19 (NS)), dat.-loc.sg. a-ni-u-ri (KUB 35.54 iii 45 (MS)), a-ni-ú-ri (KUB 5.6 iii 30 (NS)), erg.sg. a-ni-u-ra-an-za (KUB 41.9 iv 38 (OH/MS))), aniiauuar (n.) 'id.' (nom.-
acc.sg. a-ni-ia-u-ua-ar (KBo 15.21+ i 15), erg.sg. a-ni-i्टa-ua-ra-an-za (KBo 10.45 iv 40 (MH/NS))), see annanu- ${ }^{z i}$.

Anat. cognates: Pal. aniịe/a- 'to do, to work' (2sg.pres.act. a-ni-i-ia-ši, 3sg.pres.act. a-ni-et-ti, 1sg.pret.act. a-ni-e-eh-ha, 2sg.imp.act. a-ni-ia); CLuw. $\overline{\boldsymbol{a}} \boldsymbol{n n i}$ - 'to carry out, to treat' (3sg.pres.act. a-an-ni-i-ti, $a$-a-an-ni-i-[ti], an-ni-i-ti, 2sg.imp.act. $a-n i-i a(?$ in broken context)).

PIE * $h_{3} n$-ie/o-
See $H^{2}$ A: 81f. for attestations. The verb itself is consistently spelled $a$-ni-, whereas in its imperfective we almost consistently find an-ni-, with a geminate $-n n-$. The discrepancy between these two stems (with and without geminate -nn-) has led to much debate about the historical interpretation of this verb. Besides this, the IE cognates (Lat. onus 'load, burden' and Skt. ánas- 'cart') are in dispute regarding their interpretation as well.
Both Lat. onus and Skt. ánas- are neuter $s$-stems, so it is likely that they both go back to one pre-form. As neuter $s$-stems as a rule show $e$-grade in their stem, it is attractive to reconstruct an initial $* h_{3}$. The difficulty lies in the fact that Lat. $o$ corresponds to short $a$ in Skt, which apparently has not been subject to Brugmann's Law. Often, this has been explained by assuming that the root involved was $* h_{3} e n H-$, the second laryngeal of which would block Brugmann's Law in Sanskrit as it closed the syllable in which *o was found: *HonH-es-. Lubotsky (1990), however, convincingly argued that $* h_{3} e$ is not subject to Brugmann's Law in Sanskrit, and that a development *h3en-es- > Skt. ánas- is regular.
For Hittite, the reconstructed root $* h_{3} e n H$ - is used by e.g. Melchert to explain the outcomes aniie/a- besides anniške/a-. In 1994a: 85 he states that a present *enH-ie/o- would lose its laryngeal regularly before $*_{i}$, giving aniie/a-, wheres in *enH-ie-skéló- we would first find pretonic syncope, yielding *enHi-skéló-, after which *VnHV >VnnV, and therefore anniške/a-. There are a few problems with Melchert's scenario, however. Firstly, I know of no other examples of pretonic syncope, which must have been very old according to Melchert's theory, as it must have occurred before the loss of laryngeals before $*_{i}$. Secondly, I think that his proposed preforms are morphologically unlikely. Verbs in *-ie/o- usually show zero-grade in the root. The same goes for imperfectives in *-skéo-. Moreover, *-ske/o-imperfectives originally were derived from the bare root and not from the present stem, as we can see in impf. zikke/a- ( $* d^{h} h_{l}$-skée/o-) from the present stem dai- / ti- 'to place, to put' $\left({ }^{*} d^{h} h_{1}-(o) i-\right)$.

We had better search for another solution. If we assume that the other IE languages point to a root $* h_{3} e n$ - (with no second laryngeal), then the usual way of deriving a *-ie/o-present of this root is by making a formation $* h_{3} n$ - iéló-. As I have tried to show in my article on the outcome of initial laryngeals in Anatolian (Kloekhorst fthc.c), a preconsonantal initial $* h_{3}$ would in this position merge with * $h_{l}$ in PAnat., yielding Hitt. aniie//a- = /?nié/á-/ by regular sound laws.

In the case of the imperfective, we would on formal grounds expect that it was formed as *h3n-ské/ó-. Such a form would regularly have given Hitt. **aške/a-, compare * $g^{w h} n s k$ ḱló- $>* k^{w} n s k e / a->$ kuuaške/a- (cf. Kloekhorst fthc.e). Just as kuuaške/a- was too intransparent and is replaced by kuenniške/a- with geminate $-n n$ - to prevent the nasal from dropping again in front of the consonant cluster, this $* * a s ̌ k e / a-$, too, was too intransparent and was replaced by anniške/a- = /?Niské/á-/, with geminate -nn-. A similar process could be visible in annanu- ${ }^{-2 i}$ 'to educate, to train' (q.v.) if this verb is really an old causative of aniie/a-.
The details of CLuw. $\bar{a} n n \bar{l}-$ are unclear. Melchert (1993a: 17) states that the "geminate -nn- in the ānni- form is due to "Čop's Law": *énye- > *ényi- > *éni$>\bar{a} n n i$-". Again, a reconstruction *énie- to my mind does not fit our understanding of PIE morphology. In my view, we know too little about the practice of plene writing and gemination of resonants in CLuwian to give too much value to it.
See Rieken 1999a: 107f. for an extensive treatment of the derived noun aniiatt-, where she argues that the word originally was commune and that the OS form $a$ $n i-a t=s ̌ e-e t(K U B 36.100$ obv. 13), seemingly a nom.-acc.sg.n., must be emended to $a-n i-a t\langle-t a\rangle=\check{s} e-e t$, a coll.pl., which is quite commonly found of this word.

The noun aniūr must be the regular outcome of $* h_{3}$ niéur $>/$ nniór/ (see $\S$ 1.3.9.4.f for a treatment of the spelling a-ni-ú-úr). Since this form was not recognized as a derivative in -uar anymore, the heteroclitic inflection was given up. Later on, a secondary aniizaunar was created, a synchronic derivation in -uar of the stem aniia-.

```
\(\overline{\boldsymbol{a}} \boldsymbol{n k i}\) (adv.) ‘once’ (Akk. \(1=S ̌ U): a-a n-k i(\mathrm{KUB} 4.2\) iv 36, 38).
    PIE *Hoionki
```

The word occurs written phonetically only twice. The bulk of the attestations show 1 -an-ki or akkadographically $1=\check{S} U$. The ending -anki is also found in 2-an$k i$ 'twice' and 3-an-ki 'thrice' and is connected by Rosenkranz (1936: 249) with
 the latter only occurs with the numerals $4+$, whereas Hitt. -anki is only found in

1-3. Nevertheless, of $a$-an-ki only the $a$ - can be regarded as the stem denoting 'one'. Puhvel (HED 1/2: 73) proposes to interpret $a$-an-ki as reflecting *Hoionki, connecting it with the root $* \mathrm{Hoi}$ - seen in e.g. Skt. éka- 'one', Gr. oĩoç 'alone, lonely', etc. This seems formally as well as semantically attractive to me. The question remains whether we should interpret this form as $*$ Hoi-onki or $*$ Hoio$n k i$.
$\boldsymbol{a n k} \boldsymbol{u}$ (adv.) 'fully': an-ku (OS).
See $\mathrm{HW}^{2}$ A: 95 for attestations. The adverb denotes 'fully, totally' or similar ( $\mathrm{HW}^{2}$ : "ganz und gar, unbedingt") and occurs from OS texts onwards. The historical interpretation is difficult. It possibly contains the enclitic element $=k k u$ 'and' (q.v.), but the element an- remains unclear to me.
$\overline{\boldsymbol{a}} \mathrm{nsš}^{i}$ ( $\mathrm{IIb}>\mathrm{Ic} 1$ ) 'to wipe': 3sg.pres.act. a-an-ši (KBo 30.158, 9 (MS), KBo $21.80+20.44+30.158$ obv. 35 (MS), KUB 30.41 i 7 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 30.164 iv 21 (OH/NS), KBo 11.22 iv 12 (NS), KBo 44.175, 5 (NS), IBoT 4.139 obv. 8 (NS), etc.), $a$ - $a$-an-ši (KUB 30.41 i 14 ( $\mathrm{OH} / \mathrm{NS}$ )), $a$ - $a n[-a s ̌]-z i$ (KBo 19.129 obv. 29 (NS)), $a$-an-aš-zi (KUB 8.38 iii 21 (NS)), 3pl.pres.act. $a$-an-ša-an-zi (KBo 11.73 rev. 18 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 10.18 ii $31(\mathrm{OH} / \mathrm{NS})$, KUB 11.16 iv $10(\mathrm{OH} / \mathrm{NS})$, KUB 11.35 i 27 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 25.3 iii 44 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 4.9 ii 19, vi 23 (NS), KBo 22.189 v 13 (NS), KUB 25.16 i 29 (NS), KUB 41.52 iv! 6 (NS), etc.), an-ša-an-zi (KBo 20.116 rev.? 6 (MH/NS), KBo 46.130 rev. 15 (NS), KUB 49.79 i 4 (NS)), $a$-an-ši-an-zi (VSNF 12.2 vi 8 (NS)), a-a[n]-ši-ía-an-zi (KUB 29.40 ii 14 (MH/MS)), ạ-an-ši-i ic $[a-a n-z] i(K B o ~ 8.49,5(M H / M S)), 1$ sg.pret.act. $a$-an-šu-un (KUB 41.19 rev. 10, 11, 12, 14 (MH/NS)), an-šu-un (KUB 24.13 iii 19 (MH/NS), KBo 35.95, 6 (NS)), 2sg.imp.act. $a$-an-aš (KBo 21.8 ii 4 (OH/MS), KUB 33.5 ii 7 ( $\mathrm{OH} / \mathrm{MS}$ ), IBoT 3.141 i 14 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.imp.act. $a$ - $a n-a s ̌$-du (KUB 7.1 ii 68 ( $\mathrm{OH} / \mathrm{NS}$ )); part. $a-a n-s ̌ a-a n-t-(6 x)$, an-ša-an-t- (26x); impf. $a$-an-aš-ke/a- (KBo 21.8 ii 3 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 19.163 i 23, iv 4 ( $\mathrm{OH} / \mathrm{NS}$ )), a-an-ši-ke/a- (KBo 23.23, 77 (MH/MS)), $a$-an-ši-iš-ke/a- (KUB 24.13 iii 16 (MH/NS)).
Derivatives: see hane/iššz ${ }^{z i}$.
Anat. cognates: CLuw. am(ma)šša- / am(ma)šsí(ia)-'to wipe' (3pres.sg.act. $a m-m a-a \check{s ̌-s ̌ i-t i, ~ 3 p l . p r e s . a c t . ~[a m-] m a-a s ̌-s ̌ i-i ́ c i-a n-t i, ~ 3 s g . p r e t . a c t . ~ a m-m a-<a \check{s}-\curlywedge s ̌ a-~}$ $t[a]$, 3pl.pret.act. $a m-m a-a \check{s}-\check{s} a-a n-d a)$.
IE cognates: Gr. $\dot{\alpha} \mu \dot{\alpha} \omega$ 'to mow, to reap', OE māwan, OHG māwen, māen 'to mow'.

PIE * $h_{2}$ ómh $h_{1}$-s-ei

Originally, this verb is inflected according to the hi-inflection. The $m i$-form $a$ - $a n$ $a \check{s}-z i$ is found in NS texts only. From the MH period onwards we find a few forms that show a stem $\bar{a} n s ̌ i i e / a-{ }^{z i}$, which is secondarily created on the basis of 3 sg. $\bar{a} n s ̌ i$. The bulk of the attestations show initial plene $a$. All forms that show initial $a n-\check{s}-$ only are from NS texts and cannot be used for the determination of original ablaut.

In 1988b, Melchert (211f.) argued that $\bar{a} n s ̌$ - is cognate with CLuw. $a m(m a) \check{s} \check{s}(a / i)$ - 'to wipe' and further connected these verbs with Gr. $\dot{\alpha} \mu \alpha \dot{\alpha} \omega$ 'to mow, to reap', OE māwan and OHG māwen, māen 'to mow', reconstructing *am- $h_{l^{-}} / * m-e h_{l^{-}}$. For a parallel semantical development, he refers to Hitt. uarš- ${ }^{i}$ 'to reap, to harvest, to wipe' (q.v.) which reflects PIE *uers- 'to wipe'. Later on, he seems to have abandoned the IE etymology, and states that Hitt. $\bar{a} n s ̌-$ and CLuw. am(ma)š̌sa/i- reflect PAnat. *óms-, without reference to the other IE words (1994a: 164). This reconstruction is problematic, however, as a sequence *VmsV > Hitt. VššV (cf. ḩaššu- 'king' < *h $h_{2} e m s u$-; hā̌̌si 'gives birth to' < *h $h_{2}$ ómsei).

In Kloekhorst fthc.f I have argued that the original etymological connection as given by Melchert may make sense. Gr. á $\mu$ á $\omega$ 'to mow, to reap' and OE māwan, OHG māwen, māen 'to mow' point to a root $* h_{2}$ meh $_{1}$ - (note that Gr. á $\mu \alpha \dot{\alpha} \omega$ must be denominative of a noun $* h_{2} m h_{1}$-eh $h_{2}$, cf. Schrijver 1990: 20). If this root is cognate with the Anatolian forms, then these must show an $s$-extension and go back to $* h_{2} o m h_{1}-S$-ei (showing a similar Schwebe-ablaut as we see in e.g. tamāšš$\ll * d m e h_{2}-s$ - from the root $* d e m h_{2^{-}}$'to tame', cf. at tamāššs- ${ }^{z i} /$ tame/išš-). In my
 laryngeal was dropped on front of $*_{o}$ as I described in Kloekhorst fthc.c. The development * Vmh $h_{l} V>$ Hitt. $V n s ̌ V$ does not contradict the forms haššu- and hā̌̌i that show *VmsV>V̌̌šV.
As all hi-verbs, ${ }^{*} h_{2} e m h_{l} s$ - must originally have shown ablaut as well. This means that beside the singular $* h_{2} o m h_{1} s$-ei we expect a plural form $* h_{2} m h_{l} s$-enti. In Kloekhorst fthc.f I have argued that this weak-stem form regularly would yield
 a form that is indeed attested as part of the paradigm hane/ǐ̌š- ${ }^{z i}$ 'to wipe' (q.v.). I therefore assume that the original ablauting paradigm $* h_{2} o ́ m h_{1}-s-e i: * h_{2} m h_{1}-s-$ énti regularly yielded $\bar{a} n s ̌ i$ : ḩane/iššanzi, of which both stems formed their own
 stem $\bar{a} n s \check{s}$ - which explains the lack of ablaut in this verb) and on the other hand we find hane/išzi, ḩane/iššanzi (generalization of the stem hane/išš-).
-ant- (part.-suffix)
PIE *-ent-
The Hitt. participle is formed with the suffix -ant-. In ablauting verbs it is attached to the zero-grade root: kunant- 'killed' (from kuen-zi / kun- 'to kill'), appant- 'seized' (from epp- ${ }^{z i}$ / app- 'to seize'), piiant- 'given' (from pai- ${ }^{i} /$ pi- 'to give'), etc. Although in almost all cases the participle has a passive meaning ('killed', 'seized', 'given'), we come accross a few cases where the participle can have an active meaning: ašant- 'being' (from $e \check{s c}^{-2 i} / a \check{s}$ - 'to be'), akuuant'drinking' (from $e k u^{-z^{i}} / a k u-$ 'to drink'), adant- 'eating' and 'eaten' (from ed- ${ }^{z i} /$ $a d-$ 'to eat'). The participles do not show ablaut and show the normal consonantinflection:

| nom.sg.c. | kunanza | $/ \mathrm{k}^{\mathrm{w}}$ nánts/ |
| :--- | :--- | :--- |
| acc.sg.c. | kunantan | $/ \mathrm{k}^{\mathrm{w}}$ nántan/ |
| nom.-acc.sg.n. | kunan | $/ \mathrm{k}^{\mathrm{w}}$ nán/ |
| gen.sg. | kunantaš | $/ \mathrm{k}^{\mathrm{w}}$ nántas/ |
| dat.-loc.sg. | kunanti | $/ \mathrm{k}^{\mathrm{w}}$ nánti/ |
| etc. |  |  |

Note that nom.-acc.sg.n. kunan $/ \mathrm{k}^{\mathrm{w}}$ nán/ must reflect older $* / \mathrm{k}^{\mathrm{w}}$ nánt/ in which word-final $-t$ has regularly been dropped.
It is obvious that Hitt. -ant- must be etymologically cognate to the participlesuffix *-ent- as visible in many IE languages: Skt. adant- = Lat. edent- 'eating', Gr. $\tau \bullet \theta$ cic < *-ent-s 'placing', etc. It is remarkable, however, that in all IE languages (including Tocharian) this participle has an active meaning. This could indicate that in PIE the participle in *-ent- in principle could have both meanings (just as Hitt. adant- can denote both 'eating' and 'eaten'), depending on the valencies, and that in Anatolian the passive meaning was generalized (except in the archaic cases ašant-, akuuant- and adant-), whereas in post-Anatolian PIE the active meaning was generalized.
It is remarkable that in the Luwian languages participles are formed with the etymologically unrelated suffix -mma/i-. Here we only find a remnant of the suffix *-ent-, namely in the name of the Storm-god, CLuw. ${ }^{\mathrm{d}}$ Tarhuuant- / ${ }^{\mathrm{d}}$ Tarhunt-, HLuw. /trhunt-/, Lyc. Trqqñt-, which is the lexicalized (active!) participle of the verb tarhu- 'to conquer' (etymologically identical to Skt. tūrvant'conquering', see at tarhu- ${ }^{z i}$ ). On the basis of the ablaut visible in this word (CLuw. nom.sg. ${ }^{\mathrm{d}}$ Tarhuıanza vs. oblique ${ }^{\mathrm{d}}$ Tarhunt-) it is clear that originally the
participle in *-ent- must have shown ablaut. The Anatolian evidence points to a paradigm nom.sg. *CC-ént-s, acc.sg. *CC-ént-m, gen.sg. *CC-nt-ós, which fits for instance the Vedic system as well, compare the paradigm of 'being': nom.sg. sán $\left(<*\right.$ sánt-s $<* h_{l} s$-ént-s), acc.sg. sántam $\left(<* h_{l} s\right.$-ént-m), gen.sg. satás $\left(<* h_{l} s\right.$ $n t$-ós). Nevertheless, this paradigm must have been a quite recent rebuilding within PIE from an older system *CéC-nt-s, *CC-ént-m, *CC-nt-ós, traces of which still survive in the reconstructed paradigm for 'wind': * $h_{2} u e ́ h_{1}-n t-s, * h_{2} u h_{1}$ -ént-m, * $h_{2} u h_{1}-n t-o ́ s$ (see at huuant-), originally a participle of the verb $* h_{2} u e h_{l^{-}}$ 'to blow' (cf. Beekes 1985: 64-77; Kortlandt 2000).
-ant- (erg.-suffix)
PIE *-ent-
It is a well known fact that in Hittite neuter nouns cannot function as the subject of a transitive verb. If, however, a situation needed to be expressed in which a neuter noun had to function as the subject within a transitive sentence, this noun could be "animatized" with a suffix -anza. I have called this form an "ergative" throughout this book. Compare e.g. KUB $19.2+$ KUB 14.14 rev. (22) $n u$ KUR ${ }^{\mathrm{URU}} \mathrm{H} a-a t-t i=i{ }^{2} a \operatorname{a-pa-a-aš~iš-ha-na-an-za~ar-ha~nam-ma~zi-in-ni-[it]~‘Furthermore,~}$ that bloodshed has finished off the land of Hatti', in which išhananza is the animatized form of ēšhar / išhan- 'blood(shed)'. Although the suffix -anza in some literature is regarded as a real case-ending, it clearly is not as can be seen by the fact that forms displaying an "erg.pl." in -anteš occur as well (compare KUB 17.27 iii (9) $n=a-a t=z a$ am-me-el ud-da-na-an-te-eš tar-[hu]-e-er 'My words will conquer them', in which uddananteš is an "erg.pl." of the neuter noun uddar / uddan-). This means that -anza and -anteš have to be analysed as nom.sg.c. and nom.pl.c. respectively of a suffix -ant-. Without a doubt this suffix -ant- must be equated with the suffix -ant- as found in the participle, which reflects *-ent(q.v.).
anda postpos., prev. 'in(to), inwards; (with)in; in addition': an-da (OS).
Derivatives: andan (adv.) '(with)in, inside; in(to)' (an-da-an (OS)).
Anat. cognates: CLuw. $\overline{\boldsymbol{a}} \boldsymbol{n t a}$ (prev.) 'in(to)' ( $a-a n-t a, a-a-a n-t a$, $a n-t a, a-a n-d a$, $a n-d a$ ), andan (adv.) 'inside(?)' (an-da-an); HLuw. anta (prev., adv., postpos.) '(with)in, in(to)' ( $a$-ta, a-tá), antan 'into' ( $a$-ta-na (KARKAMIŠ A31 §8), $\boldsymbol{a n t a t i l a / i -}$ (adj.) 'internal' (nom.sg.c. a-tá-ti-li-i-sa (BABYLON 1 §11)); Lyd. ẽt(prev.); Lyc. ñte (prev., adv.) 'inside'.
IE cognates: OLat. endo 'into', OIr. and 'in it', Gr. évסov (adv.) 'inside'

PIE * $h_{l}$ ndo( $m$ )
In OH texts the two adverbs anda and andan are distinct in use: anda has a directional function, denoting 'into, inwards' whereas andan functions as a locative, denoting 'inside, within'. This indicates that originally anda and andan are all. and acc. respectively (compare para$<*$ pro besides peran $<$ *perom) of a noun that further is unattested in Hittite. The absence of forms with an enclitic possessive pronoun (like e.g. peran=tet 'in front of you' or šer=šet 'on top of it') shows that the lexicalization as adverbs occurred earlier with anda(n) than with the other adverbs. The distinction between directional anda and locative andan becomes blurred within the Hittite period, and in the younger texts there is no semantic difference anymore between anda and andan.
From the beginning of Hittite studies onwards, anda(n) has been connected with Gr. हैv Nevertheless, the OIr. cognate and 'in it' must reflect a zerograde *hindo(m) (McCone 1992: 26), which reconstruction formally is possible for Gr. हैv $\delta o v$ and OLat. endo as well (cf. Schrijver 1991: 58-9). Within the Anatolian languages, Lyc. ñte 'inside', too, points to $* h_{1} n d o(m)$ since a preform $* h_{1}$ éndo $(m)$ would have yielded Lyc. **ẽte. On the basis of the OIr. and Lyc. words I conclude that all IE forms reflect $* h_{l} n d o(m)$. The absence of accentuation in Hittite (no plene vowels) is explained by the establishment that in poetic verse local adverbs and postpositions are unstressed (cf. Melchert 1998a: 485).

See Kloekhorst 2004: 42f. for an explanation of the HLuwian form.

```
-anta: see -anta(ri)
```

antaka- (gender unclear) '?': dat.-loc.sg. an-ta-ki-i=š-ši (KUB 11.20 i 13, KUB 45.3 iv 17), an-ta-ki-it-ti (KUB 11.25 iii 9), an-ta-ki-it-ti-i=š-ši (KUB 7.5 i 7), $a\left[n-t a{ }^{?}-\right] k i(K U B 43.62$ i 2), all.sg. $a n-t a-g a-a=\check{s}-\check{s} a(K U B 36.44$ iv 12).

Traditionally, this word is translated as 'chamber', but Melchert (2003e), suggests that antaka-should rather be interpreted as 'loins'. I must say that I do not find his line of reasoning very convincing, and would rather regard the meaning of antaka- as unclear. Both the meaning 'chamber' as well as 'loins' (through 'intestines') are though to have derived from anda 'inside' (cf. Puhvel HED 1/2: 77 for 'chamber' and Melchert (l.c.) for 'loins'). Melchert even goes sofar in interpretating antaka- as anda $+k i$ - 'that which lies inside'. In my view, the fact that besides the normal cases all.sg. antaga and dat.-loc.sg. antaki, we also find a

Hurrian dat.-loc.-ending in the form antakitti, strongly points to a Hurrian origin of this word. I therefore remain very sceptical about the the supposed connection between antaka- and anda.
antara- (adj.) 'blue' (Sum. ZA.GÌN): acc.sg. an-ta-ra-an (KBo 27.131 iii 7 (MH/NS)), [an-t]a-ra-an (KUB 41.1 i 5 (OH/NS)), an-da-ra-an (KUB 41.1 i 3 ( $\mathrm{OH} / \mathrm{NS}$ ), VBoT 24 i 4 (MH/NS)), a-an-da-ra-an (VBoT 24 i 14 (MH/NS), KBo 5.2 iii 19 (MH/NS)), a-an-ta-ra-an (VBoT 24 i 23 (MH/NS)), an-da-ra-a-an (KUB 46.43, 9 (NS)).

Derivatives: antarant- (adj.) 'blue' (an-ta-ra-an-ta-an (KUB 24.9 i 43 ( $\mathrm{OH} / \mathrm{NS}$ )), $[a n-d] a-r a-a n-d a-a n(\mathrm{KUB} 24.9$ i $45(\mathrm{OH} / \mathrm{NS}))$ ), antare/ǐške/a- ${ }^{z i}$ (Ic6) 'to make blue' (an-ta-ri-iš-ke-et (KUB 24.9 i 44 ( $\mathrm{OH} / \mathrm{NS}$ )), an-da-ri-eš-ke-et (KUB 41.1 i $4(\mathrm{OH} / \mathrm{NS}))$ ).
IE cognates: Slav. *modrъ (Cz. modrý, SCr. mödar) 'blue’.
PIE * $m d^{h} r o ́-$
This word is attested with the spellings an-ta-ra-an, a-an-ta-ra-an and an-ta-ra-$a$-an. Because all attestations are from NS texts, it is not possible to chronologically order these spellings and determine which one is more original.

Machek (1949: 131-2) connects this word with Slav. *modrъ 'blue' < *mod'ro(the absence of Winter's Law points to $* d^{h}$ ). If this connection is justified, the Hittite word likely reflects a zero-grade $* m d^{h}$-ro-. With this reconstruction in mind, it is more likely that the spelling an-ta-ra-a-an is the correct one (for unetymological plene initial $a$ - compare e.g. $a$-an-ni-eš-ke-ši (HKM 55 rev. 26) instead of normal an-ni-iš-ke/a- 'to work (impf.)'). It would then reflect phonological /ndrā́n/, the regular outcome of *md ${ }^{h}$-ró- $m$.
-anta(ri), -antat(i) (3pl.midd.-endings)
Anat. cognates: CLuw. -antari (3pl.pres.midd.-ending): ua-aš-ša-an-ta-ri, la-ah-hi-i[n]-ta-ri < *lahhiiantari; HLuw. -antasi (3pl.pres.midd.-ending): ${ }^{\mathrm{PES}_{2}} \mathrm{HWI}$ -HWI-sà-tá-si.

PIE *CC-énto(ri), *CéC-nto(ri)
In the present, we find the endings -anta as well as -antari. Both endings occur in the OH period already, and there does not seem to be a distribution between the two (e.g. a-ra-an-ta (OS) besides $a-r a-a n-t a-r i(\mathrm{OS})$ ). In the preterite we find -antati besides -antat, but here it seems that -antati is the original ending, which is being replaced by -antat from MH times onwards (compare ki-i-ša-an-ta-ti
(OS) vs. $k i-i-s ̌ a-a n-t a-a t(M H / M S)$ or na-ah-ši-an-ta-ti (OS) vs. na-ah-ši-ía-an$t a-a t(\mathrm{NH})$ ), possibly because $-i$ had become the main marker of the present tense.

The reconstruction of the PIE middle endings is a debated topic, and I will not go into details here. It is clear that -anta(ri) and -antat( $(i)$ must reflect *-ento when the verbal root is in zero-grade (e.g. aranta(ri) < *h3r-énto(ri)) and *-nto when the verbal root is in full grade (e.g. ešanta(ri) < *h $h_{1}$ é $h_{l} s$-nto(ri)).
Kimball (1999: 245) cites a few examples of plene spellings in this ending (e.g. $a-r a-a-a n-t a, n e-e-a-a n-t a-r i$, etc.), which are all attested in NS texts. In my view, these are the result of the NH merger of $\mathrm{OH} / \overline{\mathbf{a}} /$ with $/ \mathrm{a} /$ in closed non-final syllables (cf. § 1.4.9.3): since in NH times there was no opposition between $/ \overline{\mathrm{a}} /$ and $/ \mathrm{a} /$ in these syllables anymore, the pronunciation and therefore spelling was subject to free variation.
-antaru (3pl.imp.midd.-ending)
Anat. cognates: CLuw. -andaru (3pl.imp.midd.-ending): [la]-a-la-aš-ha-an-da$r u$.

This ending clearly is built up of the 3pl.pres.midd.-ending -antari in which the $-i$ is replaced by the imperatival $-u$. See at both-anta(ri), -antat(i) and -u for further treatment.
-antat(i) (3pl.pret.midd.-ending): see -anta(ri)
-anteš (erg.pl.-ending): see -ant-
${ }^{\text {LÚ }}$ antiiant- (c.) 'son-in-law': acc.sg. an-ti-ía-an-ta-an (KBo 3.1 ii 39), an-ti-ía$a n-d a-a n$ (KBo 12.4 ii 8).
Derivatives: andaiiandatar / andaiiandann- (n.) 'son-in-lawship' (dat.-loc.sg. an-da-i-ía-an-da-an-ni (KUB 13.8 obv. 14)).

Puhvel (HED 1/2: 78f.) also cites a nom.pl. [ LÚ ]āntiĩanteš (KUB 26.1a, 10), of which $\mathrm{HW}^{2}$ states that it had better be read [pé-r] $a$-an-ti-ila-an-ti-eš.
Since Balkan (1948) this word is generally interpreted as showing syncope from *anda iiant- 'who has gone inside'. As he shows, a semantic development from 'who has gone inside' to 'son-in-law' has parallels in other languages. According to Puhvel (HED 1/2: 79) this analysis is strengthened by the derivative andaiiandatar 'son-in-lawship', which would show the un-syncopated form. In my view, however, the latter word could easily be a folk-etymological adaptation
to an original antiiiandatar, and does not necessarily prove that antiiant- stems from *anda iizant-. Nevertheless, semantically the etymology seems possible.
-antu (3pl.imp.act.-ending): e.g. ap-pa-an-tu (OS), $a-s ̌ a-a n-t u$ (OS), pé-e-ta-an-tu (OS), ap-pa-an-du (MS), $a-s \check{a}-a n-d u$ (MS), pé-da-an-du (MS)
Anat. cognates: Pal. -andu, -endu; CLuw. -andu; HLuw. /-antu/; Lyc. - Ṽtu.
PAnat. *-Vntu
PIE *CC-éntu
The 3pl.imp.act.-ending -antu is spelled -an-tu in OS texts, and -an-du in MS and NS texts. In ablauting verbs, the ending -antu goes with the weak stem. The ending must be compared with Skt. 3pl.impt.-ending -antu and reflects *-entu. Especially etymologically related pairs like Hitt. $a-s ̌ a-a n-t u \sim$ Pal. $a-s ̌ a-a n-d u, a-$ še-en-du ~ CLuw. $a-s ̌ a-a n-d u \sim$ HLuw. (á-)sa-tu ~ Skt. sántu 'they must be' < * $h_{l} s$-éntu and Hitt. ku-na-an-du $\sim$ Skt. ghnantu 'they must kill' $<* g^{w h} n$-éntu are striking.

Kimball (1999: 245) cites a few examples of plene spellings in this ending (e.g. $a p-p a-a-a n-d u$ ), which are all attested in NS texts. In my view, these are the result of the NH merger of $\mathrm{OH} / \overline{\mathrm{a}} /$ with $/ \mathrm{a} /$ in closed non-final syllables (cf. § 1.4.9.3): since in NH times there was no opposition between $/ \overline{\mathrm{a}} /$ and $/ \mathrm{a} /$ in these syllables anymore, the pronunciation and therefore spelling was subject to free variation.
andurza (adv.) 'inside, indoors': an-dur-za.
Derivatives: andurziia (adv.) 'inside, indoors' (an-dur-zi-ia), anturiial- (adj.) 'interior, native’ (nom.sg.c. an-dur-ía-aš, an-tu-ri-ía-aš, an-tu-u-ri-ia-aš, an-du-$u$-ri-i_ia-aš, nom.pl.c. an-tu-u-ri-e-eš, an-dur-ri-ía-aš, an-dur-ía-as̆).

PIE *h $n-d^{h} u r-$
Semantically there seems to be no difference between andurza and andurziia. Formally, the latter could be interpreted as andurza $+=$ (i) a 'and' (pace $\mathrm{HW}^{2} \mathrm{~A}$ : 123), which indicates that andurza is an adverbially used ablative of a stem andur-, which is visible in the derivative anturiia- as well.
An etymological connection with e.g. Lat. inter 'between', Skt. antár 'within' (Couvreur 1937: 92-3), though semantically and seemingly formally attractive, does not work as Hitt. $-u$ - would remain unexplained. A better explanation seems to be Sturtevant's suggestion (1933: 128) to interpret this form as *hle $(e) n-d^{h} u r$ 'indoors'. The root $* d^{h}$ uer- does not occur further in Anatolian, however.
antuuahhaš- / antuhš- (c.) 'man, human being, person' (Sum. UKÙ, LÚ.ULÙ.LU): nom.sg. an-tu-ua-ah-ḩa-aš (OS), an-tu-u-ua-ah-ha-aš, an-tu-uh-ḩa-aš, an-tu-uh-ša-aš, an-tu-u-ua-ah-za (KUB 12.44 iii 7 (NS)), acc.sg. an-tu-uh-ša-an (MH/MS), an-du-uh-ša-an (MH/MS), an-tu-u-uh-ša-an, an-tu-ua-ah-ḩaan, gen.sg. an-du-uh-ša-aš (OS), an-tu-uh-ša-aš (MH/MS), an-tu-ưa-ah-ḩa-aš, dat.-loc.sg. an-tu-uh-ši, an-tu-u-uh-ši, an-tu-uh-še (MH/NS), abl. an-tu-uh-ša-az, nom.pl. an-tu-uh-še-eš (MH/MS), acc.pl. an-tu-uh-šu-uš (MH/MS), gen.pl. an-tu$u h-s \check{a}-a \check{s}$, dat.-loc.pl. an-tu-uh-ša-aš (OH/MS), an-tu-u-ua-ah-h $a-a \check{s}$.
Derivatives: antuhšātar / antuhšann- (n.) 'mankind; population' (nom.sg. an-tu-uh-ša-tar, an-tu-uh-ša-a-tar, gen.sg. an-tu-uh-ša-an-na-aš, dat.-loc.sg. an-tu-uh-ša-an-ni, an-tu-uh-ša-ni, erg.sg. an-tu-uh-ša-an-na-an-za).

Anat. cognates: Lyd. ?antola, anlola 'statue'.
PIE nom. * $h_{1} n-d^{h} u e ́ h_{2}-\bar{o} s$, gen.sg. *h $n-d^{h} u h_{2}-s-o ́ s$
See $\mathrm{HW}^{2}$ A : 109f. for attestations. In the oldest texts, the paradigm of this word is nom.sg. antuuahhaš, acc.sg. antuȟ̌san, gen.sg. antuȟ̌̌aš, dat.-loc.sg. antuhši, nom.pl. antuhšeš, acc.pl. antuȟšuš, dat.-loc.pl. antuhšaš. In later texts, nom.sg. antuuahhaš was the source for some forms that show a stem antuuahha-. Besides, we find some forms that inflect according to a thematic stem antuhša-, which is based on the oblique forms with the stem antuhš-.
According to Eichner (1979b: 77) this word shows a similar formation as e.g. Gr. $\varepsilon v \theta \theta$ soc 'having god inside', and is to be connected with the root $* d^{h} u H$ - (Skt. dhūmá- 'smoke', Gr. हैv $\theta \overline{\mathrm{v}} \mu \mathrm{o}$ 'spirited'), so literally 'having breath inside'. He states that the word originally must have been a hysterodynamic $s$-stem $*$ - $d^{h} u e h_{2^{-}}$ $\bar{o} s, *-d^{h} u h_{2}-s-o s$. Rieken (1999a: 190f.) repeats this view and reconstructs *en$d^{h} u e ́ h_{2}-\breve{\sigma} s$, with $* e>a$ in front of $* n T$. Formally, a reconstruction $* h_{1} n-d^{h} u e h_{2}-\bar{o} s$ is perhaps more likely (cf. anda $n$ ) $<* h_{1} n d o(m)$ ).

For other attestations of the root $* d^{h} u h_{2}$ - 'smoke, breath' in Hittite, see tuhhuuai- / tuhhui- and tuhhae-z ${ }^{z i}$.
The root $* d^{h} u h_{2^{-}}$'smoke, breath' is attested in zero-grade in all outer-Anatolian IE languages. On the basis of Hitt. antuuahhaš- / antuȟ̌s-, we can establish that the full-grade form in fact is $* d^{h} u e h_{2}$.

```
anz-: see uēš/ anz-
-anza (3pl.pres.act.-ending): see -anzi
```

-anza (erg.sg.-ending): see -ant-
-anzi (3pl.pres.act.-ending)
Anat. cognates: Pal. -ānti; CLuw. -anti; HLuw. /-anti/; Lyd. -d ?; Lyc. - Ṽnti, -ñti.

PAnat. *-Vnti
PIE *CC-énti, *-íó-nti, *-sḱó-nti
Although the bulk of the 3pl.pres.act.-forms show the ending -an-zi, there are some rare cases where an ending -an-za is attested: iš-hi-an-za (KBo 6.26 i 7 ( $\mathrm{OH} / \mathrm{NS}$ )), $\check{a} a-k u-u$ u-an-za (KUB 13.2 iii 16 (MH/NS)). Although e.g. Puhvel (HED 1/2: 398) regards these as "misspelled", in my view they represent the original form, just as the normal 3sg.pres.act.-ending $-z i$ has a more original form $-z a$ (see at $-z i$ ).
It is generally accepted that -anzi corresponds on the one hand to the athematic primary 3pl.pres.-endings like Skt. -anti, Gr. (Dor.) - $\varepsilon v \tau L$, OCS -ętъ, Goth. -ind, etc. < PIE *-enti, and on the other to the thematic 3pl.pres.-endings like Skt. -anti, OCS -otъ, Gr. -ovol, Lat. -unt, OIr. -ait, Goth. -and $<{ }^{*}$-o-nti. The regular outcome of *-énti and *-ónti is Hitt. /-ánts/ (with *ó yielding /á/ and not /à/ in internal syllables, cf. § 1.4.9.3.a) as attested in -anza cited above. Already in PreHitt. times this $/-$ ant $^{\mathrm{s}} /$ was secondarily changed to $/-$ ant ${ }^{\mathrm{s}} \mathrm{i} /$, spelled -anzi, taking over the $-i$ from the other present-endings. In athematic ablauting verbs, -anzi goes with the weak stem, which is an archaicity, as is visible from Hitt. $a-s ̌ a-a n-z i$ $\sim$ Skt. sánti ~Gr. cíoí, Dor. ėvtí ~Goth. sind 'they are' < *hls-énti, Hitt. ịa-an-zi ~ Skt. yánti ~Gr. '̌̄ā 'they kill' < * $g^{w h} n$-énti.
Kimball (1999: 245) cites a few examples of plene spellings in this ending (e.g. ap-pa-a-an-zi, a-ta-a-an-zi, etc.), which are almost all attested in NS texts. In my view, these are the result of the NH merger of $\mathrm{OH} / \overline{\mathrm{a}} /$ with $/ \mathrm{a} /$ in closed non-final syllables (cf. § 1.4.9.3): since in NH times there was no opposition between / $\overline{\mathbf{a}} /$ and $/ \mathrm{a} /$ in these syllables anymore, the pronunciation and therefore spelling was subject to free variation.
$=(\boldsymbol{a}) \boldsymbol{p}(\boldsymbol{a})$ (encl. locatival sentence particle): $C=a p a$ ( $n=a-p a$ (OS (besides $n u=p a$
(KUB 35.148 iii 29 (OH/NS))), $n=a-\check{s}=a-p a(\mathrm{OS})$, $m a-a-n=a-p a$ (OS), DUMU-
$\check{s}=a-p a$ (OS), $n=u-\check{s}=a-p a$ (OS), $n=a-t=a-p a, n u=z=a-p a, t=a-p a, a n-d a=m=a-$
$p a, a-r a-i-\check{s}=a-p a \quad n=a-a t=\check{s} a-m a-\check{s}=a-p a),-e / i=p a(n u-u=\check{s}-\check{s} e=p a, a-k i=p a, n=a-$
$a n=\check{s} i=p a, n=a-a \check{s}=s \check{s} i=p a, n=a-a t=\check{s} e=p a, n u-u=\check{s}-s \check{s} i=p a, \check{s}=e=p a, \check{s}=e-e=p a)$,

Anat. cognates: Pal. $\boldsymbol{C = p a}, \boldsymbol{V}=\boldsymbol{p p a}$ (encl. sentence particle); CLuw. $\boldsymbol{p} \overline{\boldsymbol{a}}=$ (sentence initial particle), $=\boldsymbol{p} \boldsymbol{a}=$ (encl. sentence particle); HLuw. $=\boldsymbol{p} \boldsymbol{a}=$ (encl. entence particle); Lyd. $\boldsymbol{f a}=$ (sentence particle); Lyc. $=\boldsymbol{b e},=\boldsymbol{p} \boldsymbol{e}$ (particle).

PAnat. *-(o)bo ?
The usual form of this enclitic particle is =apa ( $n=a p a$, mān=apa etc.), the first $a$ of which drops when the preceding word ends in $e$ or $i$ : $n u=\check{s} \check{s} i=p a$, $n u=\check{s} \check{s} e=p a$. Rarely we find only $=a p$ (e.g. $\check{s}=a-n=a-a p($ KBo 3.60 ii 3, 5, 18, iii 9), $\check{s}=u-\check{s}=a p$ (KBo 3.60 iii 3), $u$ - $l i-h i-e \check{s}=m=a-a p$ (KUB 15.31 i 6): its usage seems to be limited to two texts only ( $\mathrm{HW}^{2}$ A: 125f. also cites $a n-d=a-a p$ (KBo 17.1 i 26) and $\check{s}=a-a[p]$ (KUB 36.99 rev. 3) but these are better read $a n-d a=k$ án and $\check{s}=a-a[n]$ or $\check{s}=a-a[t]$ respectively; $n=a-a p$ (KUB 8.3 obv. 12) might better be read ${ }^{\mathrm{NA}_{4}} \mathrm{KIŠIB}$, cf. Oettinger 1979a: 408).

According to $\mathrm{HW}^{2} \mathrm{~A}: 125$ the particle denotes "Richtung von außen nach innen, an etwas heran".
In the other Anatolian languages we find particles that, at least from a formal point of view, resemble Hitt. $=(a) p(a)$. If these are cognate, then the Lycian particle $=b e$ points to PAnat. $*=(o) b o$. Further no clear IE etymology. Within Hittite, connections with =pat (stressing particle), ap $\bar{a}$ - (demonstrative pronoun) and $\bar{a} p p a(n)$ (preverb) have been suggested, but these all are based on formal similarity only, not on semantic grounds.
$\boldsymbol{a p} \overline{\boldsymbol{a}}-/ \boldsymbol{a p} \overline{\mathbf{u}}$ - (demonstrative pronoun) 'that (one); he, she, it' (Sum. BI): nom.sg.c. $a-p a-a-a s ̌$ (OS, very often), $a-p a-a \check{s}$ (OS), acc.sg.c. $a-p u-u-u n$ (OS, very often), $a$ -pu-un (a few times), a-pu-ú-un (1x: KBo 6.2 ii 32 (OS)), a-pa-a-an (KUB 26.12 ii 27 (NH)), nom.-acc.sg.n. $a-p a-a$-at (OS, very often), $a-p a-a t-t=a(\mathrm{OS})$, gen.sg. a-pé-e-el (OS), a-pé-el (OS), a-pí-il (KBo 2.13 obv. 12 (NS)), dat.-loc.sg. a-pé-da-ni (OS), a-pé-e-da-ni (MH/MS), a-pé-e-ta-ni, a-pé-ta-ni, a-pé-e-da (KUB 6.48 ii $3(\mathrm{NH})$ ), abl. a-pé-e-ez (MH/MS), a-pé-ez-za (OS), a-pé-ez, instr. a-pé-et, $a-p e ́-e-d a-a n-d a(\mathrm{OS})$, nom.pl.c. $a-p e ́-e(\mathrm{OS}), a-p e ́, a-p u-u-u s ̌$ (NH), acc.pl.c. $a-$ $p u-u-u s ̌$ (OS, often), $a-p u-u s ̌$ (a few times), $a-p u-u$ - $u \check{s}=m a-a=\check{s}$-ši! (KUB 14.14 obv. $21(\mathrm{NH})$ ), nom.-acc.pl.n. a-pé-e (OS), gen.pl. a-pé-en-za-an (MH/MS), a-pé-e-en-za-an, a-pé-el, dat.-loc.pl. a-pé-e-da-aš (MH/MS), a-pé-da-aš.
Derivatives: apāšila 'himself, herself, of one's own' (a-pa-a-ši-la (MH/MS)), $\boldsymbol{a p a t t a}(\boldsymbol{n})$ (adv.) 'there' ( $a-$ pád-da (MH/MS), a-pád-da-an, a-pát-ta, a-pát-tan $)_{x}$, apiïa (adv.) 'there, then' (a-pí-ía), apiniššan (adv.) 'thus' (a-pí-ni-iš-ša-an (OS), a-pí-ni-eš-ša-an, a-pé-e-ni-eš-ša-an), apiniššuūant- (adj.) 'of such kind’ (a-pí-ni$i s ̌-s ̌ u-u a^{2} a-a n-t$ - (MH/MS), a-pé-e-ni-eš-šu-ųa-an-t-).

Anat. cognates: Pal. apa- (dem.pron.) 'that one' (acc.sg.c. $=a-p a-a n, a-p a-$ $n=i=d u$ nom.pl.c. $=a-a p-i s ̌$, nom.-acc.pl.n. $a-p a-a n-s ̌ a,=a-p a)$; CLuw. ap $\bar{a}-$ (dem.pron.) 'that; he, she, it, they' (nom.sg.c. $a-p a-a-a s ̌, a-p a-a s ̌, ~ a c c . s g . c . ~ a-p a '-$ $a^{\prime}-a n$ (text: $a-a-p a-a n$ ), $a-p a-a n$, dat.-loc.sg. $a-p a-a-a t-t i, a-p a ́ t-t i$, acc.pl.c. $a-p i-$ in-za, a-pí-en-za, gen.adj.dat.-loc.pl. a-pa-a-aš-ša-a-an-za, a-pa-a-aš-ša-an-za, a$p a-a-a \check{s}-s ̌ a-a n-z a-a n-z a)$, apati(n) (adv.) 'thus' (a-pa-ti-i, a-pa-ti-i[n], a-pa-ti-i$i[n]$ ); HLuw. ápa- 'he, she, it' (nom.sg.c. /ibas/ á-pa-sa, á-pa-sá, pa-sa, pa-sa-', acc.sg.c. /Rban/ á-pa-na, pa-na-', nom.-acc.sg.n. /iba/ á-pa, dat.sg. /Rbadi/ á-pa-

 $t a-z a$, gen.adj. /Pbasa/i-/ á-pa-sa/i-), ápati (adv.) 'there' (á-pa-ti, á-pa-ri+i); Lyd. $\boldsymbol{b i}$ - (dem.pron.) 'he' (nom.sg.c. bis, dat.-loc.sg. b $\lambda, b u \lambda$ ), bili- (adj.) 'his' (nom.sg.c. bilis, bil (endingless), dat.-loc.sg. bil入); ebad (adv.) 'here, there'; Lyc. $\boldsymbol{e b e}$ - (dem.) 'this' (nom.sg.c. ebe, acc.sg.c. ebẽ, ebẽñnẽ, ebẽ̃̃ni, nom.-acc.sg.n. ebẽ, dat.-loc.sg. ebehi, acc.pl.c. ebeis, ebeijes, nom.-acc.pl.n. ebeija, abaija, gen.pl. ebẽhथ̃(?), ebehथ̃(?), ebãhã(??), dat.-loc.pl. ebette), eb(e)- (dem.pron.) 'he, she, it' (acc.sg.c. ebñnẽ, gen.sg. ehbi, dat.-loc.pl. ebtte), ebei (adv.) 'here', ebeila (adv.) 'here', ebeli (adv.) 'here', ehbi- (adj.) 'his' (metathesized from eb(e)hi-), epttehe/i-, eb(e)ttehe/i- (adj.) 'their'.

PAnat. *Hobó-
Within the tree-way demonstrative system in Hittite, $a p \bar{a}-/ a p \bar{u}$ - functions as the medial demonstrative and can be translated 'that (near you)' (cf. Goedegebuure 2003). Within Anatolian, it must be compared with Pal. apa-, CLuw. apā-, HLuw. ápa-, Lyd. bi- and Lyc. ebe-, which point to a PAnat. form *Hobó-. As far as I am aware, there are no direct cognates in the other IE languages. Nevertheless, it is in my view quite logical that *Hobó- should be analaysed as *Ho- + -bo-, of which I would like to connect $* H o$ - with the pronominal stem *he $h_{1}$ - * $h_{1} o$ - as visible in Hitt. aši / uni / ini, and *-bo- with the Hitt. deictic element $=p a t$, which may be cognate with IE forms that reflect $* b^{h} o$-. If this analysis is correct, we are probably dealing with a PAnatolian formation that was taken over into the pronominal inflection.
Some forms of this pronoun need comments. Nom.sg.c. $a-p a-a-a \check{s} \sim$ CLuw. $a-$ $p a-a$ - $a \check{s}$ point to *Hobós and must be formally compared to ka-a-ǎ̌ < *kós. Acc.sg.c. $a-p u-u-u n$ (the one spelling $a-p u-u$-un must be erratic, cf 1.3.9.4.f) represents /Rabón/ and must in my view reflect *Hobóm (cf. CLuw. a-pa!-a!-an, HLuw. á-pa-na, Lyc. ebê). It is comparable to ku-u-un /kón/ < *kóm (see $\S$ 1.4.9.3.b for the development ${ }^{*}$-óm $>$ Hitt. /-ón/). Nom.-acc.sg.n. $a-p a-a-a t$ is
remarkable as it differs from nom.-acc.sg.n. $k i-i$ and $i$-ni: while the latter forms reflect *kí and *híl, apāt must go back to *Hobód. Nevertheless, both endings must have been extant in PAnat. for all stems: Pal. k $\bar{a} t$, CLuw. $z \bar{a}$ and HLuw. $z \bar{a}$ reflect PAnat. *ḱód, whereas Hitt. apiniššan can only be explained from a form *api that must reflect PAnat. *Hobí. The oblique cases show a stem ape-, sometimes extended with an element $-d a(n)$-. Nom.pl.c. ape must reflect *Hobói (cf. ke-e < *kói), whereas acc.pl.c. a-pu-u-uš = /Rabós/ reflects *Hobóms (see § 1.4.9.3.b). Nom.-acc.pl.n. ape at first sight seems to reflect *Hobói or *Hobéi (supported by HLuw. á-pa-i-ia ?), but this is difficult to connect to neuter plural forms in other IE languages. I would therefore want to propose that ape reflects *Hobih ${ }_{2}$, in which $*_{-i}-$ is lowered to Hitt. -e- due to the following $* h_{2}$ (similarly in $a$-aš-šu-u /RáSo/ 'goods' < *-uh 2 ). Gen.pl. apenzan shows -nzan as in gen.pl. kinzan, kuenzan and šumenzan and must be directly compared to Lyc. ebẽhẽ. I would mechanically reconstruct *HobénHsom, in which *-som can be compared to Skt. tésām 'of those', Lat. eōrum 'of these', and OCS těxъ 'of those'.
For further etymology see aši / uni / ini and =pat.
$\overline{\boldsymbol{a} p p a}$ (adv., postpos.) 'behind, afterwards; back, again, further' (Sum. EGIR): $a$ -ap-pa (OS).
Derivatives: āppan (adv.) 'behind; after(wards)' (a-ap-pa-an (OS)), āppanda (adv.) 'backwards' (a-ap-pa-an-da (KBo 17.43 i 5 (OS)), ap-pa-an-da (KBo 16.68 i 27 ( $\mathrm{OH} / \mathrm{MS}$ ))), àppananda (adv.) 'id.' (a-ap-pa-an-an-da (KBo $17.1+$ ABoT 4 i 33, iii 4 (OS), KBo 6.2 ii 10 (OS)), a-ap-pa-an-na-an-da (KBo 19.150 i 4 ( $\mathrm{OH} / \mathrm{NS}$ )), ap-pa-an-an-da (KBo 12.3 iii $12(\mathrm{OH} / \mathrm{NS})$ )), appezzi(ia)- (adj.) 'backmost, hindmost, rear’ (nom.sg.c. ap-pé-ez-zi-ia-š=a=š-ša-an (KBo 22.2 obv. 18 (OH/MS)), ap-pé-ez-zi-i_ia-aš (KUB 23.68 obv. 22 (MH/NS)), ap-pé-ez-zi$i s ̌$ (KUB 13.20 i 3 (MH/NS)), EGIR-ez-zi-iš (KUB 14.2 ii 60 (NS)), ap-pa-ez-z[i$i] s ̌$ (Bo 7777 r.col. 6 (see StBoT 18: 41) (NS)), acc.sg.c. ap-pé-ez-zi-an (HKM 43 rev. 20 (MH/MS), IBoT 1.36 iii 51 (MH/MS)), ap-pé-ez-zi-in (NH), [ap-p]a-ez-zi-an (KUB 12.66 iv 2 (NS)), nom.-acc.sg.n. ap-pé-ez-zi-ía-an (KUB 43.55 ii 3 (OH/NS)), ap-pé-ez-zi (IBoT 1.36 ii 67 (MH/MS)), a-ap-pé-ez-zi (KUB 33.67 i 30 ( $\mathrm{OH} / \mathrm{NS}$ )), a-ap-pa-az-zi (KUB 42.98 i 22 (NS)), gen.sg. ap-pé-ez-zi-ìa-aš, dat.-loc.sg. ap-pé-ez-zi, ap-pé-ez-zi-íla, abl. ap-pé-ez-zi-az, ap-pé-ez-zi-ía-az, nom.pl.c. ap-pé-ez-zi-e-eš (KBo 25.62, 9 (OS), KBo 13.119 ii 13 (NS)), acc.pl.c. ap-pé-ez-zi-uš, [ap-p]a-ez-zi-uš (KUB 12.66 iv 3 (NS)), dat.-loc.pl. ap-pé-ez-zi-ia-aš; broken ap-pé-e-ez-zi-x[...] (KBo 16.45 rev. 3 (OS)), $\bar{a} p p a$ - $^{i} / \bar{a} p p i$ - (IIa5 > Ic1, Ic2) 'to be finished, to be done' (Akk. QATV̄; 3sg.prs.act. a-ap-pa-i (e.g. StBoT 25.34 obv. 22 (OS)), ap-pa-a-i, ap-pa-i, a-ap-pa-a-i (VSNF 12.11 iii 10
(OH/NS)), ap-pí-ia-zi (KUB $13.9+40.62$ iii 7 (MH/NS)), 3pl.pres.act. a-ap-pí-an-zi (e.g. KBo 25.31 ii 12 (OS)), ap-pí-an-zi (OH/NS), ap-pí-ía-an-zi (OH/NS)), 3sg.imp.midd. ap-pa-a-ru (KBo 17.90 ii 15 (NS))), appašiuatt- (c.) 'future' (Sum. EGIR.UD ${ }^{(M I)}$; nom.sg. EGIR.UD-az, gen.sg./pl. ap-pa-ši-ua-at-ta-aš (KUB 31.81 rev. 8 (OS)), dat.-loc.sg. EGIR-pa-UD-ti, all.sg. ap-pa-ši-una-at-ta (KBo 7.28, 43 (OH/MS)).

Anat. cognates: CLuw. āppa (prev.) 'back, again' (a-ap-pa), āppan (prev., postpos.) 'behind, after' (a-ap-pa-an, ap-pa-an), *īppanda 'behind' (EGIR-anda), āpparant(i)- (adj.) 'future' (acc.sg.c. ap-pa-ra-an-ti-en, ap-pa-ra-an-ti-in, abl.-instr. EGIR-pa-ra-an-ta-ti, a-ap-pa-ra-an-t[a-ti], [a-a]p-ra-an-da-ti); HLuw. ápan (postpos., prev.) 'after, behind, again' ( $\dot{a}-p a-n a, ~ \dot{a}-p a=p a$, POST-na), *ápani (adv.) 'after, in the future’ (POST-ni), *ápara/i- (adj.) 'after-; later, younger' (nom.sg.c. POST+ra/i-i-sa, nom.pl.c. POST+ra/i-i-zi), ápi (adv.) 'back, again' (á-pi, á-pi-i); Lyc. epñ (adv.) 'afterwards', epñte (adv.) 'thereafter', epre/i(adj.) 'back-, rear-' (acc.pl.c. epris).

PIE * $h_{2}$ op-o, * $h_{2}$ op-om
The plene spelling in $a$-ap-pa and a-ap-pa-an is often interpreted as denoting a long $/ \overline{\mathrm{a}} /$. This is not necessarily the case, however: on the basis of forms like $a$-ar$a \check{s}-z i=/$ RárSt $^{\mathrm{s}} \mathrm{i} /$, with short $/ \mathrm{a} /$, we could in principle interpret $a$-ap-pa and $a$-ap$p a-a n$ as /Rapa/ and /Rapan/ respectively. Within Anatolian, a-ap-pa(-an) has clear cognates in CLuw. āppa(n), HLuw. ápan and Lyc. epñ, which reflect PAnat. */Rop-/ (with -o- because of Lyc. e-). Usually, on the basis of the assumption that a-ap-pa(-an) represents /āpa(n)/ with long /a/, it is assumed that we must reconstruct the preforms *(H)óp-o and *(H)óp-om, with accentuated *ó. This does not fit the establishment that local adverbs and postpositions are inherently unstressed (cf. Melchert 1998a: 485 and the consistent absence of plene spelling in anda(n) and katta(n)). Moreover, an accentuated *ó lenites a following consonant (cf. § 1.4.1), which means that *Hóp-o and *Hóp-om would have yielded Hitt. ** $\bar{a} p a$ and ${ }^{* *} \bar{a} p a n$, with sinlge $-p-$. I therefore interpret $a-a p-p a$ and a-ap-pa-an as /Rapa/ and /Rapan/ respectively, which must reflect PAnat. */Ropo/ and /iopom/.
From the beginning of Hittitology onwards, two views on the origin of this adverb have existed: one group of scholars connected $\bar{a} p p a(n)$ with Gr. à $\pi o ́<$ * $h_{2}$ epo, another with Gr. $\ddot{c} \pi \mathrm{t}<{ }^{2} h_{1}$ epi (see the references in Tischler HEG A-K: 41-3). On the basis of the fact that Hitt. $\bar{a} p p a(n)$ does not show an initial $h$-, nowadays the former option is often rejected. Nevertheless, as I have shown in Kloekhorst fthc.c, an initial $* h_{2^{-}}$regularly merges with $*_{1^{\prime}}$ in front of $*_{-o-}$,
which means that the preform */Rop-/ formally can reflect $* h_{1} o p$ - as well as * $h_{2}$ op-. So the matter can only be decided on the basis of semantics. Gr. á $\pi$ ó, ä $\pi \mathrm{o}$ 'from, away from' belongs with Skt. ápa 'away, off', Lat. ab 'from, away' and Goth. af 'from, away, since' and reflects *h2epo '(away) from'. Semantically, a connection with $\bar{a} p p a(n)$ would be possible, but is not immediately evident. Gr.
 ew 'and', reflecting *hepi 'upon, over'. Semantically, a connection with Hitt. $\bar{a} p p a(n)$ 'behind, back again' is not very convincing either. There are some Greek adverbs that do fit the meaning of $\overline{a p p a(n) ~ p e r f e c t l y, ~ h o w e v e r: ~ o ̋ ~ o t ı o \theta \varepsilon v ~ ' b e h i n d, ~ a t ~}$ the back' and óní $\sigma \sigma \omega$ 'backwards, back again, behind'. Usually, these are regarded as showing an ablaut-variant of ér l , but I do not see why: semantically they stand far apart from $\varepsilon$ ह̈ $\pi \iota$, and formally any laryngeal in front of $*_{\text {-o- would }}$ yield Gr. ó-. The -t- in my view is non-probative because it must be regarded as an old case-ending.
A possible connection between Hitt. appezzi(ia)- 'backmost, hindmost' and Skt. ápatya- 'offspring' (cf. also Lith. apačià 'bottom') and a possible connection between HLuw. ápara/i- 'later, younger', Lyc. epre/i- 'back-, rear-' and Skt. ápara- 'later, following', which within Sanskrit clearly belong with ápa 'away, off’, may indicate that ultimately Hitt. āppa(n) belongs with á $\pi$ ó. All in all, I would connect Hitt. āppa(n) with Gr. ő $\pi \iota \sigma \varepsilon v$ and ó $\pi i \sigma \sigma \omega$; if Hitt. appezzi(ia)indeed $\sim$ Skt. ápatya- and HLuw. ápara/i- / Lyc. epre/i- ~ Skt. ápara-, then we should reconstruct $* h_{2} o p-$.
The adjective appezzi(ia)- is predominantly spelled ap-BI-IZ-zi- and therefore often cited as appizzi(ia)-. This is incorrect in view of the one OS spelling with plene -e-, ap-pé-e-ez-zi-, which determines all other spellings as ap-pé-ez-zi-. In the oldest texts, this adjective is thematic, appezziia-, whereas from MH times onwards we increasingly find $i$-stem forms, appezzi-. This is typical for the suffix -ezzi(ia)- that is also found in e.g. hantezzi(ina)- (where it by the way is consistently spelled with $-e-$ ). In NS texts we occasionally find a secondary stem appaezzi-, with introduction of the full preverb $\bar{a} p p a$, once even appazzi-. Note that the almost consistent spelling without plene initial $a$ - points to a zero-grade formation /Rpét ${ }^{\mathrm{s}} \mathrm{i}(\mathrm{a})-/$. The verb àppai- ${ }^{i} / \bar{a} p p i-$ shows the dāi/tiizanzi-class inflection in the oldest texts. The NS form apiiazi is inflected according to the -ie/a-class, which is a normal development for dāi/tiiianzi-class verbs. If the 3sg.imp.midd.-form appāru indeed belongs here, it would show a stem appae- ${ }^{\text {zi }}$, according to the very productive hatrae-class inflection. The noun appašiuatt'future' is a compound of $\overline{a p p a}$ and šiuatt-'day' (q.v.). Note that the absence of plene initial $a$ - also points to a zero-grade formation /ipasiuat-/.
àppala- (gender unclear) 'trap, deceit': dat.-loc.sg. a-ap-pa-li (KUB 36.106 obv. 8 (OS)), ap-pa-a-li (KBo 6.34 i 16, 35, ii 1, 12 (MH/NS)).
Derivatives: āppalae- ${ }^{z i}$ (Ic2) 'to entrap' (3sg.pres.act. ap-pa-la-a-ez-zi (IBoT 1.36 i 55 (MH/MS)), 1pl.pres.act. a-ap-pa-la-a-u-e-ni (KBo 16.50 obv. 14 (MH/MS)); impf. ap-pa-li-eš-ke/a-, ap-pa-li-iš-ke/a-), appaliĩalla- (c.) '?’ (gen.sg. ap-pa-li-ía-al-la-š=a (KUB 36.110 rev. 17 (OS))).

See Puhvel HED 1/2: 95 for attestations. The noun only occurs in the expression $\bar{a} p p a l i d \bar{a}^{-}{ }^{i}$ 'to mislead (someone)' and is the source of the verb appalae- ${ }^{z i}$ 'to mislead, to deceive'. The meaning of the noun appalialla- cannot be determined on the basis of the context that it occurs in. Its alleged appurtenance to $\bar{a} p p a l a$ - is based on its formal similarity only.

The expression $\bar{a} p p a l i$ d $\bar{a}^{i}{ }^{i}$ 'to mislead' is interpreted by e.g. Starke (1990: 317 ff .) as having the literal meaning 'to take (someone) into a trap' and he therefore assumes that $\overline{a p p a l a}$ - 'trap' is cognate with the verb epp- ${ }^{z i}$ / app- 'to take, to seize'. On the basis of the long $\bar{a}$-, which does not fit the weak stem of $e p p-{ }^{z i} / a p p-$ that is consistently spelled with a short $a$-, he assumes that we are dealing with a borrowing from a Luwian word ${ }^{*} \bar{a} p p a l-$, showing the regular outcome of *héep-. Although Luwian loanwords do occasionally occur in OH texts already, the fact that a verb $* \bar{a} p p$ - is not attested in Luwian makes this etymology not immediately appealing.
${ }^{\text {UZU }}$ appuzzi- (n.) 'animal fat, tallow' (Sum. ${ }^{\text {UZU }}$ IÀ.UDU): nom.-acc.sg. ap-pu-uz$z i, ~ a p-p u-z i, a-p u-z i$, gen.sg. ap-pu-uz-zi-ia-aš, erg.sg. [ap-]pu-uz-zi-an-za (OS), ap-[p]u-uz-zi-ia-an-za.

See Puhvel HED A: 103-4 for attestations. Usually, words in -uzzi- are derived from the zero-grade form of a verbal stem (e.g. luzzi- from $l \bar{a}^{-}{ }^{i} / l-$, kuruzzi- from kuer- ${ }^{z i}$ / kur-, išhuzzi- from išhai- ${ }^{i} /$ išhi-, tuzzi- from dai- $^{i} / t i-$, etc.). In this case, we therefore should assume that we are dealing with a weak stem app-. Formally, this can only belong to the verb epp- $z^{i} / a p p$ - 'to take, to seize', but it is unclear how this connection would work semantically. Further unclear.
$\boldsymbol{a r}$ - $^{\text {tta(ri) }}$ (IIId) 'to stand (by), to be stationed, to remain standing; to be present, to occur' (Sum. GUB): 1sg.pres.midd. ar-ha-ri (OS), ar-ha-ha-ri, 2sg.pres.midd. ar$t a-t i$, ar-ta-ri, 3sg.pres.midd. ar-ta (OS, often), a-ar-ta (KBo 3.35 i 13 (OH/NS), KBo 3.46 obv. 45 (OH/NS), KBo 13.45, 4, KBo 30.164 iii 5 (OH/NS), KUB 8.30
rev. 11 (OH/NS)), ar-ta-ri (OS, often), a-ar-ta-ri (KUB 30.43 iv 5 (NS)), 1 pl.pres.midd. ar-ûa-aš-ta, 3pl.pres.midd. a-ra-an-da (OS), a-ra-an-da-ri (OS), a-ra-an-ta, a-ra-an-ta-ri, a-ra-a-an-ta (1x), a-ra-an-ta-a-ri (1x), a-ra-an-da-a-ri (1x), 1sg.pret.midd. ar-ha-ti (OH/NS), ar-ha-ha-at (NH), a-ar-ha-ha-at (NH), 2sg.pret.midd. ar-ta-ti (NH), ar-ta-at (MH/NS), 3sg.pret.midd. ar-ta-at (MH/MS), 1pl.pret.midd. ar-ua-aš-ta-at (MS), 3pl.pret.midd. a-ra-an-da-ti ( $\mathrm{OH} / \mathrm{NS}$ ), a-ra-an-ta-at ( $\mathrm{OH} / \mathrm{NS}$ ), 1sg.imp.midd. ar-ha-ha-ru (MH/NS), 2sg.imp.midd. ar-hu-ut (MH/NS), a-ar-hu-ut (NH), 3sg.imp.midd. ar-ta-ru (OH/NS), 2pl.imp.midd. ar-du-ma-at (MH/MS), ar-tum-ma-at (MH/NS), 3pl.imp.midd. $a-r a-a n-t a-r u(\mathrm{OH} / \mathrm{NS}), ~ a-r a-a n-d a-r u(\mathrm{NS})$; part. $a-r a-a n-t-$.

Derivatives: see $a r n u-{ }^{z i}$.
IE cognates: Skt. 3sg.aor.midd. ārta 'erhebte sich, hat sich bewegt' (see Kümmel 2000), Gr. $\tilde{\omega} \rho \tau 0$ 'erhebte sich', Lat. orior 'to arise, to come into existence', Arm. $y$-ar̄ne- 'to rise'.

PIE * $h_{3} r$-to
See $\mathrm{HW}^{2}$ A: 194f. for attestations. This verb occurs in the middle only and is therewith clearly distinct from the verb $\bar{a} r_{-}{ }^{i} / a r$ - 'to arrive' that occurs in the active only. The oldest spellings all show initial $a r$ - or $a-r^{\circ}$. Spellings with initial plene $a$-ar- are rare and occur in NS texts only and are therefore etymologically without value.
For PIE we have to distinguish two roots with the structure *Her-. The root *h $h_{l}$ er-means 'to come to, to reach (to move horizontally)' (Gr. हैp $\quad$ о come') whereas *her-means 'to rise (to move vertically)'. Because of semantic considerations Oettinger (1979a: 523f.) assumes that Hitt. ar- ${ }^{\text {tua(ri) }}$ must derive from $* h_{3} e r-$. In LIV ${ }^{2}$, ar- ${ }^{\text {tla(ri) }}$ is regarded as reflecting the root $* h_{l} e r-$, however, on the basis of the presumption that initial $* h_{3^{-}}$should have yielded Hitt. $h-$ - As I have shown in Kloekhorst fthc.c, the outcome of initial $* h_{3}$ is dependent on the phonetic environment: a sequence $* h_{3} e$ - indeed develops into Hitt. ha- but $* h_{3} r$ regularly yields Hitt. /?r-/ (through PAnat. *?r-). In Hittite, middles either show egrade or zero-grade in the root. Because the oldest attestations of ar- ${ }^{\text {tla(ri) }}$ are consistently written with short $a$-, it is likely that it reflects a zero-grade formation *Hr-to. All in all, I reconstruct arta / aranda as $* h_{3} r$-to $/ * h_{3} r$-ento.
$\overline{\boldsymbol{a} r} \mathbf{-}^{i} / \boldsymbol{a r}$ - (IIa2 (> Ic2)) 'to come (to), to arrive (at)': 1sg.pres.act. a-ar-hi ( $\mathrm{OH} / \mathrm{MS}$ ), 2sg.pres.act. $a$-ar-ti (MH/MS), 3sg.pres.act. $a-a-r i$ (OS), a-ri (OS), 1 pl.pres.act. e-ru-e-ni (NS), e-ru-u-e-ni (NS), er-u-e-ni (NS), 2pl.pres.act. ar-te-ni (KUB 31.101, 31 (MS)), a-ar-te-ni (KUB 23.68 obv. 25 (MH/NS)), ar-te-e-ni
(KUB 6.16+18.64 iv 3, 6 (NS)), e-er-te-ni (NH), 3pl.pres.act. a-ra-an-zi (MH/MS), a-ra-a-an-zi (NS), 1sg.pret.act. a-ar-hu-un (MH/MS), a-ar-ah-hu-un, ar-hu-un, ar-ah-hu-un, 3sg.pret.act. $a-a r-s ̌ a ~(O S), ~ a-a r-a \check{s}(\mathrm{OH} / \mathrm{MS})$, $a r-a \check{s}, ~ a-r a-$ $a \check{s}, 1$ pl.pret.act. ar-ú-en (KBo 16.61 obv. 4 (MS?)), e-ru-en (KUB 57.9, 12 (NS)), e-ru-u-en (KUB 21.10, 24 (NH)), e-er-u-en (KUB 31.68 obv. 3 (NS)), e-er-u$e$ [-en] (KUB 23.101 ii 24 (NH)), 3pl.pret.act. a-re-er (OS), e-re-er (HKM 47, 55 (MH/MS)), e-re-e-er (KUB 16.74, 8 (NS)), 3sg.imp.act. a-ru (OH/NS), 2pl.imp.act. a-ar-tén (MH/MS), ar-tén (OH/NS); part. a-ra-an-t-; impf. ar-aš$k e / a-(\mathrm{MH} / \mathrm{NS}), a-a r-s ̌ a-k e / a-(\mathrm{MH} / \mathrm{NS}), a-a r-a s ̌-k e / a-(\mathrm{NH})$.

IE cognates: Gr. ěp $\rho \circ \mu a \downarrow$ 'to come, to go', Skt. rccháti 'to go to, to go at, to attain'.

PIE * $h_{l}$ ór-ei, $* h_{l} r$-énti
See $\mathrm{HW}^{2}$ A: 208f. for attestations. On the basis of the oldest attested forms, we can assume that the original paradigm of this verb was ārhi, ārti, āri, *arueni, arteni, aranzi. The forms that show a stem er- are all secondary. The oldest of these forms is 3pl.pret.act. erer (MH/MS), instead of OS arer, which probably was created on the basis of an analogy to ašanzi : ešer, yielding aranzi : erer. From the pl.pret.-forms it spread also to the pl.pres.-forms, yielding forms like 1pl.pres. erueni and erteni. The OS spelling $a-a-r i$ is quite remarkable (hyperplene), but in my view denotes ' $a-a-r i /$ Rári/. The etymological connection with Gr. ép $\chi \circ \mu a t$ 'to come, to go' and Skt. řccháti 'to go to, to go at, to attain', both from * $h_{1} r$-skééló-, was first suggested by Sturtevant (1927b: 165-7). This means that Hitt. reflects *h $h_{1}$ ór-ei, * $h_{1}$ r-énti. Note that the imperfective of this verb is spelled $a r$ - $a \check{s}$-ke/a- (with younger adaptions to $a$ - $a r$ - $a \check{s}$-ke/a- and once $a$-ar-ša$k e / a$-, with introduction of the strong stem $\bar{a} r$-), but never $a-r i-i \check{s}-k e / a-$, which spelling is exclusively used for the imperfective of ariie/a- ${ }^{z i}$ (q.v.). This means that the imperfective of $\bar{a} r$ - / ar- was /?rské/á-/ < *h $h_{1} r$-skélóó, whereas a-ri-iš$k e / a$ - must represent /Rrịské/á-/ < * $h_{1} r h_{1}$-ské/ó-
$\overline{\boldsymbol{a}} \boldsymbol{r r} \mathbf{-}^{\boldsymbol{i}} /$ arr- (IIa2 $>\operatorname{IIa} 1 \gamma$, Ic1) 'to wash': 1sg.pres.act. $a$-ar-ra-ah-hi (KUB 57.63 i 6 (NS)), ar-ra-ah-hi (KUB 7.1 i 29 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 23.93 iii 6 (NS)), 3sg.pres.act. a-ar-ri (OS, often), ar-ri (a few times), ar-ra-i (KUB 1.13 iv 44 (MH/NS)), a-ar-ra-i (KBo 3.5 iv 48 (MH/NS)), ar-ri-ia-az-zi (KUB 44.63 ii 10 (NS)), a-ar-ri-i-e-ez-zi (KBo 17.94 iii 24 (NS)), ar-ri-ez-zi (KUB 45.47 i 30, 33 (MS)), ar-ru-ez-zi (KBo 3.5 iii 33 (MH/NS)), [ar-]ra-at-te-ni (KBo 20.108 rev. 3 (NS)), 3pl.pres.act. ar-ra-an-zi (often), a-ar-ra-an-zi (less often), ar-ru-ua-an-zi (KBo 3.5 iv 33 (MH/NS)), ar-ru-ma-an-zi (KBo 3.5 i 23ff. (MH/NS)),

1sg.pret.act. $a$-ar-ra-ah-hu-un (VBoT 120 iii 7 (MH/NS)), 3sg.pret.act. $a$-ar-aš-ta (KUB 33.99, 9 (MH/NS)), 3pl.pret.act. ar-re-er (KBo 10.24 ii 1 (OH/NS), KUB 9.1 iii 24 (MH/NS), KUB 12.26 ii 7 (NS)), 3sg.imp.act. $a$-ar-ru (KUB 43.58 i 55 (MS)), 2pl.imp.act. a-ar-at-te-en (KUB 41.23 iii 10 (MH/NS)); 1sg.pres.midd. ar-ra-ah-ha-ri (Bo 5439, 9), 3sg.pret.midd. ar-ra-at-ta-at, ar-ra-ta-at, 2sg.imp.midd. a-ar-ra-ah-hu-ut, ar-ra-ah-hu-ut, 3sg.imp.midd. ar-ra-at-ta-ru; part. ar-ra-an-t- (OS); verb.noun. ar-ru-ma-ar (KBo 42.6 obv.? 8), gen.sg. a-ar-ru-ua-aš, a-ar-ru-ma-aš, ar-ru-ma-aš, ar-ru-um-ma-aš; inf.I ar-ra-u-ūa-an-zi, ar-ra-ua-an-zi, ar-ru-ma-an-zi; impf. ar-ri-iš-ke/a-, ar-ri-eš-ke/a-, a-ar-ri-iš-ke/a-, a-ar-ri-eš-ke/a-.
IE cognates: TochA yär- 'to bathe'.

$$
\text { PIE * } h_{l} o ́ r h_{l}-e i, * h_{l} r h_{l} \text {-énti }
$$

See $\mathrm{HW}^{2}$ A: 224f. and Puhvel HED 1/2: 111f. for attestations. The oldest forms of this verb clearly show an ablauting stem ārr-/arr-. In NS texts, we find some forms that inflect according to the tarn(a)-class (arrai, ārrai) and the -ie/a-class (arriịazzi, ārriiezzi). In KBo 3.5 we find a few forms that belong to a stem arruue/a- (*arruie/a-), the origin of which is unclear.

Since Couvreur (1937: 97), Hitt. ārr- ${ }^{i}$ / arr- has generally been connected with TochA yär- 'to bathe' (pres.-stem yärnās-), from a root *HerH- (second laryngeal is visible in Hitt. $-r r-*_{-} r H-$ and TochA yärnās- $<{ }^{*} H r-n-H_{-}-$). The colour of the first laryngeal is determined by TochA $y$ - which can only reflect $* h_{l}$-. The Tocharian word does not give information on the colour of the second laryngeal, but in my view, the Hittite word does. The fact that the original 3sg.pres.act.-form is $\bar{a} r r i$ and not $\bar{a} r r a i$ (only found in NS texts) to my mind shows that the second laryngeal must have been $* h_{l}$ as well: root-final $* h_{2}$ and $* h_{3}$ would have yielded the ending -ai (as in 3sg.pres.act. mallai 'mills' $<$ *molh $_{2}$-ei, 3sg.pres.act. paddai 'digs' $<*^{h}{ }^{h}$ od ${ }^{h} h_{2}$-ei, išparrai 'tramples' $<{ }^{*}$ sporh $_{2 / 3}$-ei, etc., cf. § 2.2.2.2.d). I therefore reconstruct the root as $* h_{l} e r h_{1}$-. Note that $*_{-} r h_{1}$ - does not get lenited by a preceding *ó.
$\overline{\boldsymbol{a}} \boldsymbol{r a}$ (adv.) 'right, proper(ly)': $a-a-r a$ (OS, often), $a-r a$ (quite rarely).
Derivatives: ${ }^{(L \mathbf{L ́} / \mathbf{M U N U S})} \boldsymbol{a r a ̄}-$ (c.) 'friend' (nom.sg. $a$-ra-aš, $a-r a-a-a s ̌$ (KUB 29.1 i 13), acc.sg. $a-r a-a-a n(\mathrm{MH} / \mathrm{MS}), a-r a-a n$, dat.-loc.sg. $a-r i$ (OS), $a-r e-e=s ̌-s ̌ i$ (KUB 13.20 i 33), nom.pl. $a$-re-eš (OS), acc.pl. $a-r u-u s ̌, ~ a-r a-a s ̌, ~ d a t .-l o c . p l . ~ a-r a-~$ $a \check{s}$ ), arāua- (adj.) 'free (from)' (Akk. ELLUM; nom.sg.c. $a-r a-u$-aš (OS), a-ra-u-úa-aš (OS), $a-r a-u a-a \check{s}, n o m .-a c c . s g . ~ a-r a-u-u$-u-an, $a-r a-a-u-u a-a n(\mathrm{OH} / \mathrm{NS})$,

(3sg.pres.act. a-ra-ua-ah-hi, a-ra-u-ua-ah-hi, 3pl.pres.act. a-ra-u-ah-ha-an-zi, 1sg.pret.act. $a-r a-u a-a h-h u-u n, a-r a-u-u a-a h-h u-u n, 3 p l . p r e t . a c t . ~ a-r a-u a-a h-h e-$ er; part. $a-r a-u a-a h-h 2-a n-t-$ ), araūēšs- ${ }^{z i}$ (Ib2) 'to become free' (3sg.pret.act. $a$ -ra-u-e-eš-ta, 3pl.pret.act. a-ra-a-u-e-eš-šer), araŭan(n)i- 'free (not being a slave)' (nom.sg.c. a-ra-ua-ni-iš, a-ra-ua-ni-eš, a-ra-úa-an-ni-eš, acc.sg.c. a-ra-u-una-an-ni-in, gen.sg. [a-ra-u] a-ni-ia-aš (OS), a-ra-úa-an-ni-ia-aš, acc.pl.c. a-ra-u-ua-an-ni-uš).

Anat. cognates: Lyc. ara- 'rite' (acc.sg. arã), arawa- 'freedom' (acc.sg. arawã, loc.sg. arawa, abl.-instr. arawadi), erawazije-, arawazije- 'monument' (nom.acc.pl. erawazija, arawazija, dat.-loc.pl. arawazije, abl.-instr. arawazijedi, gen.adj.abl.-instr. [er]ewezijehedi).

PAnat. *Ror-
IE cognates: Skt. áram 'fittingly', řtá- 'truth, order', Gr. àpapioкw 'to join'.

$$
\text { PIE *h } h_{2} \text { or-o- }
$$

The interpretation of the Anatolian forms is for a large part determined by the interpretation of the Lycian forms. There we find two stems, namely ara- and era- (in erawazije- 'monument'). Melchert (1992b: 50) argues that of these two stems, ara- must be original, whereas erawazije- shows e/i-umlaut due to the syllable $-z i$-. This is very unlikely, however, as we then would have to assume that in erawazije- the umlaut skipped two syllables, which is unparalleled in Lycian. A genuine example of $e / i$-umlaut in this word is visible in the gen.adj.abl.-instr. [er]ewezijehedi, which shows that erawazije- cannot be an umlauted form. Therefore, erawazije- must be the original form and arawazijemust be the $a$-umlauted variant of it. This also shows that ara- and arawa-must be $a$-umlauted forms from original *era- and *erawa-.
Connecting Lyc. er- to Hitt. ar-, we have to reconstruct a PAnat. stem *Ror-, and not *ar-(as e.g. in Melchert 1994a: 105, 148).
Since Hrozný (1915: 28), these words have been connected with Skt. áram 'fittingly', rotá- 'truth, order', etc., which themselves are connected with Gr. ápapíбк $\omega$ 'to join', from a root $* h_{2} e r$-. If these connections are justified (and semantically they are appealing), then the Anatolian forms ultimately reflect $* h_{2} o r-$, which is an important argument in favour of the view that $* h_{2}$ neutralizes before *o (cf. Kortlandt 2004; Kloekhorst fthc.c).
${ }^{(U Z U)}$ arra- (c.) 'arse, anus' (Sum. ${ }^{\text {UZU }}$ GU.DU): nom.sg. ar-ri-iš, ar-ru-uš, acc.sg. $a r-r a-a n$, gen.sg. $a r-r a-a \check{s}$, dat.-loc.sg. ar-ri, abl. ar-ra-az, $a-a r-r a-a z$, acc.pl. ar$r u$-uš.

IE cognates: OHG ars, Gr. őppos 'arse'.

$$
\text { PIE *h } h_{1 ?} \text { orso- }
$$

See $\mathrm{HW}^{2}$ A: 234 for attestations. Within Hittite, we find forms from an $a$-stem arra-, but also a nom.sg. arriš ( $i$-stem) and nom.sg. arruš ( $u$-stem). Perhaps we are dealing with tabooistic alterations.
Since Friedrich (1923: 374-6), this word is generally connected with OHG ars, Gr. òppos 'arse' from *Horso-. It proves that *VrsV>Hitt. VrrV. If OIr. err 'tail, end' < *ers- $\bar{a}$ belongs to this word as well, then we are dealing with a root $*_{1}$ ers-.
$\operatorname{arace}^{-{ }^{z i}}$ (Ic2) 'to stop, to rein in; to overpower': 2sg.pres.act. $a$-ra- $a-$-si (here?, KBo 23.110 rev. 6, KUB 50.111, 7), a-ra-ši (here?, KUB 49.94 ii 14, iii 10), 3sg.pres.act. $a-r a-i-i z-z i$ (KUB 8.81 iii 16), $a-r a-i z-z i, a-r a-a-i z-z i$, 2pl.pres.act. $a-$ ra-at-te-ni (here?, KUB 6.15 ii 2), 3pl.pres.act. $a$-ra-a-an-zi (KUB 29.50 i 22, 25, iv 11 (MH/MS), KBo 5.6 ii $20(\mathrm{NH})$ ), a-ra-an-zi, 1sg.pret.act. $a-r a-n u-u n$ (KUB 23.87, 27), 3sg.pret.act. $a-r a-a-i t$, 3pl.pret.act. $a-r a-e r$, $a-r a-a-e r, 2$ sg.imp.act. $a-$ ra-a-i, 3pl.imp.act. $a-r a-a n-d u$; part. $a-r a-a n-t-$, $a-r a-a-a n-t$.

PIE * $h_{3}$ or-o-ie/o-
The verb arae- is mi-conjugated and belongs to the hatrae-class. It has to be separated from arai- $^{i}$ / ari- 'to rise, to raise' (q.v.), despite homophonic forms like 3pl.pret.act. arāer and 2sg.imp.act. arāi. See $\mathrm{HW}^{2}$ for a correct separation between $\operatorname{arai}^{2}{ }^{2}\left(=\operatorname{arae}^{-i}\right)$ (A: 246f.) and arai- ${ }^{-1}\left(=\text { arai- }^{i} / \operatorname{ari}\right)^{-}$(A: 244f.).
Like all hatrae-class verbs, arae- ${ }^{z i}$ probably is denominative as well. Oettinger (1979a: 369) derives arae $^{-2 i}$ from a noun * $h_{3}$ or-eh ${ }_{2}$ - 'Stand, aufgestanden Sein', a derivative of the root * $h_{3} e r$ - 'to rise'. This is in contradiction, however, with his view that hatrae-class verbs are derived from $o$-stems and $t \bar{a} i e / a$-class verbs from $e h_{2}$-stems. I therefore would assume that arae- is derived from a noun $* h_{3} o r-o$ -
arah-: see erh- / arah- / arh-
$\boldsymbol{a r a i}^{\boldsymbol{i}}$ / ari- (IIa4 > Ic2) 'to (a)rise, to lift; to raise': 1sg.pres.act. a-re-eh-hi (KBo 12.103 obv. 9 (NS)), 3sg.pres.act. $a-r a-a-i$ (OS), $a-r a-i, a-r a-a-e z-z i$ (e.g. KUB 31.101 obv. 14 (MS)), $a-r a-i z-z i(\mathrm{OH} / \mathrm{NS})$, 3pl.pres.act. $a-r i-i=-a n-z i$ (KUB 2.3 i 44, ii 29), 3sg.pret.act. $a-r a-i \check{s}$ (OS), $a-r a-a-i s ̌, a-r a-i-i s ̌, a-r a-a-e \check{s}$ (KBo 5.4 rev . 27), 3pl.pret.act. $a-r a-e-e r$ (KBo 2.2 i 49), $a-r a-a-e r$, 2sg.imp.act. $a-r a-a-i$,

3sg.imp.act. $a-r a-i d-d u$; 3sg.pres.midd. $a$-ri-et-ta (KUB 17.28 ii 2); part. $a$-ra-an-$t$-, $a-r a-a-a n-t$-; verb.noun. $a-r a-u-u a-a r$.

Anat. cognates: CLuw. ari(ia)- 'to raise' (3sg.pres.act. a-ri-it-ti, 3sg.pret.act. a-ri-it-ta, $a-a-r i-i t-t a$, 3pl.pret.act. $a-r i-i n-t a, ~ a-a-r i-i n-t a, 2 s g . i m p . a c t . ~ a-a-r i-i a$, 3sg.imp.act. $a-r i-i a-a d-d u, 3$ pl.imp.act. $a-r i-i n-d u$, part. $a-r i-i m-m i$ ), ${ }^{\text {GIšarianal- (n.) }}$ 'carrying basket' (nom.-acc.pl. a-ri-ía-la); Lyc. erije- 'to raise, to levy' (3sg.pres.act. erije, 3sg.pret.erite, inf. erijeine, erijeina).
IE cognates: Lat. orior 'to arise, to come into existence'.

$$
\text { PIE * } h_{3} r-o i-/ * h_{3} r-i-
$$

The verb arai- ${ }^{i}$ / ari- 'to rise, to raise' is originally hi-conjugated and belongs to the dāi/tiiianzi-class. From MS texts onwards we find $m i$-inflected forms as well, as if the verb inflects according to the hatrae-class. This verb has to be separated from the verb arae- $^{z i}$ 'to stop, to rein in; to overpower' (q.v.) (a mi-inflected verb belonging to the hatrae-class) despite of the many identical forms they share (e.g. 3pl.pret.act. arāer, 2sg.imp.act. arāi, etc). See for attestations and forms the lemmas arai- ${ }^{1}$ (= arai- ${ }^{i} /$ ari-) and $\operatorname{arai}^{2}{ }^{2}\left(=\operatorname{arae}^{z i}\right)$ in $\mathrm{HW}^{2}$ A: 244f.. Puhvel (HED 1/2: 123f.) wrongly regards arai- ${ }^{i}$ / ari- and arae- ${ }^{-i}$ as one verb and must assume a wild mix of inflected forms within one paradigm.
Oettinger (1979a: 479) connected arai- $^{i} /$ ari- with Lat. orior 'to arise', from the root *h $h_{3}$ er- 'to rise, to move vertically'. See Kloekhorst fthc.a for my view that the dāi/tiiianzi-class consists of $h i$-inflected $i$-presents, showing a zero-grade root followed by an ablauting suffix $*_{\text {-oi-/-i-. In the case of arai-/ari- I therefore }}$ reconstruct $* h_{3} r$-oi- $/ * h_{3} r-i$-.
It is interesting to note that the participle of this verb shows no $i$-suffix: arantinstead of expected $* *$ ariiiant-. This may point to a situation where originally only finite forms of the verb carried an $i$-suffix whereas infinite forms did not (similar in dai-/ ti- 'to place, to put' $<*^{h} h_{1}-o i-/ * d^{h} h_{1}-i$ - besides impf. zikke/a- $<* d^{h} h_{1}-$ sk'e/o-). The verb.noun arauuar probably shows loss of intervocalic -i-: *araiuar $<{ }^{*} h_{3} r$-oi-ur.
araššiie/a- ${ }^{z i}$ : see $\bar{a} r \check{s}^{z i} /$ arš-
arh(a)-: see erh- / arah- / arh-
$\boldsymbol{- a}(\boldsymbol{r i}), \boldsymbol{a t}(\boldsymbol{i})$ (3sg.midd.-endings)
Anat. cognates: CLuw. -ar(i) (3sg.pres.midd.-ending): a-a-ia-ri,zi-ia-ar, zi-i-i-iari.

PIE *-o(-ri)
In the 3 sg.midd., we find two sets of endings: pres. $-a(r i)$, pret. $-a t(i)$ vs. pres. $-t t a(r i)$, pret. -ttat(i). Sometimes it is stated that the distribution between these endings corresponds to the distribution between $m i$ - and $h i$-endings in the active, but this is incorrect. On the basis of the active inflection of a given verb, it cannot be predicted whether it will use $-a(r i) /-a t(i)$ or $-t t a(r i) /-t t a t(i)$ as 3 sg.midd.ending. For instance, h_halziia(ri), lahuūāri, lagāri and pahša(ri) correspond to the hi-inflecting actives halzai- ${ }^{i} /$ halzi-, lāhu- ${ }^{i} / l a h u-, l a \bar{a}-_{-}{ }^{i} / l a k$ - and pahšs- ${ }^{i}$, whereas e.g. eša(ri) and karša correspond to the $m i$-inflecting actives $e \check{s}_{-}^{-{ }^{i}} / a s ̌-$ and $k a r s s^{z i}$.

Usually, a verb is consistent in its 'choice' for either the ending -a(ri) / -at(i) or -tta(ri) / -ttat(i), but sometimes we encounter both (e.g. karša besides karštari or šuppari besides šuptari) and occasionally even a combination of the two (e.g. šuppattari). These are rare cases, however. For instance, the verb eš- ${ }^{\text {a(rii) }}$ 'to seat oneself' shows the ending $-a(r i)$ throughout the Hittite period, whereas e.g. ki- ${ }^{\text {Ita(ri) }}$ consistently shows -tta(ri). That this does not necessarily reflect the PIE state of affairs is visible in the fact that eša(ri) < *h $h_{l}$ éh $h_{l} s-o$ corresponds to Skt. áste and Gr. $\eta \sigma \tau \alpha \mathrm{a}$ from *hé $h_{l} s$-to. On the other hand, Hitt. kitta(ri) reflects *kéi-to just as Skt. Śéte and Gr. кعĩนa, whereas its CLuwian cognate zuìiari reflects *ḱéi-o just as Skt. sáaye.
The endings $-a(r i) /-a t(i)$ occur in all the middle classes. Note that in class IIIf (tukkāri-class), the ending is always spelled with a plene vowel (cf. § 2.2.3.2). This is due to accentuation, compare eša(ri), ešat (i) < * $h_{l} e ́ h_{l} s-o$ and $k i ̄ s ̌ a(r i)$, $k \overline{l s} a t(i)<* g$ ǵéis-o to tukkāri, tukkāti<*tuk-ó and lagāri<*lg' ${ }^{h}$-ó. In the present ending $-a(r i)$, the distribution between forms with and without $-r i$ seems connected with this: tukkāri-class middles always show -ri, whereas in fullgrade middles the $-r i$ is optional. In the preterite, the distribution between -ati and -at seems chronological: compare $e-s ̌ a-t i(\mathrm{OH} / \mathrm{MS})$ besides $e-s ̌ a-a t(\mathrm{MH} / \mathrm{NS})$, or $d u$ $u k-k a_{4}-a-t i$ (MS?) besides $t u-u k-k a_{4}-a-a t(\mathrm{NH})$.
As we saw above, the endings $-a(r i) /-a t(i)$ have a well-established IE cognate in Skt. -e (3sg.pres.midd.-ending), which is a variant of -te (compare sáaye < *kéi-$o-i$ besides śéte $<*$ kéé-to- $i$ ). In all other IE languages that show a reflex of the middle category, we find the ending *-to only (for which see at -tta(ri), -ttat(i)). It would go too far to go into the details here of the PIE distribution between *-o and ${ }^{*}$-to.
$\boldsymbol{a r}\left(\right.$ iiela) $\mathbf{-}^{z i}$ (Ic1) 'to consult an oracle; to determine by oracle': 1sg.pres.act. $a$-ri$\underset{\sim}{a} a-m i \quad(\mathrm{MH} / \mathrm{MS})$, 2sg.pres.act. a-ri-ia-ši, 3sg.pres.act. a-ri-e-ez-zi, a-ri-ía-zi,

1pl.pres.act. a-ri-i_ia-u-e-ni (MH/MS), 3pl.pres.act. a-ri-an-zi, a-ri-ia-an-zi, a-ri$e n-z i, 1$ sg.pret.act. $a-r i-i$ a-ri-ía-u-e-en, 2pl.pret.act. a-ri-ia-at-ti-en, 3pl.pret.act. a-ri-i-e-er, a-ri-er, a-ri-ia-er, 2sg.imp.act. $a-r i-i a ;$ part. $a-r a-a n-t$-, $a-r a-a-a n-t$-, $a-r i-i a-a n-t$-; verb.noun. a-ri-i_ia-u-una-ar; impf. a-ri-iš-ke/a-, a-re-eš-ke/a-.
Derivatives: ariỉašeššar / ariiiašešn- (n.) 'oracle’ (Sum. MÁŠ, Akk. BERRU; nom.-acc.sg. $a$-ri-i_ia-še-eš-šar, gen.sg. $a-r i-i \underline{1} a-s ̌ e-e s ̌-n a-a s ̌, ~ d a t .-l o c . s g . ~ a-r i-i a-s ̌ e-~$ eš-ni, a-ri-še-eš-ni, abl. a-ri-i्2a-še-eš-na-az, a-ri-ía-še-eš-na-za).
IE cognates: Gr. غ̇pé $\omega$ 'to ask'.

## PIE * $h_{1} r h_{1}-i e / o-$

Puhvel (HED 1/2: 136f.) cites the verb as ariya-, arai-, arguing that possibly forms like 2 pl.pres.act. aratteni (KUB 6.15 ii 2, broken context) belong here as well. This is improbable, however. All forms of which it can be ascertained that they mean 'to consult an oracle; to determine by oracle' inflect according to the -ie/a-class, ariie/a- ${ }^{z i}$, or show a stem ar- (in the participle arant-). There is no reason to assume an extra stem arai-: forms in broken contexts that show such a stem could just as well belong with $\operatorname{arae}^{-{ }^{z i}}$ (q.v.) or arai- ${ }^{i} / \operatorname{ari-}$ (q.v.).
The participle shows two different forms, viz. arant- and ariiant-. According to $\mathrm{HW}^{2}$ (A: 295), the original participle is arant-, showing a situation where al finite forms bear the $*_{\text {-ie/o-suffix, whereas the inifinite forms do not (cf. the situation in }}$ e.g. $\operatorname{karp}\left(\text { iiela }^{-2 i}\right)^{-2}$ ). The participle ariiant- is a younger formation.

Houwink ten Cate (1973: 209-10) argues that ariie/a- ${ }^{z i}$ is to be seen as a variant of arai- ${ }^{\text {i }}$ / ari- 'to rise; to raise', so literally denoting 'to arouse the gods'. Although verbs that belong to the dāi/tiianzi-class indeed often show younger thematizations inflecting according to the -ie/a-class (e.g. halzāi beside younger halziezzi), I do not think that semantically an equation between arai- ${ }^{\text {i }}$ ari- 'to rise, to raise' and ariie/a- ${ }^{z i}$ 'to consult an oracle' is likely.
Since Götze \& Pedersen (1934: 47f.), this verb is often connected with Lat. $\bar{o} r a ̄ r e ~ ' t o ~ p r a y ' . ~ T h e ~ l a t t e r ~ w o r d, ~ h o w e v e r, ~ b e l o n g s ~ w i t h ~ G r . ~ a ̀ ~ \rho \eta ́ ~ ' p r a y e r ', ~ w h i c h ~$ shows that the root must have been $* h_{2} e r$-. For Hittite, reconstructing a root * $h_{2} e r$ - is difficult, as we would expect an outcome **har- (unless we assume $o$ grade, but that is not likely in a *-ie/o-verb).
$\mathrm{LIV}^{2}$ connects ariie/a- with Gr. $\dot{\varepsilon} \rho \varepsilon ́ \omega$ 'to ask' from a root * $h_{l}$ reh $h_{1}$, which seems semantically plausible. This means that ariie/a- ${ }^{z i}$ must reflect $* h_{1} r h_{1} i e ́ / o ́-$, for which compare e.g. pariianzi 'they blow' < *prh $h_{1}$ iénti or kariiiant- 'grass' if from $*_{g}{ }^{h} r h_{l}-$ ient-.

The imperfective ariške/a- / areške/a- at first sight seems to reflect *arie + ske/avel sim., but in fact must be phonologically interpreted /?riské/á-/, the regular outcome of *h $h_{1} r h_{1}$-skééló- (compare paripriške/a- 'to blow (impf.)' /pripriské/á-/ < *pri-prh $l_{1}$-skéló-). This explains the fact that the imperfective of ariie/a- ${ }^{z i}$ is consistently spelled differently from the imperfective of $\bar{a} r r^{i} / a r$ - 'to arrive', which is spelled ar-aš-ke/a- in the oldest texts, representing /?rské/á-/ $<* h_{l} r$ -skéló-
For ariiáǎ̌eššar 'oracle' compare tuzziiačeššar 'army', which is seen as a compound of tuzzi- and ašeššar 'gathering'. This would mean that ariiašeššar literally means 'gathering for consulting an oracle'.
arriie/a- (Ic1) 'to be awake': verb.noun ar-ri-ia-a-u-ua-ar (KBo 13.1 i 41).
The word is attested in a vocabulary only: KBo 13.1 i 41: (Sum.) IGI.LIB.A = (Akk.) $D A ́-L A-P U=$ (Hitt.) ar-ri-ia-a-u-ua-ar. Akk. dalāpu means 'to be/stay/keep awake'. Unfortunately, the Hittite word is not found in a real text, so its meaning cannot be ascertained by context.
Szemerényi (1979: 613-6) connects arriie/a- with Arm. art'own 'watchful' and OIr. ar- '(night)watch' (in aire 'watch', ro-airius 'I have watched') and states that if these connections are justified, "Hitt. arriya- is closely related to the widely attested verbs arāi, araizzi 'rises', ar-hi 'I arrive, get (somewhere)', arhahari 'I step, stand', and, formally, may be identical with Lat. orior" (followed by e.g. Puhvel HED $1 / 2: 138 \mathrm{f}$.). It is problematic, however, to equate the geminate $-r r$ - of arriīãuar with the consistently single spelled $-r$ - of the verbs arai- ${ }^{i} /$ ari- and $a r-{ }^{\text {ta }}$.
$\boldsymbol{a r k} \mathbf{-}^{\boldsymbol{a}(r i)}, \overline{\boldsymbol{a}} \boldsymbol{r} \boldsymbol{k}^{\boldsymbol{i}}$ / ark- (IIIc > IIId; IIa2) 'to mount, to cover, to copulate': 3sg.pres.midd. $a[r-g] a$ (KUB 41.8 iv 29 (MH/NS)), ar-kat-ta (KBo 22.2 obv. 9, 10 ( $\mathrm{OH} / \mathrm{MS}$ )), 3sg.imp.midd. ar-ga-ru (KBo 10.45 iv 32 (MH/NS), KUB 41.8 iv 31 (MH/NS)); 3sg.pres.act. a-ar-ki (KBo 10.45 iv 30 (MH/NS)); part. ar-kán-t(OS); impf. 3sg.pres.midd. ar-ki-iš-ke-et-ta (KUB 29.1 i 30 (OH/NS)).
Derivatives: arki- (c.) 'testicle' (nom.pl. ar-ki-i-e-eš (KBo 17.61 rev. 15 (MH/MS)), acc.pl. [a]r-ki-uš (KUB 10.62 v 7 ( $\mathrm{OH} / \mathrm{NS}$ ))).
IE cognates: Gr. ő $\rho \chi ı \varsigma ~ ‘ t e s t i c l e ’, ~ ह ै v o \rho \chi o \varsigma, ~ \varepsilon ̇ v o ́ \rho \chi \eta \varsigma ~ ' t e s t i c l e d ’, ~ A r m . ~ o r j i-k ' ~$ 'testicle', orj 'male', Alb. herdhë, MIr. uirge, Av. arazi- 'testicle(s)', ON argr 'passive homosexual', Lith. aržùs 'lustful', eřzzilas, dial. ařzzilas 'stallion', Russ. ërzat' 'to fidget'.

PIE * $h_{3} r \dot{g}^{h}-o, * h_{3} o ́ r g^{h}-e i$.

It seems that originally the verb was middle only. Only once we find an active form, 3 sg.pres.act. $\bar{a} r k i$ (KBo 10.45 iv 30), which is a duplicate of 3 sg.pres.midd. $a[r g] a$ (KUB 41.8 iv 29). Nevertheless, it is remarkable that this $\bar{a} r k i$ seems to reflect $o$-grade, whereas all other forms reflect zero grade. If the active form was back-formed from the middle paradigm, we would have expected a short $a$ here as well.
Puhvel (HED 1/2: 142f.) connects this verb with e.g. Gr. ő $\rho \neq ı$ ‘s 'testicle', Av. arazi- 'testicle(s)', Arm. orj 'male', Lith. aržùs 'lustful', eřzzilas 'stallion' from a root $* h_{l} e r g^{\prime}{ }^{h}$-. A reconstruction with $* h_{l^{-}}$(thus also in $\mathrm{LIV}^{2}$ ) is based on the Lithuanian form eřzzilas 'stallion' only: all other IE languages reflect a vowel $* o$. In dialectal Lithuanian, we find a form ařzzilas 'stallion' as well, which makes it likely that eřzzilas / ařžilas is subject to Rozwadowski's change (i.e. mixing up of initial $e$ - and $a$-, cf. Andersen 1996: 141; Derksen 2002; Kortlandt 2002-03). This makes Lith. eřžilas valueless for the reconstructing of the initial laryngeal. As all other IE languages seem to reflect non-apophonic $*$ org $^{h}$-, we have to reconstruct * $h_{3} \mathrm{erg}^{\prime}{ }^{h}$-. This is especially prompted by the equation of Av. arazi- and Arm. orji$k^{\prime}$ (both zero-grade formations, but note that Alb. herdhë shows *e-grade, however) with Gr. ő $\rho \chi$ เৎ, which therefore is likely to be a zero-grade formation as well and must reflect $* h_{3}-: * h_{3} r g^{h}-i-$. It is likely that this is the preform that is reflected in Hitt. arki- as well, which shows that initial $* h_{3}$ disappears before $* r$ (cf. Kloekhorst fthc.c).

In Hittite, middles can either reflect zero grade (e.g. tukkāri) or e-grade (e.g. ešari). Because the middle forms of the verb ark- ${ }^{a}$ are consistently written with a short vowel, we have to assume a zero-grade formation $* h_{3} r g^{h}-o$, again with loss of initial $* h_{3}$ in front of $* r$.
If the one active form $\bar{a} r k i$ is not a secondary backformation, but original (which could be indicated by the fact that it shows full-grade versus the zerograde forms that are found in the middle paradigm), it reflects $* h_{3}$ ór $^{\prime}{ }^{h}-e i$ (o-grade as in all $h i$-verbs), and could show that initial $* h_{3}$ was lost in Hittite in front of $*_{o}$ as well (cf. Kloekhorst fthc.c).
$\overline{\boldsymbol{a}} \boldsymbol{r} \boldsymbol{k} \boldsymbol{-}^{\boldsymbol{i}} / \boldsymbol{a r k}$ - (IIa2) 'to cut off, to divide': 3sg.pres.act. $a$-ar-ki (OS), ar-ki (1467/u ii 4 (NS)), a-ar-gi (KBo 6.11 i 16), 3pl.pres.act. ar-kán-zi (OS), a-ar-kán-zi (1x, KUB 8.16+24 + 43.2 iii 14 (NS)), ar-ga-an-zi (KUB 55.39 i 5 (NS)), 3pl.pret.act. ar-ke-er (KUB 43.60 iii 20, 23); part. ar-kán-t-; inf.I ar-ku-ua-an-zi (KBo 19.142 ii 20); impf. ar-ki-iš-ke/a-.

IE cognates: Lat. (h)ercīscō 'to divide (an estate)', (h)erctum 'division (of inheritence)'.

PIE * $h_{1}$ or $r^{\prime} k^{\prime}-e i, * h_{1} r^{\prime} k^{\prime}$-enti
See $\mathrm{HW}^{2}$ A: 300f. for attestations. The oldest forms of this verb show an ablaut between $\bar{a} r k$ - in the singular and ark- in the plural, reflecting * $\mathrm{HorK}-/{ }^{*} \mathrm{HrK}$-.
According to Puhvel (HED 1/2: 141), the verb basically means 'to mark off' as can be seen in the following context:

KBo 11.17 ii
(12) nu=kán ma-ah-ha-an SILA $_{4}$ BAL-an-ti
(13) nam-m=a-an=kán ua-ap-pu-i kat-ta
(14) ȟa-at-ta-i nu e-eš-har tak-ni-i
(15) kat-ta tar-na-i $\mathrm{SILA}_{4}=m a=k a ́ n$
(16) ar-kán-zi nam-ma=kán SILA $_{4}$
(17) hu-u-ma-an-da-an pít-tal-ua-an-da-an
(18) mar-kán-zi
'While he sacrifices a lamb and then perforates it along the bank, he lets the blood flow on the ground. They $a$. the lamb and butcher the entire lamb 'plain''.

In this context, arkanzi stands between hattai 'perforates' and markanzi 'butcher', and therefore must mean something like 'mark off'. On the basis of this meaning, Puhvel connects the verb with Gr. है $\rho \chi \alpha \tau о \varsigma \cdot \varphi \rho \alpha \gamma \mu$ о́я (Hes.) 'fence'. The latter
 'guard' and ó $\rho \chi \circ \varsigma$ 'row of vines', which, because of its alternation $\chi: \kappa$ shows that these words probably are of substratum origin.
Another proposal (Eichner 1981: 63; 1982: 21-6), viz. a connection with Lat. (h)ercīscō 'to divide (an estate)', (h)erctum 'division (of inheritence)', may make more sense if the awkward sporadic presence of $h$ - in Latin does not point to unIE origin. If accepted, Hitt. $\bar{a} r k-{ }^{i} / \operatorname{ark}-$ and Lat. (h)erc- would point to a PIE root *h $h_{1}$ er $k^{\prime \prime}$ -
$\boldsymbol{a r k u} \boldsymbol{1} \boldsymbol{e} \boldsymbol{e}^{z i}$ (Ic2) 'to pray; to plead': 1sg.pres.act. ar-ku-ua[-mi] (KUB 14.14+ i 6), 3sg.pres.act. ar-ku-[ua-]iz-zi (KUB 43.57 iv 7), 3pl.pres.act. ar-ku-an-zi, ar-ku-ua-an-zi, a-ar-ku-ua-a-an-zi (KBo 23.97 iv 15), 1sg.pret.act. ar-ku-ua-nu-un (KBo 4.8 iii 22, KUB 6.46 iv 3, KUB 6.45 iii 35), 3sg.pret.act. ar-ku-ua-it (KBo 11.1 obv. 32, rev. 4), ar-ku-ua-a-it (KUB 50.53, 12), ar-ku-ut-ta (KUB 22.70
obv. 80); verb.noun ar-ku-ua-ar, ar-ku-u-ua-ar, ar-ku-u-ar, ar-ku-ar, a-ar-ku-u-ua-ar (KUB 14.10 i 23) 'prayer; plea; excuse'; impf. ar-ku-iš-ke/a-, ar-ku-ú-i-iš-ke/a- (KUB 6.46 iii 59), ar-ku-ú-e-eš-ke/a- (KUB 6.45 iii 33, KUB 21.19 ii 4).
Derivatives: arkuēššar / arkuēšn- (n.) 'prayer' (dat.-loc.sg. ar-ku-u-e-eš-ni (KUB 6.45 iii 22), ar-ku-e-eš-ni (KUB 6.46 iii 61)).
IE cognates: Skt. arc- 'to sing, to praise', TochA yärk 'worship', TochB yarke 'worship', Arm. erg 'song'.

PIE *h $h_{1}$ ork ${ }^{w} o-$ ielo-??
See $\mathrm{HW}^{2}$ A: 309f. for attestations. There is some debate about the exact semantics of this verb. E.g. HW ${ }^{2}$ (l.c.) translates "beten (bitten)"; selten "sich entschuldigen (rechtfertigen)" and argues that 'to pray' is the original meaning. E.g. Puhvel (HED 1/2: 148f.) translates "plead, argue, rejoin, riposte, respond, explain oneself, make excuses, offer defense" and states that all instances where usually 'to pray' is translated, 'to plead' would work as well.

This debate also has consequences regarding the etymology. The verb belongs to the hatrae-class, which consists of denominatives in *-ie/o- of nouns in -o-. In this case we have to postulate a noun $* a r k u a-<* H(o) r K^{w} o$ - which should be the source of arkuuae- ${ }^{z i}$. The scholars that translate arkuuae- ${ }^{z i}$ as 'to pray' connect it with Skt. arc- 'to shine, to sing, to praise', TochA yärk- 'to worship' < * $h_{1} e r k^{W}$-, implying a reconstruction $* h_{l}(o) r k^{w} o-i e / o-$. Yet, the scholars that translate 'to plead' make a connection with Lat. argū̄ 'to argue'. The interpretation of this latter word is unclear, however. Usually, Lat. arguō is seen as a denominative verb of a noun *argus, which is connected with the root for 'white', *h2erg'- (e.g. Schrijver 1991: 67-8). A connection with Hitt. arkuuae-, however, would imply a reconstruction $* h_{2} \mathrm{Org}^{w} o-i e / o$ - for Hittite and $* h_{2} \mathrm{erg}^{w}$ - for Latin. On a formal level, this etymology would only be acceptable if we assume that in Hittite an initial $* h_{2}$ is dropped in front of $*_{o}$ (for which see Kloekhorst fthc.c), and secondly that $*_{-r g}{ }^{w}$ - would yield $-r g u$ - in Latin (possibly parallel to the development of $*-n g^{w}$ - as in Lat. unguen 'nail' $<{ }^{*} h_{3} n g^{w}$-en-).
So from a formal point of view, both etymologies are possible, provided that *-rg ${ }^{w}->$ Lat. -rgu-. Semantically, however, I personally would favour the translation 'to pray' and therefore the reconstruction $* h_{l}(o) r k^{w} o-i e / o-$.

The few spellings with initial plene $a-a r-k u-u a$ - may indicate that the $a$ - was a real vowel $/ \mathrm{Rark}^{\mathrm{w}} \mathrm{ae}-/$, and point to a reconstruction $* h_{l} o r k^{w} o$-ie/o-, whereas *h $h_{1} r k^{w}$ oie/o- would have yielded /?rk ${ }^{\mathrm{w}}$ ae-/, which should have been spelled with ar-ku-ua- only.
*arma- (c.) 'moon(god); month' (Sum. ${ }^{\text {d EN.ZU, ITU }}{ }^{(\mathrm{KAM})}$, Akk. ${ }^{\text {d } S I ̂ N): ~ n o m . s g . ~}$ ${ }^{\mathrm{d}} S I ̂ N-a s ̌,{ }^{\mathrm{d}} \mathrm{EN} . Z \mathrm{Z}-a s ̌, I T U^{(\mathrm{KAM})}$-aš, acc.sg. ITU-an, gen.sg. ${ }^{\mathrm{d}} \mathrm{EN} . Z \mathrm{ZU}-a s ̌, ~ I T U-a s ̌$, dat.-loc.sg. ${ }^{\mathrm{d}} S I \hat{N}-m i$, ITU ${ }^{(\mathrm{KAM})}-m i$, abl. ITU- $a z$, instr. ITU-mi-it, nom.pl. ITU ${ }^{\mathrm{HIIA}}$ $e s ̌$, dat.-loc.pl. ITU ${ }^{\text {KAM.HI.A }}-a s ̌$.
Derivatives: *armatar (n.) 'monthspan(?)' (nom.-acc.sg. ITU ${ }^{\text {KAM }}$-tar), ${ }^{\text {(NINDA) }}$ armanni- (c.) 'lunula, crescent; "croissant" bread' (UD.SAR) (nom.sg. ar-ma-an-ni-iš, nom.pl. ar-ma-an-ni-iš, ar-ma-an-ni-eš, acc.pl. ar-ma-an-ni-uš), ${ }^{\text {NINDA }} \boldsymbol{a r m a}(\boldsymbol{n})$ tal(l)anni- (c.) type of bread, armuualae- ${ }^{\text {zi }}$ (Ic2) 'to shine (of the moon)' (2sg.imp.act. ar-mu-u-ua-la-i (KUB 6.45 + KUB 30.14 iii 69)), armuйalašha(i)- (c.) 'waxing of the moon' (nom.sg. ar-mu-ưa-la-aš-ha-aš, ar-mu-ua-la-aš-ha-iš, gen.sg. ar-mu-ua-la-aš-ha-aš).
Anat. cognates: CLuw. *darma- (c.) 'Moon-god' (nom.sg. [ $\left.\left.{ }^{\mathrm{d}} \mathrm{E}\right] \mathrm{N} . \mathrm{ZU}-a \check{s}\right)$, armannaima/i- (adj.) 'decorated with lunulae' (nom.-acc.sg.n. ar-ma-an-na-i$m a-a n$ ), *armašša/i- 'month' (nom.pl. ${ }^{\mathrm{d}} \mathrm{EN} . Z \mathrm{Z}-i n-z i$, gen.adj.dat.-loc.pl.(pl.poss.) ${ }^{\mathrm{d}} \mathrm{EN} . Z \mathrm{Z}-a n-z a-a n-z a$ (=armaššaššanzanza)); HLuw. *arma- (c.) 'moon(god)' (nom.sg. ${ }^{\text {DEUS }}$ LUNA+MI-sa (e.g. CEKKE §24, TELL AHMAR 2 §3, ALEPPO 2 §2, etc.), LUNA+MI-ma-sa (KAYSERİ §16), "LUNA"-ma-sá (SULTANHAN $\S 31)$, gen.sg. ${ }^{\text {DEUS }}$ LUNA $+M I-s a$ (KARATEPE 1 §75), dat.-loc.pl.(?) LUNA+MI$z i / a$ (TOPADA §22)); Lyd. armia- (adj.) 'belonging to Arma(?)'; Lyc. armima'moon' (nom.sg. armima), rm̃mazata- 'monthly offering(?)' (nom.-acc.pl.n. rm̃mazata), Erm̃menẽni, PN, lit. 'brother of the moon'.

$$
\text { PIE * } h_{l}(o) r-m o-(?)
$$

A reading arma- of the logograms ${ }^{\mathrm{d}} S \hat{I} N,{ }^{\mathrm{d}} \mathrm{EN} . Z \mathrm{ZU}$ and ITU ${ }^{(\mathrm{KAM})}$ is suggested by the derivative armanni- 'lunula' and names like ${ }^{\mathrm{m}} A r-m a-z i-t i-={ }^{\mathrm{m} . \mathrm{d}}$ SÎN-ma-LÚ-i(cf. $\mathrm{HW}^{2}$ A: 313). According to Puhvel (HED 1/2: 152), the form $a$-ar-me-eš (KBo 23.52 ii $10,12,15,17$ ) belongs to this word as well, and he translates 'lunulae' (nom.pl.). $\mathrm{HW}^{2}$ (A: 327) just states that the word denotes "Teil am Ochsengespann", however, without giving an exact interpretation. If the form belonged to the word for 'moon', it would be the only attestation with plene $a$-. It therefore is perhaps best to leave this form aside.
The stem arma- is found in Luwian, Lycian and possibly Lydian as well. The Lycian form Armma- at first sight seems to point to PAnat. arma-. If the first $a$ of Armma-, which is an $a$-stem, is due to $a$-umlaut, however, and the form Erm̃menẽni shows the original stem, we can reconstruct PAnat. *?(o)rm-o- (or even $* ?(o) r m$-eh $h_{2}$ - if we take the Lycian $a$-stem into account).
It is not totally clear to what extent the word-group consisting of erman / arman- 'sickness', armae- ${ }^{\text {i }}$ 'to be pregnant', etc. is related to the word for
'moon'. If a semantic connection is perceivable (perhaps through seeing the moon as the 'weaker' celestial body), the word erman 'sickness' would show that we have to reconstruct an initial $* h_{1}$ : $* h_{l}(o) r m o-$. Alternatively, we could with Van Windekens (1979) assume a connection with TochB yarm 'measure' < * $h_{l}$ ermn, assuming that 'moon' derives from 'measurer' (cf. PIE * meh ${ }_{1} n s$ 'moon' from *meh $l^{-}$'to measure'). This would point to a reconstruction $* h_{1}$ ormo- as well. Another possibility is assuming that arma-reflects *hlor-mo- derived from * $h_{l} e r$ - 'to move' (the moon as 'traveller').
$\boldsymbol{a r m a e}-{ }^{z i}$ (Ic2) 'to be pregnant': 3sg.pres.act. ar-ma-iz-zi, ar-ma-a-iz-zi, part. ar$m a-a n-t-$; verb.noun.gen.sg. ar-ma-u-ua-aš (KUB 35.103 iii 10).
Derivatives: armauant- (adj.) 'pregnant' (nom.sg.c. ar-ma-u-ua-an-za, acc.sg. ar-ma-u-an-da-an, nom.pl.c. ar-ma-u-ua-an-te-s =a), armahh- (IIb) 'to make pregnant; (with $=z$ ) to become pregnant' (3sg.pres.act. ar-ma-ah-hi, 3pl.pres.act. ar-ma-ah-ha-an-zi, 1sg.pret.act. ar-ma-ah-hu-un, 3pl.pret.act. ar-ma-ah-he-er; 3sg.imp.act. ar-ma-ah-du, ar-ma-ah-hu, ar-ma-ah-hu-u[d-du] (KUB 41.8 iv 32); part. ar-ma-ah-ha-an-t-; verb.noun gen.sg. ar-ma-ah-hu-(ua-)aš, abl. ar-ma-ah-hu-ua-az-za; verb.noun. dat.-loc.sg. ar-ma-ah-ha-an-ni).

PIE * $h_{l}(o) r-m o-i e / o-(?)$
See HW ${ }^{2}$ A: 323-4 and Puhvel HED 1/2: 155f. for attestations. The verb armae-zi inflects according to the hatrae-class. This class predominantly consists of denominative verbs that are derived from $a$-stem nouns. In this case, it is likely that armae- is derived from a noun *arma-, which also functioned as the basis for armahh- ${ }^{-}$. It is not fully clear whether this noun *arma- must be equated with *arma- 'moon' (q.v.). In addition, the connection with erman / arman- 'sickness' (q.v.) is unclear. If all these words belong together, we would have to reconstruct the basic noun as $* h_{l}(o) r m o$ - (with $* h_{1}$ - on the basis of erman $<* h_{l}$ ermn) and armae- ${ }^{z i}$ as *h (o)rmo-ie/o-.
$\boldsymbol{a r n u} \mathbf{-}^{z i}$ (Ib2) 'to make go; to transport, to deport': 1sg.pres.act. ar-nu-mi (MH/MS, often), a-ar-nu-mi (KUB 31.127 iii 29), ar-nu-um-mi (KBo 18.127, 6), 2sg.pres.act. ar-nu-ši (MH/MS), [ar]-nu-ut-ti (KBo 4.3 iii 11), 3sg.pres.act. ar-nu-uz-zi (OS), ar-nu-zi (OS), 1pl.pres.act. ar-nu-me-ni (MH/MS), ar-nu-um-meni, 2pl.pres.act. ar-nu-ut-te-ni (MH/MS), 3pl.pres.act. ar-nu-an-zi (MH/MS), ar-nu-ua-an-zi, 1sg.pret.act. ar-nu-nu-un (MH/MS), 3sg.pret.act. ar-nu-ut (MH/MS), a-ar-nu-ut (1x), 1pl.pret.act. ar-nu-um-me-en, ar-nu-um-mé-en, 3pl.pret.act. ar$n u$-er (MH/MS), ar-nu-e-er, 2sg.imp.act. ar-nu-ut, 3sg.imp.act. ar-nu-ud-du
(MH/MS), 2pl.imp.act. ar-nu-ut-te-en (MH/MS), ar-nu-ut-tén (MH/MS), 3pl.imp.act. ar-nu-an-du, ar-nu-ua-an-du; part. ar-nu-an-t- (OS); verb.noun ar-nu-mar (gen.sg. ar-nu-ma-aš); inf.I ar-nu-ma-an-zi (MH/MS); impf. ar-nu-uš-ke/a-.

Derivatives: ${ }^{\text {LÚ }}$ arnuulala- (c.) 'deportee' (Sum. NAM.RA) (nom.sg. ar-nu-ua-la-aš, acc.sg. ar-nu-ua-la-an, nom.pl. ar-nu-u_-la-aš (KUB 55.1 iii 2), dat.-loc.pl. ar-nu-ua-la-aš).
IE cognates: Gr. ő $\rho v \overline{\mathrm{v}} \mu \mathrm{t}$ 'to make (someone) move’, Skt. rṛóti 'to put in motion'.

PIE $* h_{3} r-n(e) u$ - and $* h_{1} r-n(e) u$ -
From a synchronic point of view, arnu- looks like the causative of either $\bar{a} r_{-}{ }^{i} / a r$ 'to arrive' (from PIE * $h_{1} e r$ - 'to move horizontally') or $a r_{-}{ }^{\text {HIa(ri) }}$ 'to stand' (from PIE * $h_{3}$ er- 'to move vertically'). Semantically speaking, one would favour a connection with $\bar{a} r$-/ar- 'to arrive, to come', which would mean that arnu- would go back to (virtual) * $h_{1} r$-neu-. From a historical point of view, however, the semantic as well as formal similarity with Gr. ő $\rho v \bar{u} \mu \mathrm{t}$ 'to make (someone) move' and Skt. rrnóti 'to make move' makes one wonder whether arnu- is not an inherited formation that reflects $* h_{3} r$-neu-. Formally, a development from $* h_{3} r$ -neu- to Hitt. arnu- is regular (cf. Kloekhorst fthc.c). In my view, both scenarios are possible, and I would not be surprised if Hitt. arnu- were a conflation of two originally separate formations, viz. $* h_{l} r$-neu- and $* h_{3} r$-neu-.
$\overline{\boldsymbol{a}} r \mathrm{~s}^{z}{ }^{z i} / \boldsymbol{a r s ̌}-(\mathrm{Ia} 4>\mathrm{Ic} 1>\mathrm{Ic} 2)$ 'to flow': 1sg.pres.act. ar-aš-mi (KUB 36.75+ iii 19 (OH/MS)), 3sg.pres.act. ar-aš-zi (KBo 13.31 i 8 (OH/MS), KBo 21.22 rev. 39 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 9.3 i 10 (MS), KUB 15.34 iii 24 (MH/MS), KUB 9.6 i 19, 21, 22, 37 (MH/NS)), a-ar-aš-zi (KUB 43.58 ii 15 (MS), KBo 10.45 ii 40 (MH/NS), KUB 41.8 ii 4, iv 37 (MH/NS), KUB 8.36 ii 11 (NS), KUB 17.9 i 22 (NS), KUB 18.41 ii 10 (NS), VBoT 16 rev. 6 (NS)), a-ar-zi (KBo 10.45 iv 39 (MH/NS), KUB 15.42 ii 3 (NS)), ar-ši-e-ez-zi (KUB 17.10 iii 26 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo $21.41+\mathrm{KUB} 29.7$ rev. 60 (MH/MS), KUB 33.28 iii 14 ( $\mathrm{OH} / \mathrm{NS}$ )), ar-ši-i-e-ez-zi (KUB 33.54 ii 10 (OH/NS)), ar-ši-ez-zi (KUB 29.10 i 7 (OH/NS)), a-ar-aš-ši-ez-
 $z i(\mathrm{KUB} 33.49$ ii 3 ( OH ?/NS)), a-ar-ši-ía-iz-zi (KUB 30.19+20+21+22+39.7 i 28, 29 ( $\mathrm{OH} / \mathrm{NS}$ )), a-ar-aš-ši-ía-zi (KUB 29.10 i 15 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. ar-ša-an-zi (KUB 24.8 iv 11 ( OH/NS), KUB 10.72 v 3 ( OH/NS), KUB $33.87+113$ $+36.12+14$ i 30 (NS), KUB 36.25 iv 5 (NS)), ar-ši-ia-an-zi (KUB $33.4+$ IBoT 3.141 iv 5 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pret.act. $a$-ar-aš-t[a?] (KUB 17.9 i 22 (NS)), $a$-ar-ša-aš
(KUB 36.89 rev. 12 (NS)), 3pl.pret.act. ar-še-er (KUB 36.2b ii 19 (NS)), 3sg.imp.act. ar-aš-du (KBo 17.105 ii 34 (MH/NS)); 3sg.prs.midd. ar-ša-ri (KUB 34.78, 6 (MS), broken context, so meaning not assured), 3sg.imp.midd. ar-ša-ru (KBo 47.142 obv. 9 (NS), broken context, so meaning not assured); part. ar-ša-an-t- (KUB 33.41 ii 9 (OH/NS), KUB 41.4 iii 12 (MH/NS), KBo 10.47 g iii 14 (NS)).

Derivatives: aršanu- ${ }^{z i}$ (Ib2) 'to let flow' (3pl.pres.act. ar-aš-ša-nu-ua-an-zi (KUB 30.32 i 15), 3sg.pret.act. ar-ša-nu-ut (KUB 36.89 rev. 13, 14)), āršanu(n.) 'flow, course' (nom.-acc.sg. a-ar-ša-nu (KUB 36.89 rev. 19), nom.-acc.pl. ar-ša-nu-ūa (KUB 36.89 rev. 41)), arša(r)šur- (n.) 'flowing, stream’ (nom.acc.sg.n. ar-ša-aš-šu-u-ur, dat.-loc.sg. $a-a r-s ̌ a r-s ̌ u-r i, ~ a c c . p l . c . ~ a r-s ̌ a r-s ̌ u-u-r u-u s ̌ ~$ (OH/MS), nom.-acc.pl.n. ar-šar-šu-u-ra, ar-ša-ar-šu-u-ri (OH/MS), ar-ša-a-aš-šu-ú-ri (OH/MS); case? [a]r-ša-ar-šu-u-ra-aš, ar-ša-šu-ra-aš).

Anat. cognates: CLuw. āršiiia- 'to flow' (3pl.imp.act. a-ar-ši-įa-an-du).
IE cognates: Skt. arṣ- 'to stream, to flow' (3sg.pres.act. árṣati ).

$$
\text { PIE } * h_{l} \text { ers-ti, } * h_{l} r s-e n t i
$$

See $\mathrm{HW}^{2}$ A: 341f. for attestations. Originally, the verb $\bar{a} r s \check{s}-/ a r s ̌$ - is a root-inflected present. From MS texts onwards, we find *-ie/o-inflected forms (aršiiezzi etc.) as well as occasional forms that inflect according to the hatrae-class (aršiiaizzi) and the $\operatorname{tarn}(a)$-class ( $\bar{a} r s ̌ a \check{s})$. The few attestations with geminate -šš- ( $a$-ar-aš-ši-ez-zi, $a-a r-a s ̌-s ̌ i-i a-z i$, $a r-a \check{s}-s \check{a} a-n u-u a-a n-z i)$ point to a phonemic /S/. The two middle forms are unclear regarding their interpretation: they are both found in broken contexts without clues for their meaning.

We find forms spelled both with and without initial plene $a$-. It is significant that all weak-stem forms (pres.pl. and part.) are written without $a$-. The strongstem forms show both spellings. When we order the spellings chronologically, we see that the spelling $a r$-aš- is found mainly in $\mathrm{OH} / \mathrm{MS}$ and MH/MS texts whereas the spelling $a$ - $a r$ - $a \check{s}$ - is found mainly in NS texts and only once in a MS text. Although this seems to point to a situation where the spelling ar-aš- is more archaic, I think that we nevertheless have to assume that the spelling $a$-ar-aš- is the original one: it is unlikely that a regular paradigm showing aršzi, aršanzi would innovate into an ablauting paradigm $\bar{a} r s ̌ z i$, aršanzi.
The etymology of this verb has been clear since Sturtevant (1932b: 120). It is connected to Skt. árṣati 'to flow' and reconstructed as *h $h_{l}$ ers- (Rieken 1999a: 327 states that $* h_{3}$ ers- is possible as well, but this is not true: $* h_{3}$ ers- would have given **harš-, cf. Hitt. hark- ${ }^{z i}$ 'to get lost' $<{ }^{*} h_{3}$ erg-).

Within Hittite, $\bar{a} r \check{s}-/ a r \check{s}$ - belongs to the group of verbs that show a root-structure *CeRC-. Due to the sound law $* e R C C>a R C C$, in combination with the fact that all the endings of the singular began with a consonant, the $* e$ of the strong stem yielded $a$ (Hitt. CaRC-). The weak stem, having a zero grade ${ }^{*} C R C-$, was spelled in Hittite with $a$ as well (CaRC-), which caused, at least on the level of spelling, coinciding of the two stems. It is therefore significant that $\bar{a} r \check{s}$-/arš- is the only verb belonging to this group that shows an ablaut $\bar{a}: a$. This problem was seen before, and different scholars have proposed different explanations. Kimball (1983: 181) seems to assume that $\bar{a} r s \check{s}$ - reflects $* h_{1} e ́ r s-$ and $a r \check{s}-<* h_{1} r s$-, but does not explain why e.g. *kérs- did not yield **kārš-. Melchert (1994a: 125) therefore dismisses her reconstruction and assumes that $\bar{a} r \check{s} z i$ reflects a zero grade stem *ŕs$t i$ that was generalized from the plural, which, through Pre-Hitt. *órs-ti, yielded $\bar{a} r s ̌ z i$. Yet, this solution does not explain either why we do not find $\bar{a}$ in other verbs of this type, e.g. **k'ŕs-ti>**kórs-ti>**kāršzi.
In my view, the spelling $a-a r-a \check{s}-z i$ is best regarded not to denote a long $\bar{a}$, but should be read ' $a$ - $a r-a \check{s}-z i=/$ árSt $^{\mathrm{s}} \mathrm{i} /$, in contradistinction to $a r-s \check{a}-a n-z i$, which was /RrSánt ${ }^{\text {s}} \mathrm{i} /$. So the initial plene $a$ - was used to indicate the fact that the word contained a "real" $a$ (which was short) that contrasted with the schwa which automatically preceded the pronounciation of the interconsonantal $/ \mathrm{r} /$.
The preservation of the cluster -rs- contrasts with e.g. arra- $<{ }^{*} H o r s o-$. If one assumes that the assimilation of $*-r s$ - to -rr- only occurs intervocalically, the preservation in $\bar{a} r \check{s}-/ a r s \check{s}-$ would be regular (note that this supporst the view that the first $a$ of aršanzi was not a phonological real vowel, so $/ 2 r S a ́ n t ~ i s i / i n s t e a d ~ o f ~$ /arSant ${ }^{\mathrm{s}}$ /).
See Rieken (1999a: 326f.) for a treatment of arša(r)šur, which she explains as a derivative in -ur- with full reduplication, showing occasional loss of $-r$ - due to dissimilation. As I have explained in § 1.3.9.4.f, the one spelling with the sign Ú, $a r-s ̌ a-a-a \check{s}-s ̌ u-u ́-r i-i=\check{s}-s ̌ i-i t$ (KUB 36.55 ii 20), must be a mistake instead of correct $a r-s ̌ a-a r-s ̌ u-u-r i-i=s ̌-s ̌ i-i t ~(i b i d . ~ 26) . ~$
$\boldsymbol{a r s ̌ a n} \overline{\boldsymbol{e}}^{-z} / \boldsymbol{a r s ̌ a n - ~ ( I a 1 ~ > ~ I c 1 ) ~ ' t o ~ b e ~ e n v i o u s , ~ t o ~ b e ~ a n g r y ' : ~ 2 s g . p r e s . a c t . ~ a r - s ̌ a - n e - ~}$ $e$-ši (KBo 25.122 iii $2,4,6,8,10,12,14$ (OS)), 1sg.pret.act. ar-ša-ni-e[-nu-un] (ABoT 65 rev. 4 (MH/MS)), 2sg.pret.act.(?) ar-ša-ni-e-še (ABoT 65 rev. 6 (MH/MS), error for ar-ša-ni-e-eš?), 3sg.pret.act. ar-ša-ni-ía-at (KUB 19.65, 14 (NH)), 3pl.pret.act. ar-ša-ni-i-e-er (KUB 1.1+ i 31 (NH) (with gloss wedges), KBo 3.6+ i $28(\mathrm{NH})$, KUB 1.5+ i $7(\mathrm{NH})$ ); part. nom.-acc.pl. ar-ša-na-an-d[a] (KUB 33.9 iii 7 ( $\mathrm{OH} / \mathrm{NS}$ )), ar-ša-na-an-ta (HKM 116, 32 (MH/MS)).

Derivatives: aršanatal(l)a- (c.) 'envier’ (acc.pl. ar-ša-na-tal-lu-uš, ar-ša-na-at-ta-lu-uš, ar-ša-na-at-tal-lu-uš, dat.-loc.pl. ar-ša-na-at-tal-la-aš, ar-ša-na-tal-la$a s ̌)$.

PIE $* h_{l / 3} r s-n e-h_{1}-t i / * h_{1 / 3} r s-n-h_{1}$-enti.
See $\mathrm{HW}^{2}$ A: 344 for attestations. Usually, it is stated that all the forms are derived from a nominal stem *aršan(a)-: we find aršanē-, which Watkins (1985: 244) regarded as a denominative stative in $*_{-e h_{1}}$, aršaniie/a- (-ie/o-derivative) and aršanant-. This stem *aršan(a)- is generally connected with Skt. İrsyant- 'angry', irasyáti 'to be angry', Av. arašiiaṇt- 'envious', araska- 'envy', which must reflect $* \mathrm{HrH}(e) s$-. Watkins (1.c.) therefore reconstructs $* \operatorname{aršan}(a)$ - as $* r h_{1 / 3} s-n o-$, whereas Oettinger (1979a: 355) gives ${ }^{*} r h_{l}$ son-ie-. Although the connection with the IIr. words would be possible from a semantic point of view, the formal side of this etymology is difficult. A preform $* H r H s$-no- should have given Hitt. **/Rrisna-/, spelled are/išna- (cf. paripriške/a-/pripriské/á-/ < *pri-prh ${ }_{l}$ skééló-), and *HrHs-on-> Hitt. **/RrìSan-/, spelled are/iššan- (cf. gane/iššanzi /kniSánt ${ }^{\text {si}} \mathrm{i} /$ < *ǵnh ${ }_{3}$ sénti). I therefore see no merit in this connection.
In my view, we have to look at the verb differently. It shows three stems: aršanē $\overline{-}^{z i}$ (OS), aršaniie/a- ${ }^{z i}$ (from MH times onwards) and aršan- (OH/NS and MH/MS). As -ie/a-stems are often secondary, we are left with an original ablauting stem aršan $\bar{e}^{-z i} / a r s ̌ a n-$. If we compare this ablauting pair to e.g. zinni- $z^{z i}$ / zinn- 'to finish' or hulle- ${ }^{z i}$ / hull- 'to smash', it is quite obvious that aršanē- / aršan-, too, must reflect a nasal-infixed verb with root-final $* h_{1}$ : *Hrs-ne- $h_{l^{-}} /$ $* H r s-n-h_{1}$-. The root of this verb is either $* \operatorname{Hersh}_{l^{-}}$or $* \operatorname{Hresh}_{l^{-}}$(structurally like meusH- 'aufheben, wegnemen' (cf. Skt. muṣ̣ắti) or *h $h_{1} e i s h_{2}-\quad$ 'kräftigen, antreiben' (cf. Skt. iṣṇáti); for both roots, see $\mathrm{LIV}^{2}$ ). The initial laryngeal can only be $* h_{1}$ or $* h_{3}$ as $* h_{2}$ would have yielded Hitt. ha- in this position. Unfortunately, I know no cognate in any other IE language.

ardu- 'to saw': 1pl.pres.act. ar-du-me-e-ni (KUB 36.74 iii 2); verb.noun. ar-dumar (KBo 26.19, 10); broken ar-du[-...] (KUB 33.106 iii 54: Puhvel HED 1/2: 175: 3pl.imp.act. $a r d u[u a n d u]$; $\mathrm{HW}^{2}$ A: 347: 1pl.pres.act. $\left.a r-d u[-m e-(e-) n i]\right)$.
Derivatives: ${ }^{\text {URUDU }} \operatorname{ardāl}(\boldsymbol{a})$ - (n.) 'saw' (nom.-acc.pl. ar-da-a-la (KUB 33.106 iii 54)).

Although all attested forms point to a stem ardu- (ardumēni < *ardu-ueni, ardumar $<$ *ardu-uar), this verb is usually cited as ard- (so in Puhvel HED 1/2: 175; $\operatorname{ard}(a)$ - in $\mathrm{HW}^{2} \mathrm{~A}: 347$ ), on the basis of the assumption that the $-u$ - in the verb is added after false interpretation of 1 pl . *ard-uueni and that the plain stem $\operatorname{ard}$ - is still visible in the derivative $\operatorname{arda} \bar{l}(a)$-. In my view the stem $\operatorname{ardu}$ - is primary, however, and the derivative $\operatorname{arda} l(a)-$ reflects $* \operatorname{arduol}(o)-$, showing the development *-duo- > Hitt. -da- as can be seen in e.g. idālu< *hieduólu-.

If this verb is from IE origin, it should reflect an $u$-present because a rootstructure *HerTu-, *HreTu- or *HrTeu- is impossible in PIE. Puhvel (1.c.) connects this verb to Skt. rádati 'to dig, to scrave' and Lat. rōdere 'to gnaw', which must reflect * $\mathrm{Hreh}_{3}$ d- (cf. Schrijver 1991: 309-10). Although from a formal point of view a reconstruction $* \mathrm{Hrh}_{3} \mathrm{~d}-u$ - could be possible for Hitt. ardu-, it is not very appealing.
aru- / arau- (adj.) 'high(?)': acc.pl. a-ra-m[u-us'? (KUB 33.5 ii 17).
Derivatives: aru(-)šuŭaru- (adj.) 'high-and-full(?)' (nom.sg.c. a-ru-uš šu-ua$r u-u[s ̌]$ (KBo 19.155, 5), nom.-acc.sg.n. (adv.) a-ru-šu-ua-ru (KUB 33.106 iii 33)), aruma (adv.) 'highly, very much’ (a-ru-ma, a-ru-um-ma).

Anat. cognates: CLuw. aru- ‘high’ (nom.sg.c. $a-r u-u s ̌, ~ n o m .-a c c . s g . n . ~[a]-r u, ~$ nom.-acc.pl.n. (adv.) a-ru-u-ua), aru(иа)ruйa-'to lift(?)' (1pl.pres.act. a-ru-ua-ru-un-ni, part.nom.sg.c. $a-r u-u-r u-u-u a-a m-m i-i s ̌)$.

PIE * $h_{3}(o) r-u-$ ?
Although the interpretation of most of the cited forms is not totally clear, most handbooks assume the existence of an adjective aru- / arau- that is translated as 'high'. If this is correct, then a connection with the verb ar- ${ }^{\text {Ha(ri) }}$ 'to stand' is likely, which means that aru- / arau- is derived from the root $* h_{3} e r$ - 'to rise'. Because $* h_{3}$ - yields Hitt. / $/ /$ before $* o$ and before consonant, but is retained as $h$ before $* e$ (cf. Kloekhorst fthc.c), we can reconstruct both $* h_{3} o r-u$ - and $* h_{3} r-u$-.

```
-aru (3sg.imp.midd.-ending)
    Anat. cognates: CLuw. -aru (3sg.imp.midd.-ending): a-a-ia-ru, ku-ua-la-ru.
```

This ending is clearly derived from the 3 sg.pres.midd.-ending -ari in which the 'presentic' $-i$ is replaced by the imperatival $-u$. See for further treatment at both $-a(r i)$ and $-u$.
aruna- (c.) 'sea' (Sum. A.AB.BA): nom.sg. $a-r u-n a-a \check{s}$ (OS), $a-a-r u-n a-a \check{s}$ (KBo 5.3 i 59 (NH)), a-ru-na-a-aš (KUB 36.25 iv 6 (NS)), acc.sg. a-ru-na-an, gen.sg. a-ru-na-aš (OS), dat.sg. a-ru-ni (OS), a-ru-ú-ni (KUB 36.41 i 13 (MS)), all.sg. $a$ $r u-n a$ (OS), abl. $a-r u-n a-a z$ (OS), $a-r u-n a-z a$, acc.pl. $a-r u-n u-u s ̌ ~(K B o ~ 3.41 \mathrm{rev}$. 11), gen.pl. $a-r u-n a-a \check{s}$.

Derivatives: arunuman- (c.) 'maritime' (nom.pl. a-ru-nu-ma-né-e-eš (KUB 8.14 obv. 14)).

PIE * $h_{3} r$-éu-no- ?
The word is abundantly attested from OS texts onwards. Despite the fact that the word does not look foreign at all, there is no generally accepted etymology for it. Within Hittite, a connection with aru- / arau- 'high' is possible, especially if we take into account that we find some denominatives in -una- that are derived from -u-stem words (cf. Weitenberg 1984: 281-3). If the one plene spelling $a$-ru-ú-ni indeed indicates that the stem was /?rứn-/, then aruna- must reflect * $h_{3} r$-éu-no(cf. § 1.3.9.4.f). A semantic parallel can be found in Skt. árṇa- 'wave, flood, stream' < *h $h_{3}$ er-no- (*'rising water').
The adjective arunuman- is a derivative showing the suffix of appurtenance -umen- / -umn- (q.v.).
aruuae ${ }^{z i}$ (Ic2) 'to prostrate oneself, to bow' (Akk. $\check{S} U K \bar{E} N U$, 3sg.pres.act. UŠKEN): 3sg.pres.act. a-ru-ưa-ez-zi (OS, often), a-ru-ua-a-ez-zi (OS, often), a-ru-ua-i-ez-zi (KBo 25.127 ii 4 (OS)), a-ru-ua-e-ez-zi (VSNF 12.10 i 2, 18, 25), a-ru-ú-ua-a-iz-zi (KUB 2.6 i 9), a-ru-u-ua-iz-zi (KBo 39.62 ii 9), a-ru-ua-a-zi (KBo 13.214 iv 10), ar-ua-iz-zi (KUB 59.32 iii 10 3), 3pl.pres.act. a-ru-ua-a-an-zi (OS?, often), a-ru-ua-an-zi (OS?, often), a-ru-ua-en-zi (KBo 17.28 l.col. 6 (OS)), a-ru-ua-a-en-zi (KBo 12.131, 6 (OH/NS)), a-ru-u-ua-an-zi (KBo 8.117 ii 9), ar-ua-an-zi (KBo 4.9 ii 39), 1sg.pret.act. a-ru-ua-nu-un (KUB 36.75+ ii 7), ar-ua-a-nu-un (KUB 14.13+ i 18), 3sg.pret.act. a-ru-ua-it (KUB 23.36 ii 23, KUB 36.101 ii 6, 8, KUB 36.102, 7, KUB 48.106, 18), a-ru-ua-a-[i]t (KUB 31.127 i 13), 3pl.pret.act. ar-ua-er (KBo 12.132 rev. 1), 3sg.imp.act. [(a-ru-ua-)]a-id-[du] (KUB 13.10 obv. 3 with dupl. 919/v); part. a-ru-ua-an-t-; verb.noun. a-ru-u-ua-uar (KBo 3.21 ii 10), inf.I a-ru-ua-an-zi (KBo 22.2 rev. 13 (OH/MS), KBo 10.11 i 2), a-ru-uа-u-ua-an-zi (KBo 3.38 rev. 30 (OH/NS)); impf. a-ru-ua-iš-ke/a- (OS), $a-r u$-ú-iš-ke/a-, $a-r u-u ́-e-e s ̌-k e / a$-.

PIE *h2oruo-ie/o-

The verb is attested from OS texts onwards and inflects according to the hatraeclass. This class consists of denominative verbs derived from $*_{O}$-stem nouns, which means that in this case, aruuae- is derived from a noun *aruua-. Oettinger (1979a: $345^{171}$ and 365) states that aruuae- must be derived from a noun $*$ aruāwhich is identical to Gr. $\dot{\alpha} \rho F \bar{\alpha} \dot{\alpha}$ 'prayer'. This reconstruction cannot be correct, however, as denominative verbs from nouns in $-e h_{2}$ - should inflect according to the tāie/a-class (cf. Oettinger 1979a: 393f.). Moreover, Gr. ápF $\tilde{\alpha}^{\alpha}$ reflects $* h_{2}(e) r$ ueh $2^{-}$, which should have given Hitt. **haruua-.
Nevertheless, the connection does not have to be given up. If the noun *aruuawas an $*_{O} O$-stem (as is indicated by the fact that the verb inflects according to the hatrae-class), it is quite possible that it reflects *Horuo-, since o-stem words often have $o$-grade in the root. If we then take into account that in front of $* o$ all three laryngeals were neutralized into *h (cf. Kortlandt 2004; Kloekhorst fthc.c), we are able to reconstruct $* h_{2}$ oruo-, an ablaut-variant of $* h_{2}(e) r u e h_{2}$ - as seen in Gr. $\dot{\alpha} \rho F \mathcal{F}_{\bar{\alpha}}$.
$\boldsymbol{- a s ̌}$ (gen.sg.-ending)
PIE *-os, *-s

The usual ending of gen.sg. is -aš or, when accentuated, - $\bar{a} \check{s}$ (compare $n \bar{e} p i s ̌ a \check{s}$ vs. taknăs ). This ending is found in consonant-stems as well as diphthong-, $a$-, $i$ - and $u$-stems. It clearly reflects PIE *-os, which was the normal gen.sg.-ending in $o$ stem nouns and in hysterodynamically inflected consonant-stems. In Hittite, only traces are left of the proterodynamic gen.sg.-ending $*_{-s}$, namely in the verbal noun suffix -uar, gen.sg. -uaš < *-ur / *-uen-s and in an occasional u-stem form like ${ }^{\mathrm{m}} N u$-un-nu-uš (KBo 3.34 i 16), the gen.sg. of the PN Nunnu- (cf. Friedrich 1960: 27 and Kimball 1999: 221 who gives more examples of gen.sg. in -uš; against this Melchert 1984a: 53, who rather sees these cases as syncope of -ua- to -u- in final syllables).
-ăš (dat.-loc.pl.-ending)
Although this ending is almost always spelled - $a \check{s}$, we find a few forms with plene spelling, namely pa-ta-a-aš (OS) 'feet' and ud-da-na-a-aš (MH/MS) 'words', which clearly shows that at least originally there was a difference between unaccentuated -aš and accentuated - $\bar{a} s{ }^{\text {. From the }} \mathrm{OH}$ period onwards, $-a \check{s}$ can also be used for the gen.pl., and in the NH period it is on its way to becoming the default plural marker, taking over the function of acc.pl.c. and nom.pl.c. as well.

Etymologically, the ending cannot be interpreted easily. Within the Anatolian languages, the Lycian dat.-loc.pl.-ending $-e$ seems to be cognate and would point to PAnat. *-os. Note that the Luwian dat.-loc.pl.-endings, CLuw. -anza (which must be $/-\mathrm{ant}^{s} /$ on the basis of $i-p a-m a-a n-z a-a \check{s}=t a$ (KBo 13.260 ii 28)) and HLuw. $-a-z a=/-\mathrm{ant}^{\mathrm{s}} /$, seem to be an inner-Luwian innovation, built on the acc.pl.-ending *-(o)ms.
In the other IE languages, the reconstruction of the dat.pl.-ending is difficult (note that loc.pl. *-su is quite clear and cannot be cognate with Hitt. -aš): Skt. -bhyas seems to point to $*_{-} b^{h}$ ios, Lat. -bus can reflect $*-b^{h} o s$, OLith. -mus and OCS -mъ point to $*-m u s$, which would also fit Goth. -m. It has been suggested that the forms with $*_{-} b^{h}$ - are due to conflation with the instr.pl.-ending $*_{-} b^{h} i$, which would mean that $*_{-m u s}$ is more original. If Hitt. -aš and Lyc. -e indeed point to PAnat. *-os, I do not know how this form would fit into the picture. Perhaps we must analyse it as all.sg. ${ }^{-}-o+$ plural $^{*}-s$ ?
$\overline{\boldsymbol{a}}{\breve{s} \check{s} \mathbf{s}^{z i}}^{i}$ (Ib1) 'to remain, to stay, to be left': 3sg.pres.act. $a-a \check{s}-z i$ (OS, often), $a \check{s}-z i$ (KBo 4.14 iii 43, 49 (NH)), 3pl.pres.act. $a-a \check{s}-\check{s ̌ a-a n-z i(O H / M S), 3 s g . p r e t . a c t . ~} a$ -
 ta-at (KUB 22.70 obv. 18); part. $a-a \check{s}-s \check{a} a-a n-t-(o f t e n), ~ a \check{s}-s ̌ a-a n-t-$ (rare); inf.I $a$ $a s ̌-s ̌ u-u{ }_{c} a-a n-z i(K U B 22.70$ obv. 51); impf. $a$-aš-ke/a-.

PIE * $h_{1} e N s$ - ??
See $\mathrm{HW}^{2}$ A: 366f. for attestations. The verb is almost consistently spelled with initial plene $a$ - and a geminate $-\check{s} \check{s}$-. It does not show ablaut (the few forms without plene $a$ - are to be seen as shorter spellings). It is predominantly found in
 good' which is only found in the middle.
The etymological interpretation of this verb is difficult. Especially the fact that we find a vowel $-a$ - in a $m i$-inflected verb is awkward, as $m i$-verbs in principle show $* e$-grade. Moreover, the geminate -š̌s- should be the result of some assimilation proces.
Older connections with $e \check{s}-z i / a \check{s}-$ 'to be' and $e \check{s}-$ - ${ }^{\text {(ri) }}$ 'to sit' have been discarded (e.g. Puhvel HED $1 / 2: 189 ; \mathrm{HW}^{2}$ A: 369), although it is generally stated that $\bar{a} s \check{s} \check{S}^{-}$ as a root present hardly can be but of IE origin (Puhvel (1.c.): "Indo-European origin of such a root-verb is likely"; $\mathrm{HW}^{2}$ (l.c.): "muß als primäres Vb. Ew. sein").

The only other Hitt. mi-verb ending in -ašš- is kuuašš- ${ }^{z i}$ 'to kiss' (q.v.), which I reconstruct as *kuens-. This could mean that $\bar{a} s{ }_{s} \check{s}-$ reflects $* h_{l} e N s-$. For the strong
stem forms this would work fine $\left({ }^{*} h_{1} e ́ N s-t i>/ R a S t{ }^{5} \mathrm{i} /\right.$, spelled $\left.a-a \check{s}-z i\right)$, but for the weak stem forms we have to reckon with analogical change ( $* h_{1} N s$-énti should regularly give ${ }^{* * / 2 n t}{ }^{\mathrm{s}} \mathrm{ant}^{\mathrm{s}} \mathrm{i} /$, spelled ${ }^{* * a n-z a-a n-z i) \text {, for which we could compare }}$ 3sg. hāǎi 'to give birth' < *h2oms-ei besides 3pl. haššanzi << *h $h_{2} m s$-enti that regularly should have given **hanzanzi. Unfortunately, I know no words in other IE languages that reflect $* h_{l} e N s$ - and show similar semantics.
 3sg.pres.midd. $a-a s ̌-s ̌ a-a-r i(K U B 59.50$ rev. 4 (NS)), $a-a \check{s}$-ši-íia-at-ta-ri (KUB
 (KUB 24.7 i 44 (NS)), 3pl.pres.midd. $a$ - $a s ̌$-ša-an-ta-ri (KBo 22.126 obv. 4 (NS)), 3sg.pret.midd. $a$-aš-ši-ícia-at-ta-at (KUB 33.121 ii 9 (NS)), 3sg.imp.midd. $a$-aš-šiia a-at-ta-ru (KBo 35.254 obv.? 5,7 (fr.) (NS)), 3pl.imp.act. $a$-aš-ši-ía-an-du (KUB 41.19 i 6 (MH/NS)); part. $a-a \check{s}-s ̌ i-i$
 impf. $a$-aš-ši-iš-ke/a-.

Derivatives: $\bar{a} s ̌ s ̌ i{ }_{C} a n u-{ }^{z i}$ (Ib2) 'to make beloved(?)' (impf. $a$-aš-ši-i_ia-nu-uš-ke/a(KBo 13.55 rev. 4, KUB 31.42 ii 23)), āššiiatar / āššiiann- (n.) 'love' (nom.acc.sg. $a$ - $a \check{s}$-ši-íla-tar, gen.sg. $a-a s ̌-s ̌ i-i a-a n-n a-a s ̌, ~ a-s ̌ i-i a-n a-a s ̌ ~(K U B ~ 24.7 ~ i v ~ 19), ~$ dat.-loc.sg. $a-a s ̌-s ̌ i-i a-a n-n i$, instr. [a-aš-š]i-ia-an-ni-it (KUB 33.64+KBo 21.60,
 25.421 rev. 62)), see also $\bar{a} s ̌ s ̌ u-$.

Anat. cognates: HLuw. ${ }^{\text {LITUUS }}$ áza- 'to love' (3sg.pres.act. $\dot{a}-z a-t i$ (KARATEPE 2 §2), 3sg.pret.act. LITUUS $\dot{a}-z a-t a \quad$ (often), part. ${ }^{\text {LITUUS } \dot{a} z a m a / i-~(o f t e n)), ~}$ lituus/oculus ázatiwada-, PN (lit. 'beloved by the Sun(god)'), TONITRUS-huna-
 (lit. 'beloved by the gods').

The verb is attested with middle forms only, which makes it distinguishable from $\bar{a} \bar{s} \check{s} z^{z i}$ 'to remain, to be left' that is predominantly found with active forms. In 'to be loved', we find a bare stem $\bar{a} s \check{s}^{s}-$ twice only, whereas the rest of the forms and all derivatives show a stem āššíie/a-.
Within Hittite, it is quite clear that $\bar{a} \check{s} s{ }^{\prime}(i i e / a)$ - must in some way be cognate with $\bar{a} s \check{S}^{s} u$ - / āššau- 'good, dear, favourable', but the exact connection is unclear. According to Weitenberg (1984: 96, following Laroche apud Bader 1969: 9³), it is not possible that $\bar{a} \check{s} s(i i e / a)$ - is a derivative from $\bar{a} s \check{s} s u-$, partly because the verbal stem 'to love' is common Anatolian (HLuw. áza- 'to love'). This does not seem a valid argumentation to me, however: despite the fact that Luwian does not
possess a direct cognate of Hitt. $\bar{a} s ̌ s ̌ u-$, this adjective must have existed in PAnatolian (the $u$-stem seems PIE), and it is therefore perfectly possible that we find verbal derivations of it in Hittite (with the suffix *-ie/o-) as well as in HLuwian (with the suffix *-skée/o-, cf. Rieken 1999a: 459). Moreover, a strong argument in favour of a denominal derivation is that middles in Hittite reflect either e-grade (ešari < *h $h_{l} e_{l} h_{l} s-o$ ) or zero grade (tukkāri<*tuk-ó), whereas āššhardly can be explained without assuming an o-grade. In my view, this o-grade can only be explained from a nominal origin. I therefore assume that $\bar{a} s \check{s}(i i e / a)$ - is derived from the nominal stem $\bar{a} s \check{s} u$ - / $\bar{a} \check{s} s{ }^{s} a u-$, for the etymology of which see there.
-ašša- (genitival adjective-suffix)
PIE *-osio-

Although the use of a genitival adjective-suffix is especially known from the Luwian languages (CLuw. -ašša/i-, which even has fully supplanted the genitive case, HLuw. -asa/i- and Lyc. -ahe/i-), this suffix is found in Hittite as well, namely in hanzzāšša- 'offspring' $<*_{2}$ msósio-, iugašša- 'yearling', derived from the noun iuga- 'yearling' (q.v.), which because of its OS attestation cannot be regarded as a Luwianism, and in pedaššahh- 'to implace', derived from pedašša-, itself a derivative from peda- 'place', which because of the -e-cannot be regarded as a Luwianism. On the basis of the fact that the $-a$ - as found in Lyc. -ahe/i- in principle cannot reflect $*_{O}$ or $* e$, Melchert (1994a: 77) reconstructs this suffix as *-eh ${ }_{2}$ SO-. On the basis of this reconstruction, he assumes that $*$-eh ${ }_{2}$ So- $>$ Hitt. -ǎ̌ša- shows that *Vh $s V>\operatorname{Hitt} . V \check{s} \check{s} V$. This is incorrect, however, as we can see from Hitt. paḩšari 'protects' < *peh $h_{2} s-o$, Hitt. paȟ̌̌i 'protects' < *poh ${ }_{2} s-e i$ and especially from palahša- /plaHsa-/ 'a garment' < *pleh ${ }_{2}$ so- (note that this last example cannot be explained as showing a secondary retention of - $h$-). In my view, we should rather assume that Lyc. -ahe/i- has received its - $a$ - in analogy to the many $a$-stem nouns that reflect *-eh $h_{2}$.
We should rather follow Georgiev (1967: 164; 1972: 90) in assuming that the genitival adjective suffixes Hitt. -ašša-, Luw. -ašša/i- and Lyc. -ahe/i- are derived from a pre-form *-osio- (with Lyc. -ahe/i- then from virtual *-eh2-sio-), in which the intervocalic cluster *-sí- yielded -šš-, just as in Hitt. unašše/a- ${ }^{z i}$ 'to clothe' < *us-ie/o- (see at ueš̌s- ${ }^{1 t a}$; unašše/a- ${ }^{z i}$ for a detailed treatment of this form and the development *Vsị $V>\operatorname{Hitt}^{2} V$ ššV). Etymologically, this *-osicio- may be compared with the gen.-endings Skt. -asya, Hom. -oto $<*_{\text {-osio, }}$, and, mutatis mutandis, with the Lat. suffix -ārius $<$ *-eh $_{2}$-sílo-.
$\boldsymbol{a}{ }^{\text {ššanu- }}{ }^{z i}$ : see $a s ̌ n u-{ }^{z i}$
$\boldsymbol{a}$ $a \check{s}-h e ́ ~(K B o ~ 3.28 ~ i i ~ 24 ~(O H / N S)), ~ a-s ̌ a-a s ̌-h ̌ i, ~ 2 s g . p r e s . a c t . ~ a-s ̌ a-a \check{s}-t i, 3 \mathrm{sg} . \mathrm{pres} . a c t$. $a-s ̌ a-a-s ̌ i(\mathrm{OS}$, often), $a-s ̌ a-s ̌ i \quad(\mathrm{NS}, \mathrm{often}), a-s ̌ a-s ̌ e(\mathrm{KBo} 8.121,6$ (OH/NS)), 3pl.pres.act. $a-s ̌ e-s ̌ a-a n-z i(\mathrm{OH} / \mathrm{NS}$, often), $a-s ̌ e-e-s \check{a} a-a n-z i(\mathrm{NS}, 2 \mathrm{x}), a-s ̌ i-s ̌ a-a n-z i$
 3sg.pret.act. $a-s ̌ a-a \check{s}-t a$, $a$-ša- $a[-a \check{s}-t a]$ (KUB 14.13 i 38), $a$-še-eš-ta (KBo 3.4 ii $20(\mathrm{NH})$ ), 3pl.pret.act. $a$-še-še-er (often, OH+), $a$-še-šer, $a$-še-e-še-er (KBo 3.63 i 11 ( $\mathrm{OH} / \mathrm{NS}$ ) ), $a$-ša-še-er (KBo 19.52, 4 (NS)), $a$-ša-šer (KUB 23.94, 11 (NS)), e-še-šer (KUB 41.1 iv 9 ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.imp.act. $a$-še-eš-te-e[n] (KUB 1.16 ii 38 ( $\mathrm{OH} / \mathrm{NS}$ )), $a$-še-eš-té[ $n]$ (KBo 22.6 iv 3 ( $\mathrm{OH} / \mathrm{NS}$ )); 2sg.imp.med. $a$-še-eš-hu-ut (KBo 22.6 iv $24(\mathrm{OH} / \mathrm{NS})$ ), $a-$ še-iš-ȟu-ut (KBo 12. 1 iv $6(\mathrm{OH} / \mathrm{NS})$ ); part. $a$-še-ša-an-t- (MH/MS), a-še-e-ša-an-t-; verb.noun. $a-s ̌ e-s ̌ u-u-u a-a r ~(H T ~ 42 ~ r e v . ~ 7, ~$ 11); inf.I $a$-še-šu-una-an-zi; impf. $a-s ̌ a-a \check{s}-k e / a-(\mathrm{OS}), a-s ̌ e-e s ̌-k e / a$-.

Derivatives: ašeššar / ašešn- (n.) 'settlement; assembly' (nom.-acc.sg. a-še-eššar, gen.sg. $a$-še-eš-na-ǎ̌, $a-s ̌ e-e s ̌-s ̌ a-n a-a \check{s}$, dat.-loc.sg. $a$-še-eš-ni (OS), abl. $a$-še$e s ̌-n a-z a, a-s ̌ e-e s ̌-s ̌ a-a n-n a-a z)$, aše/išanu- ${ }^{z i}$ (Ib2) 'to seat; to settle' (1sg.pres.act. $a-s ̌ i-s ̌ a-n u-m i, 3$ sg.pres.act. $a-s ̌ e-s ̌ a-n u-z i, 3 p l . p r e s . a c t$. . $a-s ̌ e-s ̌ a-n u-(u a-) a n-z i, a-s ̌ i-$ $\check{s} a-n u-a n-z i$, 1sg.pret.act. $a-s ̌ e-s ̌ a-n u-n u-u n, 3$ sg.pret. act. $a-\check{s} e-s ̌ a-n u-u t, a-s ̌ i-s ̌ a-n u-$ $u t$; inf.I $a$-še-ša-nu-ma-an-zi; impf. $a-s ̌ e-s ̌ a-n u-u \check{s}-k e / a-, a-s ̌ i-s ̌ a-n u-u s ̌-k e / a-)$.

PIE * $h_{l} s-h_{l}$ ós-ei, $* h_{l} s-h_{l} s$-énti
See $\mathrm{HW}^{2}$ A: 385 f . for attestations. The verb clearly shows an ablaut between $a \check{s} \bar{a} \check{s}$ - in the strong stem and aše/iš- in the weak stem and is therefore one of the few verbs that belongs to class IIa3, i.e. hi-verbs with an ablaut $\bar{a} / \dot{i}$ (also hamank- ${ }^{i}$ / hame/ink-, garāp- ${ }^{i}$ / gare/ip- and šarap- ${ }^{i}$ / šarip-). These verbs are generally explained as reflecting $* o / e$-ablaut, but I think that this is improbable. As I have explained in § 2.2.2.2.f, the spelling of the weak stem with both $e$ and $i$ in my view indicate that this vowel is in fact was the phoneme $/ \mathfrak{i} /$, which in these verbs emerged in the zero grade formations.
In this case, ašā̄š- ${ }^{i}$ aše/iš- clearly must be cognate with eš- ${ }^{\text {a(ri) }}$ 'to sit (down)' (q.v.) and shows a full-reduplication. If $a \check{s} \bar{a} \check{s} \bar{s}^{i} / a \check{s} e / i s^{-}$- is derived from the middle stem $\bar{e} \check{s}-$, which probably goes back to $* h_{l} e h_{l} s-$, then it is possible that $a \bar{s} a \bar{s} \Sigma^{i}$ / aše/iš- goes back to $* h_{l} h_{l} s-h_{l} o ́ h_{l} s-e i, * h_{l} h_{l} s-h_{l} h_{l} s$-énti. If, however, ašāši ${ }^{i}$ / aše/iš- is derived from the active stem, which possibly reflects * $h_{1} e s-/ * h_{l} s$-, then we can reconstruct * $h_{l} s-h_{l} o ́ s-e i, h_{l} s-h_{l} s$-énti. Either way, we have to assume for
both formations that in the zero grade stem * $\left(h_{l}\right) h_{l} s\left(h_{l}\right) h_{l} s$ - the vowel /i/ emerged to solve the heavy cluster, yielding /isis-/.

The fact that the initial $* h_{1}$ - yields Hitt. /2-/ (spelled $a$-), indicates that this verb was formed after the loss of initial prevocalic $* h_{1}$. If it were formed before that period, I do not understand how this verb could have analogically retained its laryngeal, because there was no model within the paradigm to restore it. See at $e \check{s}-$ ${ }^{a(r i)}$ for further etymology.

The causative is spelled $a-s \check{e}-s \check{a} a-n u$ - and $a-s ̌ i-s ̌ a-n u-$, with an enigmatic extra $-a$ between the stem $a \check{s} e / i s s^{-}$and the suffix -nu-. I can think of no other explanation than that this spelling is used to explicitly express the lenis character of $-\check{s}$-: /?sisnu-/ and not **/?siSnu-/.
ašāuar / ašaun- (n.) ‘sheepfold, pen' (Sum. MA.AZ.ZA, Akk. MA-AZ-ZU-U): nom.-acc.sg. $a-s ̌ a-a-u-a r$ (KUB 3.94 ii 15 (NS)), $a-s ̌ a-a-u-u[a-a r]$ (KUB 30.13 obv. 17 (MH/NS)), dat.-loc.sg. $a-s ̌ a-u ́-n i ~(O S), ~ a-s ̌ a-u-n i ~(K U B ~ 13.5 ~ i i ~ 22 ~$ (OH/NS)), $a-s ̌ a-u-n a-i(B o 6002$ obv. 7 (undat.)), abl. $a-s ̌ a-u ́-n a-a z$ (KUB 30.10 obv. 15 ( $\mathrm{OH} / \mathrm{MS}$ )), $a-s ̌ a-u-n a-a z(\mathrm{KUB} 13.4$ iv $59(\mathrm{OH} / \mathrm{NS})$, KUB 24.3 ii 12 (MH/NS)), nom.-acc.pl. $a$-ša-u-úa (KBo 17.92 obv. 6 (MS)), $a-s ̌ a-u-u)^{-} a r$ (KBo 10.2 i $7(\mathrm{OH} / \mathrm{NS})$ ).

See Puhvel HED 1/2: 296f. and HW2 A: 393f. for attestations and semantics. The word denotes a sheepfold and is attested from OH texts onwards. This noun belongs to the small class of nouns in -āuar / -aun-, to which also haršāuar / haršaun- 'tilled land', karāuar / karaun- 'horns, antlers', partauar / partaun'wing' and šarāuar / šaraun- 'storm-clouds' belong. Although e.g. haršāųar 'tilled land' clearly seems to belong with hāršs- 'to till (the soil)', the exact interpretation of the suffix - $\overline{\text { anar }}$ is unclear. In isolated forms like išhāuar 'yoke-plough-set (?)' and mugāuar 'materials for an invocation ritual', the origin is more clear (verbal nouns from išhai- ${ }^{i}$ / išhi- (so išhāuar < *išhai-uar) and mugae${ }^{z i}$ (so mugāuar from *mugaia-uar)), but that does not solve the problem of the other nouns. As I have argued under the lemma karāuar / karaun-, we may have to compare -àuar / -aun- to -ātar / -ānn- < *-ó-tr / -ó-tn- and assume that we are dealing with *-ó-ur / -ó-un-. Puhvel (l.c.) assumes an etymological connection with $e s_{-}{ }^{z i} / a \check{s}-$ ' 'to sit', which would point to a reconstruction $* h_{l} s-o ́-u r$.
aši / uni / ini (demonstr. pron.) 'that (one)': nom.sg.c. a-ši (OH/MS), a-ši-iš ( NH ), u-ni-iš (NH), e-ni-iš (NH), acc.sg.c. u-ni ( $\mathrm{OH} / \mathrm{MS}$ ), a-ši ( $\mathrm{OH}+$ ), u-ni-in (NH), nom.-acc.sg. i-ni ( $\mathrm{OH} / \mathrm{MS}$ ), e-ni ( $\mathrm{OH} / \mathrm{MS}$ ), i-e-ni (KUB 1.16+ iii 40
( $\mathrm{OH} / \mathrm{NS}$ )), gen.sg. e-el (KUB 49.70 rev. $20(\mathrm{NH})$ ), u-ni-ía-aš (NH), dat.sg. e-di (OS), e-da-ni (MH/MS), abl. e-di-iz (MH/MS), e-te-ez (NH), e-da-za (NH), nom.pl.c. e ( OS ), u-ni-uš (NH), e-ni-uš (NH), acc.pl.c. u-ni-uš (NH), dat.-loc.pl. $e-d a-a \check{s}(\mathrm{NH})$.

Derivatives: iniššan (adv.) 'thus, as stated’ (i-ni-iš-ša-an (MH/MS), e-ni-iš-šaan (NH), e-ni-eš-ša-an (NH)).

See Goedegebuure (2003: 106ff.) for a detailed treatment of this pronoun. She argues that aši refers to things associated with a 3rd person ('that (in the presence of him)'), whereas $k \bar{a}$ - is associated with the 1 st person ('this (here)') and ap $\bar{a}$ with the 2 nd person ('that (near you)').
The oldest forms of this pronoun are aši, uni, ini and edi. These probably go back to *h $h_{l} o ́ s+-i, * h_{l} o ́ m+-i$ and $* i+-m+-i$ (compare $k \bar{a} s ̌, k u \bar{n}, k \bar{l}<*$ Kós, *Ǩóm, *kíl). It seems as if dat.-loc.sg. edi shows a stem *hle-. Note that the form uni and its derivatives (uniiač̌ e.a.) are consistently spelled with initial $u$ - and never with $\dot{u}$-. This points to /Róni/, < */Rón/ +/-i/, in which /Rón/ is the regular outcome of * $h_{1} o ́ m$, just as $k u$-u-un /kón/ goes back to *kóm (see at $k \bar{a}-/ k \bar{u}$ - / ki-).

According to Goedegebuure, the nom.pl. pronoun $e$ does not belong to this paradigm but formally it could show the same formation, viz. * $h_{1} o i(+-i)$. In MH times the form ini is changed to eni, which I regard as an example of the MH lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-n-$, cf. § 1.4.8.1.d. In MH and NH times we encounter forms that are remodelled on the basis of the stems aši-, uni- and eni-, yielding forms like nom.sg. ašiš and gen.sg. uniíaš.
It is quite likely that this pronoun belongs with the pronoun $* h_{l} e-$, $*_{i-}$ as reflected in e.g. Skt. ayám (m.), idám (n.), iyám (f.), Lat. is (m.), id (n.), ea (f.) and Goth. is (m.), ita (n.). Note, however, that in the other IE languages no stem $* h_{1} O$ - can be found (e.g. Beekes 1995: 205 reconstructs nom.sg.m. $* h_{1} e$, acc.sg.m. $* i m$, nom.-acc.sg.n. $* i d$, nom.sg.f. $* i h_{2}$, acc.sg.f. $* i h_{2} m$, obl. $* h_{1} e-$ ). Perhaps the stem $* h_{1} o$ - was created within Anatolian in analogy to the pronouns $k \bar{a}-/ k \bar{u}-/ k i$ and $a p \bar{a}-/ a p \bar{u}$-. So the virtual pre-forms nom.sg.c. $* h_{l} o s$, acc.sg.c. $* h_{1} o m$, nom.acc.sg.n. $* h_{l} i$, obl. $* h_{l} e-$ show an adaptation of the PIE system nom.sg.c. $* h_{l} e$, acc.sg.c. *him, nom.-acc.sg.n. *hil, obl. * $h_{l} e$ - under influence of the pronouns that inflect nom.sg.c. ${ }^{*}$-os, acc.sg.c. ${ }^{*}$-om, nom.-acc.sg.n. ${ }^{*}$-od. Note that nom.acc.sg.n. $* h_{l} i$ (and not $\left.* h_{l} i d!\right)$ spread to the paradigm of $k \bar{a}-/ k \bar{u}-/ k i-$.

The adverb iniššan corresponds to kiššan (once also kiniššan!) and the rare apiniššan.

${ }^{(L U ́)} \boldsymbol{a}$ ašiuant- (adj.; c.) 'poor (man)' (Sum. ${ }^{\text {LÚ }} \mathrm{MÁŠDA):} \mathrm{nom.sg.c}. \mathrm{a-ši-una-an-za}$,
 41.32 rev. 9), gen.sg. $a$-ši-ưa-an-da-aš, nom.pl.c. $a$-ši-una-an-te-eš.

Derivatives: ašiúantatar (n.) 'poverty' (nom.-acc.sg. a-š[i-u]a-an-ta-tar (KUB 21.18 iv 10)), ašiųantēšš- ${ }^{z i}$ (Ib2) 'to become poor' (3sg.pres.act. $a$-ši-una-an-te-eš$z i$; impf. $a$-ši-una-an-te-eš-ke/a-).
Anat. cognates: CLuw. āššiuant(i)- (adj.) 'poor' (nom.-acc.sg.n. a-aš-ši-u्रa-an), $\bar{a} s ̌ s ̌ i u a n t a t t a r ~ / ~ a ̆ s ̌ s ̌ i u a n t a t t n-~(n) ~ ' p o v e r t y ' ~.(n o m .-a c c . s g . ~ a-a s ̌-s ̌ i-u ̛ a-a n-t a-a t-t a r, ~$
 $a s ̌-s ̌ i-i s ̌, ~ a c c . s g . c . ~ a-a s ̌-s ̌ i-u)^{-u-a n-t a-a t-t a-n a-a s ̌-s ̌ i-i n, ~} a-a \check{s}-s ̌ i-u ́-u{ }_{-} a-a n-t a-a t-t a-n a-$ $a \check{s}$-ši-in).

This noun and its derivatives are in Hittite consistently spelled $a$-ši-ua-an-, except for nom.-acc.sg.n. $a$-aš-ši-úa-an (KUB 41.32 rev .9 ), which therefore is interpreted by Melchert (1993b: 36) as a CLuwian form. See Starke (1990: 448f.) for an extensive treatment of the CLuwian word āššiuuantattar 'poverty'.
The old etymology of ašiuant- (going back to Jucqois 1964: 87-9), interpreting it as $*_{n}$-dieu-ont- 'having no god' > 'poor' is based on the semantic parallel OCS ne-bogъ 'poor'. In this latter word, however, the element bogъ does not refer to 'god' but to 'wealth' as in bogatb 'rich'. The semantic parallel therefore is weak. Formally the etymology has become improbable too, as we now cannot separate Hitt. ašiuant- from CLuw. āššiuant-, which word cannot reflect *n-dieu-because of the fact that CLuwian does not show assibilation of dentals in front of $*_{i}$. In which way the words are connected remains unclear, however. A discrepancy between single -š- in Hitt. and geminate - $\check{s} \check{s}$ - in CLuw. could be explained through Čop's Law, but this implies a reconstruction *ési-, which does not account for Hitt. $a$ -
āška- (gender unclear) 'gate(way)' (Sum. KÁ(.GAL)): acc.sg. a-aš-kán (KUB 44.57, 12, KBo 24.56 ii 8 ), $a-a s ̌-k a-n=a=k a ́ n ~(K U B 15.24 ~ i ~ 6), ~ d a t .-l o c . s g . ~ a-a s ̌-~$ $k i$ (OS, often), aš-ki, aš-ki-i (KUB 33.4 rev. 16), all.sg. $a-a \check{s}-k a$ (OS), $a \check{s}-k a$ (KUB 33.61 i 3), $a-a \check{s}-g a$, abl. $a-a \check{s}-k a-a z$ (OS, often), $a-a s ̌-k a-z a$, $a$ - $a s ̌-g a-a z, a-a \check{s}-g a-$ $z a$, $a-a s ̌-k a_{4}-z a$, dat.-loc.pl. $a-a s ̌-k a-a s ̌$ (KUB 33.121 iii 13), $a-a \check{s}-g a-a s ̌$ (KUB $30.27 \mathrm{rev} .8,15)$.

PIE * $h_{2} O s-k o-? ?$

The word is abundantly attested from OS texts onwards. The gender cannot be determined as all relevant forms (nom.sg., nom.pl. and acc.pl.) are unattested.

According to Puhvel (HED 1/2: 215), āška-probably is a native Anatolian term, like so many other terms used for (parts of) buildings. Formally, however, āškadoes not show any clear signs of foreign origin, but a good IE etymology fails nonetheless. Oettinger (p.c.), however, suggests to me that if we assume that initial $*_{2}$ drops before $*_{O}$ (as I have argued in Kloekhorst fthc.c), that āška-may be connected with the verb haš-, heš- 'to open', if the latter indeed reflects a root * $h_{2} e s$-. In that case, we would have to reconstruct ${ }^{*} h_{2} o s-k o-$.
āšma (interject.) 'lo, behold': $a-a s ̌-m a(\mathrm{OH} / \mathrm{MS})$.
PIE * $h_{1} o ́ s+$
This word is consistently spelled $a$ - $a \check{s}-m a$. It cannot be treated without taking $k a ̄ s ̌ m a ~ ' l o, ~ b e h o l d ' ~ i n t o ~ a c c o u n t . ~ T h e ~ l a t t e r ~ h a s ~ a ~ v a r i a n t ~ k a ̄ s ̌ a, ~ w h i c h ~ i n ~ m y ~ v i e w ~$ proves that it consists of $k \bar{a} \check{s}+=(m) a$ 'but'. Just as $k \bar{a} \tilde{s}(m) a$ belongs with $k \bar{a}-$ 'this', āšma must belong with $a$ - 'that' (see aši / uni / ini), and go back to *hiós + $=(m) a$.
ašnu- ${ }^{z i}$ (Ib2) 'to take care of; to be done with; to deliver': 1 sg.pres.act. aš-nu-mi, $a s ̌-s ̌ a-n u-m i, 2$ sg.pres.act. $a s ̌-n u-s ̌ i, ~ a s ̌-s ̌ a-n u-s ̌ i, 3 s g . p r e s . a c t . ~ a s ̌-n u-z i, ~ a s ̌-n u-u z-z i$, $a \check{s}-s ̌ a-n u-z i, \quad a \check{s}-\check{s} a-n u-u z-z i, \quad 1 \mathrm{pl} . p r e s . a c t . \quad a \check{s}-n u-m e-n i, \quad[a \check{s}-\check{s}] a-n u-u m-m e-n i$, 2pl.pres.act. aš-nu-ut-te-ni, aš-ša-nu-ut-te-ni, 3pl.pres.act. aš-nu-an-zi, aš-nu-ua$a n-z i, \quad a s ̌-s ̌ a-n u-a n-z i, \quad a s ̌-s ̌ a-n u-u a-a n-z i, \quad 1$ sg.pret.act. $\quad a s ̌-s ̌ a-n u-n u-u n$, 3sg.pret.act. $a \check{s}-n u-u t$, $a s ̌-s \check{a} a-n u-u t$, 1pl.pret.act. $a s ̌-s ̌ a-n u-u m-m e-e n, 3 p l . p r e t . a c t$. $a \check{s ̌-s ̌ a-n u-e-e r, ~} \quad a \check{s}$-ša-nu-er, 1sg.imp.act. $\quad a \check{s}-n u$-ul-lu, $a$-aš-ša-[nu-]ul-lu, 2sg.imp.act. $a \check{s}-n u-u t$, $a s ̌-s ̌ a-n u-u t$, 3sg.imp.act. $a \check{s}$-ša-nu-ud-du, 2pl.imp.act. aš$\check{s} a-n u-u t-t e-e n ; 3$ sg.pres.midd $a s ̌-n u-u t-t a$, $a \check{s}-n u-u t-t a-r i$, $a s ̌-s ̌ a-n u-u t-t a$, $a \check{s}-s ̌ a-n u-$ ut-ta-ri, $a s ̌-s ̌ a-n u-u d-d a-r i, a-a s ̌-s ̌ a-n u-u d-d a-a-r i, 3 p l . p r e s . m i d d . ~ a s ̌-n u-u n a-a n-t a-$ $r i, 3$ sg.pret.midd. $a \check{s}-n u-u t-t a-a t$, $a \check{s}-n u-u t-t a-t i, 3 \mathrm{sg} . i m p . m i d d . ~ a \check{s ̌-s ̌ a-n u-u t-t a-r u ; ~}$



PIE * $h_{l} s$-neu-
See $\mathrm{HW}^{2}$ A: 372f. for attestations. The bulk of the attestations of ašnu- ${ }^{z i}$ are spelled $a s ̌-n u$ - or $a s ̌-s ̌ a-n u$-. Only sporadically we find forms with initial plene $a$ (e.g. once $a$-aš-ša-nu-una-an-zi (KUB 32.103 ii 15) besides 70x $a \check{s}-n u-a n-z i, 20 \mathrm{x}$
$a \check{s ̌-n u-u a-a n-z i, ~ 7 x ~} a \check{s}-s \check{a} a-n u-a n-z i, 20 \times \quad a \check{s}-s ̌ a-n u-u{ }_{c} a-a n-z i$ and 1x $a \check{s}-s ̌ a-n u-u-u a_{-}$ $a n-z i\left(c f . \mathrm{HW}^{2} \mathrm{~A}: 373\right)$ ).
The verb has quite a wide range of semantic usages. Most attestations seem to mean 'to take care of (persons, gods)'. In the hippological texts ašnu- ${ }^{z i}$ can have 'horses' as object and then probably means 'to massage' ('*to take care of (horses)'). When ašnu- is used with an infinitive, it means 'to be done with', which could have developed out of 'to have taken care of'. In rituals, it often has an object 'cup(s)' or 'food' and seems to mean 'to deliver', e.g.

KBo 2.4 i
(19) $n u$ GIM-an SISKUR pí-ia-an-zi GAL ${ }^{\text {HI.A }}=k a ́ n$
(20) $a \check{s}$-ša-nu-ųa-an-zi
'When they give an offering, they deliver the cups';
VSNF 12.29 i
(8) GAL DUMU ${ }^{\text {MEŠ }}$ É.GAL=za e-ša ta hal-zi-i $[a]$
(9) GAL ${ }^{\mathrm{H}}\left[{ }^{\mathrm{L} \cdot \mathrm{A}}\right]-u s^{?}$ ? $a \check{s}-s ̌ a-n u-u{ }^{2} a-a n-z i$
(10) ḩa-an-t[e]-ez-zi pal-ši GUB-aš ${ }^{\mathrm{d}} \mathrm{U}$ pí-hூa-ša-ši-i[ $\left.n\right]$
(11) e-ku-zi
'The head of the palace servants sits down and screams. They deliver the cups.
First he drinks to the $p$. Storm-god standing'.
I think that it is possible that this meaning has developed out of an original to take care of / to have taken care of' as well. All in all, it is likely that the original meaning of $a$ šnu $^{-z}$ is 'to take care of, to have taken care of'. A similar interpretation can be found in $\mathrm{HW}^{2}$ A: 372, where we find the translation "(Lebewesen) versorgen; (Dinge/Sachen) besorgen". Puhvel (HED 1/2: 192), cites the verb as "as(sa)nu-, assiyanu-", however, and translates "favour, keep happy, propitiate (deities or superiors), set aright (afflected parties), treat gently, massage (racehorses); make good, carry out (well), bring off (cf. 'he made good his escape'), dispose (properly), get done, be done with". These meanings seem to be especially based on the fact that Puhvel assumes an etymological connection
 connection unlikely on semantical grounds (the basic meaning of ašnu- is 'to take care of' and not 'to make happy or beloved'), formally the connection does not work either ( $a \check{s} n u$ - is hardly ever spelled with initial plene $a$-, whereas $\bar{a} \check{s} \check{s}-$, $\bar{a} s ̌ s ̌ u$ and their derivatives always are). The two forms of the verb āššiianu- that Puhvel
stealthily equates with ašnu- do not belong here but indeed are derived from $\bar{a} \check{s} \check{s}-$ ${ }^{a(r i)}$, $a$ äšizie/ $a_{-}{ }^{\text {Ita(ri) }}$, for which see there.
There is no concensus regarding the etymological interpretation of this verb. An interpretation as a causative of $\bar{e} s{ }^{s}-$ 'to sit (down)' has been suggested (Götze 1928: 102ff.), but does not make sense semantically. A connection to $\bar{a} s ̌ s ̌ u$ 'good' (so Puhvel HED 1/2: 205, who compares tepnu- 'to diminish' from tēpu'small') is difficult formally (consistent plene writing of $a-a \check{s}-s \check{u} u$ vs. the almost consistent absence of plene in $a \check{s}-(\check{s} a-) n u-) . \mathrm{HW}^{2}$ A: 383 therefore states "aš(ša)nu- gehört seiner Bed. nach weder zu eš-"sitzen, sich setzen" noch zu aššu- "gut". [...] Etymol. steht aus".
If we look at ašnu- objectively, it hardly cannot be but a causative of a verb $a \check{s}(\check{s} a)$-. As causatives in principle are derived of the weak stem, not only the verb $\bar{e} \check{s}_{-}$a(ri) 'to sit down' (with active forms $e \check{s}_{-} z^{i} / a \check{s}-$ ), but also the verb $e \check{s}^{\prime}-{ }^{z i} / a \check{s}-$ ' 'to be' is, on formal grounds, a possible candidate for being the source of ašnu-, especially if we compare the causative šašnu- ${ }^{z i}$ of šeš-zi / šašs- 'to sleep' (also spelled šaššanu-). This connection would work semantically as well: 'to make be' is semantically equal to 'to take care of' and 'to have taken care of'. I therefore assume that $a s ̌ n n u$ - is the causative of $\bar{e} \bar{s}^{z}{ }^{z i} / a s ̌-$ 'to be' and that it reflects $* h_{l} s$ -neu-. See at $e s_{-}^{z i} / a s ̌$ - for further etymology. The numerous spellings with $a s ̌-s ̌ a-$ $n u$ - show that this verb phonologically is to be interpreted as /2Snu-/.
$=(\boldsymbol{a})$ šta (encl. locatival sentence particle): $C=a s ̌ t a(t=a-a s ̌-t a(\mathrm{OS}), p a-r a=m=a$ $a \check{s}-t a(\mathrm{OS}), ~ h a-a-r a-n a-a n=a \check{s}-t a(\mathrm{OS}), n=a-a s ̌-t a(\mathrm{OS}), m a-a-n=a-a s ̌-t a(\mathrm{OS}), k a-$ $l u-l u-p i ́-i=s ̌-m i-t=a-a s ̌-t a(\mathrm{OS})),-e / i=s ̌ t a \quad(t=e-e=\check{s}-t a$ (OS), nu-u=š-še-e=š-ta ( OS ), $n u-u=\check{s}-\check{s} i-i=\check{s}-t a(\mathrm{MH} / \mathrm{MS}), n=e-e=\check{s}-t a(\mathrm{KBo} 21.90 \mathrm{obv} .21(\mathrm{OH} / \mathrm{MS})))$.

This particle occurs in OH , MH and NH texts, but its use decreases through the time. In my corpus of OS texts (consisting of 23.000 words), $=(a)$ šta occurs 74 times ( $=3.2$ promille), in my corpus of MH/MS texts (consisting of 18.000 words), it occurs $50+$ times ( 2.8 promille), whereas in my NH corpus (consisting of 95.000 words), it occurs 19 times only ( 0.2 promille). It is clear that after the MH period, the use of this particle falls into disfavour.
In the OS and MH/MS texts, we see that the particle behaves just like $=(a) p a$ and $=(a) n$, i.e. it shows the form =ašta when following a consonant or a word ending in $u$ or $a$ (which are dropped in favour of the $a$ of =ašta): mān=ašta, $t=a s ̌ t a$ and $n=a s ̌ t a$; but drops its first $-a$ - when following a word ending in $e$ or $i$ : $t=e=\check{s t} t a, n u=\check{s} \check{s} i=s ̌ t a$. In NH, the latter rule is lost (e.g. le-e $=a \check{s}-t a$ (Bronzetafel iii $31(\mathrm{NH}))$ ).

The exact meaning of $=(a)$ šta is not fully clear. According to $\mathrm{HW}^{2}$ (A: 426f.) the basic meaning is 'out of', contrasting with $=(a) n$ and anda 'in(to)'.
Since a similar particle is not found in the other Anatolian languages, and since there is no locative adverb that matches $=(a) \check{s} t a$ in form and meaning, an etymology is lacking.
$\overline{\boldsymbol{a} s ̌ s ̌ u-~ / ~ a ̆ s ̌ s ̌ a u-~(a d j .) ~ ' g o o d ; ~ d e a r ; ~ f a v o u r a b l e ' ~(S u m . ~} \mathrm{SIG}_{5}$ ): nom.sg.c. $a$-aš-šu-uš (OS), acc.sg.c. $a-a \check{s}-s ̌ u-u n$, nom.acc.sg.n. $a-a \check{s}-s ̌ u$ (OS), gen.sg.c. $a-a \check{s}-s ̌ a-u-$


 nom.-acc.pl.n. $a-a s ̌-s ̌ a-(u-) u a$, dat.-loc.pl. $a-a \check{s}-s \check{a}-u-a s ̌$.
Derivatives: $\overline{\mathbf{a}}$ ̌̌̌̌u- (n.) 'good(ness), good things; goods, possessions' (nom.acc.sg. $a-a \check{s}-s ̌ u(\mathrm{OS})$, dat.-loc.sg. $a-a \check{s ̌-s ̌ u-u ́-i, ~} a-a \check{s ̌-s ̌ u-i, ~} a-a \check{s}-s ̌ a-u-i$, erg.sg. $a-a \check{s}-$ šu-ua-an-za, a-aš-ša-u-ua-za, $a-a \check{s}-s ̌ a-u-u a-a n!-z a$ (KUB 22.64 iii 7), abl. $a-a s ̌-s ̌ u-$ ua-az, $a-a \check{s}-s \check{a} a-u-u a-a z$, instr. $a-a s ̌-s ̌ u-i t, a-a s ̌-s ̌ u-i-i t, a-a s ̌-s ̌ a-u-i t, a-a s ̌-s ̌ a-u-i-i t$, nom.-acc.pl. $a-a \check{s}-s ̌ u-u$ (OS), dat.-loc.pl. $a-a \check{s}-s ̌ u-u-a s ̌), ~ \bar{a} s ̌ s ̌ u u a n t-~(a d j) ~ ' g o o d ;$. favourable' (nom.sg.c. $a-a \check{s}-5 ̌ u-u a-a n-z a, ~ a-a \check{s}-s ̌ u-u-u a-a n-z a$, acc.sg.c. $a-a \check{s}-\check{s} u-$ una-an-da-an, dat.-loc.sg. a-aš-šu-úa-an-ti, instr. $\mathrm{SIG}_{5}$-an-te-et), āššuuatar / āššuuann- (n.) 'favourableness, friendly fashion' (nom.-acc.sg. SIG $_{5}$-u-tar, dat.loc.sg. $a-a \check{s ̌-s ̌ u-a n-n i, ~} a-a \check{s}-$ šu-una-an-ni), aššul (n.), aššula- (c.) 'favour; greeting; well-being' (Sum. SILIM-ul; nom.-acc.sg.n. $a \check{s}-s ̌ u-u l$, (MH/MS, often), aš-šu-ú-ul (MH/MS, 2x), $a-a \check{s}-s ̌ u-u l(1 \mathrm{x})$, nom.sg.c. $a \check{s}-s ̌ u-l a-a \check{s}$, acc.sg.c. $a s ̌-s ̌ u-l a-a n, a$ - $a s ̌-$ šu-la-an, gen.sg. $a \check{s}$-šu-la-aš, dat.-loc.sg. $a \check{s}-5 \check{s} u-l i\left(\mathrm{MH} / \mathrm{MS}\right.$, often), $a \check{s}-\mathrm{s}^{\prime} u-u ́-l i(1 \mathrm{x})$, $a-a \check{s ̌-s ̌ u-l i ~(1 x)), ~ a ̆ a ̌ s ̌ u l a t a r ~ / ~ a ̆ s ̌ s ̌ u l a n n-~(n .) ~ ' w e l l-b e i n g ' ~(d a t .-l o c . s g . ~ a s ̌-s ̌ u-l a-a n-~}$ $n i, a-a s ̌-s ̌ u-l a-n i)$, see also $\bar{a} s s_{-} \overline{-}^{a(r i)}, ~ a ̄ s ̌ s ̌ i i e / a-{ }^{\text {tta(ri) }}$.
IE cognates: Gr. ċv́c 'good', Skt. sú 'good'.

$$
\text { PIE * } h_{l} o h_{l} s-u-?
$$

See $\mathrm{HW}^{2}$ A: 492f. for attestations. The adjective is abundantly attested from OS
 substantivized, it denotes 'the good > goods', which is found from OS texts onwards as well. Note that the adjective $\bar{a} s ̌ s ̌ u$ - shows ablaut ( $\bar{a} s ̌ s ̌ u-, ~ a ̄ s ̌ s ̌ a u-) ~$ whereas the noun $\bar{a} \check{s} \check{s} u$ - in principle does not show ablaut (like all $u$ - and $i$-stem nouns), although some traces of it are still found, revealing the fact that $\bar{a} s ̌ s ̌ u$ - in origin was a substantivized adjective.
An etymological connection with Gr. દ̇v́c 'good' and Skt. sú, su- 'good' is generally accepted, although opinions regarding the exact reconstruction differ.

Important is the question whether the noun is derived from the adjective or the other way around. Watkins (1982a: 261) argued that the noun reflects a PIE stative $u$-stem noun $* h_{l} o ́ s-u$, $* h_{l} e ́ s-u$, whereas the adjective goes back to a derived proterokinetic $u$-stem adjective *hiés-u-, *h $e s$-eu-. Melchert (1994c: 300f.) takes over this view and argues that the noun $* h_{1} o ́ s-u$ yielded Hitt. * $\bar{a} s ̌ u$, whereas the oblique *hées-u- yielded Hitt. *aššu- via 'limited' Čop's Law, by which an accentuated initial ${ }^{*} e$ yields $a$ with gemination of the following consonant. These forms, $* \bar{a} s ̌ u$ and $* a \check{s} s \check{u} u$ - get mixed, yielding the form $\bar{a} \check{s} s u^{-}$, which stem then was generalized in the adjective as well.
Problematic to this account, however, is the fact that in the other IE languages no $u$-stem nouns of this stem are found, whereas $u$-stem adjectives are. I therefore assume that the adjective $\bar{a} s \check{s} s u$ - is primary, and that the noun $\bar{a} s \check{s ̌ u} u$ - is a mere neuter substantivation of it. Moreover, the sound law that Melchert introduces in his 1994b-paper (*\#éC->aCC-) to explain the geminate -šš- of $\bar{a} s \check{s ̌ u} u$-, is designed for three words only ( $\bar{a} s ̌ s ̌ u-$, ammuk and anni-), and in my view has no merit.
The biggest problem of the Hittite word is the geminate -šš-. It cannot be but the product of assimilation of some consonant to ${ }^{*} s$. If we want to save the etymological connection with Skt. sú, su- and Gr. év́s, which excludes reconstructions like *ans- as e.g. in Puhvel (HED 1/2: 206), the only possibility is that -š̌s- reflects *-Hs-. This would mean that $\bar{a} s ̌ s ̌ u$ - reflects $* H o H s-u$-. Because of the Gr. $\varepsilon^{-}$, the laryngeals cannot be $* h_{2}$ or $* h_{3}$, so the form must have been $* h_{l} o h_{l} s$-(é) $u$ - (note that a preform $* h_{l} o ́ h_{l} s-u$ - would have yielded $* * /$ ā́su-/, spelled as $* * a-a-s ̌ u-)$. This means that $a-a \check{s}-s ̌ u$ - represents $/$ RáSu-/ (cf. $a-a r-a \check{s}-z i=$ $/$ RárSt ${ }^{\mathrm{s}} \mathrm{i} /$ ). All in all, we must reckon with a original paradigm $* h_{1} o ́ h_{l} s-u-s, * h_{1} h_{l} s-$ éu-s, which after generalization of the full-grade stem was altered to $* h_{l} o ́ h_{l} s-u-s$, *h $h_{l} o h_{l} s$-éu-s. This paradigm regularly should have yielded Hitt. **/Rắsus/, **/RaSús/, which was levelled out to /RáSu-/, spelled $a-a \check{s}-\check{s} u$-. The question is, of course, what kind of formation this is. On the one hand, one could compare Gr. ذ̀кúc 'quick', Skt. āsúú- 'fast', which, if they are to be connected with *hilek'uos 'horse' and Lat. acupedius 'quick-footed' < *HHk' $u$ - (cf. Schrijver 1991: 77), must reflect $* h_{1} o-h_{l} k^{\prime}-u$-, an $o$-reduplicated $u$-stem adjective. In that way, Hitt. $\bar{a} s ̌ s ̌ u$ - would reflect $* h_{l} o-h_{l} s-u$ - besides Gr. Ėv́c $<* h_{l} e s-u$ - and Skt. sú, su- < $* h_{l} s u(-)$. On the other hand, one could wonder to what extent the Gr. epic form そ̉ús 'good' is linguistically real. It has generally been dismissed as an epic metrically lengthened form, but I do not see why (żv́ç is not problematic for the hexametre). If ך̉v́c and ċv́s are ablaut-variants, it would point to a reconstruction *h $h_{l} e h_{l} s$ - $u$ - besides $* h_{l} h_{l} s-u$-. Than we could interpret Hitt. $\bar{a} \check{s} s ̌ u$ - as the $o$-grade
variant * $h_{l} o h_{l} s$ - $u$ - of which the $e$-grade is visible in Gr. $\eta$ ús and the zero grade in Gr. év́c and Skt. sú.

The derivative aššul- is predominantly spelled without initial plene $a$ - which is plausibly explained by Rieken (1999a: 459f.) as due to the fact that this word was accentuated on the suffix (as visible in the few spellinsg $a \check{s}-$-šu-ú-ul), leaving the initial $a$ - unstressed and therefore short (or are we dealing with a zero-grade formation $* h_{l} h_{l} s$-éul here?).
 derived from $\bar{a} s \check{s} u$ - and not the other way around (pace Puhvel HED 1/2: 205 and Weitenberg 1984: 96). If we would assume that the verb is basic, we would have a very hard time explaining both the vowel $\bar{a}$ and the geminate $-\check{s} \check{s}-$.
${ }^{\text {Lú }}$ äššušanni (uninfl.) 'horse-trainer': stem $a$ - $a s ̌[-s ̌] u-u s ̌-s ̌ a-a n-n i(K U B 1.13$ i 1), $a-a \check{s ̌-s ̌ u-u s ̌-s ̌ a-a n-n[i] ~(K U B ~ 29.44+~ i i i ~ 46) . ~}$

The word is used as the title of Kikkuli, the Hurrian horse-trainer: KUB 1.13 i (1) UM-MA ${ }^{\mathrm{I}} K i-i k-k u-l i{ }^{\text {LÚ }} a-a s ̌[-s ̌] u-u s ̌-s ̌ a-a n-n i(2) \check{S} A$ KUR URU $M i-i t-t a-a n-n i{ }^{\prime}$ 'Thus speaks Kikkuli, the horse-trainer from Mittanni-land'. Like many horse-training terms from the Kikkuli-text, this word, too, is generally regarded to be (at least partly) of Indic origin, reflecting Ind. aśva- 'horse'.
āššuzēri- (n.) 'good-cup’ (Sum. ZA.HUM, Akk. BIBRU): nom.-acc.sg. a-aš-šu-zé-ri (KUB 27.13 i 13 (NS)), a-aš-šu zé-e-ri (KUB 1.17 i 5 (OH/NS)), instr. a-aš-šu-zé-ri-it (KBo 20.67 i 18 ( $\mathrm{OH} / \mathrm{MS}$ )), [ $a$-aš-šu-z]é-rị-it (KBo 17.75 ii 58 (OH/MS?)), a-aš-šu z[é-r]i[-it] (IBoT 2.67, 11 (NS)).

See $\mathrm{HW}^{2}$ A: 541 for attestations. The word is written with and without a word space between $\bar{a} s ̌ s ̌ u$ and $z \bar{e} r i-$, so we are clearly dealing with a univerbation of the two words, forming 'good-cup'. See both at $\bar{a} s ̌ s ̌ u-\quad$ good' and at zēri- 'cup' for further etymology.
-at (3sg.pret.midd.-ending): see $-a(r i),-a t(i)$
atta- (c.) 'father' (Sum. A.A.MU, Akk. $A B U$ ): nom.sg. at-ta-aš (OS), ad-da-aš, acc.sg. at-ta-an (MH/MS), ad-da-an, gen.sg. at-ta-aš, ad-da-aš, dat.-loc.sg. at-ti, nom.pl. at-ti-e-eš (KUB 17.29 ii 7), acc.pl. at-tu-uš (OS), ad-du-uš, gen.pl. ad-da$a \check{s}$, dat.-loc.pl. $a d-d a-a \check{s}$.

Derivatives: attalla- 'fatherly, paternal' (nom.-acc.pl. at-ta-al-la (KUB 33.106 iii 50).
Anat. cognates: CLuw. tāta/i- (c.) 'father' (nom.sg. ta-a-ti-iš, acc.sg. ta-a-ti-in, dat.-loc.sg. da-a-ti-i, da-a-ti, nom.pl. ta-ti-in-zi), tāti(ia)- (adj.) 'paternal' (nom.sg.c. ta-a-ti-i-iš, ta-ti-i-iš, nom.-acc.sg.n. ta-ti-i-ia-an, ta-a-ti-i, a-an, abl.instr. ta-ti-ía-ti, nom.pl.c. da-a-ti-i-in-zi, nom.-acc.pl.n. ta-a-ti-e-ina), tatalla/i(adj.) 'paternal' (nom.-acc.pl.n. da-da-al-la); HLuw. tati- (c.) 'father' (nom.sg. $t a ́-t i-s a, t a ́-t i-i-s a, t a ́-t i-s a_{4}$, acc.sg. tá-ti-na, dat.-loc.sg. tá-ti(-i), tà-ti-i, nom.pl. tá$t i-z i, t a ́-t i-i-z i$, acc.pl. tá-ti-zi, dat.-loc.pl. tá-ti-ia-za), tatiiia- (adj.) 'paternal' (dat.loc.sg.? tá-ti-ia (KARKAMIŠ A23 §11), nom.-acc.pl.n. tá-ti-ia (KARKAMIŠ A11a §8)), tatala/i- (adj.) 'fatherly' (nom.sg.c. tá-tà-li-sa (KARKAMIŠ A11b+c §11)); Lyd. taada- (c.) 'father' (nom.sg. taadaś); Lyc. tede/i- (c.) 'father(?)' (nom.sg. tedi, dat.-loc.sg. te $\theta \theta i$ ).

See $\mathrm{HW}^{2}$ A: 541f. for attestations. It is remarkable that Hittite shows a stem atta-, whereas the other Anatolian languages show *todo-. Both stems clearly are onomatopoetic: Hitt. atta- can be compared to e.g. Lat. atta, Gr. ä $\tau \tau \alpha$, Goth. atta, OCS otbcb etc. 'father', whereas *todo- is comparable with e.g. ModEng. daddy etc.
HLuw. tati- often is cited as an $i$-motion stem tata/i- (especially on the basis of the stem tata- in tatala/i- 'paternal), but dat.-loc.pl. tá-ti-ia-za shows that at least synchronically the word functions as an $i$-stem.
-ātar / -ānn- (abstract-suffix).
PIE *-ótr / *-ótn-
The abstract-suffix -ātar / -ānn- can be denominal as well as deverbal. Cf. e.g. anniìātar 'mothership', antuȟsātar 'mankind', hantezziiāatar 'first position' for the former category and e.g. akkātar 'death', hukātar 'conjuration', uuātar 'inspection' etc. for the latter category. If the abstract in -ätar is derived from an ablauting noun or verb, this noun or verb shows the weak stem. The suffix is $-r / n-$ inflected: it shows nom.-acc.sg. -ātar vs. oblique -ānn- which must reflect *-ātn-. It must be noted that despite the fact that both -ātar and -ānn- are often attested without plene spelling of $-a$-, there are enough cases in which the plene spelling is found to suggest that in all cases we should in fact assume that we are dealing with -ātar and -ānn-.
In CLuwian, we find the abstract-suffix -attar / at(ta)n-, e.g. in kuršattar / kuršat(ta)n- 'parcel of land $<$ *cutting' or gulzattar / gulzat(ta)n- 'sketch <
*carving'. It is clear that these suffixes must be etymologically connected. Nevertheless, it is remarkable that we find a lenis $-t-=/ \mathrm{d} /$ in Hittite vs. a fortis $-t t-$ $=/ \mathrm{t} /$ in CLuwian. In my view, this points to the following scenario. The prePAnatolian form of this suffix, *-ótr / *-ótn- yielded PAnat. */-ódr/, */-ótn-/ (lenition of *-t- in 'intervocalic' position, but not as part of a cluster). In CLuwian, the nom.-acc.sg.-form */-ódr/ regularly yielded **/-ádr/, which was at some point altered to */-ắtr/ in analogy to /-t-/ as found in the oblique stem /-ătn-/. In Hittite the oblique stem */-ótn-/ assimilated to /-án $\mathrm{N}-/$, however, which means that there was no model anymore on the basis of which the nom.-acc.sg.-form /-ắdr/ could be altered. This means that e.g. appātar / appānn- 'seizing' reflects *h $h_{l} p$-ótr $/ * h_{l} p$-ótn-. Note that Melchert 1994a: 86 reconstructs this suffix as *-éh $h_{2}$ tr $/{ }^{*}$-é $h_{2} t n-$, probably on the basis of the fact that he does not reckon with lenition due to ${ }^{*} \dot{o}$, as well as on the basis of a presupposed connection with the factitive-suffix -ahh- ${ }^{i}$ (q.v.). This latter assumption cannot be correct: not only is there no semantic connection between the factitives in -ahh- and the abstract nouns in -ātar / - $\bar{a} n n-$, the suffix -ahh- is denominal only and would not be able to account for the many deverbal formations in -ātar / -ānn-. Moreover, if Lyc. tukedri 'statue' indeed would show a suffix -edri that must be compared to Hitt. -ātar (Eichner 1973: 80), it would show beyond doubt that we have to reconstruct *-otr, since *-eh $2_{2}$ would have yielded Lyc. $-a$-.
See at - $\bar{n} n n a$ for the fact that this inf.I-suffix is the original allative within the paradigm of -ātar / -annn-, and at -anna/i- for the verbal derivative of this suffix.
-ati (3sg.pret.midd.-ending): see $-a(r i),-a t(i)$
$\boldsymbol{a} \boldsymbol{u}^{\boldsymbol{i}} / \boldsymbol{u}$ - (IIa1a) 'to see, to look' (Akk. AMARU): 1sg.pres.act. u-uh-hi (MH/MS), 2sg.pres.act. $a-u t-t i(\mathrm{OS}), 3 \mathrm{sg} . p r e s . a c t . ~ a-u s ̌-z i(\mathrm{OS}), 1$ pl.pres.act. ú-me-e-ni (OS), ú-me-ni (OS), a-ú-ma-ni (VBoT 1, 12 (MH/MS)), a-ú-me-n[i] (KUB 21.38 obv. 35 (NH)), a-ú-um-me-ni (KUB 21.27+ ii 4 (NH)), a-ú-um-mé-e-ni (KUB 33.88, 16 (MH/NS)), 2pl.pres.act. uš-t[e-e-]ni (KBo 7.14+KUB 36.100 obv. 23 (OS)), uš-te-ni (KBo 3.28 ii 9 (OH/NS)), a-uš-te-ni (KUB 23.77, 15 (MH/MS)), a-ut-te$n i(\mathrm{NH}), 3 \mathrm{pl} . \mathrm{pres} . \mathrm{act} . \dot{u}-u a-a n-z i, 1$ sg.pret.act. $u$-uh-hu-un (MH/MS), 2sg.pret.act. $a-u \check{s}[-t a]$ (KBo 5.3 iii $56(\mathrm{NH})$ ), 3sg.pret.act. $a-u s ̌-t a$ (OS), $a-u$-uš-ta (KBo 3.60 i 8 ( $\mathrm{OH} / \mathrm{NS}$ )), 1pl.pret.act. $a$-ú-me-en (OS), a-ú-um-me-en, 3pl.pret.act. a-ú-e-er (MH/MS), a-ú-er, 1sg.imp.act. ú-ua-al-lu (KUB 14.8 rev. 42 (NH)), ú-uis-el-lu-ut (KUB 3.110, 15 (NS)), 2sg.imp.act. $a-\dot{u}$ (MH/MS), 3sg.imp.act. $a-u \check{s ̌-d u}$ ( $\mathrm{OH} / \mathrm{NS}$ ), 2pl.imp.act. a-uš-tén (MH/MS), 3pl.imp.act. ú-ua-an-du (MH/MS); 1pl.pres.midd. u-ûa-u-ūa-aš-ta-ri (KBo 16.59 obv. 7 (NS)), 1sg.pret.midd. $a$-uš-
ha-ha-at (KUB 31.121a ii $20(\mathrm{NH})$ ), u-ua-ah-ha-at (KUB 24.7 iv 34 (NS), KUB 17.31 i 18 (NS)), 3sg.pret.midd. $a$-uš-ta-at (KBo 14.40, 9 (NH)), $a$-uš-ta-t=a-an (KUB 17.10 ii 35 (OH/MS)), 3pl.pret.midd. ú-ua-an-ta-a[t] (HT $21+$ KUB 8.80, $10(\mathrm{NH})$ ), 1 sg.imp.midd. $u$-una-ah-ha-ru (KUB 14.14 rev. $15(\mathrm{NH})$ ), ú-ua-ah-ha$r u$ (KUB 14.14 rev. $30(\mathrm{NH})$ ), 3sg.imp.midd. u-ua-ru (KUB 36.44 iv 4 ( $\mathrm{OH} / \mathrm{MS}$ )), 3pl.imp.midd. u-ua-an-da-ru (KUB 21.19 iv 28 (NH)); part. ú-ua-an-$t$-; verb.noun. ú-ua-a-tar, ú-ua-tar, gen.sg. ú-ua-an-na-aš (KBo 35.246 obv. 20 (MH/MS)); inf.II ú-ua-an-na (MH/MS); impf. ú-uš-ke/a- (OS), uš-ke/a- (OS), u$u s ̌-k e / a-(K U B 6.7+$ KUB 18.58 iii 18 (NS)), uš-ki-iš-ke/a- (KBo 6.29 i 10 (NH)).
Derivatives: uиatalla- (c.) 'seer’ (acc.pl. ú-ua-tal-lu-uš (KBo 4.14 iii 18 (NH)), ${ }^{\text {(LÚ) }}$ uškiškat(t)alla- (c.) 'guard, watchman' (nom.sg. uš-ki-iš-[g]a-tal-la-aš (KUB 14.1 Rs. 45 (MH/MS)), uš-ki-iš-ga-tal-la-aš (KUB 14.16 iv $20(\mathrm{NH})$ ), acc.sg. [u]š-ki-iš-kat-tal-la-an (VSNF 12.57 iv 13 (MH/NS)), nom.pl. uš-ki-iš-kat-ta-li-iš (KUB 41.8 iv 15 (MH/NS)), uš-ki[š-kat]-tal-li-us (KBo 10.45 iv 16 (MH/NS)), uš-kiš-kat-tal-lu-uš (KBo 4.14 iii 10 (NH))), uškiške/at(t)allatar (n.) 'guard duty' (dat.-loc.sg. uš-ki-iš-ke-tal-la-ni (KUB 14.16 iv 18 (NH)), uš-ki-iš-ga-at-tal[la-an-ni] (KUB 14.15 iv 46 (NH))), see also parāuuant-.

Anat. cognates: CLuw. aua (interjection) 'behold, look here' ( $a-a-u a, a-u a)$.
IE cognates: Skt. āvís (adv.) 'evidently, before the eyes', Av. āuuiš 'id', Gr. áî̀ $\omega$ 'to perceive', aíбӨávoual 'to perceive', Lat. audiō 'to hear'.

PIE *h $h_{2}$ óu-ei, * $h_{2} u$-énti
See $\mathrm{HW}^{2}$ A: 572f. for attestations. The oldest attested paradigm (OS and MS) of this verb is as follows:

| $u-u h-h i$ | u-uh-hu-un |
| :---: | :---: |
| a-ut-ti | *autta |
| $a-u s ̌$-zi | $a-u \check{s}-t a$ |
| ú-me-e-ni | $a-u$-me-en |
| $u s$-te-e-ni | (a-uš-tén) |
| ú-ua-an-zi | a-ú-e-er |

It is clear that originally this verb must have been hi-conjugated, showing a stem $a u-/ u$ - (with regular monophthongization of $a u$ - to /o/ before $h$ ). Only the 3sg.forms are aberrant, showing $m i$-inflected forms and a stem $a u s s_{s}-$ (similar in the verb $m a u u^{i} / m u-$, maǔ̌š-: note that a stem $a u \check{s} \check{s}-$ with geminate $-s \check{s}-$ is not actually attested thus (never intervocalically), but I assume that this stem had the same shape as maušš-, which is attested with geminate -šš- in e.g. mauššer, mauššant-).

This is probably due to the fact that the expected 3sg.-forms would have been *Hóu-ei > Hitt. **/Rắue/ for the present and *Hóu-s-t > Hitt. **/RáuS/ for the preterite. Apparently, **/Rắue/ was too aberrant to be retained and analogically remade into $/ \mathrm{RáuSt}^{\mathrm{s}} \mathrm{i} /=a-u \check{s}-z i$ on the basis of 3 sg .pret. **/RáuS/. This latter form, in its turn, was analogically altered to $/ \mathrm{Ra} u \mathrm{Sta} /=a-u \check{s}-t a$ on the basis of 3 sg .pres. $a u s ̌ z i$, and likewise $3 \mathrm{sg} . i m p . a c t$. $a u s ̌ d u$ was created. On the basis of these 3 sg .forms, the stem aušš- is used for the 3sg.pret.midd. auštat ( $\mathrm{OH} / \mathrm{MS}$ ) as well, which then became the basis for 1sg.pret.midd. aušhahat (NH). Note that 2pl.pres.act. aušteni (MH/MS) and 2pl.imp.act. aušten (MH/MS) do not show a stem aušš-, however, but are just archaic forms that have to be analysed as au-šteni and au-šten, showing the archaic 2 pl.-ending -šten(i) that is characteristic for the hi-conjugation (cf. the lemma -šten(i) and Kloekhorst fthc.d).
It has been noticed since long that 1 sg.pres. and pret. are consistently spelled $u$-uh-, with the sign U , whereas 3 pl.pres. is spelled $u$ u-ua-an-zi, consistently with Ú. As I have argued in §1.3.9.4, the spelling $u$-uh-hi represents $/ \mathrm{Ro} \mathrm{Hi} /$, the regular outcome of *Hóu- $h_{2}$ ei, showing monophthongization of $*$-ou- before $* h_{2}$, whereas ú-ua-an-zi represents /Ruánt ${ }^{\text {si}} \mathrm{i}$, the regular outcome of *Hu-énti (compare 'to give’: pé-e-eh-hhi /péHi/ < *hlpói- $h_{2} e i$ vs. pí-ía-an-zi /piántisi/ < * $h_{l} p i$-énti). The imperfective is spelled $u$ u-uš-ke/a- and uš-ke/a- in OS texts, both representing /Ruské/á-/. In NS texts we come across the spelling $u$-uš-ke/a-, which in my view represents /Roské/á-/, the NH monophthongized outcome of the (unattested) intermediate stage **auške/a- (compare the imperfective of 'to give': in OH times the form is pí-iš-ke/a-/piské/á-/ < *h $h_{1} p i-s k e ́ / o ́$ - in which in MH times the full-grade stem was introduced, yielding pa-iš-ke/a-/paiské/á-/, which then monophthongizes to pé-eš-ke/a-/peské/á-/).

In the middle paradigm we find, apart from forms that show the stem auš- ${ }^{\text {Ha(ri) }}$, the spellings $u-u a$ - besides $u$ - $u a$-. In my view, the former spelling represents $/$ Rua-/, the expected outcome of $* H u-o-$, whereas the latter spelling represents /Roa-/, in which the stem /Ro-/ was analogically introduced in analogy to 1 sg. $u$-uh-hi and $u$-uh-hu-un (quite understandably in 1sg.pret.midd. u-ua-ah-ha-at and 1 sg.imp.midd. $u-u a-a h-h a-r u)$.

The verb $a u^{-}{ }^{i} / u$ - is generally etymologically connected with the Vedic hapax form uvé that occurs in RV 10.86.7a uvé amba sulābhike. Schmid (1958) argued that this form should be interpreted as 1 sg.pres.midd. 'I see', which would then point to a root $* \mathrm{Heu}$ - LIV $^{2}$ codified this view by reconstructing a root $* h_{1} e u$ "sehen, erblicken". It is problematic, however, that the meaning of uvé cannot be independently established: the translation 'to see' seems to be prompted especially by etymological considerations. Furthermore, if we compare parallel
phrases like AVP 5.1.3a hā amba suhūtale, AVP 10.1.1a hā amba tejane, AVP 20.46.8a $h \bar{a}$ amba panecari, it is quite possible that uvé more likely is an interjection comparable to $h \bar{a}$, just as Geldner (1951: 275) has interpreted it: "O weh, Mütterchen, du leicht zu kriegendes Weibchen". I therefore will leave uvé out of consideration here.
Schmid also compared Skt. uvé and Hittite au- / u- with Skt. āvís (adv.) 'evidently, before the eyes' and Av. āuuiš 'id.'. These forms, which point to *Houis, clearly belong with Gr. àî̀ 'to perceive' < * $\dot{\alpha}$ Fí $\sigma \omega<* h_{2} e u i s$ - and Gr.
 back to *h2euis- $d^{h}$ - (note that Slav. *javě 'manifestly, clearly' must be a borrowing from Iranian). These forms all reflect a PIE adverb $* h_{2}$ euis $/ * h_{2}$ ouis 'before the eyes, clearly perceivingly'. If this adverb is to be analysed as ${ }^{*} h_{2} e / o u-i s$ (showing the suffix *-is as in e.g. Skt. bahís 'outside'), we seem to be dealing with a root $* h_{2} e u$ - for which 'to see' would certainly be a fitting translation. Schmid's connection between these words and Hitt. $a u$ - / $u$ - to my knowledge have not been repeated by anyone else, probably because $* h_{2}$ - does not match Hitt. $\varnothing$-. Although in Hittite an initial $* h_{2}$ would indeed usually yield $h$-, in front of $* o$ it regularly merges with $* h_{1}$ - into /2-/ (see Kloekhorst fthc.c). This means that a paradigm *h $h_{2}$ óu- $h_{2} e i, * h_{2}$ ou-th $h_{2} e-i$, $* h_{2}$ óu-ei, * $h_{2} u$-uéni, * $h_{2} u$-sténi, *h $h_{2} u$-énti would by regular sound laws yield pre-Hitt. */RóHe/, */Ráute/, */Ráue/, */Huméni/, */Husténi/, */Huánt ${ }^{\text {i}}$ i/. Because an alteration between / $\mathrm{R}-/$ and $/ \mathrm{H}-/$ was not tolerated in Hittite, one of the consonants had to be generalized. In this case, initial /R-/ apparently was levelled out (compare e.g. $\bar{a} n \check{s} \check{-}^{i}<{ }^{i} h_{2} o ́ m h_{l} S-$, where /R-/ spread over the paradigm as well). I believe that there is still a trace left of the outcome $* / \mathrm{Hu}-/$, however, namely in the verb huške/a- ${ }^{z i}$ 'to wait for, to linger', which in my view could go back to $* h_{2} u$-ské/ó-, and therewith be a lexicalized imperfective of $* h_{2} e u$ - 'to see'.
auli- (c.) 'tube-shaped organ in the neck: throat(?), windpipe(?), carotid artery(?)': nom.sg. $a$-ú-li-iš (MS), acc.sg. $a$-ú-li-in (OH/NS), a-ú-li-en (NS), dat.loc.sg. $a-u ́-l i-i=1 a(\mathrm{OH} / \mathrm{MS})$, $a-u ́-l i-i(\mathrm{NS}), a-u ́-l i(\mathrm{MH} / \mathrm{NS})$, acc.pl. $a-u ́-l i-u s ̌$ (MS), $a-u ́-l i-u ́-s ̌=a$ (KUB 17.21 ii 18 (MH/MS)), $a-u ́-l i-u ́-u s ̌$ (KBo 25.178 i 2 (OH/NS), KUB 24.3 ii 11 (MH/NS)), a-ú-li-eš (NS), a-ú-li-iš (NS), $a-u ́-l i s ̌ ~(N S) . ~$.
IE cognates: Gr. aủ入ós 'reed, flute', etc.

$$
\text { PIE * } h_{2} \text { oul-i- }
$$

See Puhvel HED 1/2: 229f. for attestations. Puhvel translates this word as "milt, spleen", but Kühne (1986) after an elaborate treatment of this word states "daß
das Wort primär 'Kehle’ bzw. ein (blutführendes) röhrförmiges Hohlorgan des Voderhalses bezeichnet, das im Fall des Tieropfers zum unmittelbaren Ziel des schlachtenden Eingriffs wird" (o.c.: 114). In his view, auli- can be compared with Gr. aủ入ós 'reed, flute' and several other words referring to hollow tube-like objects (e.g. Gr. aủ $\lambda \omega$, 'canal', Lith. aũlas, Latv. aũle 'leg of a boot, pipe in a mill', OPr. aulis 'shinbone', Lith. aulỹs, Russ. úlej 'beehive < *hollow in a tree', etc.) and he therefore reconstructs *aul-i-. Kimball (1994b: 13-4) follows this etymological connection and states that " $[t]$ hese words cannot be derived from [..] $* h_{2}$ eul-, since the laryngeal is not preserved in Hittite". Although indeed $* h_{2} e$ would have yielded Hitt. ha-, a word-initial sequence $* h_{2} o$ - would have yielded Hitt. /Ra-/ (cf. Kloekhorst fthc.c), and I therefore think it is perfectly in order to reconstruct Hitt. auli- as $* h_{2}$ oul- $i$-.
auri- (n. > c.) 'lookout, watchtower, guardpost, border post' (Akk. MADGALTI): nom.-acc.sg.n. $a-u ́-r i-i=\check{s}-m e-e t(K U B 31.110,8(\mathrm{OH} / \mathrm{NS})$ ), nom.sg.c. $a-u ́-r i-i s ̌$ (MH/MS), acc.sg.c. $a-u ́-r i-i n(K B o ~ 12.69,5(N S)), ~ g e n . s g . ~ a-u ́-r i-a s ̌, ~ a-u ́-r i-i ́ a-a s ̌ ~$ (MH/MS), a-ú-ūa-ri-(ìa-)aš, dat.-loc.sg. a-ú-ri-i,ia, a-ú-ri, abl. a-ú-ri-īa-za (KUB
 (KUB 26.12 ii 13 (NH), KUB 13.20 i 28 (MH/NS), Bronzetafel iii 44 (NH)), gen.pl. $a-u ́-r i-i a-a s ̌, ~ d a t .-l o c . p l . ~ a-u ́-r i-i a-a s ̌ . ~$
 lu-uš), auriïatalla- (c.) 'id.' (acc.pl. $a-u$ íri-íi-tal-lu-uš), see also $a u-{ }^{i} / u-$.

PIE * $h_{2}$ ou-ri-
See $\mathrm{HW}^{2}$ A: 631f. for attestations. This word is consistently spelled $a-u$-ri- or $a-u$-ua-ri-, never with $-u$-. It is generally seen as a derivative in -ri- (cf. e.g. ešri'shape' from $e \check{s ̌}_{-}^{z i} / a s s_{-}$'to be' and edri- 'food' from ed- ${ }^{z i}$ / ad- 'to eat') of the verbal root $a u^{-} / u^{i}$ - 'to see' (q.v.). These derivatives in -ri- usually take the fullgrade form of the root and are of neuter gender. In the case of auri-, however, many commune forms are found vs. only one attestation that must be neuter: KUB 31.110 (8) $a-u ́ u-r i-i=\check{s}$-me-et. Since this attestation is found on a NH copy of an OH text, whereas all commune forms are from MH and NH texts, and because of the fact that the other nouns in -ri- are neuter as well, I conclude that this noun originally was neuter, too, and that from the MH period onwards it was brought into the commune gender.

Besides the stem auri-, we also find a stem auuari-. Rieken (2001: 375-6) states that the stem auuari- must be primary since it occurs thus 2 x in OS and is more common than $a-u$-ri- in MH originals. She therefore suggests that we have to
analyse the word as au-ari-, showing a suffix -ari- instead of -ri-. This is unlikely: the OS attestations she adduces (a-ua-ri-ia-aš (KUB 39.49 i 9 (OS)), $a-u a-r i-i\left[a-a s{ }^{?}\right]$ (ibid. iv $1(\mathrm{OS})$ ), both in rather broken context) are "fraglich ob zu auri-" (HW ${ }^{2}$ A: 632), and are spelled $a-u a-r i-$, instead of regular $a-u$-ua-ri-. Moreover, in my corpus of MH originals, I was not able to find an attestation $a-(u ́-) u a-r i-$ at all, but did find the spelling $a-u$ íri- 6 times. In my view, this indicates that the spelling $a$ - $u$-ri- is more original than $a-u$-ua-ri- (cf. Kloekhorst 2005b: 94). It is remarkable that the spelling $a$-ú-ua-ri- is only found in cases where the $-i$ - is followed by a vowel: gen.sg. $a-u$-u$-u-r i-i a-a s ̌$, nom.pl.c. $a-u$-ua-ri-$e$-eš. In my view this indicates that the phonological form /Ráurias/ in earlier times phonetically was realized as [?áuriías], spelled $a-u ́-r i(-i a)-a s ̌$, but later on as [?áwrjas], spelled $a-u$ u-u_a-ri-i_ia-aš.
See at $a u{ }^{i}{ }^{i} / u$ - for further etymology.
aušš-: see $a u{ }^{-}{ }^{i} / u$ -
auan (indecl. particle): a-ua-an (MH/MS), a-u-ua-an.
PIE * $h_{2}$ ouom ?
See HW A: 635 for attestations and semantics: this particle strengthens the meaning of other adverbs like arha, katta, šarā. See Puhvel HED 1/2: 245 for several etymological proposals. Formally, the best one is Hrozný's (1915: 28), who connected auan with Lat. au- 'off', Lith. au- 'away', etc. (cf. also $u$-). If correct, auan would reflect $* h_{2}$ ouom. See at $u$ - for further etymology.

## auцari-: see auri-

$-(\overline{\boldsymbol{a}}) \boldsymbol{z}$ (abl.-ending)
Anat. cognates: CLuw. -ati (abl.-instr.-ending); HLuw. -adi (abl.-instr.-ending); Lyc. -edi (abl.-instr.-ending).

PAnat. *-(o) ti
IE cognates: Gr. $\pi \rho o ́ t \iota ~ ' t o ’ ~<~ * p r-o ́ t i, ~ C r e t . ~ \pi о \rho \tau i ́ ~ ' t o ' ~<~ * p r-t i ~ a n d ~ S k t . ~ p r a ́ t i ~ ' i n ~$ the direction of' < *pr-éti.
PIE *-óti, *-ti

The ending of the ablative is attested in two different forms, namely $-z$ and $-a z$. The first one is primarily attested in the oldest texts and is used in certain consonant-stem nouns like nēpiš- 'heaven' (ne-e-pí-iš-za (OS)), šūhh- 'roof' (šu-
$u-u h-z a$ (OS)), per / parn- 'house' (É-er-za (OS)). In younger times, these forms are replaced by forms that show the ending -az: ne-e-pí-ša-az (OH/MS), šu-uhh $h a-a z(\mathrm{MH} / \mathrm{NS})$ and pár-na-az (OH/NS). The only cases in which $-z$ can be found in the youngest texts are petrified forms like ta-pu-uš-za, ke-ez, a-pé-e-ez. In other consonant-stems, we find the ending $-a z$ from the oldest texts onwards. In $i \check{s}-s ̌ a-a-a z$ (OS) of aiš / išš-- 'mouth' and tu-ug-ga-az (OS) of tuekk- / tukk- 'body' we seem to be dealing with a accentuated $-\bar{a} z$ that matches the fact that the stem is found in the zero-grade. In other cases, this distrubition is less obvious, e.g. ha-a-ap-pa-ra-az (OS) from hāppar- / happir- 'city', ku-uš-ša-na-az (OS) from $k u s ̌ s ̌ a n-~ / ~ k u s ̌ n-~ ' s a l a r y, ~ f e e ' . ~ I n ~ a-, ~ i-~ a n d ~ u-s t e m s, ~ t h e ~ e n d i n g ~ i s ~ a l w a y s ~-a z . ~$

All in all, I think that we have to reckon with an original situation in which there where two variants: when unaccentuated, the ending was $-z$, when accentuated it was $-\bar{a} z$. In $a$-stem nouns the ending was $-a-+-z>-a z$. Already in pre-Hittite times, this $a$-stem ending $-a z$ was spreading, first to $i$ - and $u$-stem nouns and later to consonant-stems as well. At the beginning of the OH period, all $i$ - and $u$-stem nouns bear the ending $-a z$, whereas this is the case for only part of the consonant-stems. From the MH period, virtual all consonant-stems bear the ending - $a z$ as well.

An important clue for the etymological interpretation of the ending $-(\bar{a}) z$ is the fact that when the conjunction particle $=(i) a$ is attached to it, it does not become ${ }^{\circ} z=a$ as one would expect (compare e.g. ir-ma-la-an-za-š=a=irmalanz $+=$ (i) $a$, ar-pu-u $a-a n-z a-a \check{s}-\check{s}=a=$ arpuuanz $+=(i) a, k u-u n-n a-a n-z a-a \check{s}-\check{s}=a=k u n n a n z+$ $=$ (i) $a$, [ ${ }^{\text {LÚ }}$ pát-te-i $] a-a n-z a-a \check{s}-s ̌=a(\mathrm{MH} / \mathrm{MS})=$ patteianz $\left.+=(i) a\right)$, but rather ${ }^{\circ} z=i i a$ (e.g. a-pé-e-ez-z=i-ia (MH/MS), hu-u-ma-an-da-az-z=i-ia, ku-na-an$n a-z=i-i a$, e.a.). This means that the ending -(a)z cannot be formally equated with $-a n z<*$-ent-s.
In the other Anatolian languages, we find the abl.-instr.-ending CLuw. - $\bar{a} t i$, HLuw. -adi and Lyc. -edi, which clearly go back to PLuw. *-ódi. Since an accentuated *ó causes lenition, this PLuw. *-ódi can be equated with Hitt. $-(\bar{a}) z<$ PAnat. *-(ó)ti. Strictly speaking, we would expect in Hittite lenition in the accentuated variant *-óti, but in my view it is unproblematic that in analogy to the unaccentuated and therefore unlenited $*_{-} t i$ the $*_{-} t$ - was restored in ${ }^{*}$-óti.
Within the other IE languages, there are not many clear cognates. As I have argued under parza '...-wards', however, it is in my view quite possible that this word is a petrified abl. *pr-ti out of the paradigm of peran, parā, and that it directly corresponds to Gr. п $\rho$ ótı 'to' < *pr-óti, Cret. по $\tau i ́$ 'to' < *pr-ti and Skt. práti 'in the direction of' < *pr-éti. These then would show the IE cognates to the Hitt. ending $-(\bar{a}) z$.
$e$ 'they': see aši/uni / ini
-e (3sg.pres.act.-ending of the hi-flection): see $-i$
$-\boldsymbol{e}$ (voc.sg.-ending): see $-i$
$=\boldsymbol{e}$ : see $=a$ -
${ }^{\text {GIŠ }} \boldsymbol{e a}$-: see ${ }^{\text {GIŠ }}$ eịan-
ehu (2sg.imp.act.) 'come!': e-ḩu (OS).
IE cognates: for $e$ - see at $i$-; for -hu: Skt. áva 'off, away', Gr. aũ 'again, towards', Lat. au-fugiō 'to flee (away)', Lith. au- 'away from, down from', OCS $u$ - 'from, away'.

PIE * $h_{1}$ éi- $h_{2}$ ou
Synchronically, this word functions as the imperative for the verb uez- / uua- 'to come' (q.v.). It is generally seen as consisting of the element *hlei 'go!' (see for this verbal root at $i_{-}{ }^{z i}$ 'to go') enlarged by an element - $h u$ which is to be compared with Skt. áva 'off, away', Gr. aṽ 'again, towards' etc. < *h $h_{2}(e / o) u$. The latter element is quite interesting as it hardly can be separated from the prefix $u$-visible in ue-/uua- 'to come' (<u- + *hiei-). In my view, it proves that the element $u$ must go back to $*_{2} \mathrm{O} u$-, in which the initial $*_{2}$ was lost in front of $*_{o}$ (cf. Kloekhorst fthc.c). So, whereas e.g. ú-ez-zi 'he comes' must be reconstructed as
$* h_{2} \mathrm{ou} * h_{1} e i t i$, the imperative must have been $* h_{1} e i * h_{2} o u$, univerbated in Hitt. ehu 'come!'.

GIŠeian- (n.) a tree (evergreen), perhaps 'yew': nom.-acc.sg. e-ia-an (OS), e-a-an (MH/NS), e-ía (KUB 17.10 iv 27 (OH/MS)), e-ia-na-an (KBo 37.157, 4 (NS)), gen.sg. e-ía-na-aš (MS), e-ía-aš (NS), dat.-loc.sg. e-ía-ni (OH/NS), e-a-ni $(\mathrm{MH} / \mathrm{NS}), e-i a(\mathrm{OH} / \mathrm{NS})$, abl. e-ia-az (OH/MS), nom.-acc.pl. e-ia-an $(\mathrm{OS}), e-i-e=$ $e-i-i a_{x}$ (Bo 2689 ii 30 (NS)).

See $H^{2}$ E: 22f. and Puhvel HED 1/2: 253f. for attestations. We find forms that point to an $a$-stem eia- as well as forms that point to an $n$-stem eian-. Although $a$ stem forms occur in an $\mathrm{OH} / \mathrm{MS}$ text already, I think that the $n$-stem must be more original.
The word denotes an evergreen tree with leaves as can be seen from the following context:

KUB 29.1 iv
(17)

$$
{ }^{\text {GIŠ }} e-i a-a n
$$

(18) ma-ah-ha-an uk-tu-u-ri i-ìa-at-ni-ìa-an nu ḩur-pa-aš-ta-nu-uš
(19) ar-ha Ú-UL iš-hu-ua-i LUGAL-šs=a MUNUS.LUGAL- $\check{s}=a$ QA-TAM-MA
(20) i-i̇a-at-ni-an-te-eš $a-s ̌ a-a n-d u \quad u d-d a-a$-ar-r=a-a=š-ma-aš
(21) QA-TAM-MA uk-tu-u-ri e-eš-du
'Just like the $e$. is forever (and) verdant and does not shed (its) leaves, may likewise the king and queen be healthy and may likewise their words exist forever'.

It has been suggested that eian- denotes a yew and therefore should be cognate with Russ. íva 'willow', Lith. ievà 'bird-cherry', Latv. iẽva 'bird-cherry', Gr. ol̄ך, őa, ő $\eta$ 'service-tree'. The Balto-Slavic words reflect $* h_{1} e h_{1} i-u e h_{2}$ - or $* h_{1} e i H-$ ueh $_{2^{-}}$(second laryngeal because of the acute intontation). The Greek forms perhaps reflect $* h_{1} o i H-u e h_{2}{ }^{-}$or $* h_{1} o h_{1} i-u e h_{2}-$. Although a preform $* h_{1} e ́ h_{1} i$-onindeed would yield Hitt. eian-, this etymology is far from assured.
$e k$-: see $\bar{a} k^{i} / a k k$ -
eka- (n. > c.) 'cold, frost, ice’: nom.sg.n. e-kán (KUB 13.2 iv 25 (MH/NS)), acc.sg. e-ka-an (KBo 3.41+KUB 31.4 obv. 8 (OH/NS)), e-kán (KBo 13.78 obv. 8
(OH/NS)), e[-kán or -ga-an] (KBo 12.22, $12(\mathrm{OH} / \mathrm{NS})$ ), nom.sg.c. e-ga-aš (KUB 21.18 rev. 19 (NH)), gen.sg. e-ka-aš (Bo 6980, 11 (NS)), dat.-loc.sg. e-ki (KBo 22.62 iii 24 (OS)).

Derivatives: egae- ${ }^{z i}$, igae- ${ }^{z i}$ (Ic2) 'to cool down' (3sg.pret.act. i-ga-it (VBoT 1, 27); 3sg.pres.midd. i-ga-e-et-ta (KUB 7.58 i 5), i-ga-it-ta (KUB 35.79 i 7), 3sg.imp.midd. i-ga-at-ta-ru (KUB 7.58 i 12), e-ga-at-ta-ru (KUB 7.58 i 8), e-ga-ad-da-ru (KUB 45.20 i 23)), ekuna-, ikuna- (adj.) 'cold' (nom.sg.c. e-ku-na-aš (KUB 1.16 ii 7, KUB 34.73, 5), acc.sg.c. i-ku-na-an (KBo 4.9 v 47 ), dat.-loc.sg. e-ku-ni, i-ku-ni, abl. e-ku-na-az, instr. i-ku-ni-it), ekunima- (c.) 'cold(ness)' (nom.sg. e-ku-ni-ma-aš, dat.-loc.sg. e-ku-ni-mi), ikunē̌̌š- ${ }^{z i}$ (Ib2) 'to become cold' (3sg.pres.act. i-ku-ni-eš-zi (1214/z, 6)), ikunahh- (IIb) 'to make cold' (form? i$k u-n a-a h-h u-x[. .$.$] (KUB 39.41$ i 6)), see also ikniiant-.

IE cognates: OIr. aig, gen. ega 'ice’ (*iegi-), MCorn. yeyn 'cold' (*ieg-n-), ON jaki 'ice-floe’ (*ieg-(e)n-), jökull 'glacier'.

PIE *iég-o-
See $\mathrm{HW}^{2}$ E: 27f. for attestations (but note their false citing of nom.sg.c. e-ka-aš (KUB 21.18 rev. 19), which in fact is $e$ - $g a-a \check{s})$. It is not totally clear what the original gender of this word was. Once we find a neuter nom.sg. e-kán, and once a commune nom.sg. e-ga-aš, whereas the acc.sg.-form ekan is dubious. As the neuter form occurs in a MH composition and the commune form only in a NH composition, I tentatively assume that the neuter form is the more original one.
The derived verb egae-, igae-shows a plain hatrae-class stem. It is remarkable that the noun $e k a$ - consistently is spelled with initial $e$-, whereas the verb is predominantly found spelled with $i$-. This could be due to a shift in accent: égovs. *ego-ié/ó-
See Puhvel (HED 1-2: 258) for the generally accepted view that $e k a$ - must be connected with e.g. OIr. aig, 'ice' and ON jaki 'ice-floe' from *ieg-. For Hittite, this equation would mean that word-initial $*_{i}$ - is lost before $* e$.
The stem ekuna-, ikuna- may be comparable to aruna- 'sea' < * $h_{3} r$-éu-no- and could go back to *ig-éuno- in which the full grade stem $e k$ - was introduced later on.
ekt- (c.) '(hunting) net(?)': nom.sg. e-ek-za (KBo 13.101 rev. 10 (MH/NS), KBo 17.61 obv. 17 (MH/NS), KUB 39.61 i 11 (NS), 1067/u, 5 (NS)), ek-za (KBo 3.21 ii 16 (MH?/NS)), acc.sg. e-ek-ta-an (KUB 48.76 i 2 (NS), 473/t obv. 13 (NS), KUB 31.68 obv. 27 (NS, with gloss wedges)), e-ek-za-an (KBo 13.101 rev. 6
(MH/NS), KUB 45.26 ii 2 (NS), KUB 44.54 + IBoT ii 46 ii 8/2 (NS)), gen.sg. ek-ta-aš (KBo 3.21 ii 17 (MH/NS)), instr. e-ek-te-et (473/t obv. 14 (NS)).
Anat. cognates: CLuw. aggati- (c.) 'hunting net' (Hitt. acc.pl. ag-ga-ti-us̆).
IE cognates: OHG jagōn 'to hunt', jagōd 'pursuit'.
PIE *iek-t-

See HW ${ }^{2}$ E: 28-9 for attestations. We are clearly dealing with an original consonant stem ekt- with nom.sg. ekz $a=/$ Rékts/, acc.sg. ektan, gen.sg. ektaš and instr. ektet. The accusative-form ekzan is found in NS texts only and quite obviously is a secondary formation on the basis of nom.sg. ekza. According to Hoffner (1977a: 105-7), the semi-hapax \& ag-ga-ti-uš (KUB 8.56 i $12 / / \mathrm{KBo}$ 10.47 c i 24 (fr.)) denotes 'hunting net' as well and because of its gloss wedges should be regarded as the Luwian cognate of Hitt. ekt-. This then would mean that aggati- reflects /Rakti-/ < *ékt-, showing Čop's Law and i-Motion. Hoffner suggests a connection with Lat. iaciō, iēc̄̄̀ 'to throw' (<*hile) $h_{l}-k$-), but in this form the $*_{-k}$ - is of unknown origin and does not belong to the root. Hamp (1978) more plausibly assumes a connection with MHG jaget 'hunt', which is taken over by Rieken (1999a: 143f.). She assumes that we are dealing with a verbal root *iek- 'to hunt, to catch' ( OHG jagōn 'to hunt'), of which ekt- reflects a $t$-stem. She reconstructs a 'holodynamic' paradigm *iek-ōt-s, *iek-ot-m, *ik-t-es. The Hittite forms, however, speak more in favour of a hysterodynamic *iék-t-s, *ik-ét$m$, *ik-t-ós, in which the replacement of acc.sg. *ik-ét-m by $* i e ́ k-t-m$ is trivial. The fact that OHG jagōd and MHG jaget reflect *iok-ōt-o- could show that nom.sg. *iek-t-s was replaced by *iek-ōt-s in pre-Germanic. Rieken implies that the Hitt. gen.sg. IK-ta-aš should be interpreted as /iktas/, the direct descendent of *ik-t-ós. This seems unlikely to me: the sign IK can be read $i k$ as well as $e k$, and I therefore rather interpret the spelling IK-ta-aš as ektaš, showing the generalized fullgrade stem *iek-t-.
$\boldsymbol{e k} \boldsymbol{u}^{-{ }^{j}} / \boldsymbol{a k} \boldsymbol{u}$ - (Ia3) 'to drink, to drink to (+dat.), to toast (+acc)' (Sum. NAG): 1sg.pres.act. e-ku-mi (IBoT 2.73, 5 (OH/MS), ABoT 32 ii 14 (MH/MS?), KUB 33.67 iv 17 ( $\mathrm{OH} / \mathrm{NS}$ )), 2sg.pres.act. e-uk-ši (KBo 22.1 rev. 28 (OS)), e-ku-uš-ši (KUB 1.16 iii 29 ( $\mathrm{OH} / \mathrm{NS}$ )), e-ku-ut-ti (KBo 19.112, 9 (MH/NS)), 3sg.pres.act. e$k u-z i$ (OS), e-uk-zi (OS), e-ku-uz-zi, e-ú-uk-zi (Bo 2692 v 23 (NS)), 1pl.pres.act. a-ku-e-ni (OS), e-ku-ua-ni (KBo 15.26, 7 (MH/MS)), a-ku-ua-ni (Bo 5709 obv. 10 (NS)), e-ku-e-ni (KBo 37.1 ii 37 (NS)), 2pl.pres.act. e-ku-ut-te-ni (KUB 1.16 iii 34, 48 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 13.4 ii 70, iv 53 ( $\mathrm{OH} / \mathrm{NS}$ )), e-ku-te-ni (KBo 14.41 iv 17 (OH/NS)), 3pl.pres.act. $a-k u-a n-z i(\mathrm{OS}$, often), $a-k u-u a-a n-z i(\mathrm{OS}), a-k u-u-u a-a n-$
$z i(\mathrm{KUB} 30.15$ obv. 19 (OH/NS), KUB 20.48 vi 8, 10 (NS)), e-ku-an-zi (KBo 15.34 ii 3 (OH/NS)), e-ku-ua-an-zi (KUB 20.1 ii 20 (NS)), 1sg.pret.act. e-ku-un (KUB 30.10 obv. 17 (OH/MS)), 2sg.pret.act. e-ku-ut-ta (KUB 33.96 iv 21 (NS), ?KBo 19.104, 12 (NS)), 3sg.pret.act. e-uk-ta (OS), e-ku-ut-ta (OH/NS), 1pl.pret.act. e-ku-e-en (HT 1 i 45 (MH/NS)), e-ku-en (KBo 23.106 rev. 1 (NS)), 3pl.pret.act. e-ku-er, e-ku-i-e-er (KUB 17.10 i $20(\mathrm{OH} / \mathrm{MS})$ ), 2sg.imp.act. e-ku, 3sg.imp.act. e-ku-ud-du (KUB 43.23 obv. 3 (OH/MS)), 2pl.imp.act. e-ku-ut-te-en (KBo 7.28 obv. 26 (OH/MS), KUB 4.1 ii 4 (MH/NS), KUB 43.23 rev. 11, 15 ( $\mathrm{OH} / \mathrm{MS}$ )), e-ku-te-en (KUB 33.62 iii 11 (OH/MS)), e-ku-ut-tén (KUB 13.4 ii 76 (OH/NS), KUB 13.5 ii 7 (OH/NS), KUB 17.30 iii 3 (NS), KBo 10.45 iv 12 (NS)), 3pl.imp.act. $a-k u-u a-a n-d u$ (KUB 15.34 i 49 (MH/MS), KUB 43.75 obv. 16 (OH/NS), VSNF 12.98 r.col. 6 (NS)); part.gen.sg. $a$ - $k u$-ua-an-da-aš; verb.noun. a-ku-ua-a-tar, a-ku-ua-tar, gen.sg. a-ku-ua-an-na-aš; inf.II a-ku-an-na (OS), a-ku-uиa-an-na; impf. ak-ku-uš-ke/a- (OS), a-ak-ku-uš-ke/a- (KBo 21.63 ii 10).
Derivatives: ${ }^{\text {LÚ }} \boldsymbol{a} \boldsymbol{k} \boldsymbol{k t t a r a}$ - (c.) 'drinker, toaster’ (nom.sg. a-ku-ut-tar-ra[-as'] (KBo 5.11 i 14), a-ku-ut-tar-aš (HT 40 obv. 3, 7, KBo 37.1 rev. 22(NS), a-ku-tar$a s ̌$ (KBo 37.1 rev. 29 (NS)), acc.pl. $a-k u$-ut-ta-ru-uš (KUB 55.56, 12)), a-ku-ud-da-ru-uš (KUB 55.56, 11)), see akutalla-.
Anat. cognates: Pal. ahu- 'drink' (3pl.pres.act. a-hu-ua-an-ti, a-hu-ua-a-an-ti, inf. $a-h u-u-n a)$; CLuw. $\boldsymbol{u}$ - 'to drink(?)' (2sg.pres.act. ú-ut-ti-iš); HLuw. BIBERE 'to drink' (inf. "BIBERE"-na (ÇíFTLİK §16), inf. gen. BIBERE-u-na-sa (ASSUR letter $f+g \S 36$ )).
IE cognates: TochAB yok- 'to drink', Lat. ēbrius 'drunk', ?Gr. v $\eta \varphi \omega$ 'to be sober'.

PIE * $h_{1} e g^{w h}-t i, * h_{1} g^{w h}$-énti
See Kammenhuber (1977) for an extensive treatment of the inflected forms and meaning of this verb. The verb shows a strong stem $e k u$ - vs. a weak stem $a k u$-. In OS texts we occasionally find that the strong stem is spelled e-uk-, which indicates that we are dealing with a phoneme $/ \mathrm{g}^{\mathrm{w}} /$ here. Also the observations that the 3sg.pret.act.-form is spelled $e-k u-u t-t a$ (besides $e-u k-t a$ ) and not $* * e-k u-u t$ (as e.g. in ar-nu-ut), and 1sg.pret.act. as e-ku-un, and not ${ }^{* *} e-k u-n u-u n$ (as e.g. in ar$n u-n u-u n)$ show that the $-u$ - cannot be vocalic but must be part of the consonant. This is furthermore strengthened by 1pl.pres.act. $a-k u-e-n i$ and 1pl.pret.act. $e-k u-$ en instead of **a-ku-me-ni or **e-ku-me-en (as in e.g. ar-nu-me-ni and ua-ar-nu-me-en), which shows that the labialization of the phoneme $/ \mathrm{K}^{\mathrm{w}} /$ did not participate in the sound law *uu>mu. It is remarkable that the imperfective is consistently spelled with geminate $-k k$ - ( $a k-k u-u \check{s}-k e / a-$ ), whereas the normal verb shows
single $-k$ - throughout. Apparently, the $/ \mathrm{g}^{\mathrm{w}} /$ was fortited to $/ \mathrm{k}^{\mathrm{w}} /$ by the following -ške/a- (note that this is not a matter of 'devoicing' as can be seen by e-ku-ut-ta $/$ Rég ${ }^{\mathrm{w}} \mathrm{ta} /$ and $a-k u-u t-t a-r a-/ \mathrm{Rg}^{\mathrm{w}}$ tra-/). I therefore phonologically interpret the stems as $/ \mathrm{Reg}^{\mathrm{w}}-/$, $/ \mathrm{Rg}^{\mathrm{w}}-/$ and $/ 2 \mathrm{k}^{\mathrm{w}}$ ske/a-/.
These stems hardly can go back to anything else than a PIE root $* h_{1} \mathrm{eg}^{w(h)-.}$ This means that the old connection with Lat. aqua 'water' cannot be correct as the latter, if from IE origin, shows $* h_{2} e k^{w}-e h_{2}$. Better comparanda are TochAB yok'to drink' (Pedersen 1925: 40), Lat. ēbrius 'drunk' (Juret 1934) and possibly Gr. $\nu \eta ́ \varphi \omega$ 'to be sober' (Juret 1937: 79).
The Tocharian forms seem to point to $* \bar{e} K^{w}$-, which possibly goes back to a reduplicated stem $* h_{1} e-h_{l} K^{w}$-. Lat. ēbrius, too, must reflect a reduplicated form, and shows that the labiovelar was $* g^{w h}: * h_{l} e-h_{l} g^{w h}$-. The appurtenance of Gr. $v \eta ́ \varphi \omega$ 'to be sober' is difficult in view of the one Doric attestation $v \tilde{\alpha} \varphi \varepsilon$, which implies an original $* \bar{a}$ that is contradictive with $* h_{l}$. According to Winter (1955: 173-5), Dor. v $\tilde{\alpha}-$ could be of secondary origin, however, which would make way to interpreting Gr. v $\eta \varphi \omega$ as *$n \bar{e} g^{w h} \bar{o}$ from $* n_{0}-h_{1} g^{w h}-e / o$ - 'to not-drink'.
All in all, Hitt. eku-/aku- must reflect $* h_{1} e g^{w h}-/ * h_{1} g^{w h}$-. The Palaic cognate shows a lenition of $* g^{w h}$ to $/ h^{\mathrm{w}} /$ (note that ahuuanti- must stand for $/ \mathrm{Rh}^{\mathrm{w}}$ anti/, so $* g^{w h}$ was not intervocalic), whereas in CLuwian the root $* h_{l} e g^{w h}$ - first yielded *?eu- which developed into /२ū-/.
Kimball (1999: 187) cites a form 2pl.pres.act. e-ku-ua-te-ni (KUB 1.16 iii 34), but this is incorrect: the form in fact is $e$-ku-ut-te-ni, cf. also $e-k u-u t-t e-n i$ in ibid. 48.
*ekku- (c.) 'horse' (Sum. ANŠE.KUR.RA): nom.sg. ANŠE.KUR.RA-uš (KBo 17.15 rev. 9 (OS), KBo 3.34 ii $36(\mathrm{OH} / \mathrm{NS})$ ), acc.sg. ANŠE.KUR.RA ${ }^{\text {HI.A }}-u n(\mathrm{KBo}$ 8.36 i 4 ( $\mathrm{OH} / \mathrm{NS}$ )), gen.sg. ANŠE.KUR.RA-aš (KBo $6.2+$ iv 8 (OS)), acc.pl. ANŠE.KUR.RA ${ }^{\text {MEŠ }}$-uš (HT 10, 12 (NS)).

Anat. cognates: CLuw. *̄̄ॅššu- or *azzu- (c.) 'horse’ (nom.sg. ANŠE.KUR.RAuš (KUB 35.107+108 iv 7 (MS))); HLuw. ásu- (c.) 'horse’ (nom.sg.(?) /Rasus/ ${ }^{\text {ANIMAL }}$ EQUUS-sa (TOPADA §16), ${ }^{\text {ANIMAL }}$ EQUUS-s $a_{4}$ (TOPADA §19), ${ }^{\text {animal }}{ }^{\text {EQUUS-s } a_{8}}$ (TOPADA §26), acc.sg. /Rasun/ EQUUS.ANIMAL$s \grave{u}=h a=w a / i=t a \quad(\mathrm{KARATEPE} \quad 1 \quad \S 8 \quad \mathrm{Hu}$.$) , EQUUS.ANIMAL \dot{a}-\iota s \grave{u}-\rangle=p a=w a ́ / i=t a$ (KARATEPE $1 \S 8$ Ho.), dat.-loc.sg. /Rasui/ ${ }^{\text {EQUUS.ANIMAL }} \dot{a}$-sù-wa/i (KARATEPE 1 §8 Hu.), EQUUS.ANIMAL á-sì-wá/í (KARATEPE 1 §8 Ho.), abl.-instr. /Rasuadi/ ${ }^{\text {ANIMAL }}$ EQUUS-wa/i-ti (TOPADA §5, §8, §10), ${ }^{\text {ANIMAL }}$ EQUUS-ti (TOPADA §23), nom.pl.(?) /Rasunt ${ }^{\text {i }}$ / ${ }^{\text {ANIMAL }}$ EQUUS-zi/a (TOPADA §21), dat.-loc.pl. /Rasuants ${ }^{\text {s }}$ EQUUS ${ }^{a}-$-s̀̀-wa/i-za (ANDAVAL §4)), ásusatala- 'to ride on horse' (inf.
"ANIMAL.EQUUS""-sù-sà-ta-la-u-na (BOHÇA §10)); Lyc. esb- 'horse’ (abl.instr. esbedi, gen.adj.nom.sg.c. esbehi).
IE cognates: Skt. áśva-, Av. aspa-, Gr. ï intoc, Myc. i-qo, Lat. equus, Ven. ekvon, OIr. ech, OE eoh, TochB yakwe, TochA yuk 'horse', Arm. ēs 'donkey', Lith. ašvà 'mare', OPr. aswinan 'mare's milk'.

PIE *h $h_{1}$ eḱu-
See also Starke 1995: 119f. for an overview of attestations of these words. In Hittite, the word for 'horse' is only attested written with the sumerogram ANŠE.KUR.RA. The few instances of a phonetic complement (including in OS texts) point to a $u$-stem: nom.sg. ANŠE.KUR.RA-uš, acc.sg. ANŠE.KUR.RA ${ }^{\text {HI.A }}$ $u n$ (collectively used).
The fact that we find a $u$-stem in Hittite corresponds to the HLuwian $u$-stem noun $\dot{a}$-sı̀ - 'horse'. The second sign of this word, $\oiint_{\natural}^{\infty}$, is rendered in Hawkins 2000 (see especially p. 35-6) as sù, although it is read by Melchert (1987a: 201-2) as zú (so $\dot{a}-z \dot{u}-$-). As long as we keep in mind that this sign is the regular outcome of PIE *k'u (also dోb-wa/i-ni- = sù̀-wa/i-ni- or zú-wa/i-ni- 'dog' < *k'uon-), the exact reading of this sign is not important for the interpretation of the HLuwian material. I have followed Hawkins in this matter. Often this noun is cited as "ásu(wa)-", but this is incorrect: the acc.sg.-form /Rasun/ clearly points to a $u$ stem, whereas the $-a$ - that is visible in abl.-instr. ${ }^{\text {ANIMAL }}$ EQUUS-wa/i-ti $=$ /Rasuadi/ and dat.-loc.pl. ${ }^{\text {EQUUS }} \dot{a}-$ sù̀-wa/i-za $=/$ Rasuant ${ }^{\text {s }} /$ is an inherent part of the endings -adi and -anza.
In CLuwian, we also find a $u$-stem noun underlying the sumerogram ANŠE.KUR.RA: nom.sg. ANŠE.KUR.RA-uš. Several phonetically spelled words have been pinpointed as denoting 'horse', but the meaning of none of them can be independently determined. E.g. Melchert (1993b: 44), who reads HLuw. á-2if- as á-zú-, cites dat.-loc.pl. az-zu-ua-an-za (KBo 13.260 ii 24) as 'horse', but the context is too unclear to either prove or disprove this interpretation. E.g. Starke (1995: $118^{236}$ ), who reads HLuw. á- ḑ as á-sì-, cites $a-a s ̌-s ̌[u-\ldots]$ (KUB $35.107+108$ iv 22), $a$ - $a \check{s}-s \check{s}[u-\ldots]$ (KUB 35.102 i 7) and $a$ - $a s ̌-s ̌ u-u-u t-t[i-\ldots]$ (KUB 35.100 rev .3 ) as possible broken phonetical spellings of 'horse', pointing to the fact that the first form is found on the same tablet as the nom.sg.-form ANŠE.KUR.RA-uš, and that all forms are found on tablets that belong to the same text group. Again the evidence is not decisive to either prove or disprove Starke's views.
The Lycian word for 'horse' is usually cited as esbe-, but this is not necessarily correct as the $-e$ - visible in abl.-instr. esbedi and gen.adj. esbehe/i- in both cases is
inherent to the ending (-edi ~ CLuw. - $\bar{a} t i,-e h e / i-\sim$ CLuw. $-a s ̌ s ̌ a / i-)$. I therefore cite this noun as esb-. Starke (1995: 119) further adduces a Pisidian placename Eбovoк $\omega \mu$, which he translates as "Pferde-Dorf", assuming that it contains an element *esu-'horse'.

It has often been claimed that the Luwian and Lycian words are loans from Indo-Iranian (Indic áśva- or Iran. aspa-), but as Starke (1995: 119 ${ }^{238}$ ) convincingly shows, this cannot be correct for at least the Lycian form: the Iranian name Vištāspa is borrowed into Lycian as Wizttasppa-, showing that esbwith its $e$ - and -b-cannot be from an IIr. source. Moreover, Indic names like *prītāśva- and *priyāśva- are rendered in Mitanni-Indic as Pí-ri-da-aš-šu-ūa and Pí-ri-aš-ua respectively, clearly showing the thematic vowel $-a$-. I therefore regard all Anatolian words as inherited (but see at ${ }^{\text {Lúás̃šušanni for a genuine }}$ borrowing from Indic).
On the basis of HLuw. $\dot{a}$-sì - ~ Lyc. esb- we can reconstruct a PAnat. form *Rek'u-. Taking the Hittite historical phonology into account, we would expect that the Hittite outcome of PAnat. *Pek'u- would have been **ekku-, which is the reason for me to treat these words under the lemma *ekku-.
It is of course clear that PAnat. *Rek'u-, which must reflect a preform *h $h_{1}$ ek'u-, cannot be separated from the words for 'horse' in the other IE languages that point to a reconstruction *hleḱuo- (Skt. áśsva-, Gr. Í $\pi \pi \pi \%$, Lat. equus, TochB yakwe, etc.). It is remarkable, however, that despite the fact that all non-Anatolian IE languages point to an $o$-stem *hlekuo-, the Anatolian evidence clearly points to a $u$-stem noun. Starke (1995: 120) therefore states that we are dealing with an "Umbildung des Stammausgangs ${ }^{*}{ }^{\circ} u o->^{\circ} u-"$, but this seems very unlikely to me: there is no known phonological development in the prehistory of Anatolian that would predict that an PIE sequence *-uo- would regularly yield Anat. -u-; moreover, in view of the productivity of the $o$-stem inflection in Anatolian, an analogical development of PIE *hlek'uo- to Anat. *hlek'u- is hard to defend. We must conclude that it is impossible to assume that a PIE o-stem *hiekiuo- would have yielded an Anat. $u$-stem *hle $e^{k} u$ - and that the inverse therefore must be true. I consequently assume that the original PIE word for 'horse' was a $u$-stem *h $h_{1}$ ek' $u$ - and that only after the splitting off of Anatolian this word was thematicized to *hlekuo- (a trivial development) as it is attested in all the other IE languages. We may think of an original paradigm *héék-u-s, *h ${ }_{l} k^{\prime}$-éu-m, * $h_{1} k$ k-uós, from a stem *h $h_{1} e^{k}-u$ - 'quick, swift' as also seen in Skt. āśú- ~ Gr. $\mathbf{~ \omega} \kappa$ ús 'quick, swift' < * $h_{1} o-h_{1} k^{\prime}-u-$.

- $\overline{e l}$ (pronominal gen.sg.-ending): am-me-el (OS), a-pé-e[-el] (OS), a-pé-el (MH/MS), ke-e-el (OS), ku-e-el (OS), tu-e-el (OS), tu-el (MH/MS).

The gen.sg.-ending of pronominal stems is - $\bar{e} l$. Within Anatolian, the only comparable form may be Lyd. bili- 'his', which is derived from bi- 'he, she, it' (see under $a p \bar{a}-/ a p \bar{u}-$ ). According to Kronasser (1956: 142), this ending is comparable to a Hattian suffix -el or -il that expresses apurtenance. The fact that $-\bar{e} l$ is consistently found in pronouns only makes a borrowing less likely, however. Further unclear.
muš elliianku-: see ${ }^{\text {MUŠilluianka- }}$
GIšelzi- (n.) '(pair of) scale(s)' (Sum. GIŠ.RÍN, GIŠ NUNUZ ZI.BA.NA, Akk. $Z I B \bar{A} N \bar{I} T U$ ): nom.-acc.sg. or pl. e-el-zi (KUB 30.10 rev. 13 (2x) (OH/MS)), $e-e l[(-z i)](\mathrm{KBo} 6.26$ i $52(\mathrm{OH} / \mathrm{NS}))$, el-zi(KBo 6.13 i 8 (OH/NS)), dat.-loc.pl. il$z i-i a-a \check{s}$ (KUB 32.129 i 14 (NS)).

PIE * $h_{1}$ élt-i $h_{l}$ ??
Although formally one cannot decied whether nom.-acc. $\bar{e} l z i$ is singular or plural, $H^{2}$ (E: 36) suggests that this word is plurale tantum. Semantically, this could make sense because of the fact that the word denotes a pair of scales, which is supported by the only occurrence of an oblique case of this word, dat.-loc.pl. ilziiaš.

Because of the inherent duality of this word, Puhvel (1981b: 352-3; HED 1/2: 270) assumes that the $-i$ in fact goes back to the PIE dual ending ${ }^{*}-i h_{l}$. If so, then we might have to do with a root $* h_{1}$ elt- $+-i h_{1}$. He connects the word with OIr. leth, We. lled 'halve', Lat. latus 'side', assuming that these words reflect a root *h let- besides the root *h elt- found in Hittite. Hamp (1988) followed this suggestion, but tried to show that the indeed awkward assumption of Schwebeablaut is unnecessary. He derives the Celtic forms through *letes- < *lit- from a zero-grade form *lt-, which, according to Hamp, is the preform for Lat. latus as well (like magnus < *mg-no-). Problematic to this view is the fact that in Latin, a pre-form * $h_{l} l t$ - would not give lat-, but probably should have given **alt- (cf. Schrijver 1990: 71). Moreover, Schrijver (1990: 486) takes the Celtic words as belonging with OIr. lethan 'wide' < *plth ${ }_{2} n o-$ and leaves Lat. latus unconnected.
All in all, I conclude that the etymology proposed by Puhvel and extended by Hamp is unsatisfactory. I agree that if this word shows the old dual ending $*-i h_{l}$ (which is at least possible from a semantic point of view), we mechanically have
to reconstruct $* h_{l}$ elt-i $h_{l}$, but I have not been able to find any convincing IE cognates that reflect this root as well.
eni(-) : see $a s ̌ i / u n i / i n i$
enu- ${ }^{z i}$ (Ib2) '?': 3sg.pres.act. e-nu-z[i] (KUB 44.61 iv 20 (NS)); part. e-nu-ua$a n-d a[(-) \ldots]$ (KUB 10.21 v $5(\mathrm{OH} / \mathrm{NS}))$.

The verb occurs only twice. The first text it occurs in is a medical text:
KUB 44.61 iv
(19) $[m a-a-a] n=k a ́ n ~ a n-t u-u h-s ̌ e ~ I \check{S}-T U^{\mathrm{UZU}} I-S ̌ S A-R I=\check{S} U z\left[a^{?}\right.$-ap-pí-ía-at-ta-ri (?)]
(20) [NUMU]N-an=ma- $a=\check{s}$-ši $=k a ́ n ~ U ́ U-U L ~ e-e s ̌-z i ~ n u ~ t a p-p i ́-i n ~ e-n u-z\left[\begin{array}{lllll}i & \mathrm{x} & \mathrm{x} & \mathrm{x} & \mathrm{x}\end{array} \mathrm{x}\right]$
(21) $[n u=k a ́] n^{? ~ U Z U} I-S ̌ A-R I=\check{S} U$ an-da $z i-i k-k e-e z-z i ~ a n-d a=m a\left[\begin{array}{lllll}\mathrm{x} & \mathrm{x} & \mathrm{x} & \mathrm{x} & \mathrm{x}\end{array} \mathrm{x}\right]$
(22) $\left[\begin{array}{lll}\mathrm{x} & \mathrm{x} & \mathrm{M}\end{array}\right] \mathrm{I}-a n h u-u-m a-a n-d a-a n k i-i t-t a-r i k u-i t-m a-n=a s ̌\left[\begin{array}{llll}\mathrm{x} & \mathrm{x} & \mathrm{x} & \mathrm{x}\end{array} \mathrm{x}\right]$
'When for a man from his penis [it drips?], and he has no seed, he (the doctor) $e n u$-s a tappi-, [ xx-s, and] places his penis inside. [...] a whole night it will lay until he [is cured]'.

As the noun tappi- is a hapax legomenon of which the meaning is unknown, it is not possible to determine what the verb enu- means either. The second text describes a ritual:

KUB 10.21 v
(3) $n=a-a t \mathrm{x}\left[\begin{array}{lllll}\mathrm{x} & \mathrm{x} & \mathrm{x} & \mathrm{x} & \mathrm{x}\end{array}\right]$
(4) pé-ra-an kat-ta=ma $\mathrm{x}\left[\begin{array}{ll}\mathrm{x} & \mathrm{x}\end{array}\right]$
(5) ŠÀ.BA $1^{E N}$ e-nu-ua-an-d[a(-)...]
(6) $n=a-a s ̌-t a$ GAL DUMU ${ }^{\text {MEŠ }}$ É.GAL
(7) GADA-an še-er ar-ḩa [SUD-zi?]
(8) LUGAL-uš UŠ-KI-[EN]
(9) $n=a-a s ̌-t a$ GAL DUMU ${ }^{\text {MEŠ }}$ É.GAL x[ x x]
(10) GǏ̌BANŠUR-az ar-ha da-a-[in=a-at]
(11) LUGAL-i $p a-a-i$ LUGAL- $u s^{\mathrm{d}} \mathrm{U}[-i]$
(12) pár-ši-ía
'It [...]. And down for (it) [...] one of which (is?) enuuant- [..]. The head of the palace servants [draws?] a cloth up high and the king bow[s]. The head of the
palae servants takes a [...] of the table and gives [it] to the king. The king breaks it [for] the Storm-god'.

This context, too, is too unclear to determine wat enuıand $[a(-) \ldots]$ denotes.
Nevertheless, it has often been suggested that enu- means 'to make warm' (e.g. Puhvel HED $1 / 2$ : $11 ; \mathrm{HW}^{2}$ E: 42f.) and therefore should be equated with $i n u-z^{z i}$, the causative of $\bar{a}(i)-{ }^{(a) r i} / i$ - 'to be hot' (q.v.). Although a meaning 'to make warm' in both cases would not be impossible, it is hardly evident either. In view of the fact that within the Hittite period a $\mathrm{OH} / \mathrm{i} /$ is lowered to $\mathrm{NH} / \mathrm{e} /$ before $-n$ (cf. § 1.4.8.1.d) and taking into account that both forms with $e$-nu- are attested in NS texts, the equation between $e n u^{-z i}$ and $i n u-{ }^{z i}$ formally could be defended, however.
All in all, I conclude that on the basis of these contexts a meaning of the verb $e n u$ - cannot be determined and that therefore the supposed equation with inucannot be proven either. A connection with enuma- (q.v.) (thus Puhvel l.c.) does not make much sense.
enиma- 'to be refreshed(?)': 3pl.pres.midd. e-nu-ma-an-da-ri (KUB 1.13 ii 37).
The verb occurs only once, in the Kikkuli-text:
KUB 1.13 ii
(33) $m a-a h-h a-a n=m=a-a s ̌$ ÍD- $a z$
(34) [EGI]R-pa ú-ua-da-an-zi $n=a-a s ̌ ~ I-N A ~ E ́ ~ L U ́ I S ̌ ~$
(35) [an-d] a pé-e-hu-da-an-zi nu-u=š-ma-aš nam-ma
(36) [1 $\left.{ }^{\text {DUG }} \mathrm{G}\right]$ AL $M E-E$ MUN $1{ }^{\text {DUG }}$ GAL $M E-E$ DIM $_{4} a-k u-u a-a n-n a$
(37) [pí-a]n-zi ma-ah-ha-an=ma e-nu-ma-an-da-ri
(38) $[$ nam-m] a ÍD-i pé-e-hu-da-an-zi
'When they bring them back from the river, they take them to the stable. Then, they give them one cup of salt water and one cup of malt water to drink. When they are $e$., they take them back to the river'.

Kammenhuber (1961a: 61) translates "sich erholen", which indeed seems to fit the context.

This verb is of importance as it is falsely translated 'to become hot' by Puhvel (HED 1/2: 11), who, on the basis of this translation, connects enuma- with inu- $z^{i}$ 'to make hot', the caus. of $\bar{a}(i){ }^{-(r i i)} / i$ - 'to be hot' (q.v.).

A stem enuma- does not look particularly IE to me. The comparison to ešharnumae- ${ }^{z i}$ 'to smear with blood' (see ešhar) as given by Puhvel (l.c.) does not help much either.
$\boldsymbol{e p p}^{\text {zi }}$ / app- (Ia3) 'to take, to seize, to grab, to pick, to capture' (Sum. DIB, Akk. SABATU): 1sg.pres.act. e-ep-mi (OS), 2sg.pres.act. e-ep-ši (MH/MS, OH/NS), e-ep-ti (MH/NS), 3sg.pres.act. e-ep-zi (OS), 1pl.pres.act. [a]p-pu-ú-e-ni (KUB 35.18 i 7 (MS)), ep-pu-u-e-ni (KUB 31.44 ii 10 (MH/NS), e-ер-ри-u-e-ni (KUB 22.57 obv. 13 (NS)), e-ep-pu-u-e[-ni] (KBo 9.77, 11 (NS)), e-ep-pu-u-e[-ni] (KUB 50.111, 3 (NS)), 2pl.pres.act. ap-te-ni (KUB 12.63 obv. 15 (OH/MS), KBo 22.118, 14 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 46.48 obv. 8 (NS)), e-ep-t $[$ e-ni] (KBo 19.58, 7 (MH?/MS)), e-ep-te-ni (KUB 13.5 ii $18(\mathrm{OH} / \mathrm{NS})$ ), e-ep-te-e-ni (KBo 5.13 i 7 (NH), KUB 6.41 i $50(\mathrm{NH})$ ), e-ep-te[-ni] (KBo 16.98 i 5 (NS)), 3pl.pres.act. ap$p a-a n-z i$ (OS, often), ap-pa-a-an-zi (rare), a-ap-pa-an-zi (KBo 30.109 rev. 3 (MS)), 1sg.pret.act. e-ep-pu-un (OS), e-ep-pu-u-un (KBo 3.6 ii 7 (NH)), 2sg.pret.act. e-ep-ta (KUB 14.1 rev. 23 (MH/MS)), 3sg.pret.act. e-ep-ta (OH/MS), 1pl.pret.act. e-ep-pu-en (HHCTO 2 rev. 19, 24 (MH/MS), KBo 3.60 iii $6(\mathrm{OH} / \mathrm{NS})$ ), ap-pu-en (KUB 34.77 obv. $2(\mathrm{NS})$ ), 2pl.pret.act. e-ep-tén (KUB 12.63 + KUB 36.70 obv. 10, 19 (OH/MS)), e-ep-te-en (KUB $1.16+$ KUB 40.65 iii $9(\mathrm{OH} / \mathrm{NS})$ ), 3pl.pret.act. e-ep-per (OS), 2sg.imp.act. e-ep ( $\mathrm{MH} / \mathrm{MS}$ ), 3sg.imp.act. e-ep-du (MH/MS), e-ep-tu (KUB 8.81 ii 12 (MH/MS)), 2pl.imp.act. e-ep-tén (MH/MS), e-ep-te-en (MH/MS), 3pl.imp.act. ap-pa-an-tu (OS), ap-pa$a n-d u$ (MH/MS); 3sg.pres.midd. ap-pa-at-ta-at (KBo 2.2 ii 42 (NS)), e-ep-ta-at (KUB 52.83 i 5 (NS)), 3pl.pret.med. ap-pa-an-ta-ti (KBo 10.47g, 10 (NS)), ap-pa-an-da-at (KUB $36.12+$ KUB 33.113 i 16, 22 (NS), KUB 33.92 iv 4 (fr.) (NS)), ap-pa-an-ta-at (KBo 2.2 i 22 (NS), KUB 33.106 ii 29 (NS), KUB 33.115 iii 13 (fr.) (NS)); part. ap-pa-an-t- (OS); verb.noun. ap-pa-a-tar, ap-pa-tar, gen.sg. ap-pa-an-na-aš; verb.noun gen.sg. e-ep-pu-u-ua-aš (Gurney 6, 4 (NS)); inf.I e-ep-pu-u-ua-an-zi (KBo 3.3 iii $30(\mathrm{NH})$, KUB 13.6+ ii 14 ( $\mathrm{OH} / \mathrm{NS}$ )); inf.II ap-pa-an-na (KBo 3.21 ii 5 (MH/NS), KUB 17.18 iii 19 (NS), KUB 12.62 rev. 3 (NS)), ap-pa-a-an-na (KUB 12.62 rev. 5 (NS), KUB 35.43 ii 19 (NS)); impf. ap-pí-iš-ke/a-(OS), ap-pí-eš-ke/a-(MH/MS).

Derivatives: appat(a)riiela- ${ }^{-}{ }^{i}$ (Ic1) 'to take in pledge; to confiscate' (3sg.pres.act. ap-pa-at-ri-ez-zi (KBo 6.2 iv 4 (OS)), ap-pa-ta-ri-ez-zi (KBo 6.3 iii 76 (OH/NS)), ap-pát-ri-i_ia-zi (KUB 13.9 i 10 (MH/NS)), 3sg.pret.act. ap-pa-at-ri-ia-at (KBo 14.21 i 32 (NS)); inf.I a-ap-pa-at-ri-ua-an-zi (KBo 6.26 i 28 (NS)), $a[p-p a-a t-r i-u a-a n-z i](\mathrm{KBo} 6.18$ iv 7 (NS))).

IE cognates: Skt. $\bar{a} p n o ́ t i$ 'to reach, to gain, to take possession of', Lat. apīscor 'to reach, to receive, to grab, to get', $c o-\bar{e} p \bar{l}$ 'I have started, I have undertaken'.

PIE *hlép-ti $/ * h_{l} p$-énti
See $\mathrm{HW}^{2}$ E: 44f. for attestations. This verb is abundantly attested from the OH period onwards. Its original inflection was epmi, epši, epzi, appueni, apteni, appanzi. In the MH period the full grade stem is analogically introduced in the 1st and 2 nd plural as well, giving eppuueni and epteni. The one attestation 1 pl.pret.act. appuen is remarkable, as it is, to my knowledge, the only plural preterite form of a $m i$-verb to show a zero grade instead of regular full grade. Unfortunately, it is found on a NS fragment of which the period of composition is unknown, so it is impossible to decide whether we are dealing with an archaism or with a secondary form on the basis of appueni.
Already since Hrozný (1917: 170), this verb is connected with Skt. āpnóti 'to reach, to gain, to take possession of' (a secondary present created on the basis of the perfect $\left.\frac{\bar{a}}{}{ }^{p} a<h_{1} e-h_{1}(o) p-\right)$, Lat. apīscor 'to reach, to receive, to grab, to get', $c o-\bar{e} p \bar{l}$ 'I have started, I have undertaken' (co-ēpi < * $h_{1} e-h_{1} p$ - and ap- from $* h_{l} h_{l} p-$, cf. Schrijver 1990: 28f.), reflecting a root $* h_{l} e p$ - 'to take, to seize'. According to Oettinger (1979a: 88), epp-/app- must reflect a Narten-inflection *h $h_{1}$ ép-ti, *h $h_{l}$ ép-nti, but this is improbable for a number of reasons. Firstly, 1sg.pret. * $h_{1}$ ép-m should have given Hitt. **epun /Rébun/ and not eppun /Répun/. Secondly, * $h_{l}$ ép-nti should have given Hitt. **eppanzi /Répnt ${ }^{\mathrm{s}} \mathrm{i}$ / and not appanzi /?pánt ${ }^{\text {si}} \mathrm{i}$. I therefore reconstruct a normal root present * $h_{l}$ ép-ti, * $h_{l} p$-énti.
The verb appat(a)riie/a- is derived from the verb.noun appātar $<* h_{l} p o ́ t r$, and shows that synchronically the final -ar here phonologically still was $/-\mathrm{r} /$, so appātar $=/$ ppā́dr/.
See at pai-/pi- 'to give' for my view that that verb reflects $* h_{l} p-(o) i-$, derived from the root $* h_{1} e p-$.
$e r$-: see $\bar{a} r_{-}{ }^{i} / a r-$
-er (3pl.pret.act.-ending)
PIE *-ēr
The ending of 3pl.pret.act. is often cited as -er as well as -ir (compare e.g. Friedrich (1940: 36): "-ir", vs. Friedrich (1960: 77): "-er (-ir)". This confusion is due to the fact that the ending is usually spelled with the sign IR that can be read ir as well as er. Also signs like GIR $=\mathrm{HA}_{6}$ (kir and ker), NIR (nir and ner) and

ŠIR (̌̌ir and šer) are ambiguous. So in the cases where the ending is spelled ${ }^{\circ} \mathrm{Ce} / \mathrm{i}$-IR, we cannot tell whether we should read ${ }^{\circ} \mathrm{Cir}$, ${ }^{\circ} \mathrm{Cer}$ or even ${ }^{\circ} \mathrm{Cier}$. This unclear situation has now been solved by Melchert (1984a: 117f., 137f. and 152f.), who convincingly has shown that in almost all cases the 3pl.pret.act.ending should be read -er throughout the Hittite periode. He mentions (o.c.: 138) only one exception, namely the spelling -hi-ir, which in his view must be interpreted as /-Hir/. Since the sign HI nowadays can be read hi as well as he (compare HZL 335), we are here as well allowed to read -he-er, however, which means that the 3pl.pret.act.-ending is always -er and never -ir.
The 3pl.pret.act.-ending -er likely belongs with the Lat. 3pl.perf.-ending -ēre (< $\left.*_{-}-\bar{e}-i\right)$, Skt. 3pl.perf. $-u r\left(<*_{-}-s\right.$ ) and YAv. 3pl.perf. -arə (<*-r). The difference between $*_{-\bar{e} r}$ and $*_{-r}$ can be explained if we assume that reduplicated perfects had ${ }_{-r}\left({ }^{*} C e ́-C C-r\right)$, whereas unreduplicated perfects had $*-\bar{e} r(* C C-e ́ r)$. Since in my view the Hittite hi-verbs are the reflex of PIE unreduplicated perfects, I think that $*$ - $\overline{e r}>$ Hitt. -er originally was found in the hi-conjugation only. Already in pre-Hittite times it spread from here to the mi-conjugation which undoubtedly must have had the 3pl.pret.-ending *-ent originally (cf. Luw. 3pl.pret.act.-ending -anta), which should regularly have yielded Hitt. **-an.
It has been claimed that besides the ending -er, we also find an ending -ar or -r. For instance, Neu (1989) cites the 3pl.pret.act.-forms ha-a-ni-ia-r $=a-a t$ (Bo 6472, 12 (undat.)), ú-ẹ-mi-i iạ-ar (KUB 17.10 i 37 (MS)), ša-pa-ši-ía-ar (HKM 6 rev. 7 (MH/MS), although Neu still cites the incorrect ša-ú-ši-i-ia-ar of the edition (Alp
 admits that the latter two forms can be read $d a_{x}-m[i-i] s \check{\text {-šer }}{ }_{9}$ and pí-iš-kers ${ }_{8}$ as well and therefore cannot be used as an argument, but he is right in claiming that hāniįar, uemiiiar and šapašiíar are real forms. According to Neu, these forms show an ending -ar which reflects a PIE ending *-or. Since this *-or is not attested anywhere else, it must in Neu's view be very archaic. In my view, hāniïar, uemiïar and šapašiizar are just the result of the MH replacement of the suffix -ie- by -ía- in -ie/a-verbs. Just as OH -ieši, -iezi, -iettani, etc. are replaced by MH -iaši, -ídazi, -íatteni (cf. my treatment of the -ie/a-class in § 2.2.2.1.o), the OH 3 pl .pret.act.-form ${ }^{\circ}$-ier is in these forms replaced by -iar. Of course, the ending -er was restored immediately, and the normal MH and NH 3pl.pret.-form in -ie/a-verbs is therefore -ier, although -ieraer is occasionally attested as well (e.g. a-ni-i्2a-er, a-ri-i_ia-er, ti-i्2a-er). With reference to Neu's views, CHD P: 158 argues that the forms da-lu-ug-nu-la (KUB 12.63 obv. 30) and pár-ga-nu-la (ibid. 31) should rather be read da-lu-ug-nu-úr' and pár-ga-nu-úr', and interpreted as " 3 pl . preterites w. a zero grade". See Rieken 1999a: 465f., however, for a convincing
treatment of these forms in which she shows that we should not emend the forms to dalugnur and parganur, but rather interpret dalugnula and parganula as all.sg. of dalugnul- and parganul-. This means that there is no evidence in Hittite for any other original 3 pl.pret.act.-ending than -er.
erh- / arah- / arh-, erha-, arha- (c.) 'line, boundary' (Sum. ZAG): nom.sg. er-ha-aš (KUB 17.29 ii 7 (NS), KUB 19.37 ii $45(\mathrm{NH})$ ), er-ḩa-a-aš (KUB 19.37 ii 33 (NH)), acc.sg. ar-ha-an (OS), ar-ha-a-an (KBo 22.1 obv. 31 (OS)), er-ha-an (KUB 11.23 vi 9 (NS)), gen.sg.? ar-ha-aš (KBo 8.124 rev. 6 (NS)), dat.-loc.sg. ar-hi (OS), er-hi (VBoT 133 obv. 9 (NS), KUB 15.34 iii 32 (MH/MS), KUB 41.17 ii 6 (NS), IBoT 4.182 obv. 6 (OH/NS), KBo 26.136 obv. 8, 14 (MS), KBo 40.170 ii $2(\mathrm{NS})$, KUB 10.75 i $9(\mathrm{OH} / \mathrm{NS})$ ), er-ḩe-e $=$ š-še (KUB 44.56 rev. 7 ( $\mathrm{OH} / \mathrm{NS}$ )), all.sg. $a r-h a(\mathrm{OS})$, abl. $a-r a-a h-z a(\mathrm{OS})$, er-ha-az (KBo 3.21 ii 17 ( $\mathrm{OH} / \mathrm{NS}$ )), acc.pl. er-hu-uš (KBo 3.1 i 7, 16, $26(\mathrm{OH} / \mathrm{NS})$ ), dat.-loc.pl. ar-hha-aš (KUB 36.49 iv 10 (OS)), er-ha-aš (IBoT 1.30, 7 (OH/NS)).
Derivatives: irhatt- (c.) 'row, series, circuit' (dat.-loc.sg. ir-ha-at-ti (KBo 39.152, 2, 3, 4 (NS), ir-ha-a-at-ti (KUB $25.32+27.70$ ii 16 (NS)), ir-ha-ti (KUB $25.32+27.70$ ii 49, iii 12 (NS))); irhae- ${ }^{z i}$, arhae- ${ }^{-3}$ (Ic2) 'to go down the line, to circulate, to make the rounds, to treat in succesion, to list, to enumerate, to conclude' (ir-ha-a-mi (NS), 3sg.pres.act. ir-ha-a-iz-zi (OH/NS), ir-ha-iz-zi (MH/NS), ir-ha-a-i-ez-zi (MS), ir-ha-a-zi (MH/MS), ir-ha-a-e-ez-zi (NS), ar-ha-$a-e z-z i(\mathrm{KBo} 17.74$ ii 22 (OH/MS?)), 3pl.pres.act. ir-ha-an-zi (OS), ir-ha-a-a[nzi] (OS), 3sg.pret.act. ir-ḩa-a-et (OH/MS), 2pl.imp.act. [ir-]ha-at-te-en (OH/MS); 3sg.pres.midd. ir-ha-et-ta (MS?), ir-ha-a-it-ta (OH/NS), ir-ha-it-ta-ri (NS), ir-ha-a-it-ta-ri (NS), 3pl.pres.midd. ir-ha-an-ta-ri, ir-ha-an-da-ri, 3sg.pret.midd. ir-ha a-it-ta-at (MH/NS); part. ir-ha-a-an-t- (OH/MS), ir-ha-an-t-; verb.noun ir-ha-a-ua-ar (OH/MS), ir-ha-u-ua-ar (OH/MS), gen.sg. ir-ha-u-ua-aš; inf.I ir-ha-a-u-una-an-zi, ir-ha-u-ua-an-zi; impf. ir-ha-i-iš-ke/a- (OS), ir-hi-iš-ke/a-, ir-hi-eš$k e / a-$ ), arha (adv. postpos.) 'off, away (from), out of, on account of' (ar-ha (OS)), $\boldsymbol{a r h a i a}(\boldsymbol{n})$ (adv.) 'separately, apart, especially, additionally' (ar-ha-ina, ar-ha-íaan), arahza (adv.) 'around; on the outside, away, absent, abroad' (a-ra-ah-za (OS)), arahzanda (adv.) '(all) around' (a-ra-ah-za-an-da (OS), a-ra-ah-za-anta), arahza- (adj.) 'alien' (nom.sg.c. a-ra-ah-za-aš (NH)); arahziiia- (adj.) 'alien’ (nom.sg.c. a-ra-ah-zi-ia-aš (NS)), arahzena- (adj.) 'bordering, adjoining, surrounding; outer, external, foreign, alien' (nom.sg.c. a-ra-ah-zé-na-aš (MH/MS), acc.sg.c. a-ra-ah-ze-na-an, nom.-acc.sg.n. a-ra-ah-zé-na-an, a-ra-ah-ze-na-an, dat.-loc.sg. a-ra-ah-zé-ni, a-ra-ah-ze-ni, a-ra-a-ah-zé-e-ni (KUB 13.3 iii 16 (OH/NS)), all.sg. a-ra-ah-zé-na, abl. a-ra-ah-zé-na-za, nom.pl.c. a-ra-ah-
zé-ni-eš, [a-ra-ah-]zé-ni-e-eš, a-ra-ah-zé-nu-uš (NH), a-ra-ah-zé-na-aš (NH), acc.pl.c. $a-r a-a h-z e ́-n a-a s ̌, ~ n o m .-a c c . p l . n . ~ a-r a-a h-z e ́-n a$, dat.-loc.pl. $a-r a-a h-z e ́-$ $n a-a \check{s})$, arahzenant- (adj.) 'id.' (nom.pl.c. a-ra-ah-zé-na-an-te-eš (NH)).

Anat. cognates: HLuw. irha- (c.) 'border' (acc.pl. FINES+ha-zi (IZGIN 1 §4, $\S 15$, IZGIN $2 \S 3, \S 4, \S 5$ ), dat.-loc.pl. "FINES" $i+r a / i-h a ́-z a$ (KARATEPE 1 § 19 Ho., $\S 30 \mathrm{Hu}),$. "FINES" $i+r a / i-h a-z a$ (KARATEPE $1 \S 30$ Ho.), FINES+ha-za (IZGIN 1 §4)).
IE cognates: Lat. ōra 'brim, edge, boundary, coast, region'.

$$
\mathrm{PIE} * h_{1} \operatorname{erh}_{2 / 3^{-}} / * h_{1} r h_{2 / 3^{-}}
$$

See Puhvel HED 1/2: 129f. for attestations. Because the sign IR in principle can be read ir as well as er, the forms that are spelled IR- $h^{\circ}$ can be interpreted as $i r-h^{\circ}$ as well as as er-h $h^{\circ}$. The absence of plene spelling (never $* * e-e r-h^{\circ}$ or $i-i r-h^{\circ}$ ) makes the matter difficult to decide.

The spelling of abl. $a-r a-a h-z a$ is remarkable. The fact that this word and its derivatives are never spelled $* * a r-a h-z a$ or $* a r-h a-z a$ precludes an analysis "arhza" (cf. e.g. /ualHt ${ }^{\text {s }} \mathrm{i} /$ 'he hits' that is spelled ua-al-ah-zi as well as ua-la-ah$z i)$. Instead, it is enevitable that the second $-a$ - is linguistically real. E.g. Melchert (1994a: 29, 84) is aware of this as well, but states that "/araHts/" must through anaptyxis have developed out of an original *arHts. This is improbable, since such an anaptyxis is fully absent in words with comparable clusters like pár-ḩa$z i$, pár-ah-zi $=/$ párHt ${ }^{\text {si}} \mathrm{i}$ 'he chases' or ua-al-ah-zi, ua-la-ah-zi $=/ \mathrm{ualHt} \mathrm{i} \mathrm{i}$. I therefore assume that the stem arah- is to be taken seriously.
If these words are of IE origin, the alternation e/irh- : arah- : arh- must reflect ablaut. It is remarkable that all OS attestations of the noun show arh- or arah-, whereas the forms with e/irh- are found in MS and NS texts only. Nevertheless, the fact that the OS attestations of the derived verb irhae- ${ }^{z i}$, arhae- ${ }^{z i}$ all show $e / i r h$ - indicates that the variant $e / i r h$ - must have been present in the noun as well. In my view, such an ablaut can only be interpreted in a meaningful way if we assume that we are dealing with erh- : arah- : arh-. I therefore have read the sign IR as er-in the forms of the noun as cited above.

An ablauting pair erh- : arah- : arh- is not unproblematic, however, especially in view of the sound law "* $\breve{e} R h_{x} V>a R R V$ " as formulated by Melchert (1994a: 83) for PAnatolian. If this sound law is correct it is impossible that a Hitt. sequence erh- is from IE origin. When we look at Melchert's examples (1994a: 79-80) in favour of this development, however, we see that they all are weak or must be explained otherwise: anniške/a-<*enhxiskéló- (compare my analysis of this imperfective at aniie/a- ${ }^{-2}$ ); malla- $<$ melh $_{2^{-}}$(this verb is hi-inflected and
 alternative account); -anna/i- < *-enh $i$ i- (I reconstruct this suffix as *-otn-(o) i-); harra- < * $h_{2} e r h_{3} o$ - (here the $-a$ - is due to the preceding $* h_{2}$ ); tarhu- < *terh $h_{2} u$ - (I rather assume that tarhuzzi /tárH $\mathrm{H}^{\mathrm{w}} \mathrm{t}^{\mathrm{s}} \mathrm{i} /<$ */térH $^{\mathrm{w}} \mathrm{t} \mathrm{I} /$ in which $-a$ - is due to the development *eRCC>aRCC); išparranzi<*spérh ${ }_{l} n_{0} t i$ (see at išpār- ${ }^{i} /$ išpar- and išparra- ${ }^{i}$ / išparr- for an elaborate account of these verbs). As we see, none of the examples in favour of $* e R H V>a R H V$ can withstand scrutiny.
Another problem regarding the stem erha- is that $* V R H V>V R R V$, as is visible from e.g. mallai $<{ }^{*}$ molh $_{2} e i$, išparrai $<{ }^{*}$ sporh $_{2 / 3} e i$, etc. This can be solved by assuming that arh- reflects a zero-grade form, ${ }^{*} C R H V$, where the laryngeal regularly was retained, and on the basis of which - $h$ - was restored in erha-.
All in all, if this noun is of IE origin, the ablaut-variants erh- : arah- : arh- can only go back to $* h_{1} e r h_{2^{-}}: * h_{1} r e h_{2^{-}}: h_{1} r h_{2^{-}}$. From an Indo-European point of view, this ablaut is only comprehensible when it is interpreted as a hysterodynmically inflecting $h_{2}$-stem $* h_{1} e r-h_{2}-:$ nom.sg. $* h_{1} e ́ r-h_{2}$, acc.sg. $* h_{1} r$ $e ́ h_{2}-m$, gen.sg. $* h_{1} r-h_{2}-o ́ s$. Because of the regular retention of $* h_{2}$ in the gen.sg.form * $h_{1} r h_{2} o ́ s$, it was restored in the rest of the paradigm. This means that the synchronic $a$-stem noun arha-, erha- as attested in Hittite is a recent thematicization going back to virtual $* h_{1} r h_{2}-O-$ and $* h_{1} e r h_{2}-o-$. This is supported by the archaic abl. $a-r a-a h-z a$ that shows the ending $*_{-z}$ attached directly to the stem and reflects virtual $* h_{1} r$-é $h_{2}$-ti.
The derived verb irhae ${ }_{-}^{z i}$ must go back to virtual $* h_{1} e r-h_{2}-o-i e^{e} / o ́-$. Because pretonic *-e- yields Hitt. -i-, I have transliterated all forms of this verb with initial $i r$ - in the overview above. The variant arhae ${ }_{-}^{z i}$ reflects $* h_{1} r$ - $h_{2}$-o-iélóo.

The HLuwian cognate irha- must show $i$ - from pretonic $* e$ - (cf. Hajnal 1995: 63) and therefore go back to $* h_{1} e r-h_{2}-o ́-$.

The reconstruction $* h_{1} e r-h_{2^{-}}: * h_{1} r-e h_{2^{-}}: * h_{1} r-h_{2^{-}}$is based on inner-Anatolian reasoning only. Perhaps the root $* h_{l} e r$ - is to be identified as the verbal root $* h_{l} e r$ 'to move horizontally', which is also found in Hitt. $\bar{a} r_{-}{ }^{i} / a r$ - 'to arrive' and $a r n u^{z i}$ 'to transport'. As an outer-Anatolian cognate, often Lat. $\bar{o} r a$ 'brim, edge, boundary' has been mentioned (Sturtevant 1942: 48, who also, less convincingly, adduces Skt. ārā́t 'from afar, āré 'far'), which then could reflect $* h_{1} \bar{o} r-e h_{2}$ - or * $h_{1} o-h_{1} r$-eh $h_{2}$ - Kimball (1999: 166) adduces Lith. ìrti "to separate" as well. Although semantically at first sight this seems attractive, the verb rather means 'to desintegrate', however, which is a bit further from 'border' than "to separate" would have been. Moreover, the acute accent points to a pre-form $* \mathrm{HrH}$-, which implies that the second laryngeal is inherent part of the root, whereas in the Hittite noun $* h_{2}$ must be the suffix.
erman / armn- (n.) 'sickness, illness’ (Sum. GIG): nom.sg.c. GIG-aš (KBo 1.42 iv 5 (NS), KUB 14.15 ii $6(\mathrm{NH})$ ), acc.sg.n. e-er-ma-an (KBo 17.1 iv $2(\mathrm{OS})$ ), e-er-ma- $a(n)=$ š-me-et $($ KBo 17.1 iii 11 (OS), KBo $17.3+4+\mathrm{KBo} 20.15+\mathrm{KUB}$ $43.32+39$ (StBot 25.4) iii 11 (OS)), er-ma-an (KBo 3.4 i 7 (NH), KBo 4.6 rev. $16(\mathrm{NH})$, KUB 29.1 ii 18 (OH/NS), KUB 29.2 ii $10(\mathrm{OH} / \mathrm{NS})$ ), er-ma- $a(n)=\check{-}-m a-$ $a \check{s}=k a ́ n(K B o 17.3$ i 7 (OS)), er-ma-a-an (KUB 26.87, 8 (NH)), acc.sg.c. GIG-naan (KUB 19.29 i 7 (NH)), dat.-loc.sg. er-ma-ni (KUB 8.62 i 19 (NS)), erg.sg. er-ma-na-an-za (KUB 37.190 rev. 6 (undat.)), GIG-an-za (KUB 37.190 rev. 4 (undat.)), abl. GIG- $a z$, GIG-za.

Derivatives: armaniie/a- ${ }^{\text {ta(ri) }}$, ermaniie/a- ${ }^{\text {ta(ri) }}$ (IIIg) 'to be(come) ill' (3sg.pres.midd. ar-ma-ni-ia-at-ta (KUB 4.72 rev. 3 (OS)); verb.noun er-ma-ni-ía-u-ua-ar (KBo 1.42 iv 6 (NH))), armala-, ermala- (adj.) ‘sick, ill' (nom.sg.c. ar-ma-la-aš (KUB 30.10 rev. 15 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 30.11 rev. 12 ( $\mathrm{OH} / \mathrm{MS}$ ), \& er-ma-la-aš (KUB 1.1 i 44 (NH)), er-ma-la-aš (KBo 3.6 i 37 (NH), KBo 18.79 obv. 7 (NS)), ermalant- (adj.) ‘sick, ill' (nom.sg.c. er-ma-la-an-za (KBo 5.9 i 16 (NH), KUB 5.6 i 47 (NS)), armaliie/a- ${ }^{\text {ta(ri) }}$, ermal(l) iiela- ${ }^{\text {ta(ri) }}$ (IIIg) 'to be(come) ill; to afflict (with illness)' (1sg.pres.midd.(?) ar-m[a-li-i-ia-ah-ha-at?] (KUB 1.16 ii 2 $(\mathrm{OH} / \mathrm{NS})$ ), 3sg.pret.midd. er-ma-li-ia-at-ta-at (KBo 3.4 ii $20(\mathrm{NH})$, KBo 3.4 i 6 ( NH ), KBo 16.1 i $20(\mathrm{NH})$ ), er-ma-li-at-ta-at (KBo 3.4 i $13(\mathrm{NH})$ ), er-ma-al-li-ía$a t-t a-a t(\mathrm{KBo} 5.9$ i $15(\mathrm{NH}))$, part. er-ma-li-an-za (KBo 4.12 obv. $22(\mathrm{NH}))$ ).
IE cognates: ?ON armr 'poor, miserable', ?OE earm 'wretched'.

## PIE * $h_{l}$ érmn, * $h_{1}$ rméns

See Puhvel HED 1/2: 157f. for attestations. The noun shows neuter (erma(n)=šmet) and commune (GIG-aš) forms. The oldest attestations (OS) clearly show that originally this noun was neuter, however, whereas the commune forms are found in NS texts only. The noun itself is consistently spelled e-IR-maan (OS) or IR-ma-an (OS+), to be read as e-er-ma-an and er-ma-an respectively. In its derivatives, we sometimes find a stem arman- (e.g. armaniidatta 'he became ill'). Apparently on the basis of these derivatives showing a stem arman-, Puhvel (1.c.) cites this word as $\operatorname{arma}(n)-$, $\operatorname{erma}(n)-$, $\operatorname{irma}(n)$ - and states (159) that " $a$ [is] most frequent in Old Hittite". Although indeed in the derivatives the stem $\operatorname{arma}(n)$ - seems to be older than erma(n)- (armaniizatta (OS) vs. ermaniizauuar $(\mathrm{NH})$; armalaš ( $\mathrm{OH} / \mathrm{MS}$ ) vs. ermalaš (NH); arm[alizaḩhat] ( $\mathrm{OH} / \mathrm{NS}$ ) vs. ermaliiattat (NH)), the noun iself only shows a stem erman-, which is attested multiple times in OS texts. $\mathrm{HW}^{2}$ does not treat this word nor its derivatives under $\operatorname{arma}(n)-$ or $\operatorname{erma}(n)-$, but refers to a future lemma irma(n)- (E: 93). Both
practises seem incorrect to me. The OS spellings $e$-IR-ma-an clearly show that the younger spellings IR-ma-an have to be read as erman. Nevertheless, the derivatives originally probably all showed a stem $\operatorname{arma}(n)-$, which was altered to $\operatorname{erma}(n)$ - on the basis of the noun.
The fact that in the older texts we find a stem $\operatorname{arma}(n)$ - used for the derivatives, suggests that originally the noun itself showed ablaut as well, although such an ablaut is not attested anymore. From an IE point of view, we would expect a protero-dynamic inflection $* h_{1}$ érmn, $* h_{1}$ rméns.
Note that the forms that show a stem ermal- and armal- may have to be regarded as dissimilations from original erman- and arman- (cf. § 1.4.7.2.f).

Within Hittite, erman is connected with arma- 'moon' and armae- ${ }^{z i}$ 'to be pregnant' by e.g. Puhvel HED 1/2: 159-60, who assumes a basic meaning 'weak', which he further connects with OE earm 'weak' and ON armr 'wretched'. This is a possibility. Melchert (1984a: $88^{15}$ ) suggests a relationship with Alb. jerm 'daze, stupor, sickness, etc.' and states that "the root is that of *( $h_{l}$ )er- 'move' in the sense of 'be agitated'". Anoter etymology was proposed by Hajnal (1999), who connects erman with Skt. anarmán- 'without wounds' (AV hapax, variant of anarván- 'id.'). These latter two etymologies imply that erman is a -men-stem, which from an IE point of view is necessary anyway (cf. the absence of roots ending in $*-e R R$-, which precludes reconstructing a root $* * h_{l}$ erm-).
$\boldsymbol{e s ̌} \mathbf{z}^{z i} / \boldsymbol{a s}$ š- (Ia3) 'to be (copula); to be present': 1sg.pres.act. e-eš-mi (KBo $3.46+$ KUB 26.75 obv. 3 (OH/NS), KBo 3.55 rev. 11 ( OH/NS), VBoT 58 iv 3 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 36.35 i 13 (NS), KBo 16.23 i 19 (NH)), 2sg.pres.act. e-eš-ši ((OS) but see commentary), e-eš-ti (KUB 36.98c rev. 5 ( $\mathrm{OH} / \mathrm{NS}$ ), but see commentary), 3sg.pres.act. ẹ-eš-za (KBo 6.2 iv 54 (OS) // e-eš-zi (KBo 6.3+ iv 53 (OH/NS))), e$e s ̌-z i$ (OS, often), i-eš-zi (KUB 34.114 rev. 5 (OS)), 1pl.pres.act. e-šu-u्रa-ni (KUB 26.83 iii 18 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 44.60 ii 1, 2 (fr.) (NS)), 3pl.pres.act. $a-s ̌ a-a n-z i(\mathrm{OS})$, 1sg.pret.act. e-šu-un (OH/NS), 2sg.pret.act. e-eš-ta (KBo 5.13 i 19 (NH)), 3sg.pret.act. e-eš-ta (OS), 1pl.pret.act. e-šu-u-en (KUB 14.3 iv 9 (NH), KUB 31.47 obv. 9 (NS)), e-šu-en (KUB 23.1 i 32 (NH)), e-eš-šu-u-en (KUB 18.24 iii 6 (NS)), 2pl.pret.act. e-eš-te-en (KUB 15.34 iv 12 (MH/MS)), 3pl.pret.act. e-še-er (OS), e-šer (OS), 1sg.imp.act. e-eš-li-it (KUB 26.35, 6 (OH/MS?), KUB 23.82 rev. 16 (MH/MS), KBo 5.3 iv 33 (NH)), e-eš-lu-ut (KUB 7.2 ii 23 (NS), KUB 8.35 iv 23 (NS)), $a$-ša-al-lu (KBo 4.14 i 43 (NH)), 2sg.imp.act. e-eš (OH/MS), 3sg.imp.act. e-eš-tu (OS), e-eš-du (MH/MS), 2pl.imp.act. e-eš-te-en (MH/MS), e-eš-tén (MH/MS), 3pl.imp.act. $a$-ša-an-tu (OS), $a$-ša-an-du (OS); part. $a$-ša-an-t-
(OS), $a-s ̌ a-a-a n-t-$; verb.noun. $e-s ̌ u-u$ u-ar (KUB 24.7 i 55 (NS)), e-šu-u-u_a-ar (KBo 1.42 i 7, 8 (NS)), gen.sg. e-šu-una-aš (KUB 26.43 obv. 11 (NH)).
Derivatives: see ašnu- ${ }^{z i}$ and ešri-.
Anat. cognates: Pal. $\overline{\boldsymbol{a} s}$ - / aš- 'to be' (2sg.imp.act. $a$ - $a \check{s}$, 3sg.imp.act. $a$ - $a \check{s}$ - $d u$, 3pl.imp.act. $a$-ša-an-du, $a$-še-en-du); CLuw. $\overline{\boldsymbol{a} s ̌-/ a s ̌-~ ' t o ~ b e ' ~(3 s g . p r e s . a c t . ~} a$ - $a \check{s}$ - $t i$, 3sg.pret.act. $a-a s ̌-t a$, 3sg.imp.act. $a-a \check{-}-d u$, $a-a-a \check{s}-t[u]$, 3pl.imp.act. $a-s ̌ a-a n-d u$ ); HLuw. ás- / s- 'to be' (3sg.pres.act. a-sa-ti (KARAHÖYÜK §20, §21), ASSUR letter $f+g \S 14, \S 20, \S 22, \S 33, \S 48$ ), 2pl.pres.act. $a$-sa-ta-ni (ASSUR letter $e \S 6$ ), 3pl.pres.act. $\dot{a}$-sa-ti (KARKAMIŠ A5a §9), $a$-sa-ti (ASSUR letter $b$ §8), 1sg.pret.act. á-sa-ha (KÖRKÜN §2, KARAHÖYÜK §10, PORSUK §5), á-sá-ha (KULULU 4 §1, §8), á-sa-ha-' (BOR §2), á-sa $a_{8}-h a$ (KULULU 4 §11), 3sg.pret.act. $\dot{a}-$-sa-ta (KARKAMIŠ A7 §5, CEKKE §14, ÇALAPVERDİ 1 §3), á-sa-tá (KARKAMIŠ A6 §18, ANCOZ 4 §1, AKSARAY §10), á-sa-ta-' (KARKAMIŠ A6 §12), sa-ta (MARAŞ 4 §8), $a$-sa-tá (YALBURT bl. 3 §1), sa$t a^{\prime}$ (TELL AHMAR 1 §8), sa-ta (MARAŞ 4 §8), 3pl.pret.act. á-sa-ta (KARATEPE 1 §33, ANCOZ 8 §6), a-sá-ta (KARATEPE 1 §6 Hu., § 12 Hu., §27, PALANGA §2, KULULU 1 §2), á-sa-ta-' (KARATEPE 1 § 12 Ho.), sá-ta (KARATEPE $1 \S 36, \S 40$ ), sa-tá-' (KARKAMIŠ A11a §17), sa-ta $a_{x}$ (TOPADA §3, §21), sa-ta (BOHÇA §6), sa-tá-' (KARKAMIŠ A11b §2), 3sg.imp.act. $a$-sa$t u$ (KARAHÖYÜK §24), á-sa-tu-u-' (SULTANHAN §42), sa-tu (MARAŞ 14 §7), sa-tu-' (SHEIZAR §7), sá-tú-' (MEHARDE §6), 3pl.imp.act. á-sa-tu (KULULU 6 §4), á-sa-tu-u (ANCOZ 7 §14)); Lyd. 1sg.pres. -im 'I am (?)’ (Gusmani 1971), 3sg.pres. el 'he is (?)'; Lyc. es- / ah- 'to be' (3sg.pres.act. esi, 3sg.imp.act. esu), ahãma(n)- 'existence', ahñta- 'property, possessions' (old part. of 'to be').

PAnat. *Res- / *?s-
IE cognates: Skt. ásmi 'to be', Gr. દ̇ $\sigma t i ́$ 'he is', Lat. est 'he is', Goth. ist 'he is', etc.

PIE * $h_{1}$ és-ti, * $h_{1} s$-énti
See $H^{2}$ E: 93f. for attestations. The Hittite language does not express the present tense copula 'to be' but uses a nominal sentence instead and therefore the number of attestations of present tense forms of this verb is lower than we would have liked. Especially the situation regarding 2sg.pres.act. is poor. In OS texts, the form $e$-eš-ši occurs a number of times, predominantly in the formula $n u-u=\check{s}$ -ša-an 8-in-zu ne-pí-ši e-eš-ši (in ritual texts collected in StBoT 25). For instance, Puhvel (HED 1/2: 285) translates this sentence as 'thou art in heaven', taking $e$ $e \check{s}$-ši as 2sg.pres.act. of $e s^{2}-{ }^{z i} / a \check{s}$ - 'to be'. Neu (1983: 39), however, states that in
this case the use of the locatival enclitic particle =̌̌̌šan indicates that e-eš-ši belongs to the active paradigm of $e \check{s}^{\text {a (ri) }}$ 'to sit' and must be translated 'you sit in heaven' (thus also $\mathrm{HW}^{2} \mathrm{E}$ : 93). Nevertheless, one OS attestation of e-eš-ši remains that does not occur in this formula, viz. KUB 31.143a + VBoT 124 iii (8) [... ]x-aš-ša e-eš-ši [(n=a-an an-da-an mi-iš-ri-ưa-an-da-aš)] (cf. StBoT 25: 189). Unfortunately, the meaning of this sentence is unclear. If, however, the broken word [...]x-aš-ša is to be interpreted as [...]x-ǎ̌šs=a (it could hardly be anything else), and if =(i) $a$ functions as a sentence initial particle here, it would mean that in this case we are dealing with a form e-eš-ši that occurs without the particle $=\check{s} \check{s} a n$ and that therefore possibly could stand for 'you are'.

A possibly more secure example of a 2 sg.pres.act.-form is $e$-eš-ti, found in the OH ?/NS text KUB 36.98c rev. (5) [..]x EGIR-pa LUGAL-uš e-eš-ti. Because of the fact that the main story is told in the first person and deals with the military campaign of a king (cf. ibid. (2) [...-]un $n u=m u \operatorname{DINGIR}^{\text {MEŠ }}[\ldots]$ 'I [...](1sg.pret.) and the gods [...] me', (3)[... ]ẹ-ep-pu-un 'I took', (7) KASKAL ${ }^{\mathrm{MES}}=\check{S} U$ una-ar-$n[u-n u-u n]$ 'I burnt down his roads' and (10) [...]x $n u$ LUGAL.GAL pa-a-un 'I, the Greatking, went'), it is in my view likely that this sentence was spoken to the author by someone else (presumably by the inhabitants of a conquered city or land), and therefore has to be translated '(for us?) afterwards you will be king'. Puhvel (HED 1/2: 285), claiming that the form is "OHitt.", implausibly interprets $e-e \check{s}-t i$ as 3 sg.pres.act. here, however, and also $\mathrm{HW}^{2}$ (E: 93) translates "... danach(?) ist er (oder evtl. bist du?) König". Taking this form as 3sg.pres.act. would be very problematic, however, as it would show a very archaic nonassibilation of $* t$ in front of $i$, which to my knowledge is unparalleled in Hittite.
A form that indeed is very archaic, however, is 3 sg.pres.act. ee-eš-za found in the OS version of the Hittite Laws, of which the meaning 'he is' is ascertained by its younger copy that shows $e$-eš-zi. This form, together with a few other forms that show an OS 3 sg.pres.-ending $-z a$, shows that the ending *-ti regularly gave Hitt. $/-\mathrm{t}^{\mathrm{s}} /$, spelled $-z a$, which was restored into the familiar $-z i$ on the basis of $-m i,-s i$, etc.

The one attestation 3sg.pres.act. $i$-eš-zi (KUB 34.115 rev. 5, see StBoT 26: 372) is, despite the fact that it is found in an OS text, too aberrant not to be a mistake. Note that the fact that the preceding word, $k u-i s ̌-k i$, ends in $-i$ may have been the cause of this error.

The etymology of the verb $e \check{s}^{z i} / a \check{s}$ - is fully clear, of course: PIE * $h_{1} e s$ - 'to be' (already Knudtzon 1902: 45 identifies e-eš-tu (VBoT 1, 7) as 'it must be', equating it with Gr. $\begin{gathered} \\ \sigma \\ \\ \omega\end{gathered} \omega$ and Lat. esto). In my view, e-eš-zi, $a-s ̌ a-a n-z i$ is phonologically to be interpreted as $/$ Rést ${ }^{\mathrm{s}} \mathrm{i} /$, / $/ \mathrm{s}$ ánt ${ }^{\mathrm{s}} \mathrm{i} /$ from $* h_{l}$ és-ti, $* h_{l} s$-énti. See at
$e \check{s}-{ }^{a(r i)} / a \check{s}-$ 'to seat; to sit' for the view that the meaning 'to be (present)' is a quite recent lexicalization of an original meaning 'to sit', still visible in the Hitt. verb $e \check{s}-{ }^{\text {a(ri) }}$ 'to seat' and $e \check{s}-{ }^{z i} / a \check{s}-$ 'to sit'.

See Kloekhorst (2004: 41f.) for a detailed treatment of the HLuw. verb ás- 'to be' and its aphaeresis.
$\boldsymbol{e s ̌ - ~}{ }^{a(r i)} / \boldsymbol{a} \check{s}-$ (IIIa; Ia3) '(midd.) to sit down, to seat oneself; (+ = $=$ š̌̌an) to sit; (act.) to sit, to reside; (trans.) to settle’ (Sum. TUŠ): 1sg.pres.midd. e-eš-ḩa-ha-ri (KBo 16.98 ii 12 (NS), KBo 46.3 ii 6 (NS), KUB 8.48+ i 21 (NS)), 2sg.pres.midd. e-eš-ta-ri (KUB 14.1 obv. 20 (fr.), 44 (MH/MS), KUB 57.24, 5 (NS)), 3sg.pres.midd. $e-s ̌ a$ (OS), e-ša-ri (OS, often), e-ša-a-ri (KBo 3.7 iv 13 ( $\mathrm{OH} / \mathrm{NS}$ )), $i$-ša-ri (KBo 15.25 obv. 30 (MH/MS)), 1pl.pres.midd. e-šu-ua-aš-ta (OS), e-šu-aš-ta (KBo $16.24+25$ i 82/71 (MH/MS)), e-šu-ua-aš-ta-ti (KBo 3.7 iv 7 (OH/NS), KUB 24.8 iv $6(\mathrm{OH} / \mathrm{NS})$, KUB 33.106 ii 13, 14 (NS)), 3pl.pres.midd. e-ša-an-ta (OS), e-ša$a n-d a(\mathrm{OS}), ~ e-s ̌ a-a n-t a-r i(\mathrm{OH} / \mathrm{NS}), ~ e-s ̌ a-a n-d a-r i(\mathrm{OH} / \mathrm{NS}), ~ e-s ̌ a-a n-d a-a-r i$ (KUB 34.128 rev. 9 (MS)), e-eš-ša-an-ta-ri (KBo 2.14 iv 12 (NS)), $a$-ša-an-da (KUB 10.17 ii 9 ( $\mathrm{OH} / \mathrm{NS}$ )), $a$-ša-an-ta (KBo 4.9 iii 26 (NS), KBo 12.38 ii 13 (NH)), 1sg.pret.midd. e-eš-ḩa-at (KBo 17.23 rev. 5 (OS?), KBo 3.1 ii 16 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 31.8, 8 (NS), KBo 3.4 i 3, 19, 28, iv 44 (NH), KBo 4.4 iv 66 (NH), KBo 5.8 ii $40(\mathrm{NH})$, KUB 14.16 i $12(\mathrm{NH})$ ), e-eš-ha-ti (KBo 3.55 iii 6 ( $\mathrm{OH} / \mathrm{NS}$ )), e-eš-ha-ḩa-ti (KUB 36.98b rev. 8 ( $\mathrm{OH} / \mathrm{NS}$ )), e-eš-ha-ha-at (KBo 19.78, 7 (NS), KBo 16.1 i $30(\mathrm{NH})$, KBo 16.8 ii $14(\mathrm{NH})$ ), iš-ha-ha a-at (KBo 16.8 ii $10(\mathrm{NH})$, KUB 31.71 iii $3(\mathrm{NH})$ ), 2sg.pret.midd. [e-eš-]ta-at (KUB 14.1 rev. 34 (MH/MS)), 3sg.pret.midd. e-ša-ti (KUB 17.10 i 34 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 12.3 iii 4 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 31.64 iii $12(\mathrm{OH} / \mathrm{NS})$, KUB 33.8 ii $19(\mathrm{OH} / \mathrm{NS})$, KBo 13.99 rev. 4 (NS), KBo 15.34 iii $15(\mathrm{OH} / \mathrm{NS})$ ), e-ša-di (KUB 33.59 iii $13(\mathrm{OH} / \mathrm{NS})$ ), e-ša-at (MH/NS), e-eš-ta-at (KUB 30.34 iv 3, 4 (MH/NS), KBo 5.8 ii $15(\mathrm{NH})$ ), e-eš-šaat (KBo 37.1 ii 27 (NS)), eš-ta-at (1490/u, 11 (NS)), 1pl.pret.midd. e-eš-šu-ua-aš$t a-t i(1490 / \mathrm{u}, 14(\mathrm{NS}))$, 3pl.pret.midd. e-ša-an-ta-ti (KUB 33.45+53+FHG 2 iii 21 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 51.56, 6 (NS)), e-ša-an-ta-at (KUB 48.124 obv. 8 (NS), KBo 18.179 rev.? v 8 (NS), KBo 5.8 ii 13, 18, $25(\mathrm{NH})$, KUB 26.43 rev. $10(\mathrm{NH})$ ), e-ša-an-da-at (KUB 19.29 iv $15(\mathrm{NH})$, KUB 19.37 iii $5(\mathrm{NH})$ ), 2sg.imp.midd. e-eš-hu-ut (KUB 14.1 obv. 17 (MH/MS), KBo 3.21 iii 15, 21, 25 (MH/NS)), 3sg.imp.midd. e-ša-ru (KUB 30.10 rev. 6 (OH/MS), KUB 31.131 + ABoT 44a iii $4 / 2$ ( $\mathrm{OH} / \mathrm{NS}$ ), Bo 3211 rev. 6 (NS), KUB 14.3 ii 28, 71, 75 (NH)), 2pl.imp.midd. [e-]eš-tu-ma-ti (KUB 31.64 ii 3 ( $\mathrm{OH} / \mathrm{NS}$ )), e-eš-du-ma-at (KUB 14.1 rev .40 (MH/MS)); 2sg.pres.act. e-eš-ši (OS), 3sg.pres.act. e-eš-zi (OS), 3pl.pres.act. $a$ -ša-an-zi (OS), e-ša-an-zi (KUB 20.76 iii 14 (OH/NS)), 2sg.imp.act. e-eš (KUB
14.1 obv. 16, 44 (MH/MS), KUB 14.3 iv 3 (NS)), e-ši (KUB 14.1 obv. 19 (MH/MS)), 2pl.imp.act. e-eš-te-en (KUB 15.34 ii 16 (MH/MS), KUB 14.16 i 17 ( NH ) ); part. $a-s ̌ a-a n-t-(\mathrm{OS}), e-s ̌ a-a n-t-(\mathrm{NH})$; verb.noun. $a$-ša-tar, $a$-ša-a-tar (gen.sg. $a-s ̌ a-a n-n a-a \check{s}$ ); inf.II $a-s ̌ a-a-a n-n a$ (MH/MS), $a-s ̌ a-a n-n a$ (MH/MS); impf. e-eš-ke/a- (midd.) (OS).

Derivatives: ašandul- (n.) 'occupation force, garrison' (gen.sg. $a$-ša-an-du-la$a s ̌), \boldsymbol{a s ̌ a n d u l a / i - ~ ( a d j . ~ u s e d ~ w i t h ~ E R I N ~}{ }^{\mathrm{MES}}$ ) 'occupation force' (nom.sg.c. $a-s \check{a}$-an$d u-l i s ̌, ~ a c c . s g . c . ~ a-s ̌ a-a n-d u-l a-a n$, dat.-loc.sg. $a$-ša-an-du-li, $a-s ̌ a-a n-d u-l a$, abl. $a$ -ša-an-du-la-az, $a-s \check{a}-a n-d u-l a-z a)$, ašandulae- ${ }^{z i}$ (Ic2) 'to be on garrison duty' (3pl.pres.act. $a-s ̌ a-a n-d u-l a-a n-z i)$, ašandulatar / ašandulann- (n.) 'garrisoning' (dat.-loc.sg. $a-s ̌ a-a n-d u-l a-a n-n i)$.
Anat. cognates: CLuw. ištardalli- (adj.) 'throne-like' (nom.-acc.pl.n. iš-tar-da-al-la (KBo 20.75 rev. 14), see Starke 1990: 416)); HLuw. ás- 'to be seated, to dwell’ (3sg.pres.med. SOLIUM+MI-sá-i (KARATEPE 1 §54 Hu.), SOLIUM+MI-i (KARATEPE 1 §24, ÇİFTLİK §10, ÇALAPVERDİ 2 §2), 3pl.pres.act. SOLIUM $+M I-t i$ (KARKAMIŠ A2+3 §17e), 1sg.pret.act. SOLIUM$h a$ (IZGIN §2), 3sg.pret.act. SOLIUM-tá (KARAHÖYÜK §4), SOLIUM+MI-ta (KARATEPE 1 §37 Hu.), 3pl.pret.act. ${ }^{\text {SOLIUM }} \dot{a}-$-sa-ta (KARKAMIŠ A11b §10); verb.noun nom.sg. SOLIUM+MI-ia-sa (KARATEPE 1 §36 Hu.)), isnu(wa)- 'to
 $s[a ̀]-n u ́-h a$ (KARATEPE $1 \S 47 \mathrm{Hu}$ ), ${ }^{\text {SoLIUM }+M i} i$-sà-nu-ha (KÖRKÜN §5), "SOLIUM" $i$-sà-nu-wa/i-ha (MARAŞ 1 §4), SOLIUM $_{i \text {-sà-nu-wa/i-ha (KARKAMIŠ }}$
 Hu., KARKAMIŠ A11b+c §17, KARABURÇLU line 3, GÜRÜN §3b, TELL AHMAR 2 §10), "SOLIUM" $i$-sà-nu-wà/i-há-" (KARATEPE 1 § 16 Ho.), ${ }^{\text {SOLIUM }+M I} i_{i-}$ sà-nú-wa/i-ha (KARKAMIŠ A1a §16), 3pl.pres.act. ${ }^{\text {SOLIUM }_{i \text {-sà-nú-wa/i-ti }} \text { (Karal }}$ (KARATEPE $1 \S 54$ Ho.), 3sg.pret.act. "SOLIUM" $i$-sà-nu-wa/i-ta (TELL AHMAR 5 §3), 3pl.pret.act. ${ }^{\text {SOLIUM }}{ }_{i \text {-sà }}$-nú-wa/i-ta (MARAŞ 1 §3)), ása- (c.) 'seat' (nom.sg. "MENSA.SOLIUM" ${ }^{a}$-sa-sa (KARKAMIŠ A6 §25), acc.sg. "MENSA.SOLIUM" ${ }^{\prime}$-sa-na (KARKAMIŠ A6 §24), "MENSA.Solium" ${ }^{-1}-s a-n a-$ ' (KARKAMIŠ A6 §8), "SOLIUM" $s a-$ $n a$ (HAMA $4 \S 5, \S 6$ ), dat.-loc.sg. ${ }^{\text {SOLIUMMI }}{ }^{a}-s a$ (KARAHÖYÜK §4), SOLIUM$s a-$ ' (HAMA 4 §8), "SOLIUM""]sa (HAMA 5 §5)), istarta- (n.) 'throne' (nom.acc.sg. THRONUS $i$-sà-tara/i-tá-za (BOYBEYPINARI 1 §1), i-sà-tara/i-ta-za (BOYBEYPINARI 1 §5, BOYBEYPINARI $2 \S 5$, §15), dat.-loc.sg. THRONUS $i$-sà-tara/i-ti-i (MARAŞ 1 §3, MARAŞ $4 \S 17$ ), "THRONUS" ${ }^{i}$-sà-tara/i-tí-i (KARATEPE $1 \S 16$ Ho.), "THRONUS" $i$-sà-tara/i-ti (KARATEPE $1 \S 16 \mathrm{Hu}$.), THRONUS-tara/i-ti (IZGIN 1 §2)).

IE cognates: Skt. áste 'to sit, to live, to settle, to abide, to continue', āsa- (n.)


PIE *h $h_{l}$ é $h_{l} s-o, * h_{l}$ é $h_{l} s-n t o ; ~ * h_{l}$ és-ti, * $h_{l} s$-énti
See $\mathrm{HW}^{2}$ E: 97f. for attestations. Already Hrozný (1919: XIII, 14) connected this verb with Gr. $\tilde{\eta} \sigma \tau \alpha 1$ 'to sit' and Skt. áste 'to sit'. These latter forms seem to reflect $* h_{l} e ́ h_{l} s$-to, displaying a root $* h_{l} e h_{l} s$-. Because this structure is quite remarkable, it is generally assumed that $* h_{l} e h_{l} s$ - must reflect an old reduplication $* h_{l} e-h_{l} s$ - of a root $* h_{l} e s$ - 'to sit' (cf. LIV ${ }^{2}$ ). This root $* h_{l} e s$ - is identical to $* h_{l} e s$ 'to be (present)', indicating that 'to sit' is a development out of the meaning 'to be present'.

The formal interpretation of the Hittite material is quite straightforward. We find a middle stem $e \check{s}^{-a(r i)}$ besides an active stem $e s \check{s}^{z i} / a \check{s}-$. Usually, the middle paradigm ešari / ešantari is interpreted as reflecting *hé $h_{l} s-o$, * $h_{l}$ é $h_{l} s$-nto. The active stem $e \check{s} \underline{s}^{z i} / a s ̌$ - is formally identical to $e s s_{-}^{z i} / a s s^{-}$'to be' (and, as we saw above, historically as well), and therefore is best regarded as reflecting $* h_{1} e ́ s-t i$, * $h_{l} s$-énti.

In HLuwian, the verb 'to be seated' is predominantly written with the logogram SOLIUM. Only once we find a full phonetic form, namely 3 pl.pret.act. ${ }^{\text {SOLIUM }} \dot{a}-$ $s a-t a$. When we compare this to Hitt. $a-s ̌ a-a n-z i$ 'they sit', it is quite possible that HLuw. á-sa-ta represents /isanta/ < * $h_{l}$ sénto (see Kloekhorst 2004 for my view that the HLuwian sign á can represent $/ 2-/$ ). In the derivatives $i$-sà-nu-wa/i- 'to seat, to settle' and $i$-sà-tara/i-ta- 'throne' we find a stem is-. The interpretation of this stem is not fully clear. At first sight it is tempting to interpret the stem is- as the strong stem variant of ás-. E.g. Hawkins \& Morpurgo-Davies (1978: 107-11) therefore assume that the stem is- is the one hidden behind the logogram SOLIUM+MI, and Starke (1990: 418) subsequently interprets SOLIUM+MI-sa-i 'he sits' as /isai/, which he regards as the direct cognate of Hitt. eša. On the basis of his assumption that HLuw. -i- can reflect *-eh $h_{1^{-}}$, Starke reconstructs/isai/ as *heh $h_{l}$ so. Melchert (1994a: 265) claims that *-eh $l_{l^{-}}$yields Luw. - $\bar{a}$-, however, which would mean that Starke's reconstruction is impossible. Because Luw. -ican also reflect a pretonic $* e$ (cf. e.g. HLuw. tipas- $<* n e b^{h}{ }^{2}$ es-), the stem is- could also be regarded as the outcome of the unreduplicated stem $* h_{l} e s$ - in pretonic position. In the verb $\operatorname{isnu}(w a)$ - this is certainly possible (<virtual *hles-néu-) and in i-sà-tara/i-ta- probably as well ( $<* h_{1} e s$-tró-+ ?). This could mean that the relationship between the stems is- and ás- is not one of strong vs. weak, but rather one of unaccentuated vs. accentuated.

All in all, the phonetic form of SOLIUM+MI-sa-i cannot be deduced from the available evidence. The 3pl.pret.act.-form á-sa-ta probably reflects $* h_{l} s$-énto and the noun $\dot{a}$-sa- 'seat' in my view must reflect $* h_{l} s$-o- (in which the initial preconsonantal /R-/ occasionally is dropped within the HLuwian period (the socalled aphaeresis), cf. Kloekhorst 2004: 46-7). The interpretation of the other forms depends on one's view on the outcome of $*_{-e h_{1}}$ in Luwian. If one follows Starke in assuming that $*_{\text {-eh }}^{1^{-}}>$Luw. $-i$-, isnu(wa)- and $i$-sà-tara/i-ta- can reflect *h $h_{l} e h_{l} s-n(e) u$ - and $* h_{l} e h_{l} s$-tro-. If one follows Melchert in assuming that *-eh $h^{-}>$ Luw. - $\bar{a}$-, one must reconstruct $* h_{1} e s$-néu- and $* h_{1} e s-t r o ́-+~(o r ~ s i m i l a r) ~$ respectively.
-eš (nom.pl.c.-ending)
PIE *-ei-es

This ending is usually cited as $-\bar{e} \check{s}$, but this is incorrect. If we look at OS texts, we see that it is predominantly spelled ${ }^{\circ} \mathrm{Ce}$-eš (e.g. la-a-le-eš, li-in-ki-ía-an-te-eš, a-re-eš, ku-ú-še-eš, pal-ua-at-ta-al-le-eš, pí-še-né-eš, etc.). The only cases in which a plene $-e$ - is found, is when the ending is attached to a stem in vowel (e.g. ha-a-pí-e-eš, ma-a-ri-e-eš, pal-ha-a-e-eš, ap-pé-ez-zi-e-eš, ha-an-te-ez-zi-e-eš, ku-i-e$e \check{s}$, har-ša-e-ešs). In my view, the plene $-e$ - in these cases much more likely denotes the hiatus than a long vowel. So pal-ha-a-e-eš = /píHāes/, ha-a-pí-e-eš = /hábies/, har-ša-e-eš = /Hŕsāes/, etc. In cases like iš-ȟe-e-eš (MS) and perhaps also šu-me-e-eš (MS) (but compare the OS spelling šu-me-eš!), we are probably dealing with real accentuated endings /RisHés/ and/sumés/. In younger times, we do find some spellings ${ }^{\circ} \mathrm{Ce}-e-e s ̌$ (e.g. pal-ua-at-ta-al-le-e-eš, hu-uh-he-e-eš), but these are much less common than ${ }^{\circ} \mathrm{Ce}$-eš. All in all, we must conclude that the ending is to be interpreted as /-es/, with short $-e-$. Nevertheless, since this ending is usually unaccentuated (except in already mentioned išh $\bar{e} \check{s}$ and šumēss), and since unaccentuated /e/ reflects $*-\bar{e}-$, we must assume that the ending -eš reflects a preform *-ēs.

In younger times, we sometimes find spellings like ${ }^{\circ} \mathrm{Ci}-e \check{s},{ }^{\circ} \mathrm{Ce}$-iš and ${ }^{\circ} \mathrm{Ci}-i s ̌$, which could show that the ending is deteriorating to $/$-is/. From MH times onwards, we see that the nom.pl.c. can also be expressed by the original acc.pl.c.ending -uš and even by the original dat.-loc.pl.-ending -aš.
For a detailed treatment of the prehistory of this ending, cf. Melchert 1984a: 121-2, who argues that *-ès goes back to $*$-ei-es, the original nom.pl.c.-ending of $-i$-stems. This implies that the contraction of $*$-eie- to $*-\bar{e}$ - must have been much earlier than the loss of intervocalic $* i$ as described in § 1.4.8.1.a, namely before
the weakening of unaccentuated $* e$ to $a$ in open syllables. So for the nom.pl.c. of $i$ - and $u$-stem adjectives, we must envisage the following scenario:
(1) expected PIE preform:
*CC-éi-es and *CC-éu-es
(2) generalization of word-initial stress:
*CV́C-ei-es and *CV́C-eu-es
(3) contraction of $*$-eie- to $-\bar{e}-$ :
*CV́C-ēs and *CV́C-eu-es
(4) restoration of suffix-syllable -ei- in the $i$-stem adjective on the basis of e.g. acc.pl.c. *CV́C-ei-us:
*CV́C-ei-ēs and *CV́C-eu-es
(5) spread of the marked nom.pl.c.-ending -és throughout the other nominal stems:
*CV́C-ei-ēs and *CV́C-eu-ēs
(6) weakening of posttonic $* e$ in open syllable to $-a$ - and subsequent shortening of unaccentuated $* \bar{e}$ to $e$ :

* CV́Caies and CV́Caues
(7) loss of intervocalic $* i$ with lengthening of the preceding vowel:

$$
C V ́ C a ̄ e s ̌ ~ a n d ~ C V ́ C a u e s ̌ ~
$$

```
-\overline{ěš-}\mp@subsup{}{-}{zi}\mathrm{ ("fientive"-suffix)}
```

PIE *-é $h_{1}-s h_{1}$ -
The verbs in - $\bar{e} \check{s} s s^{-}$are traditionally called 'fientives' since they denote 'to be ...' or 'to become ...'. They are often derived from adjectives, but can be derived from nouns and verbs as well. For adjectives, compare: araunēšsz- 'to become free' from arauant- (adj.) 'free'; harkiiēšss- ${ }^{z i}$ 'to become white' from harki- / hargai- (adj.) 'white'; idalaūēšss- ${ }^{-2 i}$ 'to become bad' from idālu- / idālaú- (adj.) 'evil’; makkēšš-Zi 'to become numerous’ from mek, mekki- / mekkai- (adj.) 'numerous' (note the zero-grade formation); mīēšš-zi 'to be(come) mild' from mīu- / mīiaul- 'soft, mild'; parkēšss- ${ }^{z i}$ 'to become tall' from parku- / pargau- (adj.)
'high'; parkuēšš- ${ }^{z i}$ 'to become tall' from parku- / pargaut- (adj.) 'high'; tepaunēšss- ${ }^{-2 i}$ 'to become little' from tēpu- / tēpaú- (adj.) 'little'. For verbs, compare: hatēšš- zi 'to become dry' from hāt- ${ }^{i}$ / hat- 'to dry up'; miēš̌sz- 'to grow' from mai- ${ }^{i}$ /mi'to grow'; tukkēšš-zi 'to be important' from tukk- ${ }^{\bar{r} r i}$ 'to be important'. For nouns, compare: šaknēšš- ${ }^{z i}$ 'to be(come) impure' from šakkar, zakkar / šakn'excrement'.
The verbs that bear this suffix inflect according to the mi-conjugation and do
 Note the difference between tepau $\bar{e} \check{s} \check{s}-$, parkuēšs- and mīezšš-, all derived from $u$ stem adjectives.

According to Watkins (1973a: 71f.), the suffix -ēšš- must be an 'inchoative' in $-s$ - of the stative suffix $*$-e $h_{l^{-}}$, just as in Latin we find the inchoative suffix -ēscere (e.g. rubēscere 'to become red'), which in his view reflects *-eh -sk'e/o(the stative suffix *-eh $l_{1}$ itself is also sporadically attested in Hittite: nakke- ${ }^{z i}$, papre ${ }_{-}^{z i}$, parkue- ${ }^{z i}$ and šulle ${ }_{-}^{z i}$, cf. the treatment of this class in $\S 2$ 2.2.2.1.1). Nevertheless, as we can see from $* h_{l} e ́ h_{l} s-o>$ Hitt. eša 'to seat', a reconstruction *-éh $h_{l}-s$ - cannot explain the geminate -šš- found in -ēšś-. In my view, this means that we must reconstruct *-é $h_{1}-s h_{1}$ - in which the element $*$-sh $h_{1}$ - must be compared with the imperfective-suffix $-\check{s} \check{s}(a)$ - that reflects $*_{-s}(o) h_{1}$-. Just as the Hittite imperfective suffixes $-\check{s} s \check{(a)}\left(a *_{-s}(o) h_{l^{-}}\right.$and -ške/a- $<*_{-s k}{ }^{-} / o$ - are functionally equal, we can now even better understand that the Hittite fientive suffix -ēšš- < *-é $h_{1}$-sh $h_{1}$ - is functionally equal to the Latin suffix -ēscere < *-e $h_{1}$-sḱe/o-.

-ešš(a)- ("imperfective"-suffix): see -šš(a)-
ēššari-: see ēšri-
${ }^{\text {síG }}{ }_{\text {ēššari-: }}$ see ${ }^{\text {SíG }} \overline{e s s ̌ r i-~}$
$\overline{e s}$ şa-: see $i s ̌ h \bar{a}-$
ēšhahru-: see išhahru-
ešhar / išhan- (n.) ‘blood; bloodshed’ (Sum. ÚŠ, Akk. TAMMU): nom.-acc.sg. e-eš-ḩar (OS, often), iš-har (KBo 3.67 ii 12 (OH/NS), KUB 31.115, 12 (OH/NS), KBo 14.41 iv? 3 (OH/NS), HFAC 40 obv.? $8(\mathrm{OH} / \mathrm{NS})$, KBo $3.16+$ KUB 31.1 ii

17 (OH/NS), KBo 12.8 iv 32 (OH/NS), KBo 12.91 iv 6 (MH/NS), KBo 13.131 obv. 7 (MH/NS), KUB 30.33 i 11, 18 (fr.) (MH/NS), KUB 9.34 ii 34 (NS), KBo 1.51 rev. 17 (NS), HT 1 i 37 (NS), KUB 44.63 ii 7, 8 (NS), VBoT 74, 7 (NS)), gen.sg. iš-ha-na-a-aš (KBo 17.1 iv 8 (OS), KBo 15.10 i 1, 20, 32, ii 39 ( OH ?/MS)), iš-h $a-n a-a-s ̌=a(\mathrm{KUB} 13.7$ i 14 (MH/NS)), iš-hூa- $a-n a-a \check{s}$ (KUB 17.18 ii 29 (NS)), iš-ha-na-aš (KBo 15.10 i 22, ii 17, 32 (OH?/MS), KUB 11.1 iv 19 ( OH/NS), KBo 3.1+ iv 27 (OH/NS), KUB 17.34 i 2 (fr.) (OH/NS), KBo 10.45 iii 19 (MH/NS), KUB 19.67+ 1513/u i 18 (NH), KUB 30.50 + 1963/c 12f. (NS), KUB 22.38, 5f. (NS), KUB 19.2 rev. 9 (NH), KUB $14.14+19.1+19.2$ rev. 9 f. (NH)), e-eš-ha-na-aš (KUB 41.8 iii 10 (MH/NS), KUB 13.9 ii 3f. (MH/NS), KUB 17.28 ii 1 (MH/NS), KUB 9.4 i 38 (MH/NS), KUB 30.35 i 1f. (MH/NS), KUB 39.102 i 1f. (MH/NS), KUB 7.41 obv. 1 ff. (MH/NS), KBo 10.45 iii 1 (MH/NS), KUB 41.8 iii 10 (MH/NS), KBo 24.52, 4 (NS), KUB 30.50+, 11 (NS)), e-eš-<ḩa->na-aš (KUB 41.8 ii 36 (MH/NS)), dat.-loc.sg. iš-ḩa-ni-i (KBo 15.33 iii 31 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 11.49 vi 18 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 10.45 iv 26 (MH/NS), KBo 30.153 ii $6(\mathrm{OH} / \mathrm{NS})$, KUB 11.26 ii 11 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 44.12 ii 13 (NS)), iš-ha-ni (KUB 40.28 ii 6 (MH/MS?), KUB 55.28 ii 6 (MH/NS), KUB 9.34 ii 34 (fr.) (NS), KBo 22.52 ii 3 (NS)), e-eš-ḩa-ni-i (KBo 11.45 iii 22 (OH/NS), KUB 10.62 v 1 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 9.4 i 17 (fr.) (MH/NS), KBo 11.1 obv .45 (NH)), e-eš-ha-ni (KUB 45.47 iii 18 (MH/MS), KUB 10.11 vi 5 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 43.56 iii 12 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 41.8 iv 25 (MH/NS), KUB $44.4+$ KBo 13.241 rev. 2 (NS)), erg.sg. iš-ḩa-na-an-za (KUB 39.103 rev. 4 (MH/NS), KUB 54.1 iv 19 (NS), KUB $14.14+19.2$ rev. $23(\mathrm{NH})$ ), e-eš-ha-na-an-za (KUB 30.34 iv 7 (MH/NS), KUB 4.1 ii 22 (MH/NS), KUB 9.4 i 38 (MH/NS)), iš-ha-na-<an-ヶza (KUB 9.34 ii 46 (NS)), abl. e-eš-ha-na-az (KUB 43.58 i 47, ii 41 (MS?), KUB 16.77 iii 19 (NH)), $i s ̌-h a-n a-z a$ (KUB 30.33 i 10 (MH/NS)), iš-ḩa-na-az (KUB 15.42 ii 30 (NS), KUB 30.31 i 42 (NS), KUB 41.22 iii 3f. (NS), KUB 14.14+ obv. 34 (fr.) (NH)), $e-e s ̌-<h ̧ a->n a-z a$ (IBoT 1.33, 52 (NS)), e-eš-h $h a-n a-z a(K U B 19.20$ rev. $9(\mathrm{NH})$ ), iš-ha-na-an-za (KUB 39.102 i 1 (MH/NS)), instr. iš-ha-an-da (KBo 17.4 iii 15 (OS), e-eš-hูa-an-ta (HT 1 i 38 (NS)), e-eš-ha-ni-it (Bo 3696 i 7, 10 (NS)).
Derivatives: išhanuuant-, ēšhanuuant- (adj.) 'bloody’ (nom.sg.c. iš-ha-nu-u्रa$a n-z a$ (KBo 13.131 iii 14 (MH/NS)), nom.-acc.pl.n. e-eš-ha-nu-úa-an-ta (HT 1 i 30 (NS), KUB 9.31 i 37 (fr.) (MH/NS), dat.-loc.sg. iš-ha-nu-uূa-an-ti (KUB 36.89 obv. 14, rev. 1 (NS))), ēšhaškant-, išhaškant- (adj.) 'bloodied’ (nom.sg.c. e-eš-ha-aš-kán-za (KUB 7.41 obv. 15 (MH/NS)), acc.sg.c. e-eš-ha-aš-ga-an-ta-an (KBo $25.127+147$ iii 8 (OS)), acc.pl.c. iš-ha-aš-kán-tu-uš (KBo 17.4 ii 7 (OS)), nom.-acc.pl.n. eš-ḩa-aš-kán-ta (KBo 3.34 i $20(\mathrm{OH} / \mathrm{NS})$ ), iš-ha-aš-kán-ta (KBo 17.1 i 24 (OS))), išharnu- ${ }^{z i}$, ēšharnu- ${ }^{\text {zi }}$ (Ib2) 'to make bloody; to dye blood-red'
(1sg.pres.act. ẹ[-eš-ḩar-nu-]mi (KUB 14.1+ obv. 27 (MH/MS)), e-eš-har-nụ[-mi] (KUB 14.1+ rev. 47 (MH/MS)), 3sg.pres.act. e-eš-har-nu-zi (KUB 14.1+ rev. 30 (MH/MS)), 3pl.pres.act. iš-ḩar-nu-ua-an-zi (KBo 6.34+ iii 47 (MH/NS)), 2sg.imp.act. e-eš-ḩar-nu-ut (KUB 14.1+ rev. 18 (MH/MS)), 2pl.imp.act. e-eš-har-nu-ut-tén (KUB 14.1+ rev. 29, 65 (MH/MS)); part. iš-har-nu-ua-an-t(OH/NS); impf. iš-har-nu-uš-ke/a- (KBo 12.126 + KUB 24.9 i 38 (OH/NS), KUB 30.36 iii 1 (MH/NS)), e-eš-har-nu-uš-ke/a-(Bo 2709 ii 8 (NS))), 厄̌šharnumae- ${ }^{z i}$, išharnumae- ${ }^{z i}$ (Ic2) 'to make bloody, to smear with blood' (3sg.pres.act. iš-ḩar-nu-ma-iz-zi (KBo 5.1 i 26 (MH/NS), KUB 15.31 ii 23 (MH/NS)), iš-har-nu-ma-a-iz-zi (KUB 15.32 ii 18 (MH/NS), KBo 13.114 iii 3 (MH/NS)) 3pl.pres.act. e-eš-har-nu-ma-an-zi (KUB 29.4 iv 39 (NS)), iš-har-nu-ma-an-zi (KBo 5.1 iii 41 (MH/NS), KBo 29.3 i 7 (MS?), KUB 46.40 obv. 16 (NS), KUB 50.31 i 7 (NS)), $i s ̌-h a r-n u-m a-a-a n-z i(K B o 14.127$ iv 3 (fr.), 7 (fr.), 9 (fr.) (NS)), 3sg.pret.act. e-eš-ȟar-nu-ma-it (KBo 35.198 rev. 7), 1pl.pret.act. iš-har-<nu->ma-u-en (KBo 13.101 i 5 (MH/NS)); inf.I e-eš-har-nu-ma-a-u-ua-an-zi (KBo 24.45 rev. 11 (MS?), KBo 27.202, 9 (fr.) (NS))), ēšharưahh- (IIb) 'to make blood-red' (impf.3sg.pres.midd. e-eš-har-ua-ah[-hi-eš-ke-et-ta] (KBo 15.1 i 27 (NS))), išharuant- (adj.) 'bloody’ (acc.sg.c. iš-har-ųa-an-da-an (KUB 9.34 i 26 (NS), KUB 17.15 iii 2 (fr.) (NS)), dat.-loc.sg. iš-har-ua-an-ti (KUB 36.89 obv. 13 (fr.), rev. 1 (NS)), all.sg. iš-har-ua-an-da (KUB $33.54+47$ ii 14 (OH/NS), KUB 34.76 i 3 ( $\mathrm{OH} / \mathrm{NS}$ )), instr. [iš-]har-ua-an-te-e[t] (KBo 17.25 rev. 14 (OS)), nom.pl.c. [i]š-har-ưa-an-te-eš (KBo $8.74+19.156+$ KUB $32.117+35.93$ iii 3 (OS)), acc.pl.c. iš-har-ua-an-tu-uš (KBo $17.1+253$ i 25 (OS)), nom.-acc.pl.n. iš-ḩar-ua-an-ta (KBo $30.39+25139+$ KUB 35.164 rev. 17 (OS))), išharuieške/a- ${ }^{-i}$ (Ic6) 'to be blood-red' (3sg.pres.act. iš-ḩar-ú-i-eš-ke-ez-zi (KUB 28.6 obv. 11b
 ú-i-il (KBo 24.42 rev. 11 (NS), Bo 5969 i 3 (undat.), KUB 7.13 obv. 25 (fr.) (NS), KBo 21.47 iii 4 (fr.) (MS), KBo 23.16, 4 (fr.) (NS)), iš-har-ú-ui $i_{5}-i[l]$ (KBo 27.32, 4 (NS)), e-eš-har-ú-i-il (KUB 9.4 ii 5 (NS), KUB 7.13 obv. 14 (NS))), išhanallē̌̌š- ${ }^{z i}$ ( Ib 2 ) 'to become a blood-shedder (?)' (3sg.pres.midd. iš-ȟa-na-alle $e_{x}$-eš-ta-at (1490/u, 11 (NS)), iš-ha-na-al-li-iš-t[a-at] (1490/u, 6 (NS))), išhanattalla- (c.) 'blood-shedder, murderer (?)' (nom.sg. iš-ha-na-at-tal-la-aš (Bo 4222 (see KUB 21.19) rev. 8 (NH))).
Anat. cognates: CLuw. $\overline{\boldsymbol{a} s ̌ h a r ~(n .) ~ ' b l o o d ' ~(n o m .-a c c . s g . ~} a-a \check{s}-h a r-s ̌ a, ~[a-] a s ̌-h a-$ ar), āšharnu- 'to bloody' (part. a-aš-har-nu-um-m[i-]), āšharnummai- (adj.) 'covered with blood' (nom.pl.c. a-aš-ḩar-nu-um-ma-in-zi), äšhanuuant(i)- (adj.)
 HLuw. ásharmi- (c.) 'offering(?)’ (nom.sg. /Rasharmis/ "*350" á-sa-ha+ra/i-mi-sà),
áshanantisa- (n.) 'blood-offering' (nom.-acc.sg. /?shanantisant's a/ á-sa-ha-na-ti-sa-za (lit. a substantivized gen.adj. of a noun *?shanant(i)- ~ Hitt. išhanant-, 'that of blood').

PAnat. *PésHr, *?sHanós
IE cognates: Skt. ásrık, asnás 'blood’, TochA ysār 'blood’, TochB yasar 'blood’, Gr. ह̌a $\rho$ 'blood’, Latv. asins 'blood’, Lat. sanguen/sanguis, sanguinis 'blood'.

PIE * $h_{1} e ́ s h_{2}-r, * h_{1} s h_{2}$-én-s
See $\mathrm{HW}^{2}$ E: 115 f . for attestations. The oldest attestations show that the paradigm originally was nom.-acc.sg. e-eš-har, gen.sg. iš-ha-na-a-aš, dat.-loc.sg. iš-ha-ni-i. The spelling nom.-acc.sg. iš-har is found in NS texts only. In the case of the oblique cases, the spelling e-eš-ha-n- is predominantly NS, too, except for one possible MS spelling e-eš-ha-na-az. This is either due to introduction of the vowel $e$ - of the nom.-acc.sg.-form into the oblique cases, or due to the the NH lowering of $\mathrm{OH} / \mathrm{i} /$ to /e/ before $-s \check{-}$ - (cf. § 1.4.8.1.d). In the literature we often find reference to forms that are spelled (i-)e-eš-šar and (i-)e-eš-na-aš, on the basis of which occasional loss of - $h$ - in interconsonantal position is assumed. As I will show under its own lemma, the forms $i$-eš-šar and $i$-eš- $n$ - cannot mean 'blood' and therefore should be separated. All other instances where $-\underline{-}$ - is not written must be regarded as spelling errors. The form e-eš-šar (KUB 41.8 iii 9) duplicates $e$-eš-har (KBo 10.45 iii 18) and therefore must mean 'blood'. It contrasts with the spelling e-eš-har as found on the same tablet (KUB 41.8 i 29, ii 15, 17, iii 4, iv 2, 12) and in my view therefore must be regarded as a spelling error due to the form DI-eš-šar in the preceding line. The form e-eš-na-aš (KUB 41.8 ii 36) duplicates $e$-eš-ha-na-aš (KBo 10.45 iii 1), and therefore must mean 'of blood'. It contrasts with the manyfold spellings $e$-eš-h $a-n^{\circ}$ as found on the same tablet (KUB 41.8 ii 43 , iii 5,10 , iv 25,34 ) and in my view therefore must be a spelling error $e$-ešs $-h a>n a-a \check{s}$ (cf. tar-ša<-an>-zi-pí in the same line). All in all, I only reckon with the forms $\overline{e s h} h a r$ (išhar) and išhan- (éšhan-).

Since Ribezzo (1920: 128), ēšhar / išhan- has generally been connected with Skt. ásrık, asnás 'blood', Gr. éap 'blood', etc. Opinions on the exact reconstruction differs, however. If we compare nom.-acc.sg. e-eš-har to Skt. ásrık and Gr. $̇ \quad \alpha \rho$, we can hardly reconstruct anything else than $* h_{1} e ́ s h_{2} r$. Nevertheless, for instance Melchert (1984a: 92) reconstructs * $h_{1}$ és $h_{2} r$, apparently on the basis of the plene spelling e-eš-. This argument can be refuted if we compare e.g. e-eš$m i<* h_{l} e ́ s m i$. Moreover, CLuw. nom.-acc.sg. āšhar(ša) points to ${ }^{*} h_{1} e ́ s h_{2} r$, as ** $h_{1}$ ésh $h_{2} r$ would have yielded CLuw. **īshar (cf. Starke 1990: 559).

The reconstruction of the oblique cases is more difficult. Let us first look at the root syllable. From a PIE point of view, we expect an ablauting paradigm $* h_{l} e s h_{2}-r, * h_{l} s h_{2}$. In the oblique cases, the initial $* h_{l}$ would drop regularly in front of consonants in pre-Hittite times (cf. Kloekhorst fthc.c), giving an alternating paradigm $*$ ? es $H-$, $* s H-$. There are now three scenarios. The first one is that this situation was retained and that the initial cluster of the oblique case receives the automatic prothetic vowel $i-$, giving/isH-/, spelled $i s ̌-h a-$. I know of no other example, however, where a pre-Hittite ablaut $* ? e-$, $\varnothing$ - was retained (in verbs with initial $* h_{l^{-}}$, for example, the initial laryngeal was restored, e.g. ašanzi $<* h_{l}$ senti), so this scenario may not be very likely. If the $* h_{l^{-}}$was restored, we would expect that pre-Hitt. *?sH- would yield Hitt. /?sH-/, spelled **aš-h $a$-. This apparently was not the case. The last possibility is that not only the initial laryngeal was restored, but also the vowel of the nominative (cf. gen.sg. pahhuenaš 'fire’ < *peh $u$-en-os $\ll$ *ph $h_{2} u$-en-s), giving pre-Hitt. *ResH-. This form would yield /RisH-/ in unaccentuated position, spelled $i s$ - $h a-$. On the basis of these considerations, I assume that the spelling $i s ̌-h a$ - of the oblique cases reflects unaccentuated $* h_{1} e s h_{2}-$. Note that the Luwian forms cannot be used as an argument in this respect: $* h_{1} e C$ - would yield Luw. $/ 2 \mathrm{aC}-/$ and $* h_{l} C$ - would yield Luw. /?C-/, but both outcomes are spelled the same: $a C$ - in CLuwian and $\dot{a}-C$ - in HLuwian.
The interpretation of the suffix syllable is not easy either. The equation of Skt. asnás with Hitt. išhanāǎ seems to show that we have to reconstruct * $h_{1} e s h_{2} n o ́ s$, showing zero grade in the suffix syllable and accentuated full grade in the ending. One could argue that an extra argument in favour of this view can be seen in the one attestation e-eš-na-aš (KUB 41.8 ii 36), which would be the phonetically regular outcome of $* * h_{1} e s h_{2} n o s$, showing loss of $* h_{2}$ between consonants (cf. Puhvel HED 1/2: 313). This form, however, must be regarded as a scribal error and emended to e-eš-<ha->na-aš (cf. HW ${ }^{2}$ E: 117). Moreover, Skt. asnás cannot reflect * $h_{1} e s h_{2}$ nós as the latter form should regularly yield **asinás. It therefore is likely that Skt. asnás is a quite recent formation, taking over the word into the productive hysterodynamic inflection. The strongest argument against the view that Hitt. išhanāš reflects * $h_{1} e s h_{2} n o ́ s, ~ h o w e v e r, ~ i s ~ t h e ~ f o l l o w i n g . ~ I f ~ i s ̌ h a n a ̄ s ̌ ~ i n d e e d ~$ would reflect $* h_{1} e s h_{2} n o ́ s$, it would synchronically have to be phonologically interpreted as /RisHnā́s/, showing a cluster /-sHn-/. If so, then I cannot understand why this word is consistently spelled $i \check{s}-h{ }^{2} a-n a-$ and never $* * i \check{s}-a h-n a-$ as e.g. pár-ha-zi besides pár-ah-zi/párHt ${ }^{\text {si}} \mathrm{i}$. Moreover, the one spelling $i s ̌-h a-a-n a-a s ̌$ in my view shows that the $-a$ - of the suffix syllable was real. I therefore interpret $i s ̌-h a$ -na-a-aš phonologically as /RisHanā́s/, which must reflect *hesh enós. This
interpretation coincides with our view that neuter $r / n$-stems in principle were proterodynamic in the proto-language, showing a structure *CéC-r, *CC-én-s.

All in all, I conclude that e-eš-har, iš-ha-na-a-aš must reflect (virtual) *h $h_{1} e ́ s h_{2} r$, $* h_{1} e s h_{2} e n o ́ s$, from PIE * $h_{1} e ́ s h_{2} r, * h_{1} s h_{2} e ́ n s$. Note that the full grade suffix syllable is still visible in Lat. sanguen $<* h_{1} s h_{2} e n$-. The phenomenon that in synchronic Hittite we find a hysterodynamic accentuation of an original proterodynamic word is also found in uttar / uddan- 'word' and ${ }^{\text {(GI, GIŠ) }}$ pattar / pattan-' 'basket'. Note that this is not the case in e.g. ūātar, uitenaš 'water' and pahhur, pahhuenaš 'fire' that both are original proterodynamic $r / n$-stems, too, but still show show accentuation on the suffix syllable in the oblique cases (/uidénas/ and $/ \mathrm{paH}^{\mathrm{w}}$ énas/). It cannot be coincidental that in all three words of the first group, išhan-, uddan- and pattan-, the original ${ }^{*} e$ of the suffix syllable has been coloured to $-a$ - due to a preceding $* h_{2}\left(* h_{1} s h_{2}\right.$-en-, $* u t h_{2}$-en-, $* p t h_{2}$-en- $)$, whereas in uiten- and pahhuen- the *e remained: apparently the colouration to $-a$ - caused an accentual shift from the suffix to the ending.
The bulk of the derivatives show spelling with išh- in the older texts, which is being replaced by $\bar{e} s \check{h}$ - in the younger texts (possibly the result of the NH lowering of $\mathrm{OH} / \mathrm{i} /$ to $/ \mathrm{e} /$ before $-\check{s}$-, cf. § 1.4.8.1.d). Only the formally rather obscure ēšhaškant-, išhaškant- shows a spelling e-eš-ha-aš-k- in OS already (besides $i \check{s}$ - $h a-a \check{s}-k$ - as well in OS, however). Note that besides the old adjective išharuant- (attested in OS texts a few times), we find a younger išhanuuant- in NS texts, which seems to have to be equated with CLuw. ašhanuunant(i)- (note that Kimball (1999: 356) incorrectly cites išhanuuant- as a form in which -r-has been sporadically lost: the adjective is not a participle of the verb $i s ̌ h a r n u{ }^{z i}$, but rather reflects *h $h_{1} e s h_{2} e n-u e n t-$ 'having blood'). On the basis of išharuant-, however, the stem išharu- received some productivity, resulting in forms like ēsharuahh-, išharuieške/a- (as if from a verb išharuiie/a- or išharuae-), and išharū̄l.
ešharrieškeddu : read še!-hur-ri-eš-ke-ed-du, see under šehur
$\bar{e} s ̌ r i-(n$.$) 'shape, image, statue' (Sum. ALAM, Akk. ȘALMU): nom.-acc.sg. e-eš-$ $r i, ~ e-e s ̌-s ̌ a-r i, ~ d a t .-l o c . s g . ~ e-e s ̌-s ̌ a-r i ~(O S), ~ e-e s ̌-r e-e=\check{s-s ̌ i ~(K B o ~} 3.7$ iii 20), e-eš-ri-$i=t-t i(K U B 33.34$ obv. 12), e-eš-ri-ía (KUB 9.28 iv 5), instr. e-eš-ša-ri-t=a$a t=k a ́ n($ KUB 24.13 ii 7 ).

PIE * $h_{1}$ es-ri-

This word must be separated from ${ }^{\text {síG }}$ ēšri- ‘fleece’ (q.v.), which shows commune forms as well (pace Puhvel HED 1/2: 313f.).
Just like edri- 'food', auri- 'look-out' etc., which are derivatives in -ri- from $e d-{ }^{z i} / a d$ - 'to eat' and $a u$ - $^{i} / u$ - 'to see' respectively, ēšri- must be a derivative of the verb $e s \check{L}_{-}^{z i} / a \check{s}-$ 'to be' (q.v.) and reconstructed as *h$h_{l} e s-r i-$. The spelling e-eš$\check{s} a-r i$ - points to /RéSri-/, in which the single $-s$ - of $* h_{1} e s$ - has been fortited to /S/ due to the adjacent $-r$-.

The suffix -ri- is of PIE date as we can see in Skt. áśri- 'sharp edge, angle' ~ Gr. öкрıs 'mountain top' < * $h_{2}$ ék'-ri- (cf. Brugmann 1906: 381-4).
 17.10 iv 2 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 41.1b obv. 21 (MS), KUB 33.54+47 ii 17 (OH/NS), KBo 21.23 i $20(\mathrm{NS})$ ), e-eš-šar-[ri] (KUB 34.76 i 5 ( $\mathrm{OH} / \mathrm{NS}$ )), nom.sg.c. e-eš-riiš (KUB 32.133 i 12 (NS)), acc.sg.c. e-eš-ri-in (KUB 41.1 i 16 ( $\mathrm{OH} / \mathrm{NS}$ )), dat.loc.sg. e-eš-ri (KBo 41.1b rev. 26 (MS)).

The word shows neuter as well as commune forms. As the neuter forms are more numerous and found in older texts than the commune forms, I assume that ${ }^{\text {SíG }} \overline{e s ̌ r} i-$ was neuter originally. Formally, it is homophonic with $\bar{e} s ̌ r i-$ 'image, statue' (q.v.) (although the latter word is neuter only), but semantically, the two words are too different to be equated just like that (pace Puhvel HED 1/2: 313f.). I know of no convincing etymology.
$\boldsymbol{e d} \boldsymbol{-}^{z i} / \boldsymbol{a d}$ - (Ia3 > IIal $\gamma$ ) 'to eat' (Sum. KÚ): 1sg.pres.act. e-et-mi (OH/NS), 2sg.pres.act. e-ez-ši (KBo 22.1 obv. 28 (OS)), [e-ez-za-a]š-ši (KUB 1.16 iii 19 ( $\mathrm{OH} / \mathrm{NS}$ )), e-ez-za-a[t-ti] (KUB 36.13 i 3 (NS)), 3sg.pres.act. $e-z a-a z-z i(\mathrm{OH} / \mathrm{NS})$, $e-e z-z a-z i(\mathrm{MS}), ~ e-e z-z a-a z-z i(\mathrm{OH} / \mathrm{NS}), i-i z-z a-a z-z i(\mathrm{KBo} 27.130$ rev. 6 (NS)), e$e z-z a-i$ (MH/NS), e-ez-za-a-i (MH/NS), 1pl.pres.act. a-tu-e-ni (OS), a-du-e-ni (OS), a-du-ua-ni (Bo 5709 obv. 10 (NS)), e-du-ua-a-ni (KUB 29.1 i 15 $(\mathrm{OH} / \mathrm{NS})$ ), e-du-e[-ni] (Bo 5621 i 6 (undat.)), 2pl.pres.act. [a]z-za-aš-te-e[-ni] (KBo 25.112 ii 2 (OS)), az-za-aš-te-ni (KUB 1.16 iii 34, 48 (OH/NS)), e-ez-za-at-te-ni $(\mathrm{OH} / \mathrm{NS})$, ez-za-at-te-ni $(\mathrm{OH} / \mathrm{NS})$, e-ez-za-te-ni (NS), 3pl.pres.act. $a-d a-a n-$ $z i$ (OS, often), a-ta-an-zi (OS), a-ta-a-an-zi (KBo 3.60 ii 5 (OH/NS)), 1sg.pret.act. e-du-un (OH/MS), 2sg.pret.act. e-za-at-ta (KUB 33.96 iv 20 (NS)), [e-e]z-za-at-ta (KUB 33.112 + 114 ii 4 (NS)), 3sg.pret.act. e-ez-za-aš-ta (HKM 19 obv. 8 (MH/MS)), e-ez-ta (KBo 32.47c iii 1 (MH/MS), KBo 3.60 ii 18 ( $\mathrm{OH} / \mathrm{NS}$ )), e-ez-za-aš (IBoT 1.33, 14 (NS)), ez-za-a-aš (KBo 13.131 iii 13 (MH/NS)), 1pl.pret.act. e-du-u-en (477/u, 13 (undat.)), 3pl.pret.act. e-te-er
( $\mathrm{OH} / \mathrm{MS}$ ), 2sg.imp.act. e-et ( $\mathrm{OH} / \mathrm{NS}$ ), e-ez-za ( $\mathrm{OH} / \mathrm{NS}$ ), 3sg.imp.act. e-ez-du (KUB 43.23 obv. 3 (OH/MS), KUB 31.104 i 8 (MH/MS)), e-ez-za-aš-du (KBo 8.35 ii 20 (MH/MS)), e-ez-za-ad-du (KUB 36.25 i 5 (NS)), e-ez-za-du (KUB 57.79 iv 23 (NS)), 2pl.imp.act. e-ez-te-en (OH/NS), e-ez-za-at-te-en, e-ez-za(-at)tén, e-ez-za-aš-tén, 3pl.imp.act. $a$-da-an-du (MH/MS), e-ez-za-an-du (KUB 9.31 iii 2 (NS)), ez-za-an-du (KUB 54.34 ii 3 (NS)); part. $a$-da-an-t-; verb.noun. $a$-da-(a-)tar, gen.sg. a-da-an-na-aš; inf.II $a-d a-a n-n a, ~ a-d a-a-a n-n a$; impf. $a z-z a-k e / a-$ (MH/MS), az-zi-ke/a- (MH/MS, often).
Derivatives: see ${ }^{(\mathrm{NINDA})} e d r i-$.
Anat. cognates: Pal. ad- 'to eat' (3pl.pres.act. $a-t a-a-a n-t i, a-d a-a-a n\left[-t i^{?}\right]$, impf. 2sg.imp.act. $a z-z i-k i-i)$; CLuw. $\overline{\boldsymbol{a} d} \boldsymbol{d}$ / ad- (2sg.pres.act.(?) $a z-z a-a s ̌-t i-i s ̌$, 2/3sg.pret.act. $a z-z a-a \check{s}-d a, 2$ pl.imp.act. $a-a z-z a-a \check{s}-t a-a n$, 3pl.imp.act. $a-d a-a n-$ $d u$, 2pl.pres.midd. $a z-t u-u-u a-r i$, inf. $a-d u-n a$, part. $a$-da-am-mi-in-zi); HLuw. ád'to eat' (3sg.imp.act. EDERE- $t[u]$ (BULGARMADEN §16), 3pl.imp.act. /Radantu/ á-tà-tu-u (SULTANHAN §33, KAYSERİ §12), $a+r a / i-t u$ (KULULU 5 §11), EDERE-tú (KARKAMIŠ A6 §32), inf. /Raduna/ ${ }^{\text {EDERE }} \dot{a}-r u-n a$ (ÇIFTLİK §16), á-ru'-na (? TOPADA §31), part. "EDERE"-tà-mi-i-sa 'eating' (KULULU 2 $\S 3$ ); broken á-ta-[...] (KARKAMIŠ A13a-c §5)), ádaha- (adj.) epithet of gods who have to eat something ( $\dot{a}-t a-h a-$ (SULTANHAN §33, KAYSERİ §12, KULULU 5 §11)).

PAnat. *Red- / *Rd-
IE cognates: Skt. $a d-$ 'to eat', Gr. $\varepsilon \delta \mu \varepsilon v a l$ 'to eat', Lat. edō 'to eat', Lith. ésti 'to eat', OCS jasti 'to eat', Goth. itan 'to eat'.

PIE * $h_{1} e ́ d-t i / * h_{l} d$-énti
See $H W^{2}$ E: $128 f$. for attestations. The original paradigm of this verb was /Rédmi, PédSi, ?édst ${ }^{\text {s }} \mathrm{i}$, ?duéni, ?dsténi, ?dánt ${ }^{\mathrm{s}} \mathrm{i} /$. In NS texts, we find a few forms that seem to show a stem ezza- ${ }^{i}$ that inflects according to the productive $\operatorname{tarn}(a)$-class: 3 sg.pres.act. ezzāi, 3sg.pret.act. ezzāš, 2sg.imp.act. ezza and 3pl.imp.act. ezzandu. Apparently, the stem $e z z(a)$ - was reanalysed out of the forms where the original stem ed-shows assibilation due to endings beginning in $t$-. Puhvel (HED 1/2: 320) also mentions forms like ezzašši and azzašteni (OS!) as showing this stem, but these forms rather use intricate spellings to denote the cluster $/ \mathrm{ds}(\mathrm{t}) /:$ ezzašši (besides $e$-ez-ši $)=/$ RédSi $/>* h_{1}$ éd-si, azzašteni $=/$ Rdsténi $/<* h_{1} d$-th $h_{l}$ éni. It has been claimed that the HLuwian form "*471" $\dot{a}-z a-i$ (BABYLON 1 §10) shows a similar formation as $e z z(a)_{-}^{i}$, but the meaning of this form is not assured.
The etymological connection with e.g. Skt. $a d-$, Gr. $\dot{\varepsilon} \delta-$, Lat. ed-, etc. 'to eat' was one of the keys to deciphering the Hittite language. On the basis of the long
vowels in Lith. ësti, OCS jasti (< *ěsti) and Lat. 3sg.pres.act. ēst, it has been assumed that the PIE root * $h_{1} e d$ - originally was 'Narten-inflected': * $h_{1} \bar{e} d-/ h_{1} e d-$ (e.g. LIV ${ }^{2}$ ). Oettinger (1979a: 89) therefore assumes that the Hittite paradigm is a remodelling of $* h_{l} e^{e} d-t i / * h_{l} e ́ d-n t i$, replacing $* * e$ - with $a$ - in the plural, yielding ezzazzi / adanzi. This view is followed by e.g. Melchert who states (1994a: 138) that 1 pl.pres.act. $e-d u-u a-a-n i(\mathrm{OH} / \mathrm{NS})$, which seems to reflect a full grade stem, must be a more archaic form in spite of the numerous OS attestations $a-d u-e-n i$ and $a-t u-e-n i$, which show a zero grade stem. This is in contradiction to the facts. All OS attestations of this verb show that the pres.plur.-forms had zero grade in the root: adueni, azzaštēni and adanzi. Only in NS texts, we find that the full grade is introduced in 1 pl. and 2pl., giving eduuāni/edueni and ezzatteni. This is perfectly regular if we compare the other $e / a$-ablauting $m i$-verbs: their OS pres.pl.-forms all show zero grade roots, whereas forms with a full grade root are found from MH times onwards only, which clearly indicates that these full grade forms are secondary. There can therefore be no doubt that the original paradigm of 'to eat' was ezzazzi / adanzi, reflecting a normal root present * $h_{1} e ́ d-t i, * h_{1} d$ énti. Moreover, the entire concept of Narten-inflection should be abandoned (cf. De Vaan 2004). The long vowel and acute intonation found in Balto-Slavic (Lith. ésti and OCS jasti < *ésti) are due to Winter's Law, whereas the long vowel in Lat. $\bar{e} s t$ 'eats' (but short in ĕdō 'I eat'!) is due to Lachmann's Law. We therefore are dealing with a perfect exemple of a PIE root-present with *e/Ø-ablaut: *héd$t i / * h_{l} d$-énti.
Note that in HLuwian the ablaut seems to have been given up: 3pl.imp.act. $\dot{a}$-tà$t u-u$ and $a+r a / i-t u$ show rhotazation of intervocalic $/ \mathrm{d} /$ and therefore must be interpreted as /Radantu/, which contrasts with Hitt. adandu = /Rdántu/.
${ }^{(N I N D A)}$ edri- (n.) 'food' (Sum. ŠÀ.GAL): nom.-acc.sg. e-et-ri, nom.-acc.pl. e-et$r i^{\text {HI.A }}, e t-r i^{\text {HI.A }}$.

Derivatives: edriịe/a- ${ }^{z i}$ (Ic1) 'to feed' (impf.3sg.pres.act. e-et-ri-eš-ke-ez-zi), edriianu- ${ }^{z i}$ (Ib2) 'to feed(?)' (impf.3sg.pret.act. e-et-ri-ia-nu-uš-ke-e[t $\left.{ }^{\text {? }}\right]$ (KUB 39.41 rev. 15)).

Anat. cognates: HLuw. ádri(a)- 'to feed(?)' (3pl.imp.act. EDERE-tà-ri+i-tu (MALPINAR §7)).

PIE * $h_{1} e d-r i-$
Just like auri- 'lookout' and ēšri- 'image' are derived from $a u-{ }^{i} / u$ - and $e s s^{-}{ }^{z i} / a \check{s}-$, edri- 'food' is a derivative in $-r i$ - from the verb $e d^{-z i} / a d-$ 'to eat' (q.v.). See at $\bar{e} s ̌ r i$ - for more information on the suffix -ri-.
euk ${ }^{z^{i}}$ : see eku- ${ }^{z i} / a k u-$
(UDOUL) euan- (n.) a kind of grain; (with det. UDÚL) soup of a kind of grain: nom.acc.sg. e-ua-an (KBo 4.2 i 10, KBo 11.14 i 6, IBoT 3.96 i 12, FHL 4, 12), e-u-uaan (KBo 10.341 23, KBo 25.161 obv. 12, KUB 24.14 i 7, KUB 29.1 iii 9, KUB 29.4 ii 51, 63, iv 17, KUB 42.97, 5, KUB 44.52, 8), gen.sg. e-u-ua-na-aš (KBo 10.34 i 13, 21 (MH/NS)), e-u-ua-aš (KBo 13.227 i 13 (OH/NS), KUB 29.6+ ii 9 (NS), KUB 7.55 obv. 6 (NS)), instr. e-u-ua-ni-i[ $[\mathrm{t}]$ (KUB 51.48, 14 (NS)).
IE cognates: Skt. yáva- 'grain, corn, crop, barley', Lith. jãvas 'grainplant', Lith. javaĭ 'grain', Gr. ̧eıál 'spelt'.

PIE *iéu-on- ?
See $\mathrm{HW}^{2}$ E: 141 for attestations. In the oblique cases, we find forms that point to a stem eưa- (gen.sg. eunaš) and forms that point to a stem eunan- (gen.sg. euuanaš and inst. euuanit). Because all forms are attested in NS texts, we cannot determine on the basis of diachronical ordenings which stem is the original one. Nevertheless, since it is not a normal practice that $a$-stem neuters secondarily take over the $n$-stem inflection, it seems likely to me that the $n$-stem inflection is more original.
The word is predominantly found in lists of edible items, which does not reveal too much about its exact meaning. In KUB 29.1 iii (9) nu še-ep-pí-it e-u-ua-an$n=a$ šu-uh-ha-er nu pa-ak-ku-uš-kán-zi 'they have strewn šeppit and eunua- and crush it' it is likely, however, that eunan-, just as šeppitt- (q.v.), denotes some kind of grain. Puhvel (HED 1/2: 320) interprets the word as 'barley' (which cannot be ascertained, however, cf. $\mathrm{HW}^{2}$ (1.c.)) and plausibly connects it with Skt. yáva'grain', Gr. 乌̌aí 'spelt' and Lith. javaĩ 'grain', reconstructing *iéuo-. Since I regard the $n$-stem as more original, I would adapt this reconstruction to *ieu-on-. Because in Hittite only initial *i- drops in front of $e$ (cf. eka- 'ice' < *iego-) whereas *Hie- yields $i$ - (cf. ianzi 'they go' < *hienti), we cannot reconstruct *Hieuo-, which is sometimes done by scholars who assume that ${ }^{*} \mathrm{Hi}_{-}>\mathrm{Gr} . \zeta$. Nevertheless, since the exact meaning of euan- has not been established, we must regard this etymology with caution.
$e z z a^{-}{ }^{i}$ : see ed- ${ }^{z i} / a d-$
$\boldsymbol{h} \overline{\boldsymbol{a}}^{-{ }^{z i}} / \boldsymbol{h}$ - (Ia2 > Ic2) 'to believe, to trust, to be convinced': 1sg.pres.act. ha-a-mi, 2sg.pres.act. h ha-a-ši, 1sg.pres.act. ha-a-nu-un, 2sg.pret.act. ha-a-iš, 2pl.pret.act. ha-at-tén, 3pl.pret.act. h. ha-a-er, 2sg.imp.act. h ha-a, part. ha-a-an-t-.

IE cognates: ?Lat. ōmen 'omen'.

$$
\text { PIE * } h_{3} e H-, * h_{2} e h_{3^{-}}
$$

See $H W^{2}$ ( $\left.\mathrm{H}: 1\right)$ for semantics and attestations. This verb often is cited as hai(e.g. Puhvel HED 3: 9) or hae- (Oettinger 1979a: 360f.), but the bulk of the attestations point to a stem $h \bar{a}$-. We only once find a form that seems to show a stem hai- (2sg.pres.act. ha-a-iš (KUB 26.89, 14 (NH))), but in my view this form can easily be secondary. It is often stated that this verb inflects like la(i)- (Puhvel 1.c., $\mathrm{HW}^{2}$ l.c.), but this is not necessarily so. The verb $l \bar{a}^{-}{ }^{i} / l$ - (q.v.) must have been $h i$-inflected originally, whereas in the case of $h \bar{a}$ - there is no indication for this (cf. also Oettinger 1979a: $361^{211}$ ). In my opinion, the fact that $h \bar{a} \bar{a}$ - has an initial $h$ - points to original $m i$-inflection as both $* h_{2} e$ - and $* h_{3} e$ - yields Hitt. ha $a$-, but $* h_{2} O-$ and $* h_{3} O->$ Hitt. $a$ - (cf. Kloekhorst fthc.c). If 2 pl.pres.act. ha-at-tén belongs to this paradigm (so Oettinger, but $\mathrm{HW}^{2}$ states that this form hardly can mean 'to trust, to believe'), then we see an ablaut $h \bar{a}-/ h-$.
Formally, $h \bar{a}_{-}{ }^{z i} / h$ - must reflect $* h_{2 \beta} e H-$. From the few etymological proposals (cf. Puhvel 1.c.), only Benveniste's comparison (1962: 10-11) with Lat. ōmen would make sense formally, if we assume that one of the laryngeals of $* h_{2 / 3} \mathrm{eH}$ was $* h_{3}$. Semantically, however, the connection is not without problems.
-hha (1sg.pres.midd.-ending): see -hha(ri)
${ }^{\text {(GIŠ) }} \boldsymbol{h a} \boldsymbol{a} h \boldsymbol{h a l l -}$ (n.) 'greenery, verdure, (wild) vegetation': nom.-acc.sg. ha-a-ah-haal (OS), ha-ah-hal, gen.sg. ha-ah-hal-la-aš, dat.-loc.sg. ha-ah-hal-li, ha-ah-ha-li, erg.sg. ha-ah-ha-al-la-an-za (KBo 13.248 i 12), instr. ha-a-ah-ha-al-li-it (OS), ha-ah-ha-al-li-it, dat.-loc.pl. ḩa-ah-hal-la-aš, erg.pl. haa-ah-hal-la-an-te-eš.

Derivatives: ${ }^{\text {MUNUS }}$ hahhallalla- (c.) a female functionary (nom.pl. ha-ah-ha-(al-)la-al-le-eš), hahhalieške/a- ${ }^{\text {i }}$ (Ic6) 'to become yellow(green)' (3sg.pret.act. ha-ah-ha-li-eš-ke-et), hahhaluuant- '?' (dat.-loc.sg. \& ha-ah-ḩa-lu-ua-an-ti), $\boldsymbol{h a h l a h h}{ }^{i}$ (IIb) 'to make yellow(green)' (impf.3sg.pret.act. hatah-la-ah-hi-iš-k[e$e t]$ ), hahlanieške/a- ${ }^{-i}$ (Ic6) 'to make yellow(green)' (3pl.pret.act. hatah-la-n[i-eš$k] e r$ ), hahlauant- (n.) 'the yellow' (nom.-acc.pl. ha-ah-la-u-ua-an-da), hahlimma- (c.) 'jaundice(?)' (nom.sg. ha-ah-li-im-ma-aš), hahliunant- ( $\mathrm{SIG}_{7}-$ uant-) (adj.) 'yellow(green)' (nom.sg.c. ha-ah-li-u-ua-an-za).

See $\mathrm{HW}^{2} \mathrm{H}: 3$ for semantics and attestations. In OS texts, the stem of this word is hāhhall-, whereas in younger texts we find hahhall-. Most derivatives show a syncopated stem hahl-. The only gloss wedged form, hahhaluuanti, of which the meaning is not clear, is regarded by $\mathrm{HW}^{2} \mathrm{H}$ : 7f. as not belonging to this group of words.
Although the word seems genuinely Hittite (OS attestations already, no aberrant case-forms or spelling variancies, multiple derivatives) I know of no good IE etymology.
-hhahari (1sg.pres.midd.-ending): see -hha(ri)
-hhaharu (1sg.imp.midd.-ending): see -hharu
-hhahati (1sg.pret.midd.-ending): see -hhat(i)
$\boldsymbol{h a i}(\boldsymbol{n}) \boldsymbol{k}^{\text {ta(ri) }}$, hink- ${ }^{\boldsymbol{a}(r i)}$; hi(n)k- $\boldsymbol{k}^{\boldsymbol{z i}}$ (IIIh; Ib3) '(act. trans.) to bestow, to offer; (act. intr.) to bow; (midd.) to bow': 3sg.pres.midd. ha-ik-t[a-ri] (OS) // [ha-i]k-ta-ri ( $\mathrm{OH} / \mathrm{NS}$ ), ha-ik-ta (OH/MS), hé-ek-ta (OS), hi-ik-ta (MS), hi-in-ga (OS), hi-in-ga-ri (MH/MS), hi-in-kat-ta (OH/MS), 3pl.pres.midd. h. ha-in-kán-ta (OS or $\mathrm{OH} / \mathrm{MS}$ ), ḩa-en-kán-t[a] (NS), hi-in-kán-ta (OH/MS), hi-i-in-kán-ta (NS), 3pl.pret.midd. hi-in-kán-ta-ti (MH/NS), hi-in-kán-ta-at (OH/MS); 1sg.pres.act. hii-ik-mi (OH/MS), hi-in-ik-m[i] (NS), [hi-i]n-ga-mi (NS), 3sg.pres.act. hi-ik-zi (MH/MS), hi-in-ik-zi (OH/NS), hi-in-ga-zi (MH/NS), hi-ni-ik-zi (1x, NS), hi-in-ki-ez-z[i] (NS), 1pl.pres.act. hi-in-ku-ua-ni (MH/NS), hi-in-ku-e-ni (NS), 3pl.pres.act. ḩi-in-kán-zi (OH/NS), 1sg.pret.act. ḩi-in-ku-un (NH), 3sg.pret.act. hai-
in-kat-ta (OH/NS), [hi]-in-ik-ta (NS), he-en-ik-ta (MH/NS), 1pl.pret.act. hi-in-ku-u-e-en (NS), 3pl.pret.act. hi-in-ker (OH/NS), 2sg.imp.act. hi-in-ga (NH), hi-in$i[k]$ (NS), 3pl.imp.act. hi-in-kán-du (MH/NS); verb.noun hi-in-ku-ua-ar (OH/MS), hi-in-ku-u-ua-ar (NS), gen.sg. hé-en-ku-ua-aš (OS), he-en-ku-ua-aš (NS), hi-in-ku-ua-aš (OH/NS); inf.I hi-in-ku-ua-an-zi (OH/NS); impf. hi-in-ga-aš-ke/a- (OS), hi-in-ki-iš-ke/a- (MS), hi-in-ki-eš-ke/a- (MH/NS).
Derivatives: hengur / hengun- (n.) 'gift, offering' (nom.-acc.sg. hé-en-gur (OH/NS), dat.-loc.sg. hé-en-ku-ni (OH/NS), nom.-acc.pl. hi-in-ku-ua-ri (NS)), *hinkatar / hinkann- (n.) 'gift' (dat.-loc.sg. IGI.DU ${ }_{8}$.A-an-ni (NS)), hinganu- ${ }^{\text {zi}}$ (Ib2) 'to make bow' (3sg.pres.act. hुi-in-ga-nu-zi (NS)), ${ }^{\text {LÚ }}$ hinkula- (c.) 'offerant' (nom.sg. hii-in-ku-la-aš (OH/NS)), see henkan-.

See Puhvel HED 3: 289f. and 292f. for attestations. The verbal forms that I have treated here under one lemma, are sometimes regarded as belonging to two separate verbs. For instance, Puhvel (1.c.) distinguishes "henk-, hi(n)k- 'bestow, consign, commit, secure, assign, allot, provide, present, offer'" from "he(n)k-, $h i(n) k-$, hai(n)k- 'bow (reverentially), curtsy'". Although indeed at first sight the two meanings 'to bestow' and 'to bow' seem to differ substantially, I regard them as belonging to the same verb for the following reasons. Oettinger (1979a: 171-7) has shown that in OH texts, all active forms denote 'to bestow' and all middle forms 'to bow'. Only in younger texts, we find active forms that, when intransitive, denote 'to bow' as well. Since in my view the meaning 'to bow' can be derived from 'to bestow oneself, to offer oneself', we can easily regard all forms as belonging to one verb. In the active, this verb was transitive and meant 'to bestow something, to offer something'; in the middle it was intransitive / reflexive and meant '*to bestow oneself, to offer oneself' > 'to bow'.
If we look at the formal side of this verb, we see that in the active paradigm we find the stems hik- and haink- (assuming that the spellings hi-in-ik-zi and hi-in-ga$z i$ and the hapax $h i-n i-i k-z i$ stand for $/ H i n k t^{\text {s }} \mathrm{i} /$ ). In the older texts (MS) these show a clear distribution between hik-C and hink-V (compare e.g. li(n)k- ${ }^{z i}$, harni(n)k- ${ }^{z i}$, ištarni(n) $k^{z i}$, etc.). In the younger texts (NS) this distribution is given up, and we here find /Hinkmi/ and /Hinkt ${ }^{\mathrm{s}} \mathrm{i} /$ here as well. Only once, in a NS text, we find a form, hi-in-ki-ez-zi, which seems to show a stem hinkiie/az- according to the very productive -ie/a-class. In the middle paradigm, the stems hik- and hink- are found as well, again showing hik-C vs. hink-V. The stem henk- that occasionally is found in NS texts must be regarded as the result of the NH lowering of $\mathrm{OH} / \mathrm{i} /$ to /e/ before -n- (cf. OH lingai- > NH lengai- and § 1.4.8.1.d).

Besides the stems hik-C, hink-V and henk-, we occasionally find the stems haink- and haik- as well, which show the same distribution regarding the presence or absence of -n-: haik-C vs. haink-V. Yet, the status of these forms is in dispute. E.g. Puhvel (o.c.: 295) regards them as "reverse spellings, a kind of spurious diphthong notation for $e$ ". Melchert (1994a: 144) gives an overview of the other claimed instances where an etymological -e- is spelled hypercorrectly as -ai-. The form appaizzi- instead of normal appezzi- (cited as an example of -ai- for -e-by Puhvel) is regarded by Melchert as "a morphologically renewed form based on the adverb $\bar{a} p p a+$-izzi-". The hapax $a$-ip-ta 'he seized' (KBo 5.6 i $11(\mathrm{NH})$ ) instead of normal e-ep-ta clearly is a scribal mistake of the sing A (If) for the sign E (HI) (only two vertical strokes missing). These two examples are therefore not cogent. The third example, ma-ik-kat-uš 'many' (KUB 26.1 iii $58(\mathrm{NH})$ ) instead of expected $m e-e k-k a_{4}-u s ̌$, is regarded by Melchert as a convincing parallel of a 'reverse spelling' of -ai- for -e-, however, and on the basis of this sole example he as well concludes that the 'reverse spelling' of $-e-$ as $-a i$ - is a real phenomenon and that therefore the spellings haik- and haink- do not have to be taken seriously and should be interpreted as standing for hek- and henk- respectively. Apart from the fact that I in principle disagree with dismissing 6 well-attested spellings, most of which occur in OS and MS texts, on the basis of one form in a NH text, I doubt the status of the form "ma-ik-ka $-u s{ }^{\prime}$ ". If we look closely at this form in the handcopy of KUB 26.1, 共, we see that it in fact does not read ma$i k-k a_{4}-u \check{s}$, but rather $k u-i k-k a_{4}-u \check{s}$ (for the clear distinction between the signs MA and KU in the handwriting of this scribe compare e.g. the form of these signs in
 basis of which it is fully clear that the sign in line 58 should be read KU instead of MA). This means that this form does not show a 'reverse spelling' of $-e$ - as -aiat all: the spelling $k u-i k-k a_{4}-u s{ }_{s}$ can only be regarded as a (rather big) scribal mistake for correct me-ek-ka ${ }_{4}$-uš, and not as the result of the scribe's desire to archaize the text by 'reversing' an -e- to -ai- on the basis of his awareness that in older times an original $*_{\text {-ai- contracted to }-e \text {-. All in all, I conclude that the }}$ spellings haik- and haink- must be taken seriously phonetically. They show that the original stem was hai(n)k-. Already in OS times this hai(n)k- was contracted to he(n)k- and slightly later on it became hi(n)k- on the basis of the raising of -ein front of -nk-. In NH times, the stem hink- developed into henk- again due to the NH lowering of $\mathrm{OH} / \mathrm{i} /$ to /e/ before $-n$ -

The original stem hai(n)k- should also be taken as the basis for etymological considerations. Nevertheless, most proposed etymologies are based on the idea that the basic form of this verb is henk-. In order to explain the $-e$ - that is adjacent
to $h$-, the magic wand of Eichner's Law is used and henk- is subsequently reconstructed as $* h_{2} \bar{e} n K$-. E.g Oettinger (1979a: 175f., referring to Pedersen 1938: 183f.) connects "henk-" with Gr. ávó $\gamma \kappa \eta$ 'fate' and OIr. écht 'killing' and reconstructs * $h_{2} \bar{e} n k$-. The semantic connection between Hitt. "henk-" 'to bestow' and Gr. 'fate' and Ir. 'killing' is explained through the "semantische Bindeglied" henkan- 'fate, death' (q.v.). Others have proposed a connection with Gr. $\varepsilon$ ve $\gamma \kappa \varepsilon \tilde{v} v$ 'to bring', OCS nositi 'to carry, to bear' (e.g. Götze \& Pedersen 1934: 50), which is semantically more attractive, but formally impossible as these reflect PIE * $h_{1}$ nek ${ }^{\prime}$-.

In my view, the original stem hai(n)k- can only reflect $* h_{2 / 3}$ einK-. As such, this root violates the PIE root constraints (there are no parallels of roots in -eRRC-). If this verb is of IE origin, we can only assume that it reflects a nasal-infixed stem of a root $* h_{2 / 3} e i K$-. Problematic, however, is the fact that the only other secure example of a nasal-infixed stem of a root *CeiK- shows the structure Ci-nin-K-: nini(n) $k^{z i}$ 'to mobilize' from the root *neik- (cf. § 2.2.4). Moreover, we would not expect a nasal-infix in a middle paradigm. All in all, at this moment I do not see any way to convincingly connect this verb with words from other IE languages, neither to give a logical analysis of its form.

Melchert (1984a: $24^{46}$, but retracted in 1994a: 144) proposed to interpret hai(n)k- as a compount $* h_{3} e-h_{l} e n k^{\prime}$-, the second part of which should be the root underlying Gr. ėveүкعiv 'to bring'. As we saw above already, on the basis of OCS nositi 'to carry' e.a., this root must be reconstructed as *he $h_{l} k^{-}$-, which makes Melchert's reconstruction impossible.
halai- $^{i}$ / hali-' (IIa4 > Ic2) 'to set in motion': 1sg.pres.act. ha-la-a-mi (KBo 47.292, 3 (NS)), 2sg.pres.act. ḩa-la-a-ši (KBo 5.9 iii 9 (NH), KUB 36.46, 6 (NS)), 3sg.pres.act. ha-la-a-i (KUB 9.1 ii 32 (MH/NS)), 3pl.pres.act. ha-la-a-an$z i$ (KUB 15.27 ii 3 (NS)), ha-li-en-zi (here? KBo 6.26 iv 14 (OH/NS)), 3sg.pret.act. ha-la-iš (KUB 24.8+ iii 11 (OH/NS)), ha-a-la-eš (here? KUB 36.55 ii 38 (MH/MS?)), 2pl.pret.act. ha-la-it-[t]én (KBo 26.100 i 7 (MS)), 3pl.pret.act. ha-la-a-er (KUB 26.65 iii 5 (NS), KUB 5.25 iv 35 (NS)), ha-a-la-er (KUB 50.37, 14 (NS)).
IE cognates: Gr. ió $\lambda \lambda \lambda \omega$ 'to send off, to stretch forth'.

$$
\text { PIE * } h_{2} l-o i-, * h_{2} l-i-
$$

See $\mathrm{HW}^{2} \mathrm{H}$ : 16 f . for a semantic treatment of this verb. Formally, it is attested both with forms that belong to the $m i$-inflection (hatrae-class) and with forms that belong to the hi-inflection. Because of the fact that almost all forms are found in

NS texts (except 2pl.pret. halaitten), it is not easy to determine to which inflection the verb belonged originally. Nevertheless, the fact that 3 sg .pres. halāi and 3 sg.pret. halāiš are found in MH and OH compositions respectively, it is in my view likely that the $h i$-inflection was the original one. If this is correct, then the verb must have belonged to the dāi/tiiianzi-type (if it belonged to the $d(\bar{a})$ type, it would have had a 3 sg .pret. **halāš (like dāš 'he took') or **halāit (like lāit 'he released', which is a mi-form on the basis of the secondary stem lāi-)). We then expect to find, next to halai-, a stem hali-, which is possibly seen in 3pl.pres.act. halienzi (thus also Puhvel HED 3: 12, but against this $\mathrm{HW}^{2} \mathrm{H}: ~ 16$ ).

Puhvel (l.c.) connects this verb with Gr. lád $\lambda \lambda \omega$ 'to send off', which must reflect * $h_{2} i-h_{2} l-i e / o-$, from a root $* h_{2}$ el-. For Hittite, this means that halai- ${ }^{i} /$ hali- ${ }^{?}$ must reflect *h2l-oi- / *h $h_{2} l$ - $i$ - (see Kloekhorst fthc.a on the formation of the daii/tiianziclass verbs). Note that in this formation, the $o$-grade did not cause the initial laryngeal to disappear (contra Oettinger's account (2004) of arāi $<{ }^{*} h_{3} r o ́ i$-ei due to the 'de Saussure Effect').
For an original homophonic verb, see at haliie/a- ${ }^{z i}$.
hallanna- ${ }^{i}$ / hallanni- (IIa5) 'to trample down, to flatten (fields and plants)': 3pl.pres.act. hal-la-an-ni-an-zi (Bo 3267 obv. 6 (MS)); 3sg.pres.midd. hal-la-an-ni-ía-at-ta-ri (KUB 4.3 ii 9 (NS)); impf. hal-la-an-ni-eš-k[e-...] (KBo 19.112, 17 (MH/NS)).
IE cognates: ?Gr. ő $\lambda \lambda \overline{\mathrm{u}} \mu \mathrm{t}$ 'to destroy', ?Lat. dēleō 'to destroy', ab-olē 'to destroy'.

PIE * $h_{3} e l h_{l^{-}}$?
The verb occurs a few times only, namely in the following text:
KUB 4.3 ii
(6) A.ŠÀ-ni=ma=za=kán an-da TÚL-tar le-e DÙ-ši
(7) $m a-a-a n=m a=z a=k a ́ n$ A.ŠÀ-ni=ma an-da [T]ÚL DÙ-ši
(8) $n u=z a=k a ́ n{ }^{\text {LÚ }} \mathrm{KÚR}-a \check{s} \mathrm{GÌR}=[S ̌] U$ an-da tar-na-at-ti
(9) nu A.ŠÀ-aš=ti-iš ḩal-la-an-ni-ia-at-ta-ri
(10) $i \check{s}-t a l-k i-i-i a-a t-t a-r i$
'You must not make a well in the field. If you do make a well in the field, however, you will let in the foot of the enemy and your field will be $h$.-ed (and) levelled';
as well as in Bo 3267 obv. (see Puhvel HED 3: 13) (6) uelku ḩaršani=šši hallanianzi 'They h. the grass on his head' and KBo 19.112 (17) [...-z]i ar-ha hal-la-an-ni-eš-k[e-...]. The last context is too broken to give a meaningful interpretation, but the first two contexts seem to indicate that, just as ištalkiie/ain KUB 4.3 ii 10, hallanna/i- ${ }^{i}$ denotes the flattening or trampling down of plants and fields. Therefore, $\mathrm{HW}^{2} \mathrm{H}: 18$ translates "zertreten(?), niedertreten(?) o. ä." and Oettinger (1979a: 81) "niederstrecken". Puhvel (1.c.), however, translates "lay waste, ruin, savage, ravage", but apparently does so largely because of an etymological connection with Gr. ő $\lambda \lambda \overline{\bar{u}} \mu \mathrm{t}$ 'to destroy'.
Formally, the verb looks like a imperfective in -anna/i- of a further unattested root *hall-. If from IE origin, this *hall- could reflect $* h_{2 / 3} e l H-$ or $* h_{2 / 3}$ eln-.

As we saw, Puhvel connects this verb with Gr. ő $\lambda \lambda \bar{u} \mu \mathrm{~L}$ 'to destroy', etc., implying a reconstruction $* h_{3}$ elh $h_{l^{-}}$, which was followed by e.g. Melchert (1994a: 82). Because it is less likely to assume that an original meaning 'to destroy' would develop into 'to flatten (fields and plants)', we must assume that if this etymology is correct, the Hittite verb preserves the original meaning of $* h_{3} e l h_{1}$ and that the meaning 'to destroy' as found in Greek and Latin has developed out of this.
$\boldsymbol{h a} \boldsymbol{a} \boldsymbol{l} \boldsymbol{i}-(\mathrm{n}$.$) 'pen, corral (for cows and horses)': nom.-acc.sg. ha-a-li (OH/NS),$ gen.sg. ha-li-ia-aš (OH/NS), dat.-loc.sg. ha-a-li (OH/NS), ha-a-li-ia (NS), ha-liía (NS), abl. ha-a-li-az (OH/MS), ha-a-li-ia-az (MH/NS), ha-li-ia-az (OH/NS), instr. h. ha-a-li-it (NS), nom.-acc.pl. ha-a-li-i_ia (MH/NS), dat.-loc.pl. ha-a-li-ia $a_{x}-a s ̌$ (OS) // [ha-a-li-i] $] a-a \check{s}(\mathrm{OH} / ?) / /$ ha-a-li-aš (OH/NS).

See Puhvel HED 3: 26f. and HW ${ }^{2} \mathrm{H}: 30$ for attestations. The word denotes a pen or corral for cows and horses, which contrasts with ašāuar / ašāun- 'pen (for sheep and goats)' (q.v.). Puhvel translates this word as "lunar halo (in omina)" as well, but only refers to KUB 8.3 rev . (5) [... h] $a$-a-li aš-pu-uz-za LUGAL-an ua$a k-r i-i a-z i ~ k u-i s ̌-k i$ ' [If ... h]alli ašpuzza, someone will become rebelious to the king' for this meaning, of which $\mathrm{HW}^{2}$ (H: 30) states that it must be regarded as belonging with hāli- 'night watch (as a time measurement)'. Puhvel's etymological connection with Gr. ö $\lambda \omega \varsigma$ 'halo' therefore becomes impossible.
Rieken (1999a: 226) connects hāli- with hāla- 'courtyard' and reconstructs a root "* $h_{2}$ el- 'einfassen' o. ä., die zwar außerhalb des Hethitischen nur mit Gutturalerweiterung als *h2elk-/*h2lek- (gr. á $\lambda \varepsilon ́ \xi \omega$ 'wehre ab, beschirme', ai. rákṣati 'hütet, schirmt, bewahrt', aengl. ealgian 'schützen', etc.) erscheint, die sich aber in heth. hai-(i-)la- 'Hof' < *h $h_{2} \bar{e} l-e ́ h_{2}$ - und in ha-a-li- 'Viehhürde' <
*h $h_{2}$ óli- fortsetzt" (1.c.), and which, according to Rieken, also is visible in the noun hališša- 'casting, overlay'. Because the noun hīla- (q.v.) cannot reflect *h $h_{2} \bar{e}-e h_{2}$-, this etymological connection in my view falls apart.
haliie/a- ${ }^{z i}$ (Ic1) 'to kneel down': 3sg.pres.act. ha-li-ida-zi (KUB 8.62 i 4 (NS), KUB 16.72, 7, 23 (NS)), ḩa-li-e[-ez-zi] (KBo 13.106 i 6 (OH/NS)), ha-li-ez-zi (KBo 53.15, 3 (NS)), 3pl.pres.act. ha $a$-[l]i-en-zi (here? KBo 6.26 iv 14 (OH/NS)), ha-li-ia-an-zi (KUB 9.34 i 2 (NS) // IBoT 3.99, 3 (NS)), 3sg.pret.act. ha-li-ia-at (KBo 3.3 i 13 (NH)), 3pl.pret.act. ha-a-li-er (KBo 3.34 iii 12 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-a-li-i-e-er (KBo 3.4 iii $16(\mathrm{NH})$, KBo 4.4 iv $20(\mathrm{NH})$, KUB 19.13 i $51(\mathrm{NH})$ ); 3sg.pres.midd. ha-a-li-ia (KUB 10.11 ii 17 (OH/NS)), ha-li-ia-ri (KUB 12.11 iv 33 (MS?)), ha-a-li-ia-ri (KUB 20.99 ii 5 (OH/NS), KUB 28.82 i 6 (OH/NS), KBo 17.75 i 27 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pret.midd. ha-li-i-i a-at-ta-at (KUB 14.15 iv 29, $32(\mathrm{NH})$, KUB 19.30 i 18 (NH), KBo 5.5 ii 1 (NS), KBo 10.12 i 25 (NH), KBo 10.13 i 25 (NH), KUB 33.106 iv 5 (NS)), ha-li-at-ta-at (KUB 19.49 i 39 (NH)), 3pl.pret.midd. háa-a-li-i̇a-an-da-at (KBo 4.4 iii 47 (NH), KUB 14.15 iii $47(\mathrm{NH})$ ); part. ha-a-li-an-t- (KUB 29.1 iii 3 (OH/NS)); verb.noun. ha-li-ía-tar (HKM 13 obv. 4 (MH/MS), KUB 3.95, 6 (NS)); impf. ha-a-li-iš-ke/a- (KUB 5.6 ii 51 (NS)).

Derivatives: halinu - $^{i i}$ (Ib2) 'to make kneel' (3pl.pres.act. haa-li-nu-an-zi (KUB 29.40 iii 47 (MH/MS), KUB 29.45 i 14 (MH/MS), KUB 29.50 i 13, 28 (MH/MS)), ha-li-nu-ua-an-zi (KBo 8.49, 7 (MH/MS))), halihla- ${ }^{i}$ / halihli- (IIa5) 'to genuflect, (trans.) to make obeisance to' (2sg.pres.act. ha-li-ih-la-at-ti (KBo 3.34 ii 21 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pres.act. ha-li-ih-la-i (KUB $14.1 \mathrm{rev} .10(\mathrm{MH} / \mathrm{MS})$ ), 2pl.pres.act. [ha-l]i-ih-la-at-te-ni (KBo 3.23 rev. $13(\mathrm{OH} / \mathrm{NS})$ ); 2sg.pres.midd. ha-li-ih-li-iš-ta-ri (KBo 7.28, $5+\mathrm{KBo}$ 8.92, 4 ( $\mathrm{OH} / \mathrm{MS}$ )), 3pl.pres.midd. ha-li-ihh-li-ía-an-da-a-ri (KUB 29.1 iv 1 (OH/NS)), 3pl.imp.midd. [ha-l]i-ih-li-ia-an-da-ru (Bo 3417 rev. 9 (NS)); impf. ha-li-ih-li-iš-ke/a- (MS)).

PIE *h $h_{2} l$-ói-ei $/ * h_{2} l$-i-énti
See Puhvel HED 28f. for attestations. The bulk of the forms are attested in NS texts. They all show the -ie/a-class. Since this class is quite productive in NH times, it is not necessarily the case that this verb was -ie/a-inflected originally, however. Although the spelling ha-li- is the most common one, we also find a fair number of examples of plene spelling ha-a-li-.
In my view, the exact interpretation of this verb for a large part depends on the analysis of its derivative halihla- ${ }^{i}$ / halihli- 'to genuflect'. This verb, which is inflected according to the $m \bar{e} m a / i$-class, clearly shows a reduplication $/ \mathrm{Hli}-\mathrm{Hla} / \mathrm{i}-/$.

As I have argued under the treatment of the mema/i-class (see $\S 2.2 .2 .2 . \mathrm{h}$ ) the verbs that belong to this class used to belong to the dāi/tiianzi-class. In this case, halihla/i- therefore must go back to *halihlai- ${ }^{i}$ / halihli-. In my view, we must draw two conclusions from this analysis. First, the basic verb was dāi/tiianziinflected as well. Second, the plene spelling ha-a-li- cannot reflect an old situation, since there is no vowel visible in halihlai-/halihli- = /Hli-Hlai- / Hli-Hli-/. So, the verb that is attested as haliie/a- ${ }^{z i}$ only must go back to an original *halai- ${ }^{i}$ / *hali-.
This outcome means that originally, this verb was homophonic to the verb halai- ${ }^{i}$ / hali- 'to set in motion' (q.v.). This may explain the fact that in 'to kneel down' no specific forms of the dāi/tiianzi-class have survived into the NH period: to avoid the homophony, halai- / hali- 'to kneel down' was fully taken over into the -ie/a-class, whereas halai- ${ }^{i}$ / hali- 'to set in motion' was partly taken over into the hatrae-class.

Etymologically, also *halai- ${ }^{i}$ / hali- 'to kneel down' can hardly reflect anything else than *h2l-oi- / * $h_{2} l-i-$. Nevertheless, I know no good comparandum. Puhvel's attempt (1.c.) to connect it to the 'elbow'-words like Gr. $\dot{\omega} \lambda \varepsilon ́ v \eta$, Lat. ulna etc. is abortive. Not only the semantics are wrong (the meaning 'elbow' is very consistent throughout the IE languages), the formal side is difficult as well: the elbow-words seem to reflect $* \mathrm{Heh}_{3} l$-en- or $* h_{3} \mathrm{eHl}$-en-, which does not fit $* h_{2} l$-oi/ *h $h_{2} l-i$-.
halīna- (gender unclear) 'clay(?)’: gen.sg. ha-li-i-na-aš (OS).
IE cognates: Gr. à $\overline{\text { Îveverv }}$ 'to anoint, to smear', Lat. linō, lēvi 'to rub, to smear'. PIE * $h_{2}$ liH-no- ??

The word occurs in the genitive only, describing teššummi- 'cup(?)' and zēri'cup'. A translation 'clay(?)' (thus $\mathrm{HW}^{2} \mathrm{H}: 43$, Puhvel HED 3: 32) is a possibility but is not ascertained. On the basis of this meaning, Puhvel (l.c.) suggests a connection with Gr. á $\lambda \bar{i} \mathrm{v} v e \mathrm{v} v$ 'to smear' and Lat. linō 'to smear' that reflect a root *h2leiH- (cf. $\mathrm{LIV}^{2}$; note that the $-n$ - in these forms are from the nasal present). If this connection is jusified, Hitt. halīna-would reflect *h2liH-no-.
halki- (c.) 'barley; grain' (Sum. ŠE): nom.sg. hal-ki-iš (MH/MS), acc.sg. hal-kiin (OS), gen.sg. hal-ki-aš (OS), hal-ki-ia-aš (OS), dat.-loc.sg. hal-ki-i (MH/MS), abl. hal-ki-ia-za, hal-ki-ia-az, instr. hal-ki-it (OS), nom.pl. hal-ki-e-eš (MH/MS), hal-kl ${ }^{\text {HI.A }}-a s ̌ ~(M H / M S), ~ h ̧ a l-k i ~(H I . A) ~-u s ̌ ~(N S), ~ a c c . p l . ~ h a l-k i-u s ̌ ~(M H / M S), ~ h a l-k i ~ i t . A ~-~$ $u s ̌$ (MH/MS), ḩal-ki ${ }^{\text {HIA }}-a s ̌$ (MH/MS), hुal-ki-ía-aš (NS).
 hal-kiš, acc.sg. ḩal-ki-in (OS), hal-ki-en, gen.sg. hal-ki-aš, hal-ki-ía-aš, dat.loc.sg. hal-ki-i्2a (OS), hal-ki).

The word is abundantly attested from OS texts onwards. Within Anatolian, the Lycian form qelehi is often regarded as a cognate (e.g. Melchert 1993a: 60; 2004a: 55). This word is the nom.sg.c. of a genitival adj. of a divine name qele/iwhich was first equated with Hitt. ${ }^{\text {d HeHalki- by Neumann (1979b: 270). Neumann }}$ himself admits himself, however, that this equation is based on a slight formal similarity between the two words only, and not on semantic evidence. As I have shown in Kloekhorst fthc.c, Lyc. $q$ reflects $* h_{2} u$, however, and therefore the connection with Hitt. halki- is untenable.
Although the word is attested in the oldest texts and does not show any specific non-IE characteristics, IE cognates are unknown.
halkuēššar / halkuē̌̌n- (n.) 'supplies (for festivals)' (Akk. MELQĒTUM): nom.acc.sg. hal-ku-eš-šar, hal-ku-e-eš-šar, hal-ku-i-eš-šar (KUB 12.66 iv 5), gen.sg.(or dat.-loc.pl.) hal-ku-e-eš-na-aš (KUB 13.1 iv 3), hal-ku-iš-ša-na-š=a (KUB 13.2 iv 12), dat.-loc.sg. hal-ku-eš-ni, nom.-acc.pl. hal-ku-eš-šar ${ }^{\text {HIIA }}$.

IE cognates: Skt. árhati 'to earn, to be worth', YAv. arəjaiti 'to be equal', Gr. $\dot{\alpha} \lambda \varphi \alpha ́ v \varepsilon \iota v$ 'to bring in as profit', à $\lambda \varphi \varepsilon \tilde{\tau} \nu$ (aor.) 'to earn, to obtain', Lith. algà 'salary, pay'.

$$
\text { PIE * } h_{2} l g^{w h}-e ́ h_{l} s h_{l}-r / * h_{2} l g^{w h}-e ́ h_{l} s h_{1}-n-
$$

See $H^{2}$ H: 62f. for semantics and attestations of this word. Puhvel (HED 3: 40f.) plausibly connects halkuēššar with the PIE root $* h_{2} e l g^{w h}$ - 'to yield, to supply'.
haluka- (c.) 'message, announcement, tidings, news': nom.sg. ha-lu-ga-aš (OS), ha-lu-ka-aš, acc.sg. ḩa-lu-kán (OS), ha-lu-ga-an, ha-lu-ka-an, ha-lu-ka ${ }_{4}-a n$, dat.loc.sg. ha-lu-ki (MH/MS), abl. ha-lu-ga-az (MH/MS), instr. ha-lu-ki-it (MH/MS), acc.pl. ha-lu-ku-uš (MH/MS).
Derivatives: haluki- / halugai- (adj.) 'message-..' (nom.sg.c. ha-lu-ki-i[š] (HKM 75 obv. 8 (MH/MS)), nom.pl.c. ha-lu-ga-e-eš (KBo 14.4 i 1)), LÚ halukat(t)alla- (c.) 'messenger, envoy' (Akk. ${ }^{\text {LÚ }}{ }^{T} E_{4}-M U$; nom.sg. ha-lu-ga-tal-la-aš, acc.sg. ha-lu-kat-tal-la-an, ha-lu-ga-tal-la-an, acc.pl. ha-lu-ga-tal-lu-uš (MH/MS)), haluganna- ${ }^{i}$ / haluganni- (IIa5) 'to make an announcement, to bring news' (impf. ha-lu-ga-an-ni-iš-ke/a- (KUB 27.29 iii 17)), haluganae- ${ }^{z i}$ (Ic2) 'to
bring news' (3sg.pres.act. ha-lu-ga-na-iz-zi (KUB 28.4 iii 14)), haluganili (adv.) 'in messenger-fashion' (ha-lu-ga-ni-li (KUB 17.16 iv 4)).
IE cognates: Goth. liugan 'to lie', OCS lbgati 'to lie', OIr. lu(i)ge, lugae 'oath'. PIE * $h_{2} l(e / o) u g^{h}-o-$

See Puhvel HED 3: 44f. for attestations. This word is attested in OS texts already. The basic stem is haluk-, with a thematic noun haluka- and an $i$-stem adjective haluki- / halugai-. Two forms go back to a stem halugan(a)-, namely haluganili and haluganaizzi.
Despite its OS attestation and perfectly normal derivations, it is difficult to etymologize haluka-. Sturtevant (1932a: 8) connected haluka- to Goth. liugan 'to lie', which further belongs with OCS lbgati 'to lie' and OIr. lu(i)ge, lugae 'oath'. Although formally possible (we should then reconstruct $* h_{2} l e u g^{h}$-), the semantic side of this connection is at first sight not self-evident. Nevertheless, if one compares for instance ModEng. to tell stories $=$ 'to lie', then we could imagine how 'to bring news' and 'to lie' are cognate. See at hulukanni- 'carriage' for the claim that this word is a derivative.
Dercksen (fthc.) suggests that the word hulugannum that occurs in the OAssyrian text AKT 1.14 from Kültepe (acc. pl. hu-lu-kà-ni in line 7 and gen.sg. hi-lu-kà-ni-im (with scribal error) in line 30) may be a loanword on the basis of Hitt. acc.sg. halugan.
halzai- ${ }^{\text {i }}$ halzi- $($ IIa4 $>$ Ic1; IIIc $>$ IIIg) 'to cry out, to shout, to call (trans.), to invoke, to recite': 1sg.pres.act. hal-ze-eh-hi (OS, often), hal-zi-ía-mi (KUB 15.23, 19 (NH)), 2sg.pres.act. hal-za-i-it-t[i] (KBo 17.23 obv. 2 (OS)), hal-za-it-ti (KUB 13.3 iv 28 ( $\mathrm{OH} / \mathrm{NS}$ )), hal-ze-eš-ti (KUB 26.88 obv. 8 (NS), KUB 31.136 ii 3 (NS)), [hal-]zi-ia-ši (KUB 26.12 iii 23 (NH)), [hal-z]i-ia-š[i] (KUB 15.1 iii 11 (NH)), hal-zi-ía-at-ti (KBo 5.4 rev. $26(\mathrm{NH})$ ), 3sg.pres.act. hal-za-a-i (OS, often), hal-za-i (OS, less often), 1pl.pres.act. hal-zi-ua-ni (KUB 17.21 iv 11 (MH/MS)), hal-zi-ia-u-e[-ni] (KUB 12.50, 6 (MH/NS)), 2pl.pres.act. hal-zi-ia-at-te-ni (KUB 13.4 iv 17 ( 2 x ) ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. hal-zi-an-zi (OS, often), hal-zi-ía-an-zi (often), 1sg.pret.act. hal-ze-eh-hu-un (OS, often), 2sg.pret.act. hal-za-it[-ta] (KUB 30.10 obv. 9 (OH/MS)), hal-za-it-ta (KUB 1.16 ii $60(\mathrm{OH} / \mathrm{NS})$ ), hal-za-$a[-i t-t a]$ (KBo 18.28 i 3 (NS)), 3sg.pret.act. hal-za-iš (OS, often), hal-za-i-iš (MH/MS), hal-za-a-iš (often), hal-za-a-i-iš (1x), hal-zi-ía-at (KUB 21.16 i 18 (NH)), 1pl.pret.act. hal-zi-e-u[-en] (KUB 23.77a obv. 11 (MH/MS)), hal-zi-ú-en (KBo 5.3 i $40(\mathrm{NH})$ ), hal-zi-ia-u-en (KBo 11.1 obv. 1, 2, 3, 4, 5, 9 (NH)), hal-zi-ia-ú-en (KUB 4.1 ii 2 (MH/NS)), 3pl.pret.act. hal-zi-i-e-er (KUB 29.1 i 25
(OH/NS), KUB 31.68 ii 49 (fr.) (NS)), hal-zi-e-er (KUB 18.56 iii 35 (NS), KUB 18.24 iii 22 (NS)), hal-zi-er (KBo 14.12 iv 33 (NH)), 2sg.imp.act. hal-za-i (HKM 21 rev. 21 (MH/MS), HKM 81 rev. 30 (MH/MS)), hal-za-a-i (KUB 31.115, 7 (OH/NS), KUB 13.2 iii 30 (MH/NS), KBo 18.24 i 14 (NH), KUB 6.45 iii 24 (NH), KUB 21.16 i 20 (fr.) (NH)), 3sg.imp.act. hal-za-a-ú (KUB 36.90 obv. 5 (NS)), hal-zi-ịa-ad-du (KUB 56.48 i 20 (NS)), hal-zi-iš-d[u] (KBo 9.107 rev. 4, 9 (NS)), 2pl.imp.act. hal-zi-iš-tén (KBo 3.1 ii 51 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 28.82 i 18 $(\mathrm{OH} / \mathrm{NS})$, VBoT 58 i 27, 29, $32(\mathrm{OH} / \mathrm{NS})$, KUB $9.11+28.82+$ IBoT 3.98 i 18 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 13.98 rev. 7 (fr.) ( $\mathrm{OH} / \mathrm{NS}$ )), hal-zi-iš-te-en (IBoT 3.89 obv. 6 ( $\mathrm{OH} / \mathrm{NS}$ )), hal-zi-eš-tén (KBo 13.106 i 18 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.imp.act. hal-zi-an-du, hal-zi-ía-an-du; 2sg.pres.midd. hal-zi-ía-at-ta-ri (KUB 26.12 iii 18 (NH)), 3sg.pres.midd. hal-zi-ia (OS, often), hal-zi-i_ia-ri, hal-zi-ri, hal-zi-i्na-at-ta-ri (KUB 25.41 v 11 (NS), IBoT 1.29 obv. 54 (OH/NS)), hal-zi-ia-ta-ri (KUB $25.32+$ 27.70 ii 43 (OH/NS)), 3sg.pret.midd.(?) hal-zi-ia-ti (KBo 3.34 iii 13 (OH/NS)); part. hal-zi-ia-an-t- (MH/MS); verb.noun. hal-zi-i-ia-u-ua-ar (KBo 9.96 i 12 (NS), KUB 30.55 rev. 10 (fr.) (NS), KUB 48.119 obv. 19 (fr.) (NS), KUB 52.79 i 4 (NS)), gen.sg. hal-zi-ia-u-ua-aš, hal-zi-íia-ua-aš; inf.I hal-zi-ia-u-ua-an-zi (KUB 36.89 obv. 24 (fr.), rev. 6, 53 (NS), KUB 21.16 i 12 (fr.) (NH)), hal-zi-ía-u-an-zi (KBo 23.7 i 5 (fr.) (NS), KBo 17.65 lk. Rd. 6 (fr.) (MS), KBo 27.69, 6 (fg.) (NS)); impf. hal-zi-iš-ke/a-, hal-zi-eš-ke/a-.
Derivatives: see halzišša- ${ }^{i}$ / halzišš-.
Anat. cognates: CLuw. halta/i- 'call, appeal (?)' (dat.-loc.sg. hal-ti, hal-[t]e?), halta/i- 'to call, to appeal (?)' (3sg.pres.act. hal-ta-at-ti (in Hitt. context), 3sg.pres.midd. hal-ti-it-ta-ri).
IE cognates: Goth. lapon, ON laða, OE lađian, OHG ladōn, 'to call, to summon, to invite'.

PIE * $h_{2} l t-o i-, * h_{2} l t-i-$
See $H W^{2}$ H: 92f. for an extensive treatment of semantics and attestation places. This verb is abundantly attested from OS texts onwards. It clearly belongs to the dāi/tiiianzi-class. The secondary mi-inflected stem halziie/a-, created on the basis of a wrong analysis of 3pl.pres.act. halziianzi, is sporadically found in NH and NS texts. The Luwian forms that are regarded as cognate, are not ascertained regarding their meaning and therefore should be used with caution.
Puhvel (HED 3: 63f.) plausibly connects halzai- ${ }^{i}$ / halzi- with Goth. lapon etc. 'to call, to summon' (derived of a noun $*$ lot $\bar{a}-$ ), which points to a root $* h_{2}$ let-. Puhvel (1.c.) assumes a Schwebe-ablaut * $h_{2} e l-t-$, $* h_{2} l-e t-$, but this is unnecessary. As I have shown in Kloekhorst fthc.a, the dāi/tiianzi-class consists of verbs that
show an ablauting *-oi-/-i-suffix attached to the zero grade of the verbal root. In the case of halzai-/halzi- this means that it goes back to $* h_{2} l t$-oi- / $* h_{2} l t-i$-. The assibilation of the root-final $-t$ - in front of $*-i$ - in the weak stem spread throughout the paradigm (cf. the same principle in zai- ${ }^{i} / z i$ - 'to cross').
For the impf. halzišša- ${ }^{i}$ / halzišš- see at its own lemma.
halzišša- ${ }^{i}$ / halzišš- (IIa1 $\gamma:$ impf. of halzai- ${ }^{i} /$ halzi-) 'to cry out, to call': 1sg.pres.act. hal-zi-iš-ša-ah-hi (MH/MS), 2sg.pres.act. hal-zi-iš-ša-at-ti (MH/MS), hal-ze-eš-ša-at-ti (KBo 18.24 i 7 (NS)), 3sg.pres.act. hal-zi-iš-ša-i (OS, often), hal-zi-iš-ša-a-i (OS), hal-ze-eš-ša-i (KUB 17.7 iii 15 (NS), KUB 36.89 obv. 24 (NS)), hal-zi-ša-i (KUB 10.72 ii $20(\mathrm{OH} / \mathrm{NS})$ ), 1pl.pres.act. hal-ze-$e-e[\check{s}-\ldots]$, 2pl.pres.act. hal-ze-eš-ša-at-te-ni (KBo 12.110, 8 (NS)), 3pl.pres.act. hal-zi-iš-ša-an-zi (OS, often), hal-ze-eš-ša-an-zi (NS), hal-zi-ša-an-zi (KUB 17.35 iii 10 (NS), KUB 30.56 iii 8 (NS)), 2sg.pret.act. hal-zi-iš-ši-iš-ta (KBo 16.1 iii $11(\mathrm{NH})$ ), hal-ze-eš-še-eš-ta (KBo 3.4+ ii $12(\mathrm{NH})$ ), 3pl.pret.act. [hal-]zị-iš-šier (KBo 18.66 obv. 9 (MS)), hal-ze-eš-šer (KBo 3.4 i 24 (NH), KBo 16.1 i 37 (NH)), 2sg.imp.act. ḩal-zi-iš-ša (KBo 20.31 obv. 6 (OS)), 3pl.imp.act. hal-zi-iš-ša-an-du (KUB 33.120 ii 59, 62 (MH/NS)), hal-ze-eš-ša-an-du (KUB 1.16 iii 57 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 24.8 iii 14 ( $\mathrm{OH} / \mathrm{NS}$ )).

PIE * $h_{2} l t-i$-só $h_{1}$-ei $/ * h_{2} l t-i-s h_{1}$-énti
This verb is an imperfective in -šš(a)- of the verb halzai- ${ }^{i}$ / halzi- 'to cry out, to call' and belongs to the small group of imperfectives in -šš(a)- (next to $\bar{l} s \check{s}(a)$-, šišš(a)- and unarrišš(a)-). The oldest forms (OS and MS) are all spelled hal-zi-iš-, whereas a spelling hal-zi-eš- occurs in NS texts only. This is due to the NH lowering of $\mathrm{OH} / \mathrm{i} /$ to /e/ before $-s \check{c}$-, cf. § 1.4.8.1.d (similarly in $\bar{s} s ̌ s ̌(a)->\bar{e} s \check{s}(a)-$, šišš(a)-> šešš(a)- and uarrišš(a)-> unarrešš(a)-). See at halzai-/halzi- and -šš(a)for further etymological treatment.
hamank- ${ }^{i}$ / hame/ink- (IIa3) 'to tie, to betroth': 1sg.pres.act. [h]a-ma-an-ga-ah-hi (KBo 12.96 i 20 (MH/NS)), ha-ma-an-ga-mi (KUB 41.18 ii 12 (MS?), KUB 9.31 iii 24 (NS)), ha-ma-an-kạ́m-mi (KBo 13.72 obv. 6 (NS)), ha-ma-an-ak-mi (KBo 23.113 iii 20 (NS)), [ha-me-]en-ki-mi (IBoT 3.99, 12 (NS)), 3sg.pres.act. ha-ma-an-ki (KBo 35.94, 7, 10 (NS), KBo 40.133, 6 (NS), KUB 47.35 i 13 (NS), KBo 12.112 obv. 6, 7, 9 (NS), KBo 4.2 i 28, 31, 34, $36(\mathrm{OH} / \mathrm{NS})$, KBo 5.1 iv 7 (MH/NS), KUB 11.20 i 6 (OH/NS), etc.), ha-ma-ak-zi (KUB 24.9+JCS 24 ii 47 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-ma-an-ga-[zi] (KUB 4.47 obv. 19), 3pl.pres.act. ha-mi-in-kán-zi (KUB 2.3 ii 24 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-me-in-kán-zi (KBo 39.14 i 2, 3 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-ma-
an-kán-zi (KUB 10.91 ii 4 (OH/NS)), KUB 39.24 rev. 5 (OH/NS), KBo 44.222, 12 (NS), KBo 21.34 iii 43, iv 13, 15 (MH/NS), KUB 60.161 ii 38 (MH/NS), HT 1 iii 15 (NS), KUB 43.49, 13, 15 (NS), KUB 41.31 ii 13 (MS?), KUB 17.18 iii 16 (MH/NS)), ha-ma-an-ga-an-zi (KUB 41.18 ii 13 (MS?), KUB 9.32 obv. 11 (NS)), 1sg.pret.act. ha-ma-an-ku-un (KUB 58.108 iv 12 (MH/NS)), 3sg.pret.act. hámi-ik-ta (KBo 3.8+ iii 3, 4, 8, 9, 10, 11, 12, 13 (OH/NS), KUB 7.1+ iii 35, 36, $37,38,42(\mathrm{OH} / \mathrm{NS})$, KBo $22.128+145$ iii $3,5,6(\mathrm{OH} / \mathrm{NS})$ ), ha-ma-ak-ta (KUB 51.33 i 13 (NS), KUB 26.91 obv. 9 (NS)), ha-ma-na-ak-ta (KUB 14.4 ii 10 (NH)), 3sg.imp.act. ha-me-in-kad-du (KBo 10.45 iv 27 (MH/NS)), 3pl.imp.act. ha-mi-in-kán-du (KUB 7.41 iv 26 (MH/NS)), ha-ma-an-kán-du (KUB 21.38 obv. $64(\mathrm{NH})$ ); 3sg.pret.midd. ha-mi-ik-ta-at (KBo 22.128+145 iii 4 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB $7.1+$ iii $34,40,41(\mathrm{OH} / \mathrm{NS})$, KBo $3.8+$ iii $33(\mathrm{OH} / \mathrm{NS})$ ), 3pl.pret.midd. ha-me-in-kán-ta-at (KBo 12.100 i 4, 10 (NS)), ha-me-en-ga-an-ta-at (KBo 12.100 i 6, 7 (NS)), ha-me-en-kán-ta-at (KBo 12.100 i 9 (NS)), ha-mi-en-kán-ta-at (KBo 12.100 i 19, 20 (NS)); part. ha-mi-in-kán-t- (KBo 17.15 obv.? 12 (OS), KBo 23.74 ii 13 ( $\mathrm{OH} / \mathrm{MS}$ ) ), KBo 17.105 iii 11 (MH/NS), KUB 27.67 ii 13 (MH/NS), KUB 9.28 iv 3 (MH/NS)), ha-me-in-kán-t- (KBo 6.3 ii 11 (OH/NS), KUB 27.67 iii 18 (MH/NS)), ha-am-me-en-kán-t- (KBo 6.5 iii $6(\mathrm{OH} / \mathrm{NS})$ ), ha-am-mi-in-kán-t- (HKM 116, 39 (MH/MS)), ha-ma-an-kán-t- (KUB 59.43 i 14 (NS), KUB $12.51+$ i 8 (NS), KUB 15.31 ii 21 (MH/NS), KUB 22.20, 2 (NS), KUB 58.107 iv 10 (MH/NS), etc.); verb.noun ha-me-en-ku-ua-a[r] (KBo 1.38 rev. 6 (NS)), ha-me-in[-ku-ua-ar] (KBo 1.38 rev. 4 (NS)), gen. ha-ma-an-ku-ua-aš (KUB 20.66 iii 4 (OH/NS)), ha-me-en-ku-ua-aš (KUB 30.48, 14 (OH/NS)), ha-mi-i[n-ku-ua-aś] (KUB 7.1+ iii 62 ( $\mathrm{OH} / \mathrm{NS}$ )); impf. ha-me-in-ki-eš-ke/a- (KBo 11.11 i 5 (NS)).
IE cognates: Gr. ${ }^{\alpha} \gamma \chi \omega$ 'to tie up, to strangle', Lat. angō 'to throttle, to choke, to strangle', Skt. áṃhas- 'distress, trouble’.

PIE * $h_{2} m$-ón- $\dot{g}^{h}-e i, * h_{2} m-n$ - $\dot{g}^{h}-$ énti
This verb shows two stems, hamank- and hame/ink-. Although in the younger texts the two stems seem to be found randomly within forms (e.g. 3pl.imp.act. haminkandu vs. hamankandu), in the older texts it is clear that hamank- is found in the strong-stem forms, and hame/ink- in the weak-stem forms (cf. OS part. haminkant-).
The etymological connection with Gr. ä $\gamma \chi \omega$ 'to tie up' and Skt. áṃhas'distress' etc. is generally accepted (cf. Puhvel HED 3: 67; Oettinger 1979a: 148) and points to a root $* h_{2} \mathrm{emg}^{h}-$.
The synchronic ablaut a/e is explained by many scholars as reflecting an original ablaut *o/e (cf. especially Jasanoff 2003). In my opinion, this view is
problematic as no other IE language shows such a verbal ablaut pattern. I therefore assume that, although hamank- indeed reflects an $*_{o \text {-grade }}$ form *h2 móng ${ }^{h}$-ei, the stem hame/ink- must be the outcome of a zero grade form $* h_{2} m n g^{h}$-énti, showing the development $* C N N C>C N i N C$. For this latter development and a treatment of the prehistory of this nasal present, see § 2.2.4.
hammaša- (gender unclear) '?’: gen.sg. h్ ha-am-ma-ša-aš (KBo 10.10 iv 9).
The word occurs only once, in KBo 10.10 iv (9) ŠA É.GAL ha-am-ma-ša-aš 'of the palace of hammaša-'. Laroche (1962: 29) compares this term with ÉGAL hu$u h-h a-a s ̌$ 'the palace of the grandfather' (attested several times) and therefore equates hुammaša- with Luw. ḩamsa/i- 'grandchild' (see at haāšša- 'descendant' for full citation of the Luwian words). This interpretation is widely followed (e.g. HW Erg. 3: 13: "kleines Kind"; Puhvel HED 3: 68: "grandchild"), but $\mathrm{HW}^{2}$ (H: 120) casts doubt: it is rightly argued that although the term 'palace of the grandfather' refers to a specific building (namely the palace of the grandfather of the present king), a term 'palace of the grandson' does not make much sense. $\mathrm{HW}^{2}$ suggests to rather interpret hammaša- as a personal name.
All in all, a connection between hammaša- and the words for 'grandson' in the other Anatolian languages is far from assured and phonetically impossible if we
 'offspring' < *h $h_{2}$ msósio- (see under hāaš- ${ }^{i}$ / hašš- 'to give birth').
hamenk-: see hamank- ${ }^{i}$ / hame/ink-
hamešha- (gender unclear) 'spring' (Sum. Ú.BAR ${ }_{8}$, Akk. DÏŠĪ): acc.sg. ḩa-meš-ḩa-an (KUB 50.90, 20 (NS)), gen.sg. hatme-eš-ha-aš (KUB 12.2 ii 10 (NS)), ha me-iš-ḩa-aš (KUB 38.32 rev. 21 (NS)), ḩa-mi-eš-ha-aš (KBo 13.231 obv. 2 (NS)), dat.-loc.sg. ha-me-eš-hi (often), ha-am-me-iš-ȟi (KUB 59.1 iv 16 (NS)), ha-mi-eš-ȟi (IBoT 2.1 vi 10 (NS), KUB 33.5413 ( OH/NS), KUB 42.100 iv 23 (NS)), ḩa-mi-iš-ȟi (KUB 13.32 obv. 7 (NH), KUB 25.23 i 8, 38, iv 8 (NH), KUB 25.18 i 2 (NS)).

Derivatives: hamešhant- (c.) 'spring' (nom.sg. ḩa-me-eš-ha-an-za (often), ha-me-iš-ha-an-za (KBo 2.7 rev. 4 (NS), KUB 7.24 obv. 11 (NS), KUB 8.6 obv. 6, 8 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-mi-eš-ȟa-an-za (KBo 2.5 iii 38 (NH), KUB 60.27 rev. 12 (NS)), ḩa-meš-ha-an-za (KBo 2.7 rev. 16 (NS)), ḩa-mi-iš-kán-za (KUB 38.26 rev. 1 (NS)), ḩa-mi-eš-kán-zi (KUB 38.26 rev. 19 (NS)), acc.sg. ha-mi-eš-hha-an-tanx (KUB 4.4 obv. $5(\mathrm{NH})$ ), gen.sg. hatme-eš-ha-an-da-aš (often), ha-me-iš-ha-an-
da-aš (KUB 25.2 vi 24 (OH/NS)), ha-mi-iš-ha-an-ta-aš (KUB 15.21, 14 (NS)), ha-mi-iš-ha-an-da-aš (KUB 24.1 ii 4 (NS)), ha-am-me-eš-ha-an-ta-aš (KBo 19.128 vi 33 (NS)), ha-am-mi-iš-ha-an-ta-aš (KBo 24.118 vi 7 (NS)), dat.-loc.sg. ha-me-eš-ha-an-ti (KBo 24.119 iii 12 (NS)), [h]a-mị-iš-ha-an-ti (KBo 19.5, 5 ( $\mathrm{OH} / \mathrm{NS}$ )), all.sg. ha-me-eš-ha-an-da (KBo 6.2 iv 60 (OS), KBo 6.3 iv 60 ( $\mathrm{OH} / \mathrm{NS}$ )), abl. ha-me-eš-ha-an-da-za (KUB 56.14 iv 5 (NS)).
IE cognates: Gr. á $\mu \alpha ́ \omega$ 'to cut, to mow', OHG māen, OE māwan 'to mow'.

$$
\text { PIE *h } h_{2} \mathrm{meh}_{1}-\mathrm{sh}_{2} \mathrm{O}-
$$

See $\mathrm{HW}^{2} \mathrm{H}$ : 121f. for semantics and attestations. Despite the fact that I here have cited hamešhant- as a derivative of hamešha-, the two stems function as one word, just as zena- and zenant- 'autumn' and $\operatorname{gim}(m)$ - and gimmant- 'winter'. The gender of the stem hamešha- cannot be determined due to the lack of genderspecific forms. It seems as if the two stems show a distribution per case: the stem hamešha- is not found in the nom.sg., whereas nom.sg. hamešhanza is found numerous times. The acc.sg. is sporadic for both stems (both attested only once). The gen.sg. is found 4 times only with the stem hamešha-, whereas numerous times with hamešhant-. The dat.sg., however, is attested only twice for hamešhant- whereas hamešhi is attested multiple times.

The oldest (OS ha-me-eš-ha-an-da) and most common spelling is ha-me-eš-ha-, whereas the alternative spellings (ha-me-iš-ha-, ha-mi-eš-ha-, ha-mi-iš-ha- and ha-am-mi- or ha-am-me-) are all found in NS texts only. In one NS text we find a spelling hameškant-, but this is not to be taken seriously phonologically.
The word denotes 'spring', which contrasted with the two other seasons $\operatorname{gimm}(a n t)-$ 'winter' and zena(nt)- 'autumn'. The fact that hamešha(nt)- is written with the sumerogram Ú. $\mathrm{BAR}_{8}$ 'harvest' as well, shows that this season also was the time of harvesting.
The word has received many etymological proposals, for which see Puhvel HED 3: 73f. Most of these proposals are phonetically impossible, however. For instance, Goetze's reconstruction *Hant-uesHa- 'front-spring' (1951: 471), which builds on a connection with Skt. vasantá-, Gr. ěa $\rho$, Russ. vesná 'spring', would not yield Hitt. hamešha- according to our understanding of Hittite historical phonology. Moreover, the word for 'spring' found in the other IE languages must be reconstructed as *ues-r, *ues-n-, and not as *uesh $2_{2}$. Similarly, Hoffner's interpretation *hant-miiasha- (of mai-/mi- 'to grow') (1974: 15) is phonetically impossible.

In my opinion, we should rather return to Sturtevant's proposal (1928c: 163-4) to connect hamešha- with Gr. d̉ $\mu$ á $\omega$, OE māwan 'to mow'. These latter verbs
point to a root $* h_{2}$ meh $_{l^{-}}$(note that Gr. $\dot{\alpha} \mu \alpha \dot{\alpha} \omega$ probably is derived from the noun ${ }_{\alpha} \mu \eta<* h_{2} m h_{1}-e h_{2^{-}}$, cf. Schrijver 1990: 20), which would mean that hamešhareflects *h ${ }_{2}$ meh $_{1}-$ sh $_{2} o$ - (see tešha- 'dream' and damme/išh $\bar{a}$ - 'oppression' for the suffix -šha- < *-sh $2_{2} o-$ ). Semantically, this etymology fits the fact that hamešha- is the season in which harvest took place, as we see by the use of the sumerogram Ú. $\mathrm{BAR}_{8}$. Puhvel (HED 3: 74) is sceptical about this etymology because in his view deriving hamešha- "from a nonattested verb remains dubious". This scepsis can be nullified by my claim that the root $* h_{2} m e h_{l^{-}}$is visible in the Hittite verbs $\bar{a} n s \check{s}^{i}$ and hane/išš- ${ }^{-i}$ 'to wipe'. It is remarkable that these latter verbs show an $s$ extension of $* h_{2}$ meh $_{1}$ - besides the nominal suffix -sh $h_{2}$ - in hamešha-, which reminds of the situation of tamā̌̌š-zi tame/išš-, which shows a verbal $s$-extension besides the nominal suffix $-\mathrm{sh}_{2} \mathrm{O}$ - visible in damme/išh $\bar{a}-$.
hamink-: see hamank- ${ }^{i}$ / hame/ink-
hamišha-: see ḩamešha-
hā̄n- ${ }^{i}$ / han- (IIa2 > Ic1) 'to draw (liquids)': 1sg.pres.act. ha-a-ni-ia-mi (KUB 30.26 i 18 (NS)), 3sg.pres.act. ḩa-a-ni (OH/MS, often), 1pl.pres.act. ha-a-nu-mé-$e-n i$ (KBo 23.27 ii 27 (MS)), 3pl.pres.act. ha-a-na-an-zi (KUB 32.72 obv. 10 (MS), KBo 23.27 ii 30 (MS), KUB 31.57 i 25 (OH/NS)), ha-na-an-zi (KBo 10.31 ii 14 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 13.178, 3 (fr.) (NS)), ha-a-ni-ia-an-zi (KBo 23.27 iii 12 (MS)), ha-ni-ia-an-zi (KUB 29.4 i 60 (NS)), ha-a-ni-a[n-zi] (KUB 55.63 ii 17 (NS)), 3pl.pret.act. ha-ni-er-r=a=at (KUB 44.56 rev. 1 ( OH ?/NS)), ha-a-ner (KUB 54.31 obv. 8 (NS)), ha-ni-e-er (KUB 33.106 i 10 (NS)), he-e-ni-r=a-at (KUB 33.34 i $6(\mathrm{OH} / \mathrm{NS})$ ), he-e-ni-er (KUB 33.34 i $8(\mathrm{OH} / \mathrm{NS})$ ), he-ni-er (KUB 33.34 i 7 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-a-ni-ia- $r=a-a t(\mathrm{Bo} 6472$, 12 (undat.)), 2sg.imp.act. ha-aan, ha-a-ni, 2pl.imp.act. ha-an-tén (KBo 22.127 i 1 (NS)); inf.I ha-nu-ưa-an-zi (KUB 39.71 i 24 (NS)), ha-nu-ma-an-zi (KUB 29.4 i 59 (NS)); inf.II ha-na-an-na (KUB 32.72 i 5 (MS)); impf. ha-ni-iš-ke/a- (KBo 15.37 v 9 (MH/NS)), ha-a-ni-iš-ke/a- (KUB 47.62, 10 (NS)), ha-a-ni-eš-ke/a- (KBo 25.172 iv 6 (NS)).
Derivatives: ${ }^{\text {DUG }}$ haneššar / hanešn- (n.), a vessel (nom.-acc.sg. [ha-n]e-eš-šar (KBo 11.41 iv 10 (NS)), ha-ne-eš-ša(-)x[...] (IBoT 2.93, 16 (NS)), gen.sg. [ha$n] e-i s ̌-n a-a \check{s}(K B o 11.41$ iv 11 (NS)), ha-ne-eš-n[a-aš] (IBoT 2.93, 17 (NS))).
IE cognates: Gr. äv $\tau \lambda$ oc 'bilge-water', ?Arm. hanem 'to draw out'.
PIE * $h_{2}$ ón-ei, ${ }^{*} h_{2} n$-énti

See $\mathrm{HW}^{2} \mathrm{H}$ : 133f. for semantics and attestations of this verb (cited as han-/hen-). It shows a variaty of stems, namely hān-, han-, hāniie/a- and hen-. The form 3sg.pres.act. hāni is the oldest and most often attested form. The forms with a stem hāniie/a- are all NS and clearly built on 3sg.pres. hāni. As 3pl.pres.act. we find both hānanzi and hananzi. Despite the fact that hānanzi is attested in MS texts, and hananzi in NS texts only, I think that hananzi must be considered the original form, with hānanzi showing secondary introduction of the long $\bar{a}$ from the singular. The stem hen- is found in one NS text only, in the form 3pl.pres.act. henier (note that Oettinger (1979a: 52) cites he-e-ni-er and he-ni-er as MH, but KUB 33.34 must be NS, as can be seen by e.g. young form of the sign IG in obv. 16 (compare now also Košak 2005b: 230, who dates this tablet as "jh."). The forms with hen- must be secondarily formed in analogy to ašanzi $:$ ešer = hananzi : $x$ (similarly erer in the paradigm of $\overline{a r} r^{-} /$ar- 'to arrive' and eker in the paradigm of $\bar{a} k-{ }^{i} / a k k-$ ). All in all, I reckon with an original ablauting verb $h \bar{a} n-{ }^{i} /$ han-.
 and Arm. hanem 'to draw out'. If this connection is justified, then we must reconstruct hāni, hananzi as *h2ón-ei, *h2n-énti. Note that *h2 regularly would have dropped in front of *o in the strong stem *h $h_{2}$ on- (cf. Kloekhorst fthc.c), but was restored on the basis of the weak stem $* h_{2} n$-.
A connection with the vessel ${ }^{\text {DUG }}$ hane/išša- (q.v.) is difficult, despite Rieken's attempt (1999a: 227) to invent an IE scenario to explain hane/išša-. Nevertheless, the sporadic NH secondary remodellings into an $r / n$-stem haneššar / hanešn-, as if it were a verb.noun of hann-/han-, shows that at that time the Hittite speakers folk-etymologically associated ${ }^{\text {DUG }}$ hane/išša- with this verb.
hanna- ${ }^{i}$ / hann- (IIa $\gamma$; IIIh) 'to sue; to judge'; hanneššar hann(a)- ${ }^{i}$ 'to render judgement': 1sg.pres.act. ha-an-na-ah-hi (KBo 19.70 iii 3 (NH)), 3sg.pres.act. ha-an-na-i (KUB 21.17 iii 39 (NH)), ha-an-na-a-i (KBo 3.3 ii 3 (NH), KUB 43.35, 8 (fr.) (MS)), 2pl.pres.act. ha-a[n]-n[a-at-te-ni(?)] (HKM 57 rev. 30 (MH/MS)), ha-an-na-[at-te-ni(?)] (HKM 57 rev. 31 (MH/MS)), 3pl.pres.act. ha-an-na-an-zi (KUB 19.20 rev. $15(\mathrm{NH})$, StBoT 24 iii 72 (NH))), 1sg.pret.act. ha$a n-n a-n u-u n(K U B 14.4$ ii 9 (NH)), 3sg.pret.act. ha-an-ni-iš[-ta] (KUB 36.19, 6 (MH/NS)), 2sg.imp.act. ha-an-ni (HKM 52 rev. 29 (MH/MS), KUB 13.2 iii 31, 32 (MH/NS)), ha-an-ne (KUB 19.14 iv 6 (NH)), 3sg.imp.act. ha-an-na-ú (KUB 13.2 iii 23 (MH/NS)), ha-an-na-a-ú (KBo 3.4 ii 14 (NH), KBo 16.1 iii 14 (NH), ABoT 48, 9 (fr.) ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.imp.act. ha-an-ni-iš-tén (HKM 60 obv. 9 (MH/MS)), ha-an-ni-ě̌-tén (KUB 54.1 ii 43 (NS)), [ h]a-an-n[a]-at-tén (HKM 57. rev. 23 (MH/MS)), ha-an-na-at-te-en (KUB 4.1 i 22, 33, 34 (MH/NS)),

3pl.imp.act. ha-an-na-an-du (KUB 14.17 iii 19 (NH), KUB 19.26 iv 3 (NH), KUB 50.67 1.col. 5 (NS)); 2sg.pres.midd. ha-an-na-at-ta (KUB 30.11+ obv. 3, 6 ( $\mathrm{OH} / \mathrm{MS}$ )), ha-an-na-at-ta-ri (KUB 31.135+ obv. 12 (OH/MS), KUB 31.127+ i 43, 44, 46 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 26.27 iii 12 (fr.) (undat.)), 3sg.pres.midd. ha-an-na-ri (KBo 30.19 i 35 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 30.24 ii $2(\mathrm{OH} / \mathrm{NS})$, KUB 39.14 iv $2(\mathrm{OH} / \mathrm{NS})$, KUB 39.17 ii 3 (OH/NS), KBo 4.10 rev. 23 (NH), KBo 26.24 ii 23? (undat.)), 3sg.pret.midd. haa-an-na-ta-at (78/e rev. 4 (undat.)), ha-an-na-<ta->at (KUB 12.63 obv. 33 ( $\mathrm{OH} / \mathrm{MS}$ )), ha a-an-na-ad-da-a[t $\left.t^{?}\right]$ (KUB 34.51, 5 (NS)), 2pl.pret.midd. ha-an-na-d[u-ma-a]t (KBo 10.45 iii 36 (MH/NS)) // [ha-an-na-]tum-ma-at (KUB 41.8 iii 27 (MH/NS)), 3pl.pret.midd. ha-an-na-<an->ta-ti (KUB 12.26 ii 2 (NS)), 3sg.imp.midd. ha-an-na-r[u] (KBo 3.46 iii 3 ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.imp.midd. ha-an-na$a d-d u-m a-t i$ (KBo 10.45 iii 17 (MH/NS)), ha-an-na-du-ma-ti (KUB 41.8 iii 8 (MH/NS)); part. nom.-acc.sg.n. ha-an-na-an (KUB $13.9+40.62$ iii 19 (MH/NS)); inf.I [h]a-an-nu-ua-an-zi (KUB 13.9+ i 9 (MH/NS)); sup. ha-an-nu-an (KUB 29.39 rev. 8 (NS)); impf. ḩa-aš-ši-ke/a- (KUB 34.84+ i 33, ii 18 (MH/MS), KUB 13.2 iii 10 (MH/NS)), ha-an-ni-iš-ke/a- (KBo 16.42 rev. 5 (MS), KUB 13.20 i 32 (MH/NS), KBo 13.74, 4 (fr.), 5 (fr.) (NS), KUB 6.46 iii 56 (NH)), ha-an-ne-iš$k e / a$ - (KUB 13.20 i 32 (MH/NS), KUB 6.45 ii 17 (NH), KUB 31.66 iii $10(\mathrm{NH})$ ), ha-an-na-aš-ke/a- (KUB 36.83 i 14 (NS)).

Derivatives: hanneššar / hannešn- (n.) 'law-suit, case, trial' (Sum. DI-eššar, Akk. DINAM; nom.-acc.sg. ḩa-an-ne-eš-šar (MH/MS), gen.sg. ḩa-an-ne-eš-na-aš (OS), dat.-loc.sg. ḩa-an-ne-iš-ni (OS), ḩa-an-ne-eš-ni, all.sg. ha-an-ni-eš-na, erg.sg. ḩa-an-ni-iš-na-an-za, abl. hुa-an-ne-eš-na-az, instr. ha-an-ne-eš-ni-it), hannešnatar / hannešnann- (n.) 'jurisdiction' (dat.-loc.sg. haa-an-ni-eš-na-an-ni (KUB $13.9+40.62$ i 7 (MH/NS)), hanne/italuana- (c.) 'legal advisory, litigator' (nom.sg. ha-an-ni-tal-ua-na-aš (KUB 7.60 iii 31), nom.pl.c. ha-an-ne-tal-ua-ni-e$e s ̌$ (KUB 31.66 iii 6)), hannitaluanē̌̌š ${ }^{z i}$ (Ib2) 'to become legal adversaries' (3pl.pret.act. ha-an-ni-tal-ua-<ne-»-eš-šer (KUB 21.17 i 3)).
IE cognates: Gr. ővo $\mu$ al 'to blame, to treat scornfully'.
PIE * $h_{3} e-h_{3}$ nó $h_{3}$-ei, * $h_{3} e-h_{3} n h_{3}$-énti
See $\mathrm{HW}^{2} \mathrm{H}$ : 135f. for attestations and semantics of hann(a)- and $\mathrm{H}: 149$ for hanneššar. The verb is found both in active and in middle forms, without difference in meaning. It is usually assumed that the middle forms are original and that the active forms are secondarily derived (e.g. Puhvel HED 3: 82). This assumption cannot be supported by a chronological ordering of the material: we find both middle and active forms in MS texts already. Moreover, from a formal point of view it is impossible to derive the active from the middle. In the middle
we find only one stem, namely hanna-. If the active indeed was derived from the middle, we would expect that it would show the stem hanna- throughout the paradigm. The case is, however, that besides the stem hanna-, we also find a stem hann-, namely in 2pl.imp.act. hanništen (MH/MS). This form cannot be a recent creation as we can see by the fact that it shows the archaic hi-ending -šten. This ending was the unproductive one, being replaced by the mi-ending -tten from OH times onwards already (visible in secondary hannatten, with introduction of the strong stem hanna-, which is attested in a MH/MS text as well). So, the fact that we find an ablauting stem hanna- ${ }^{\text {i }}$ / hann- in the active (of which hann- cannot be secondary as it is found in an archaic form) besides a non-ablauting stem hannain the middle proves that the active cannot be derived from the middle and therefore must be the primary formation. This is an important establishment for the etymology.
The active paradigm of hanna- / hann- inflects according to the tarn(a)-class. Some of the verbs belonging to this class were explained by Oettinger (1979a: 496) as reflecting reduplicated roots ending in laryngeal: * $\mathrm{Ce}-\mathrm{Co} \mathrm{H}-e i: ~ * \mathrm{Ce}-\mathrm{CH}-$ énti. For hanna-/hann-, this means that we have to reconstruct *He-HnóH-ei : * He-HnH-énti.

As an Anatolian cognate, Puhvel (HED 3: 82) adduces Lyc. qã-, which he translates as 'to call to account, to judge (guilty), to punish'. Beside the fact that Melchert (1993a: 59; 2004a: 54) translates $q \tilde{a}$ - as 'destroy', which would not fit the semantics of hanna-/hann-, a formal connection between the two verb is impossible as well, since Lyc. $q$ reflects PAnat. $* / \mathrm{H}^{\mathrm{w}} /<* h_{2} u$ (cf. Kloekhorst fthc.c).

Other Anatolian cognates are seen by some scholars in the HLuwian words haniiatastar- 'evilness' (abl.-instr. ${ }^{\text {MALUS }_{2}}$ ha-ní-ia-ta-sa-tara/i-ti (KARATEPE 1 §72), haniia- (adj.) 'malicious' (nom.-acc.pl.n. ${ }^{\text {MALUS }_{2} h a ́-n i ́-i a ~(K A R A T E P E ~} 1$ §12)), hanhaniwa- (n.) ‘wickedness’ (nom.-acc.sg.n. ${ }^{\text {MALUS }_{2}} h a-h a-n i ́-w a / i-z a$ (TELL AHMAR $1 \S 20$ )) and the CLuwian forms haniiaa- 'malicious' (abl.-instr. haniįati) and hanhaniiza- 'to be malicious' (3sg.pres.act.(Hittitized) hanhaniiai) (e.g. Starke 1990: 387-8; Melchert 1993b: 51). This connection must be false as on the one hand the semantics do not fit and on the other hand the Luwian forms show single - $n$ - vs. the geminate -nn- in Hittite.
On the IE level, Puhvel (83) proposes to connect Gr. ôvo 1 al 'to blame, to treat scornfully', which has more merit. The Greek verb shows a stem óva- once (in the aorist $\omega$ "vato), on the basis of which Puhvel reconstructs a root $* h_{3} e n h_{2}$-. This connection is taken over by e.g. Melchert (1994a: 51) who, on the basis of his supposition that the middle inflection of hanna- is the primary one, reconstructs

* $h_{3}$ enh $h_{2}-o$. This is incorrect in two respects. Firstly, Van de Laar (2000: 232) states that the Gr. stem óva- must be secondary and that the stem óvo- points to a root $* h_{3} e n h_{3}$-. In my view, a root $* h_{3} n e h_{3}$ - is possible as well, as in Greek we only find middle forms that go back to a zero grade stem $* h_{3} n h_{3}$. Secondly, we have determined that in Hittite the active inflection must be primary, which reflects * $\mathrm{He}-\mathrm{HnoH}-$, $* \mathrm{He}-\mathrm{HnH}$-. If we apply this structure to the root $* h_{3}$ neh $_{3^{-}}$we arrive at the reconstruction $* h_{3} e-h_{3} n o ́ h_{3}-e i, * h_{3} e-h_{3} n h_{3}$-énti, which by regular sound laws yielded Hitt. hannāi, hannanzi.

In my view, the root $* h_{3} n e h_{3}$ - is visible in PIE $* h_{3} n e h_{3}-m n$ 'name' as well (see läman) and must have originally meant 'to call (by name)', which on the one hand developed into Gr. 'to call names > to treat scornfully' and, on the other, into Hitt. 'to call to court > to sue'.
The original form of the imperfective must have been haššike/a- as it is, next to hanniške/a-, the oldest attested form and, more importantly, within the paradigm of hanna- / hann- shows such an aberrant form that it cannot have been secondarily created. In my opinion, it points to a development $* h_{3} n h_{3}$-skééló- > /HəSiké/á-/.
The derivative hannetaluana- clearly is derived from the verb hann(a)-, but its exact formation is unclear. Rieken (1999a: 274) implausibly reconstructs * $h_{2}$ onh $h_{1}$-e-tlo-uon-. It recalls annitaluatar 'motherhood' that is derived from anna- 'mother' (q.v.).
hanna- (c.) 'grandmother': dat.-loc.sg. hatan-ni (NH), nom.pl. haa-an-ni-iš (NS), acc.pl. ḩa-an-ni-iš (OH/NS), gen.pl. ha-an-na-aš (undat.), dat.-loc.pl. ha-an-na$a \check{s}$ ( $\mathrm{OH} / \mathrm{NS}$ ), ḩa-a-an-n[a-aš] (HFAC 14 obv. 4 (NS)).
Anat. cognates: Lyc. $\chi \tilde{n} n \boldsymbol{n}$ - 'grandmother' (gen.adj.dat.sg. $\chi \tilde{n} n a h i$, gen.adj.nom.-acc.pl.n. $\chi$ ñnaha).

IE cognates: Lat. ănus 'old woman', OHG ana 'grandmother', ano 'grandfather' OPr. ane 'grandmother', Lith. anýta 'husband's mother', Arm. han 'grandmother'.

PIE * $h_{2}$ enHo-
See Puhvel HED 3: 84f. and HW ${ }^{2} \mathrm{H}$ : 141f. for attestations. Although the word at first sight seems to belong to the other family words that have their origin in baby-talk (anna- 'mother', atta- 'father'), this word has a good IE etymology (just as Hitt. hūhh-, huhha- 'grandfather' (q.v.)). Especially Arm. han and Lat. anus point to an initial $* h_{2}$-. The fact that in Hittite we find a geminate $-n n$ - can only be explained from *-nH-.
hane/išš- ${ }^{i}$ (Ib1) 'to wipe': 3sg.pres.act. ha-ni-iš-zi (KUB 41.4 ii 21 (MH/NS), KBo 19.142 iii 31 (NS)), ha-ni-eš-zi (KBo 29.65 i 5 (NS), KUB 10.99 vi 10 (fr.), KUB 41.83 obv. 4 (fr.)), ha-ne-eš[-zi] (KUB 10.99 vi 7, 12) ha-ni-šẹ-ẹz-zi (KBo 21.74 iii 11 (NS)), 2pl.pres.act. ha-ni-iš-te-ni (KUB 29.1 iii 32 (OH/NS)), ha-ni-eš-te-ni (KUB 29.1 iii 31, 32, 33 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. ha-ni-iš-ša-an-zi (KBo 43.61 i 3 (NS), KUB 11.3 i 5 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-ni-eš-ša-an-zi (IBoT 3.148 iii 15 (MH/NS)), 3pl.pret.act. ha-ni-eš-še-er (KUB 40.83 obv. 15 (NS)), 2sg.imp.act. ḩa-a-ni-iš (KUB 29.1 i 8, 9 (OH/NS)), ha-a-ni-eš (KUB 40.122 rev. 4), 2pl.imp.act. ha-ni-eš-te-en (KUB 29.1 iii 34 (OH/NS)), ha-ni<-ešヶ-te-en (KUB 29.1 iii 34 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.imp.act. ḩa-ni-eš-ša-an-du (KUB 31.91 ii 6 (MH/NS)), ha-ni-iš-ša-an-du (KUB 31.86+ ii 42, KUB 31.87+88 ii 16 (fr.) (MH/NS), KUB 13.2 ii 15 (MH/NS)), ha-ạ[-n]i-iš-ša-an-du (KUB 31.86 ii 43 (MH/NS)); part. haa$n i-i s ̌-s ̌ a-a n(K B o \quad 23.74$ iii 19 ( $\mathrm{OH} / \mathrm{MS}$ )), h ha-ni-iš-ša-a-an (KBo 21.22 rev. 42 (OH/MS)), [h]a-ni-iš-ša-an-[t]a (ABoT $21+$ KBo 17.65 rev. 10 (MS)); inf.I ha$n i-e s ̌-s ̌ u-u c^{\prime} a-a n-z i(K U B 29.1$ iii 29 (OH/NS)), ḩa-ni-iš-šu-uূa-an-zi (KBo 18.33 obv. 6); verb.noun ha ha-a-ni-iš-šu-uạ-ạr (KUB 31.86 iii 1 (MH/NS)), ha-a-ni-ẹš-$\check{s}\left[u^{?}\right.$-ưa-ar(?)] (VSNF 12.57 iv 2), ha-ni-iš-šu-ua-ar (KUB 31.87+88 ii 18 (MH/NS), KUB 13.2 ii 16 (MH/NS)), [ha-n]i-iš-šu-ua-ar (KBo 1.36, 2 (NS)), ha $a-$ ni-iš-šu-u-ưa-ar (KUB 7.13 i 11 (NS)), abl. hูa-ni-eš-šu-una-az (KUB 26.43 rev. 11 (NH)).
Anat. cognates: CLuw. am(ma)š̌̌a- / am(ma)šši(ía)-'to wipe' (3pres.sg. am$m a-a s ̌-s ̌ i-t i, 3 p l . p r e s . a c t .[a m-] m a-a \check{s}-s ̌ i-i{ }_{2} a-a n-t i, 3 s g . p r e t . a c t . ~ a m-m a-<a s ̌->s ̌ a-t[a]$, 3pl.pret.act. $a m-m a-a s ̌-s ̌ a-a n-d a)$.

IE cognates: Gr. á $\mu$ á $\omega$ 'to cut, to mow', OHG māen, OE māwan 'to mow'. PIE * $h_{2} m h_{1}$-s-énti

See $\mathrm{HW}^{2} \mathrm{H}$ : 143f. for semantics and attestations. Puhvel (HED 3: 86) cites this verb as han $(n) e \check{s}(\check{s})$-, assuming that a geminate $-n n$ - can be seen in 2 pl.imp.act. ḩa-an-ni-eš-tén (KUB 54.1 ii 43). $\mathrm{HW}^{2}$ (H: 153) takes this form as belonging to hanna- / hann- 'to sue, to judge', however: KUB 54.1 ii (42) nu=ua am-meel=pát iš-ha[-ah-ru] (43) ha-an-ni-eš-tén 'Judge my tears!' (instead of Puhvel's translation 'wipe my tears!').
Besides the hapax hanišezzi, which shows a NH -ie/a-derivative, this verb shows two stems, viz. ḩane/išš- /HniS-/ and hānišš- /Hānis-/. Diachronically, a third stem /Rāns-/ can be found in the paradigm of $\bar{a} n s s^{-}{ }^{i}$ 'to wipe' (q.v.). As I have argued at $\bar{a} n \check{s} \check{s}^{i}$, both verbs ultimately reflect an $s$-extension of the PIE root $* h_{2} m e h_{l^{-}}$and go back to an ablauting paradigm $* h_{2} o m h_{1-S-} / * h_{2} m h_{1}-s-$. The
regular outcome of this paradigm was quite different per form: 1sg.pres.act. *h $h_{2} o ́ m h_{l} s-h_{2} e i$ and 2 sg.pres.act. * $h_{2} o ́ m h_{1} s-t h_{2} e i$ should regularly have given **/RániSHi/ and **/Ránínti/, 3sg.pres.act. $h_{2} o ́ m h_{l} s-e i ~ y i e l d e d ~ / R a ̆ ́ n s i / ~ w h e r e a s ~$ 3pl.pres.act. * $h_{2} m h_{1}$ sénti regularly gave /HniSántisi/cf. Kloekhorst fthc.f for details). So, from one paradigm three different stems emerged, namely /RāniS-/, /Rāns-/ and /HniS-/.
The stem /Rāns-/ became the source of the verb ānši, ānšanzi (q.v.), the stem /Hnis-/ became the source of the verb hane/išzi, hane/iššanzi whereas the stem /RāniS-/ restored the initial /H-/ on the basis of /HniS-/ and yielded the forms 2sg.imp.act. hāniš and verb.noun hāniššuuar that usually are taken as belonging to the verb hane/išš- ${ }^{z i}$.
${ }^{\mathbf{D U G}}$ hane/išš̄̄̄- (c./n.) a vessel: nom.sg.c. ḩa-ni-iš-ša-a-aš (OS), ha-a-ni-eš-ša-a-
 ḩa-ni-ša-a-aš, acc.sg.c. ha-ni-iš-ša-an (OS), h] $a$-[a]-ne-eš-ša-an (KBo 25.58 ii 3 (OS)), ha-ni-eš-ša-an, ha-ni-iš-ša-a-an, h ha-a-ni-iš-ša-a-an, h ha-ni-ša-an, nom.acc.sg.n. hูa-ne-eš-ša (Bo 3123 iv 8 (OS)) // h[a]-ne-eš-ša[(-) (KBo 25.79 iv 8 (OS)), hூa-ne-e-eš-ša (KUB 42.107 iii 12 (NS)), hूa-ni-iš-ša, ḩa-ni-ša, gen.sg. ḩa$n i-s ̌ a-a \check{s}$, abl. ḩa-a-ni-eš-ša-az, ha-a-ni-eš-ša-a-za, ha $a-n i-i s ̌-s ̌ a-z a$, dat.-loc.pl. ha $n i-e s ̌-s ̌ a-a-a s ̌$.

Derivatives: ${ }^{\text {DUG }}$ hanniššānni (n.) a vessel (nom.-acc.sg. ha-ni-iš-ša-a-an-ni (KBo 20.3 ii 15), ha-ni-ša-an-ni (KBo 11.11 iii 6)).

See HW ${ }^{2}$ H: 145f. for attestations. HW ${ }^{2}$ cites two lemmas, ${ }^{\text {DUG }}$ hanešša- and ${ }^{\text {DUG }}$ haneššar (both denoting a vessel) that I would regard as identical words, since they are used in identical contexts. In my view, the forms that show a stem ḩaneššar / hanešn- (that I have cited as a derivative of hān-i / han-) are NH remodellings due to a folk-etymological connection with hān- / han- 'to draw (water)' (formally, haneššar / hanešn- would be a verb.noun of haan- ${ }^{i}$ / han-).
The original word shows different stems in OS texts already, viz. commune stems haniššā-, hanišša- and hānešša- besides a neuter stem ḩanešša. In my opinion, these alternations point to a foreign origin. Rieken's attempt (1999a: 227) to explain hane/išša- as an IE formation on the basis of a stem $* h_{2} e n$ - 'to draw (water)', is unconvincing.
hāni(ia)- (gender unknown) '?': gen.sg. ha-a-ni-į्a-aš, ha-ni-ia-aš.

See $H W W^{2}$ (H: 156) for attestation places. The word only occurs in the combination ḩāniíaš KÁ(.GAL) 'gate of h.'. Puhvel (HED 3: 76) argues that this gate must be a wellgate by which water flows are regulated and connects hāni(ia)- with ha $\bar{n} n^{i}{ }^{i} /$ han- 'to draw (water)'. $\mathrm{HW}^{2}$ argues, however, that the hāniįaš KÁ(.GAL) is an ordinary gate of which an etymological connection with hān- ${ }^{i}$ / han- cannot be proven.
hāniiela- ${ }^{z i}$ : see hān- ${ }^{i} /$ han-
$\boldsymbol{h} \overline{\boldsymbol{a}} \boldsymbol{n} \mathbf{I}^{\text {s. }}$ : see hane/išš- ${ }^{z i}$
hanišš- ${ }^{j i}$ : see hane/išš-zi
hant- (gender unclear) 'forehead, front(age)' (Sum. SAG.KI, Akk. PÜTUM): nom.sg. hatan-za (KUB 3.95, 13 (NS)), ha-an-za=ti-it (KUB 10.96 iv 11 (NS)), ha-an-za-a=t-ti-it (KUB 10.96 iv 14 (NS)), acc.sg. ha-an-z[a(-)...] (KBo 8.73 ii 6 (NS)), dat.-loc.sg. ha $a-a n-t i-i=s ̌-s ̌ i ~(K U B ~ 33.66 ~ i i ~ 19 ~(O H / M S)), ~ h a-a n-d i-i=s ̌-s ̌ i ~$ (KBo 13.31 ii 6 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 10.23 iv $5(\mathrm{OH} / \mathrm{NS})$ ), ha-an-te-e=š-ši (KUB $32.123+$ KBo 29.206 i 15 (NS)), abl. ha-an-ta-a-az (KBo 17.22 iii 19 (OS)), ha$a n-t a-a z$, ha $a-a n-d a-a z$, nom.pl. haa-an-ti-iš (KUB 42.78 ii 18 (NS)).
Derivatives: hanza (adv.) 'in front' (ha-an-za (NS), ha-a-an-za (KUB 9.28 ii 12 (MH/NS), KUB 48.118 i 17 (NH))), hanzan (adv.) 'id.' (KUB 17.21 iv 13 (MH/MS), ABoT 60 rev. 10 (MH/MS))), handa (adv.) 'for the sake of, in view of' (ha-an-da (MH/MS), ha-an-ta, ha-a-an-da (NH)), handaš (adv.) 'for the sake of, regarding' (ha-an-da-aš (NH)), 'Hantašša- (c.) deity of the forehead (nom.sg.
 pa-an (OS), ${ }^{\mathrm{d}} \mathrm{H} a-a n-t a-s ̌ e-p e ́-e s ̌ ~(O S), ~ a c c . p l . ~ ل{ }^{\mathrm{d}} \mathrm{Ha} a n-t a-s ̌ e-p u-u s ̌$ (OS)), hanti (adv.) 'opposite, against; instead; apart' (ha-an-ti (OS), ha-an-di (OS), ha-an-ti-i (MH/MS), ha-an-di-i), hantiiae- ${ }^{z i}$ (Ic2) 'to support(?)' (3sg.pres.act. ha-an-ti-ía-$i[z-z] i, 3 p l . p r e s . a c t . ~ h a-a n-t i-i a_{1} a-a n-z i, 1$ sg.pret.act. ha-an-ti-ia-nu-un, 3sg.pret.act. ha-an-ti-i-ia-it), see also hantezziila-.

Anat. cognates: CLuw. handauat(i)- (c.) 'supreme authority, king' (nom.sg. ha-an-da-ua-te-eš, acc.sg. ha-an-da-ua-te-en), handauadahit- (n.) 'kingship' (nom.acc.sg. ḩa-an-ta-u ua-da-hi-ša), hantil(i)- (adj.) 'first' (nom.sg.c. ha-an-te-li-eš, nom.-acc.sg.n. ha-an-ti-il-za), hanti(ia)- 'headband' (nom.sg. ha-an-ti-iš); HLuw. $\boldsymbol{h a n t}-(\mathrm{n}$.$) 'face, forehead' (dat.-loc.sg. FRONS-ti-i (KARKAMIŠ A6 §20), abl.-$ instr. "FRONS" $h a-t a-t i \quad$ (KARKAMIŠ A2+3 §6), nom.-acc.pl. "FRONS" $h a-t a ́$ (KARKAMIŠ A3 §23), "FRONS" ha-ta (KIRÇOĞLU §3), dat.-loc.pl. "FRONS" ha-ta-
$z a$ (TELL AHMAR 1 §17)), hanti- (adj.) 'first' (nom.sg.c. FRONS-ti-sa ${ }_{7}$ (TOPADA §19), abl.-instr. FRONS-ti-ia+ra/i (TOPADA §21) gen.adj.nom.sg.c. FRONS-ti-ia-si? ${ }^{\text {? }}$ sa (TOPADA §19), gen.adj.abl.-instr. FRONS-ti-ia-sa $a_{5}+r a / i$ (TOPADA §21)), hantil(i)- (adj.) 'first, former; first, preeminent' (nom.sg.c. FRONS-li-i-sá (KARATEPE 1 §50 Ho.), FRONS-la/i/u-sá (KARATEPE 1 §50 Hu.), FRONS-la/i/u-sa (CEKKE §6a), nom.pl.c. FRONS-li-zi (KARATEPE 1 $\S 26 ~ H u.), ~ F R O N S-l a / i / u-z i ~(K A R A T E P E ~ 1 ~ § 26 ~ H o),. ~ F R O N S-l a / i / u-z i ́ ~$ (PALANGA §2), FRONS-la/i/u-za/i (TOPADA §2)), hantili (adv.) 'foremost' (FRONS-la/i/u (KARKAMIŠ A11a §17)), hanti (adv.) 'against' (FRONS-ti (KARKAMIŠ A4b §3)), FRONS-hit- (n.) 'preeminence' (dat.-loc.sg. "FRONS"-hi-ti (KARKAMIŠ A7 §2, KARKAMIŠ A15b §14)), *hantawad(i)- 'king' (nom.sg. REX-ti-i-sa, REX-ti-sa, REX-ti-sá, dat.-loc.sg. REX-ti-i, nom.pl. REX-ti-zi, dat.-loc.pl. REX-ta-za, REX-tá-za), *hantawadi- (adj.) 'royal' (nom.sg.c. REX $+r a / i-s a_{7}$ (TOPADA §19), abl.-instr. REX-ti-ia-ri+i (SULTANHAN §41), REX+ra/i-ti (TOPADA §5, §10)), *hantawatahit- (n.) 'kingdom' (nom.-acc.sg. REX-ta-hi-sá (KARATEPE $1 \S 73$ Ho.), dat.-loc.sg.? REX-«tá? $)$-hi-tà (ALEPPO 2 §4)), *hantawata- 'to be(come) king(?)' (1sg,pret. REX-wa/i-ta-ha (BOR §8), 3sg.pret.act. REX-ta (KARABURUN §2)); Lyc. $\chi$ ñtawa- 'to rule' (3sg.pret.act. $\chi$ ñtawate, $\chi$ ñtewete), $\chi n ̃$ tawata- 'rule, kingship' (acc.sg. $\chi \tilde{n} t a w a t a \tilde{a}, ~ l o c . s g$. $\chi$ ñtawata, $\chi$ ñtawwata), $\chi$ ñtawat(i)- 'ruler, king' (nom.sg. $\chi$ ñtawati, dat.sg. $\chi$ ñtawati, abl.-instr. $\chi$ ñtawatedi, gen.adj. $\chi$ ñtawehe $i-$ ), $\chi$ ñtawati(je)- 'of the ruler, royal' (dat.-loc.pl. $\chi$ ñtawatije).

IE cognates: Gr. àvtí (prep., prev.) 'opposed, facing', Arm. and 'for, instead of', Lat. ante 'in front of', Gr. äv ${ }^{\prime} \alpha$ 'over against, face to face', Skt. ánti 'before, near, facing'.

PIE * $h_{2}$ ent-
See Puhvel HED 3: 89f. for attestations. Within Hittite it is clear on the basis of e.g. dat.-loc.sg. hanti (OH/MS) and abl. hantāz (OS) that we are dealing with a stem hant-. Nevertheless, the interpretation of the nominative- and accusativeforms are unclear. At first sight, nom.sg. hanza seems to show that we are dealing with a commune nom.sg. hant-s. This commune form then would correspond to the commune nom.pl. hantiš. Nevertheless, the forms hanza=tit and hanza=ttit 'your forehead' bear a neuter enclitic possessive pronoun $=t t i t$. Moreover, if the accusative-form ha-an-z[a(-)...] should be read as hanza, we rather seem to be dealing with a neuter nom.-acc.sg. hanza. Starke (1990: 125f.) therefore states that the nominative-accusative-forms hanza are rather to be interpreted as Luwian forms that show the neuter secondary ending -sa, so hant-sa (note that Starke still
interpreted this $-s a$ as the neuter plural-ending, whereas nowadays it is generally assumed that $-s a$ denotes the nom.-acc.sg.). In his view, the form SAG.KI-an (KUB 5.9 obv. 8) shows the unextended Luwian nom.-acc.sg. *hān. Rieken (1999a: 31f.) argues that this latter form could be interpreted as hanzan as well, the regular adverbial form. Nevertheless, she agrees that the Hittite evidence is too inconclusive to decide which gender this word had originally. Since all instances of nom.-acc.sg. hanza are found in NS texts, they could in principle indeed be Luwianisms in $-s a$. Note that in HLuwian, we find nom.-acc.pl. "FRONS" $h a-t a=/$ hanta/, which seems to indicate that here the word is neuter.
Already since Hrozný (1917: 21) it has been generally assumed that hant-, which in the Anatolian languages still has its full nominal meaning 'forehead', is etymologically connected with adverbs and preverbs like Gr. ảvtí 'opposed, facing', Lat. ante 'in front of', Skt. ánti 'before, facing', etc. In Hittite, we see that the stem hant- has given rise to some adverbially used forms as well. E.g. hanza 'in front' probably reflects $* h_{2}$ ent-i (and therewith is directly cognate with Gr. àvtí and Skt. ánti) and shows that already at an early time it was not regarded as part of the paradigm of hant- 'forehead' anymore, since neither the *-t- nor the $*_{-i}$ was restored (as opposed to the synchronic dat.-loc.sg. hanti and its adverbialized variant hanti). The adverbial forms hanti (derived from the dat.loc.sg.), handa (< all.sg.) and handaš (< dat.-loc.pl.) are slight later lexicalizations of inflected forms of hant- 'forehead'. The adverb hanzan probably is a secondary formation, adding the -an from andan, appan, kattan, etc. to hanza. Note that the Gr. adverb duvtiov 'against' has a remarkable parallel formation (both from virtual $* h_{2}$ enti-om).

Because it is not fully clear whether hant- was commune or neuter originally, we cannot properly reconstruct a paradigm. Note that therefore Gr. ävta can either reflect acc.sg. * $h_{2}$ ent-m (if originally a commune word) or nom.-acc.pl. * $h_{2}$ ent- $h_{2}$ (if originally a neuter word).
hantae- ${ }^{z i}$ (Ic2) '(trans.) to arrange (together), to prepare, to fix; to determine; (intr.) to get married; (midd.) to get fixed, to fit' (Sum. (NÍG.)SIxSÁ): 1sg.pres.act. ha-an-ta-a-mi, ha-an-da-a-mi, ha-an-da-mi, ha-a-an-da-mi (KUB 7.54 i 10 (NS)), 2sg.pres.act. h ha-an-da-a-ši (MH/MS), 3sg.pres.act. ha-an-ta-a$e z-z i(\mathrm{OS})$, ha-an-da-a-iz-zi, ha-an-ta-iz-zi, ha-an-da-iz-zi, ha-an-da-zi, ha-an-te$e z-z i$ (HT 1 iii 7), ha-an-da-a-i (KBo 5.2 iv 16), 1pl.pres.act. ha-an-da-a-u-ni (1691/u ii 15 (MS), cf. Puhvel HED 3: 98), 3pl.pres.act. ha-an-ta-a-an-zi, ha-an-da-a-an-zi, ha-an-ta-an-zi, ha-an-da-an-zi, 1sg.pret.act. ha-an-ta-a-nu-un, ha-an-da-a-nu-un, ha-an-ta-nu-un, ha-an-da-nu-un, 3sg.pret.act. ha-an-da-a-it, ha-an-
$d a-i t, 1$ pl.pret.act. ha-an-da-a-u-en, ha-an-da-u-e-en, 3pl.pret.act. ha-an-da-a-er (MH/MS), ha-an-ta-a-er, ha-an-ta-er, ha-an-da-er, 2sg.imp.act. ha-an-da-a-i, 3sg.imp.act. ha-an-da-a-ed-du (MH/MS), ha-an-da-ed-du (MH/MS), ha-an-ta-id$d u$, 3pl.imp.act. ha-an-da-a-an-du, ha-an-ta-an-du, ha-an-da-an-du; 3sg.pres.midd. ha-an-da-a-et-ta (OS), ha-an-da-a-e-et-ta (OS), ha-an-da-a-it-tari, ha-an-ta-a-it-ta-ri, ha-an-ta-it-ta-ri, ha-an-da-it-ta-ri, ha-an-da-it-ta-a-ri, ha-an-da-a-ta-ri, ha-an-da-a-at-ta-ri, 3pl.pres.midd. ha-an-da-a-an-ta-ri, ha-an-da-an-da-a-ri, ha-an-da-an-ta-ri, 2sg.pret.midd. ha-an-da-a-it-ta-at, 3sg.pret.midd. ha-an-da-a-et-ta-at (MH/MS), ha-an-ta-it-ta-at, ha-an-da-it-ta-at, ha-an-da-a-ta-at, ha-an-da-a-at-ta-at, 3pl.pret.midd. ha-an-da-an-ta-ti (OH/MS), ha-an-ta-an-ta-ti (OH/NS), ha-an-ta-an-da-ti (OH/NS), ha-an-da-an-da-ti (OH/NS), ha-an-da-a-an-ta-at (MS), ha-an-ta-an-ta-at (OH/NS), ha-an-da-an-da-at, 2sg.imp.midd. ha-an-da-ah-hu-ut, ha-an-da-hu-ut, 3sg.imp.midd. ha-an-da-it-ta-ru; part. ha-an-da-a-an-t- (OS), ha-an-da-an-t- (often), ha-a-an-da-a-an$t$ - (KUB 20.29 vi 4 (OH/NS)); verb.noun. ha-an-da-a-u-ua-ar, ha-an-da-u-ua-ar, ha-an-da-u-ar, gen.sg. ḩa-an-da-a-u-ua-aš; inf.I ha-an-da-a-(u-)ua-an-zi, ha-an-da-u-ưa-an-zi; impf. ha-an-da-a-iš-ke/a- (MS), ha-an-ta-iš-ke/a-, ha-an-te-eš$k e / a-$, ha-an-te-iš-ke/a-.
Derivatives: parā handandātar (n.) 'providence (of a deity)' (nom.-acc.sg. ha-an-da-an-ta-a-tar, ha-an-da-an-da-a-tar, ha-an-da-a-an-ta-tar, ha-an-ta-an-tatar, ha-an-da-an-ta-tar, ha-an-da-an-da-tar, ha-an-ta-an-da-tar, ha-a-an-da-an-da-tar (NH), ha-an-ta-tar, ha-an-da-a-tar, gen.sg. ha-an-ta-an-ta-an-na-aš, ha$a n-d a-a n-t a-a n-n a-a s ̌, ~ h a-a n-d a-a n-d a-a n-n a-a \check{s}$, dat.-loc.sg. ha-an-da-an-da-an$n i$, ha-an-da-a-an-ni, ha-an-da-an-ni), parā handandae- ${ }^{z i}$ (Ic2) 'to show providence' (3sg.pres.act. ha-an-da-an-da-i[z-zi] (KUB 40.1 obv. 39 (NS)), 3pl.pres.act. has-an-da-an-da-a-a[n-zi] (KBo 15.34 iii 20 (OH/NS)), 3sg.pret.act. ha-an-da-an-te-eš-ta (StBoT 24 i 21 (NH))), handatt- (c.) 'trust, determination(?)' (gen.sg. ha-an-da-at-ta-ǎ̌), LÚ hantantiiala- (c.) 'repairman (?)' (dat.-loc.sg. ha-an-ta-an-ti-i-ia-li).

See $\mathrm{HW}^{2} \mathrm{H}$ : 163f. and Puhvel HED 3: 96f. for semantics and attestation of this verb and its derivatives. The verb inflects according to the hatrae-class, which mainly consists of denominal verbs ending in *-o-ie/o-. For hantae-, this seems to indicate that this verb is derived from a noun *hanta-. The question is whether a noun hant-, too, would yield a derived verb hantae- ${ }^{z i}$. There are only a few other verbs that end in -antae-. The NH verb ištantae- 'to stay put' derives from OH ištantāiela- ${ }^{z i}$ (q.v.) and reflects $*_{\text {sth }_{2} e n t-e h_{2}-i e ́ l o ́ o ́-. ~ T h e ~ v e r b ~ h a n d a n d a e-~}^{\text {zi }}$ 'to show providence' (cited here) and the verb nekumandae- ${ }^{z i}$ 'to undress oneself' clearly
are derived from handant- and from nekumant- 'naked' (q.v.) respectively. Both verbs are sporadically attested (handandae- thrice and nekumandae- once), however, in NS texts only, which indicates that both verbs are likely to be recent formations, created in a period in which the hatrae-class was a very productive category. So it is questionable whether on formal grounds we are allowed to derive hantae- (which is attested in OS texts already) from a noun hant-.

Oettinger (1979a: 367) states that hantae- is derived from hant- 'forehead, front', but this is, apart from the formal difficulties as raised above, semantically unattractive: I do not see how 'to arrange together' can be derived from 'forehead'. Puhvel (l.c.) derives handae- from hānt-, the participle of the verb hā${ }^{z i}$ 'to believe, to trust', arguing that occasional plene spellings ha-a-an- point in that direction. In my corpus, I have found 430+ examples of handae- ${ }^{z i}$ and derivatives that show a spelling ha-an- (of which 23 are found in OS texts) vs. only 3 plene spellings ha-a-an-. As these latter are attested in NS texts only, they hardly can be phonologically valuable. Moreover, a semantic connection with $h \bar{a}-$ ${ }^{z i} / h$ - 'to trust, to believe' is unattractive.
All in all, we have to conclude that hantae- ${ }^{-i}$ must have been derived from a further unattested noun *hanta-, of which no cognates are known.
handa(i)š- (c.) 'heat': nom.sg. ḩa-an-da-iš (KBo 3.23 obv. 6, rev. 9 (OH/MS)), h $h a-a n-d a-a-[i s]$ (KUB 31.115, $9(\mathrm{OH} / \mathrm{NS})$ ), dat.-loc.sg. h. ha-an-ta-i-ši (KBo 3.22 obv. 17, 19 (OS)), [ha-a]n-da-iš-ši (1554/u, 8 (NS)), ha-an-da-š[i] (KBo 3.23 obv. $8(\mathrm{OH} / \mathrm{NS})$ ), [ha-an-d]a-ši (KUB 31.115, $11(\mathrm{OH} / \mathrm{NS})$ ).
IE cognates: ?OIr. and- 'to kindle'.

$$
\text { PIE } * h_{2} e n d^{(h)}-\text { ? }
$$

This word is often regarded as neuter (e.g. Puhvel HED 3: 107; $\mathrm{HW}^{2} \mathrm{H}: 167$ ), but this cannot be correct as it functions as the subject of a transitive verb in the following text:

KBo 3.23 obv. (with duplicate KUB 31.115, 9f.)

$$
\begin{equation*}
m a-a-n[(=a-a n)] \tag{5}
\end{equation*}
$$

(6) ha-an-da-iš ua-la-ah-zizi-g=a-an e-ku-ni-mi da-i
(7) ták-ku-u=a-an e-ku-ni-ma-aš ua-la-ah-zi n=a-an háa-an-da-š[(i)]
(8) $d a-i$
'When heat strikes him, you must place him in the cold. If cold strikes him, place him in the heat'.

Nevertheless, the word cannot be interpreted as a diphthongstem hantai-, as the dat.-loc.sg. shows the stems hantaiš- and hantaš-. The form hantaiši occurs in the formula hantaiši mēhuni 'in the heat of noon' only (ha-an-ta-i-ši me-e-h[u-ni] (KBo 3.22 obv. 17), ha-an-ta-i-ši me-e-hu-n[i] (KBo 3.22 obv. 19) and [ha-a]n-da-iš-ši=kán me[-hu-ni] (1554/u, 8 (cf. StBoT 18: 98)), whereas handaši is only attested in the above cited context. Neumann (1960: 141) assumes that hantaiši mēhuni is a wrong inflection of an originally nominal sentence *hantaiš mēhur 'heat is the time = daytime'. Rieken (1999a: 220) convincingly argues that it is better to assume that just as nekuz mēhur, *hantaiš mēhur shows an original gen.sg. *hantaiš 'the time of heat'. Problematic, however, is the question how to interpret this gen.sg. *hantaiš formally. Moreover, if the form handaši represents the real dat.-loc.sg., I would not be able to explain how the stem handaš- is to be seen in comparison to a nom.sg. handaiš and a gen.sg. *hantaiš. According to Rieken (1.c.), the forms are all explicable if we assume an originally ablauting $i$ stem *hand-i-, *hand-ai-, but her line of reasoning seems unattractive to me.
Regarding the root, it has been generally accepted since Pedersen (1938: 48) that the word is to be compared with OIr. and- 'to kindle' and Gr. äv $\theta \rho \alpha \xi$ 'coal', although the latter word probably is of substratum origin. If the connection with OIr. and- is justified, however, then we must reconstruct a root $* h_{2} e n d^{(h)}$-.

## handaš-: see handa(i)š-

hantezzi(ia)- (adj.) 'first, foremost' (Sum. IGI-zi(ía)-, Akk. MAHRU ${ }^{(1)}$ : nom.sg.c. ḩa-an-te-ez-zi-ìa-aš (OS), ha an-an-te-ez-zi-aš (OS), ha-an-te-ez-zi-i-ǎ̌ (OH/NS), haa-an-te-ez-zi-iš (MH/MS), acc.sg.c. hatan-te-ez-zi-an (OS), hatan-te-ez-zi-in (MH/MS), ha-an-ti-iz-zi-an (KBo 25.123, 8), nom.-acc.sg.n. hatan-te-ez-zi-an (OS), ha-an-te-ez-zi (MH/MS), ha-an-te-e-ez-zi (KUB 36.55 ii 21), gen.sg. ha$a n-t e-e z-z i-i$ an-te-ez-zi-e-eš (OS), ḩa-an-te-ez-zi-uš (NH), acc.pl.c ha-an-te-ez-zi-uš, ha-an-te$e z-z i-i s ̌$, gen.pl. ha-an-te-ez-zi-i्na-aš, dat.-loc.pl. haa-an-te-ez-zi-(ia-)aš.

Derivatives: hantezzi (adv.) 'firstly; in front' (ha-an-te-ez-zi), hantezziiaz (adv.) 'before; in front' (ha-an-te-ez-zi-az, ha-an-te-ez-zi-ịa-az, ha-an-te-ez-zi-i्ia-za), hantezzili (adv.) 'in earlier times' (ha-an-te-ez-zi-li), hantezziiahh- ${ }^{i}$ (IIb) 'to make foremost' (3sg.pret.act. ha-an-te-ez-zi-ia-ah-ha-aš), hantezziiatar / hantezziiann- (n.) 'first position' (dat.-loc.sg. ha-an-te-ez-zi-į्a-an-ni).

PIE *h ${ }_{2}$ ent-etiHo-

The word shows two stems, namely hantezziiia- and hantezzi-. It is remarkable that all OS attestations belong to the stem hantezziía- (nom.sg.c. hantezziiǎ̌, acc.sg. hantezzian, nom.-acc.sg.n. hantezzian), whereas from MH onwards we find the stem hantezzi- (nom.sg.c. hantezziš, acc.sg.c. hantezzin, nom.-acc.sg.n. hantezzi). The stem hantezzi- does not show an ablauting suffix (no *hantezzai-). The hapax spelling with -i- (ha-an-ti-iz-zi-an) is found in a text that also contains the aberrant $\dot{u}$-i-it 'he came' (cf. Melchert 1984a: 93).
The adjective clearly is derived from hant- 'forehead; front' (q.v.) with the -ezziial-suffix that we find in appezzi(ĩa)- (from $\bar{a} p p a$ (q.v)) as well. The suffix seems to go back to *-etiHo- (note that *-etio- probably would have given **-ezza-, cf. zāh- $\left.{ }^{i} / z a h h-<* t i o h_{2}-\right)$.
hanzana- (adj. / c.) 'black'; ‘web’: nom.sg. hha-an-za-na-aš.
This word occurs several times but its meaning is not always clear. In some contexts it seems to denote a colour: KUB 29.4 i (31) SÍG SA SÍG ZA.GÌN SÍG ḩa-an-za-na-aš SÍG $\mathrm{SIG}_{7}$. $^{-} \mathrm{SIG}_{7}$ SÍG BABBAR da-an-zi 'They take red wool, blue wool, $h$. wool, yellow wool and white wool' and Laroche (1953: 41) has argued that it means 'black' then. In the vocabulary KBo $1.44+$ KBo 13.1 i 50 the Akkadian phrase $Q U$ ' $U E T-T[\grave{U}-T I]$ 'spider web' is glossed by Hitt. $a-u-u a-u a-a \check{s}$ ha-an-za-na-aš 'h. of a spider', which would mean that hanzana- means 'web' here. $\mathrm{HW}^{2} \mathrm{H}$ : 195 cites a context in which ${ }^{\text {GIŠ hanzana- should denote "ein Gerät". }}$ So it is possible that we are in fact dealing with three homophonous words hanzana-.
The first hanzana-, which should mean 'black', has been connected with Gr. äбıc 'mud' and Skt. ásita- 'dark, black' by Čop (1970: 95-6), on the basis of which e.g. Melchert (1994a: 121) reconstructs $* h_{2} m s(o) n o-$, although in my view a reconstruction * $h_{2} n s$-(o)no- is equally possible. It should be noted that the etymology is far from certain, however.
hanzāšša- (c.) 'offspring': dat.-loc.sg. h ha-an-za-aš-ši, all.sg. h ha-an-za-a-aš-ša (MH/MS), ha $a-a n-z a-a \check{s}-5 ̌ a(M H / M S)$, instr. h ha-an-za-ǎ̌-ši-it, nom.pl. haa-an-za-$a[-a s ̌-s ̌ e]-e s ̌(\mathrm{OS})$, ḩa-an-za-aš-še-eš, hha-a-an-za-aš-še-eš (1x, MH/NS), acc.pl. ha-an-za-aš-šu-uš, ha-an-za-šu-uš (1x, NS), dat.-loc.pl. ha $a-a n-z a-a s ̌-s ̌ a-a \check{s}$ (OS).

PIE * $h_{2}$ msósio-
See Puhvel HED 3: 224f. and HW ${ }^{2}$ H: 397f. for attestations. This word only occurs as the second part of the expression h hãšša- hanzāǎša- that denotes 'further
offspring', compare e.g. KUB 29.1 iv (2) $n u \quad$ DUMU.NITA $^{\text {MEŠ }}$ DUMU.MUNUS ${ }^{\mathrm{MEŠ}}$ ḩa-aš-še-eš ha-an-za-aš-še-eš ma-ak-ke-eš-ša-an-du 'May the sons, daughters and further offspring become numerous!'. When used in the all.sg., the expression has an adverbial feeling to it and must be translated 'down all generations', compare e.g. KUB 21.1 i (70) kat-ta=ma am-me-el DUMU=IA
 (acc.) and grandson (acc.) down all generations'. Although the plene spelling ha$a n-z a-a-a \check{s}$ - occurs a few times only, it must be taken seriously because it is attested in an OS and in a MS text.
In my view, it is quite obvious that hanzāšša- and h $\bar{a} \bar{s} s ̌ a$ - are etymologically cognate. For the nasal in hanzāǎša-, compare Luw. hamsa/i- 'grandchild' as cited under the lemma of h hāšša-. Within Hittite, hanzāšša- and ha $\bar{a} s ̌ s ̌ a-c l e a r l y ~ b e l o n g ~$ with the verb hā̆š- / hašš- 'to procreate', and therefore also with haššu- 'king'. See at the lemma of h $\bar{a} \check{s} s^{i} /$ hašš- for a detailed treatment of these words. There I argue that hanzāšša- must reflect *h2msó-, the full-grade of which yielded hā̃̌ša-. The second part, -ašša-, in my view must be equated with the genitival suffix -ašša- (q.v.), which means that h hāšša- h hanzāšša- literally means 'offspring (and) the offspring thereof'. All in all, I reconstruct hanzāšša- as *h2msósio-.
$\boldsymbol{h a p p}^{z^{i}}$ (Ia4; IIIa > IIIb) '(act.) to join, to attach; (impers., midd.) to arrange itself, to work out': 2sg.pres.act. hatap-ti (MH/MS), 3sg.pres.act. haa-ap-zi (OH/NS), 1sg.pret.act. ha-ap-pu-un (MS); 3sg.pres.midd. ha-ap-da-ri (MS?), 3sg.pret.midd. ha-ap-da-at (MS?), ha-ap-ta-at (NH), 3sg.imp.midd. hatap-pa-ru (OS).

Derivatives: ${ }^{(U Z U)}$ happeššar / happešn- (n.) 'joint, limb, member, body part'
 dat.-loc.sg. ha-ap-pé-eš-ni, abl. ḩa-ap-pé-eš-na-za, [h]a-ap-pé-eš-na-za, [ha-]ap$p i ́-i s ̌-n a-a z$, instr. ${ }^{\mathrm{UZU}} \mathrm{U} R-i t$, nom.-acc.pl. ${ }^{\mathrm{UZU}}{ }^{\mathrm{U}} \mathrm{R}^{\mathrm{HIIA}}-$-ša, gen.pl. h ha-ap-pé-eš-na-aš, ha-ap-pí-iš-na-aš, dat.-loc.pl. ha-ap-pí-iš-na-aš ), happešnant- (c.) 'id.' (nom.sg. ${ }^{\mathrm{UZU}} \mathrm{U} R-z a$, acc.sg. ${ }^{\mathrm{UZU}} \mathrm{U} \mathrm{R}-d a-a n$, nom.pl. ha-ap-pí-iš-na-an-te-eš), happešnae- ${ }^{z i}$ '(+ arha) to dismember' (1sg.pres.act. ḩa-ap-pí-iš-na-mi, 3pl.pres.act. ha-ap-pé-eš-na-a-an-zi, ha-ap-pé-eš-na-an-zi, ha-ap-pí-iš-na-an-zi, ha-ap-pí-iš-ša-na[-an$z i]$, [ha-ap-]pé-eš-ša[-na-an-zi]), see ḩappu-.
Anat. cognates: CLuw. ${ }^{(\mathbf{U Z U})}$ happiš- 'limb, member' (nom.-acc.sg. ha-ap-pí-iš$\check{s} a$, abl.-instr. ḩa-ap-pí-ša-a-ti, h ha-ap-pí-ša-ti, ha $a-a p-p i ́-i-s ̌ a-a-t i)$.
IE cognates: Lat. aptus 'connected, fitting'.
PIE * $h_{2}$ ep-

See $\mathrm{HW}^{2} \mathrm{H}$ : 196f. for attestations and semantics. The oldest form is 3sg.pres.midd. happaru (OS), which may indicate that the middle inflection was original. Puhvel (HED 3: 113-4) convincingly connects happ- with Lat. aptus 'connected, fitting' and reconstructs $* h_{2} e p-$.
hapa- (c.) ‘river’ (Sum. ÍD): nom.sg. ÍD-aš, acc.sg. ÍD-an (OS), gen.sg. ha-pa-aš, dat.sg. [Í]D-pí (KUB 36.49 i 11 (OS)), all.sg. ÍD-pa, ha-pa-a, abl. ÍD-az, ÍD-za,


Derivatives: hapae- ${ }^{-i}$ (Ic2) 'to wet, to moisten' (3sg.pres.act. ha-pa-a-iz-zi, 3pl.pres.act. ha-a-pa-a-an-zi; impf. ha-pí-iš-ke/a-), hapāti- (c.) 'river land(?)' (acc.sg. ha-pa-a-ti-in (MH/MS)).
Anat. cognates: Pal. hāpna- (c.) 'river' (nom.sg. ha-a-ap-na-aš); CLuw. hāapa/i(c.) 'river' (nom./voc.sg. ha-a-pí-iš, dat.-loc.sg. ÍD-i, abl.-instr. ÍD-ti, nom.pl.(? in Hitt. context) ḩa-pa-an-zi, acc.pl. ÍD ${ }^{\text {HI.A }}-i n-z a$, dat.-loc.pl. ÍD $\left.{ }^{\text {MEŠ̌ }}-a n-z a\right)$, hāpinna/i- (c.) 'little river, stream’ (acc.pl. ḩa-a-pí-in-ni-in-za, haa-pí-in-ni-in-za); HLuw. hapa/i- (c.) 'river' (acc.sg. /hapin/ FLUMEN-pi-na (KARKAMIŠ A15b §7, §8), FLUMEN-pi-i-na (KARKAMIŠ A15b §9), FLUMEN(-)*311 ${ }^{?}(-) p i-n a$ (TELL AHMAR fr. 6, but interpretation uncertain), FLUMEN-na (IZGIN 1 §8), dat.-loc.sg. /hapī/ FLUMEN-pi-i (TELL AHMAR 5 §9), FLUMEN-pi (MARAŞ 8 §8)), hapad(a)i- (c.) 'riverland’ (nom.sg. /hapadis/ "FLUMEN" há-pa+ra/i-sá (KARATEPE $1 \S 48$ Hu.), FLUMEN-pari-i-sá (KARATEPE 1 §48 Ho.), /hapadais/ FLUMEN.REGIO-tà-i-sa (HAMA 1 §3), FLUMEN.REGIO-tà-i-sà (HAMA 2 §3, HAMA 7 §3), FLUMEN.REGIO-sà (HAMA 3 §3), acc.sg. /hapadin/ FLUMEN-pa-ti-na (KARKAMIŠ A12 §6), FLUMEN.REGIO-ti-na (MARAŞ 8 §3), abl.-instr. /hapadiadi/ FLUMEN.REGIO-ia-ti-i (MARAŞ 8 §2), acc.pl. /hapadint ${ }^{\text {s}} \mathrm{i} /$ FLUMEN.REGIO-zi (IZGIN 1 §5), dat.-loc.pl. /hapadiant ${ }^{\text {T }}$ FLUMEN.REGIO-za (IZGIN 1 §5)); Lyc. $\boldsymbol{\chi} \boldsymbol{b a}(\boldsymbol{i})$ - 'to irrigate' (3pl.pret.act. $\chi$ baitẽ).

PAnat. *h $h_{2}$ ebo-
IE cognates: OIr. $a u b$, gen. abae, MWe. afon 'river', Lat. amnis 'stream, river'. PIE * $h_{2} e b^{h}-o-, * h_{2} e b^{h}-n-$

See $\mathrm{HW}^{2} \mathrm{H}$ : 197f. for attestations. There, an all.sg.-form ha-ap-pa with geminate -pp- is cited as well (KUB 31.74 ii (9) ha-ap-pa an-da še-eš-te-en[ ...] 'You must sleep inside the $h . .^{\prime}$ ), but in my view there is no indication from the context that this word should mean 'river'. Besides the stem hapa-, a few $n$-stem forms are mentioned as well, namely dat.-loc.sg. ÍD-ni (KUB 17.8 iv 23), all.sg. ÍD-an-na
(KUB 53.14 iii 14), and the phonetically spelled forms ha-a-ap-pa-na (KUB 58.50 iii 2), ha-pa-na (Bo 6980, 7, cf. Hoffner 1971: 31f.). Although the forms that are spelled with the sumerogram ÍD cannot be interpreted otherwise than as 'river', I am not sure whether this goes for the phonetically spelled words as well. I therefore leave them out of consideration. The real $n$-stem forms may have to be seen as a more close cognate to Pal. ha $\bar{a} n a-$.
The consistent spelling with single $-p$ - in Hittite and Luwian points to IE $* b^{(h)}$, which is confirmed by Lyc. $\chi b a(i)-$. We therefore have to reconstruct PAnat. * $h_{2}$ ebo-, which cannot be connected with $* h_{2} e p$ - 'water' as seen in Skt. áp- and OPr. ape 'brook, small river'. We must rather connect the Anatolian form to the It.-Celt. forms (OIr. aub, gen. abae, Lat. amnis 'stream, river'), which go back to * $h_{2} e b^{h}-n$ - These $n$-stem forms remind of Pal. hāpna- and Hitt. ÍD-n-.
hāppar- / hāppir- (n.) 'business, trade; compensation, payment, price’ (Sum. ŠÁM): nom.-acc.sg. ha-a-ap-pár (OS), ha-ap-pár (OS), ha-ap-pí-ir (NS), dat.loc.sg. ha-ap-pa-ri (OH/NS), abl. ha-a-ap-pa-ra-az (OS), ha-ap-pár-ra-az ( $\mathrm{OH} / \mathrm{NS}$ ).
 sell, to deliver, to dispense' (1sg.pres.act. ha-ap-pa-ri-ia-mi (MH/NS), 2sg.pres.act. ha-ap-pí-ra-a[-ši] (MH/MS), 3sg.pres.act. ha-ap-pa-ra-ez-zi (OS), ha-ap-ra-ez-zi (OH/MS), ha-ap-ri-ez-zi (MH/MS), ha a-ap-pi-ra-a-iz-zi (OH/NS), ha-ap-pí-ra-iz-zi (OH/NS), 2pl.pres.act. ha-ap-píra-at-te-ni (MH/MS), 3pl.pres.act. ḩa-ap-pár-ra-an-zi (OH/NS), ha-ap-pí-ra-a-an-zi (NH), ha-ap-ra-an-zi (NS), 1sg.pret.act. ha-ap-pa-ri-e-nu-un (OS), 3sg.pret.act. ha-ap-pa-ra-a-et (OS); part. [ha-a]p-pi-ra-a-an-t- (MH/MS), ha-ap-pí-ra-an-t- (MH/NS); impf. ha-ap-pí-ri-iš-ke/a-(MH/NS)), see happina-, hāppir(ii)a-.

IE cognates: Skt. ápas- 'work', Lat. opus 'work'.
PIE * $h_{3}$ ép- $r$ -
See HW ${ }^{2} \mathrm{H}: 215 \mathrm{f}$. for attestations. The oldest attestations (OS) of the noun hāappar show plene spelling ha-a-ap-pár. A nom.-acc.sg. ha-ap-pí-ir is attested twice in one NS text only. Nevertheless, this stem is attested in the derived verb happirae- ${ }^{z i}$ (oldest attestation MH/MS) and happir(ii)a- 'town' (q.v.) as well, which proves that it is linguistically real (note that in 'town' it is attested with plene spelling of -a-: ha-a-ap-pi-ri). The alternation between happarae- and haprae- and happariie/a- and hapriie/a-, shows that the stem hāppar is to be analysed as /Há̀pr/. This means that we are dealing with two stems, /Hāpr-/ and /Hāpir- / Hāper-/. It is likely that these reflect ablaut, but the original ablaut
pattern cannot easily be established anymore. We probably should think of an $r$ stem * $h_{3}$ ép- $r$, * $h_{3} p$-ér-s yielding the secondary stems *h $h_{3}$ ép-ēr and *h $h_{3}$ ép-r-os, * $h_{3} e ́ p-r-i$, etc. through analogy (cf. also Kimball 1987a: 186f.).

Since Sapir (1936: 179) this word is generally compared with Skt. ápas- 'work', Lat. opus- 'work' < *h $h_{3}$ ep-. Reconstructing an original $-r / n$-stem on the basis of hāppar besides happina- 'rich' is unnecessary (pace Rieken 1999: 315). We find $n$-stem derivatives meaning 'wealth' in other IE languages as well (e.g. Skt. ápnas- 'wealth'), showing that we can easily assume an independent $n$-stem. Moreover, $-r / n$-stems are that common in Hittite that it is unattractive to assume that an original $-r / n$-stem developed into a Hittite $r$-stem (which are much rarer).
The Lyc. form epirijeti is since Laroche (1958: 171-2) translated as 'sells' and connected with häppar- (and especially happiriie/a-). This has led to the generally accepted view that initial $* h_{3^{-}}$dropped in Lycian (Kimball 1987a). Rasmussen (1992: 56-9) convincingly shows that Laroche's translation 'sells' of epirijeti was not based on any contextual considerations, however, but on the formal similarity with Hitt. happiriie/a- only. He shows that several other interpretations in principle are possible as well and that any conclusions based on this form alone are therefore unreliable. As I have shown in Kloekhorst fthc.c, I believe that $* h_{3} e-$ yielded Lyc. $\chi e-$, and that therefore the connection between Hitt. hāppar- < *h ep-r- and Lyc. epirijeti cannot be upheld anymore.

The connection with Lyd. afaris' (allegedly 'sale deed') as given by Puhvel HED 3: 126 is far from assured.

## happena-: see hapn- / happen-

happina- (adj.) 'rich' (Sum. NÍG.TUKU): dat.-loc.sg. ha-ap-pí-ni (NH).
Derivatives: ${ }^{(L \mathbf{U C}} \boldsymbol{h} \boldsymbol{h a p p i n a n t -}$ (adj.) 'rich (person)' (nom.sg.c. ha-ap-pí-na-an-za, gen.sg. ha-ap-pí-na-an-da-aš, [h]a-ap-pí-n[a-an-t]a-aš, dat.-loc.sg. haa-ap-pí-na$a n-t i$, nom.pl.c. ha-ap-pí-na-an-te-eš), happinahh ${ }^{i}$ (IIb) 'to enrich' (1sg.pres.act. ha-ap-pí-na-ah-ha-ah-hi, 3sg.pres.act. haa-ap-pi-na-ah-[hi], 1sg.pret.act. ha-ap-pi-na-ah-hu-un, 3pl.pret.act. ha-ap-pi-na[-ah-he-er], 2sg.imp.act. ha-ap-pi-na-ah, ha-ap-pí-na-ah-hi), happinē̌̌š- ${ }^{z i}$ (Ib2) 'to become rich' (2sg.pres.act. NÍG.TUKU-ti, 3sg.pres.act. ȟa-ap-pí-ni-eš-zi, [h]a-ap-pí-ni-iš-ši-e[z-zi]), happinatt- (c.) 'wealth' (nom.sg. ha-ap-pi-na-az, acc.sg. ha-ap-pi-na-at-ta-an).

IE cognates: Lat. ops 'wealth', opulentus 'rich', Skt. ápnas 'possessions', YAv. afnay 'haṇt- 'rich in property'.

PIE * $h_{3}$ ep-en-o-

See $\mathrm{HW}^{2} \mathrm{H}$ : 230f. for attestations. It is generally accepted that happina- and its derivatives are derived from the noun hāppar- / hāppir- 'business, trade' (see there for etymology). According to Szemerényi (1954: 275-82), Hitt. happinantis to be equated with Lat. opulentus 'rich' from *h3ep-en-ont- (the latter showing dissimilation of $*-n-n$ - to $-n-l-)$. Other $n$-derivations of the stem $* h_{3} e p$ - are found in e.g. Skt. ápnas 'possessions'.
happina- 'baking kiln, fire-pit': see hapn- / happen-
happir-: see hāppar- / hāppir-
hāppiriiia-, hāppira- (c.) 'town' (Sum. URU): nom.sg. URU-ri-aš (KBo 10.2 i 26 ( $\mathrm{OH} / \mathrm{NS}$ )), URU-pí-ra-aš (MS), acc.sg. URU-ri-an (KBo 34.110 obv. 7 (OH/NS)), URU-ía-an (KUB 35.135 rev. 19 (NS)), [URU-i]a-an (KBo 6.10 iii 17 ( $\mathrm{OH} / \mathrm{NS}$ )), [U]RU-pí-ra-an (ABoT 32 i 4 (MH/MS?), gen.sg. ha-ap-pí-ri-ía-aš (KUB 51.27 obv. 11 (NS)), URU-ri-i-ia-aš (KUB 13.2 iii 4 (MH/NS)), URU-ía-aš (KUB 23.72+ rev. 52 (MH/MS)), [U]RU-pí-ra-aš (KUB 3.62, 8 (NH?)), dat.loc.sg. ha-a-ap-pí-ri (KBo 5.6 i 16 (NH)), all.sg. URU-ri-ía (VSNF 12.30 iv 4 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 16.54 + ABoT 53, 16 (undat.), VBoT 24 ii 23 (MH/NS)), abl. URU-ri-az (NS), URU-ia-za, URU-ra-az (KUB 60.60 l.col. 12 (NS)), nom.pl. URU ${ }^{\text {(DIDLI.)HI.A }}(\mathrm{OS})$, acc.pl. URU ${ }^{\text {DIDLI.HI.A }}-u s ̌$, gen.pl. URU-ri-ía[-an], URU-ía$a n$, dat.-loc.pl. URU-ri-aš.
Derivatives: *hāppiriiiašeššar / hāppiriiiašešn- (n.) 'town-settlement' (nom.acc.sg. URU-ri-a-še-eš-šar (KBo 4.4 iv 6), URU-ía-še-eš-šar (KBo 6.34+ iii 29), URU-ri-įa-še-eš-š[ar] (KUB 23.116 i 6), dat.-loc.sg. URU-ri-a-še-eš-ni (VSNF 12.57 i 21)), *hāppiriiant- (c.) 'town (personified)' (nom.sg. URU-az (KUB 41.8 iv 30)).

$$
\text { PIE * } h_{3} e p-e r-i
$$

See HW ${ }^{2}$ H: 233f. for attestations. The word shows two stems, namely hāppiriíaand *hāppira- (URU-pira-). According to $\mathrm{HW}^{2}$, hāppiriiia- is the older form, although *hāppira- is attested in MH times already. Puhvel (HED 3: 128) assumes that happira- is a backformation on the basis of oblique forms like dat.loc.sg. hāppiri.
It is generally accepted that hāppiriia- is derived from hāppar- / hāppir'business, trade' and therefore originally probably meant 'place of trade'. See at hāppar- / hāppir- for further etymology.
hapn- / happen- (gender undet.) 'baking kiln, fire-pit, broiler (oven)': gen.sg. ha-ap<-pé»-e-na-aš (KUB 46.73 iii 4 (NS)), ha-ap-pé-na-aš, ha-ap-pa-na-aš (KBo 25.171 v 6 (NS)), dat.-loc.sg. haa-ap-pé-e-ni (OH/MS), h. ha-ap-pé-ni, all.sg. haa-ap-pé-na, instr. ha-ap-pé-ni-it.

PIE * $h_{3} e p-e n-$
See $\mathrm{HW}^{2} \mathrm{H}$ : 229-30 for attestations. There the word is classified as commune, but I have not been able to find any form that specifically shows to what gender this word belongs. The two attestations with plene $-e$ - show that in all other attestations the sign BI should be read as -pé-, which means that the stem in fact is happen- (note that $\mathrm{HW}^{2}$ treats this word under the lemma happina-). $\mathrm{HW}^{2}$ cites one form "mit der singulären Schreibung" ha-ap-pa-na-aš, which they interpret as gen.sg. of "Herdfeuer". If this interpretation is correct (and it does not seem improbable to me), it would show that we are dealing with an (originally) ablauting $n$-stem happen-, hapn- (in which I interpret ha-ap-pa-na-aš as /Hapnas/), and not with a thematic noun happena- (as usually cited). Herewith it becomes very probable that the word is of IE origin.
Puhvel (HED 3: 121-2) connects this word with Gr. ó $\pi \tau$ 'á $\omega$ 'to bake', itself probably derived from Gr. ó $\pi \tau$ ó ‘ 'baked'. This would point to a root $* h_{3} e p-$, which means that we have to reconstruct an original paradigm * $h_{3} e ́ p-n,{ }^{*} h_{3} p-e ́ n-s$ (if the word originally was neuter) or * $h_{3}$ ép-ōn, * $h_{3} p-e ́ n-m, * h_{3} p-n$-ós (if it was commune, cf. *pešan- / pešn- / pišen- for a similar paradigm).
happu- (adj.) 'secret(?)': nom.-acc.sg.n. hap?-pu.
Hapax in vocabulary KBo 1.42 ii 22, where Sum. GÚ.ZAL and Akk. PÍ-RI-ÌŠ-TÙ 'secret' are glossed with Hitt. hap'-pu ut-tar 'h. matter', on the basis of which we must assume that happu- means something like 'secret' (cf. Weitenberg 1984: 26). To what extent this happu- is cognate with happu- 'cage(?)' is unclear. One could assume that an original *'caged' develops into 'secret'. See then at happu'cage' for further etymology.
happu- (gender unclear) 'fence, railings, cage (within a pen)': dat.-loc.sg. ha-ap-pu-i, ha-ap-pu-u-i, ha-ap-pu-ú-i.

Derivatives: ${ }^{\text {(KUŠ) }} \boldsymbol{h} \boldsymbol{h} \boldsymbol{l}$ $u t-r i)$.

PIE * $h_{2} e p-u-$

See $\mathrm{HW}^{2}$ H: 255 for attestations. The word probably means something like 'fence, railing(s)' or more general 'cage' within a pen in which cows are gathered (cf. also Puhvel HED 3: 129f.). This makes it likely that ${ }^{\text {KUŠ̌ }}$ happutri-, which denotes a leather part of the harness of oxen, is derived from happu-. Tischler HEG 1: 167 proposes to connect happu- with happ- 'to join, to attach' (q.v.), which is widely followed. This would mean that happu- reflects * $h_{2} e p-u$-. Puhvel (1.c.) compares this $u$-stem with Lat. cōpula- 'binding' $<{ }^{*}$ co-apula-). For the possibility that happu- 'secret' is derived from this happu-, see there.
hapuri- (c.) 'foreskin': acc.sg. ha-pu-ri-in.
See $\mathrm{HW}^{2} \mathrm{H}$ : 256 for attestation and context. This word is generally connected with "hapuš-' 'penis'" (cf. e.g. Puhvel HED 3: 131; Rieken 1999: 206), but this has now become impossible since "hapuš-", which in fact is hāpūuša(šš)-, does not denote 'penis', but 'shin-bone' (cf. Kloekhorst 2005a). This leaves hapuriwithout any reliable IE etymology.
hapuš-: see h $\bar{a} p \bar{u} \stackrel{s}{s} a\left(\check{s} s{ }^{s}\right)-$
 $p u-u ́-s ̌ a=k a ́ n(K U B 9.4$ i 13), gen.sg. ha-a-pu-ú-ša-aš (KUB 9.4 i 31), dat.-loc.sg. ḩa-a-pu-ú-ša-aš-ši (KUB 9.4 i 13), dat.-loc.sg. hुa-pu-ša-ši (KUB 9.34 ii 34), erg.sg. hat-pu-ša-aš-ša-an-za (KUB 7.1 ii 35), erg.sg. [ha-a-p]u-ša-an-za (KUB 9.4 i 30), nom.-acc.pl. ḩa-pu-ša-aš-ša (KUB 7.1 ii 35), nom.-acc.pl. ḩa-a-pu-ša$a \check{s}-s ̌ a$ (KUB 17.8 iv 5), nom.-acc.sg.n. ḩa-pu-ú-še-eš-šar (KUB 7.1 ii 16).
Derivatives: hapušeššar (n.) '(arrow)shaft' (nom.-acc.sg. or pl. haa-pu-ú-še-eššar (KUB 7.1 ii 16)).

This word, which usually is cited as hapuš-, on the one hand denotes 'shaft (of an arrow and of reed)', and on the other hand refers to a body part that occurs in a list of body parts in the Ritual of the Old Woman. According to Alp (1957: 25), in this latter context the word means 'penis', a view that is generally accepted. On the basis of the meaning 'penis', Watkins (1982b) proposes to connect it with Gr. ò $\pi v i ́ \omega$ 'to wed, to have sexual intercourse', reconstructing $* h_{3} p u s$-. As I have argued in detail in Kloekhorst 2005a, the word in fact shows a stem hā̄pūša(šš)and can hardly mean 'penis' because the list already contains a term for 'penis', namely ${ }^{\text {UZU }}$ ÚR. Since h hāpū̌ša( $\left.\check{s} \check{s}\right)$ - is mentioned between hupparattiiati- 'pelvis' and tašku(i)- 'thigh-bone(?)' on the one hand and GÍR 'foot' on the other, it is in
my view much more likely that it denotes 'shin-bone' (cf. the translation 'Bein' in $\mathrm{HW}^{2} \mathrm{H}: 259 \mathrm{f}$.). The connection between 'shin-bone' and 'shaft (of arrow or reed)' lies in the notion 'hollow pipe'. This new interpretation nullifies Watkins' etymology. In my opinion, h hāpū̄sa(šš)- hardly can be of IE origin.
$\boldsymbol{h a p u s ̌ ( \widetilde { s } ) -}{ }^{z i}$ (Ib1) 'to make up for, to make up, to bring after': Luw.1sg.pres.act. ha-pu-uš-uis, 3sg.pres.act. ḩa-pu-uš-zi, 3pl.pres.act. (4) ḩa-pu-ša-an-zi, ha-pu-uš-ša-an-zi, 2sg.imp.act. ha-pu-uš, 3sg.imp.act. ha-pu-uš-du; 3sg.pres.midd. ha-p[u$\check{s} a-a-r] i$, 3sg.pret.midd. hha-pu-uš-ta-at, 3pl.pret.midd. ha-pu-ša-an-ta-at; verb.noun. gen.sg. ha-pu-uš-šu-u-u[a-aš]; impf. ḩa-pu-uš-ke/a-.

See $\mathrm{HW}^{2} \mathrm{H}$ : 258-9 for attestations and semantics. The verb denotes 'to make up for, to bring after' and is used in contexts where neglected festivals or rituals/offerings have to be made up and in contexts where objects (mostly food products used in rituals) have to be brought after. The one Luwian inflected form and the occasional use of gloss wedges show that it probably was Luwian, too. It should be noted that although most of the forms show a single spelled $-p-, \mathrm{HW}^{2}$ cites some forms with geminate $-p p$ - as well. The appurtenance of these forms is uncertain however. E.g. 3pl.pres.act. [h]a-ap-pu-uš-ša-an-zi (KUB 16.2 iv 11) is attested in such a broken context, that its meaning cannot be determined independently. The form ha-ap-pu-ša-an-da-ǎ̌ (KBo 6.26 iii 48), which is duplicated by ḩa-pu-ša-an-da-aš (KUB 13.14 i 7), modifies TÚG 'clothe' in an enumeration of clothes. Although a meaning 'brought after' is possible, it is not self-evident. The verb.noun ha-ap-pu-uš-šu-ua-ar is attested in the vocabulary KBo $8.10+29.9$ i 5, where Hitt. $\mathrm{MU}^{?}$-aš ha-ap-pu-uš-šu-ua-ar (cf. MSL 15: 91) glosses Akk. uz-zu-bu 'vernachlässigt, verkommen' (thus in AHW, note that this meaning fits the fact that $\mathrm{MU}^{?}-a \check{s}$ ha-ap-pu-uš-šu-ua-ar is found in a paragraph together with (4) ar-ha da-lu'-mar 'forsaking', (6) [ư]a-aš-túl 'sin' and (7) [h]a-ra-tar 'crime'). All in all, I conclude that all the forms that can be ascertained as belonging to this lemma on semantic grounds, show a single spelling $-p-$. Phonologically, we therefore have to interpret this verb as /Hbus-/.
Puhvel (HED 3: 133f.) translates this verb as 'reclaim, resume, reschedule, make up for', stating that "the base-meaning may be 'reclaim'". This assumption seems predominantly inspired by Puhvels proposal to etymologically connect hapuš- with Gr. ŋ̇ $\pi$ v́ $\omega$ 'to call out to, to invoke, to summon'. In my view, the basic meaning is rather 'to take care of something in arrear', which does not easily fit the Greek semantics. Unfortunately, I have no convincing alternative etymology to offer.
hā̄ra- 'eagle': see hāran- ${ }^{\text {(MUŠEN) }}$
harra- ${ }^{\boldsymbol{i}}$ / harr- (IIa1 $\gamma$ ) 'to grind, to splinter up (wood), to crush (bread), (+ arha) to destroy; (midd.) to go to waste, to go bad': 3sg.pres.act. har-ra-i, 1pl.pres.act. har-ru-ua-ni (KUB 23.77, 50 (MH/MS)), 3pl.pres.act. har-ra-an-zi, har-rạa-a-an$z i($ KUB 46.22 i 6 (NS)); 3sg.pres.midd. har-ra-at-ta-ri, 3sg.pret.midd. har-ra-atta; part. har-ra-an-t-, har-ra-a-an-t- (KUB 9.31 i 2 (MH/NS)); inf.I har-ru-ua$a n-z i$.
Derivatives: harranu- ${ }^{z i}$ (Ib2) 'id.' (3sg.pret.act. har-ra-nu-ut; impf. har-ra-nu-uš-ke/a-), see h̄āršs- ${ }^{-}$.

Anat. cognates: CLuw. harra- 'to crush(?)' (3pl.pret.act. har-ra-an-ta (KBo 29.34 i 6)), ${ }^{\mathbf{N A}_{4}} \boldsymbol{h}$ arra- 'grindstone' (abl.-instr. har-ra-a-ti); HLuw. ARHA hara'to destroy' (3sg.pres.act. /haradi/ ha+ra/i-ri+i (TOPADA §34, BULGARMADEN §13), 3pl.imp.act. /harantu/ $h a+r a / i-t[u ́ u-u]$ (TOPADA §38), $h a+r a / i-t u$ (BULGARMADEN §15)).

IE cognates: Gr. ảpów, Lat. arō, OIr. -air, OHG erien, Lith. ariù, árti, OCS orjo, orati 'to plough'.

PIE * $h_{2} o ́ r h_{3}$-ei, $* h_{2} r h_{3}$-énti?
See $H^{2}$ : H 263f. for attestations. There, a 3sg.pres.act.-form ha-ra-ra-zi is mentioned as belonging to this verb, which in my view is rather to be interpreted as a noun (see ${ }^{\mathrm{NA}_{4}}$ hararazazi- for its own lemma). The verb shows a stem harrabesides harr- (in inf.I h.harruuanzi and 1pl.pres.act. harruuani (although this latter form is mentioned under the lemma har (k) $-^{z i}$ in $\left.\mathrm{HW}^{2} \mathrm{H}: 280\right)$ ) which determines it as belonging to the $\operatorname{tarn}(a)$-class. In NS texts we occasionally find forms that inflect according to the hatrae-class (harrānzi, harrānt-). The tarn(a)-class consists of verbs with the structure $*(\mathrm{Ce}) \mathrm{CeH}-$, and of verbs with the structure * $\mathrm{CeCh}_{2 / 3^{-}}$(cf. §2.2.2.2.d, where I have argued that the colouring of the 3 sg.pres.act.-ending $*_{\text {-ei }}$ to ${ }^{*}$-ai due to the preceding $* h_{2 / 3}$ was responsible for these verbs' transition into the tarn(a)-class: cf. also iškalla- ${ }^{i}$ / iškall- 'to split', išparra- ${ }^{i}$ / išparr- 'to trample', malla- ${ }^{i}$ / mall- 'to mill', padda- ${ }^{i}$ / padd- 'to dig' and šarta- ${ }^{i} /$ šart- 'to wipe, to rub'). Because the first structure is unlikely for harra- ${ }^{i}$ / harr-, we rather have to assume the second: *HerH- (note that this structure explains geminate -rr- as well). Since in *HórH-ei, *HrH-énti the initial laryngeal stands in front of either $*_{O}$ or $* r$, and since in both these positions $* h_{3}$ would drop, the only possible reconstruction is with $* h_{2}$ - Because $* h_{2^{-}}$was dropped in front of $*_{o}$ as well, but not in front of $* r$, we have to assume that $h$ - is
restored throughout the paradigm on the basis of the weak stem * $h_{2} r \mathrm{H}$ - (cf. Kloekhorst fthc.c for the outcome of the initial laryngeals). The root-final laryngeal must be $* h_{2}$ or $* h_{3}$. So formally, harra-/harr- can only reflect a root $*_{2}$ erh $_{2 / 3}$.

A connection with PIE * $h_{2} e r h_{3^{-}}$'to plough' (Gr. ảpó $\omega$, Lat. arō, Lith. árti, etc. 'to plough') has been proposed by Goetze \& Sturtevant (1938: 70), which would formally indeed work perfectly. The semantic side of this etymology is debatable, however. If one accepts this etymology, it has to be assumed that PIE $* h_{2} e r h_{3^{-}}$ originally meant 'to crush', which developed into 'to plough' (from 'to crush the soil', cf. also at $h \bar{a} \bar{a} r s^{-}{ }^{i}$ 'to till the soil' $<{ }^{*} h_{2} o r h_{3}-s-$ ) only after the splitting off of the Anatolian branch.
Puhvel (HED 3: 136) alternatively suggests a borrowing from Akk. harāru 'to grind', but in my opinion, the inflection of harra- ${ }^{i}$ / harr- cannot easily be explained by this assumption.
hāran- ${ }^{(M U S ̌ E N)}$ (c.) 'eagle' (Sum. Á ${ }^{\text {MUŠEN }}$, Akk. $\left.E R \bar{U}, A R \bar{U}\right):$ nom.sg. ha-a-ra-aš (OS, often), ha-ra-aš (rare), ha-ra-a-aš (1x, KBo 12.86, 7 (NS)), acc.sg. ha-a-ra$n a-a n$ (OS, often), ha-ra-na-an (OS, less often), ha-ra-na-a-an (KBo 13.86 obv. 16 (OH/NS)), ha-a-ra-an (KUB 30.34 iv 12 (MH/NS)), ha-ra-an (KUB 30.35 iv 4 (MH/NS), KUB 58.99, 6 (NS)), ha-ra-a-an (KBo 39.239, 3 (MS?)), gen.sg. ha-a-ra-na-aš (often), ha-ra-na-aš, har-ra-n[a-aš] (KUB $20.54+$ KBo 13.122 rev. 8 ( $\mathrm{OH} / \mathrm{NS}$ )), dat.-loc.sg. hูa-a-ra-ni (KBo 12.77, 12 (MS)), nom.pl. ḩa-a-ra-ni-iš (KUB 33.62 ii 2 ( $\mathrm{OH} / \mathrm{MS}$ )), ha-a-ra-«ne->e-eš (KUB 50.1 ii 12 (MS)), ha-ra-a-ni$i s ̌$ (Bo 6472, 13 (undat.)), acc.pl. ha-a-ra-ni-e-e[š] (KUB 41.33 obv. 12 (OH/NS)) // ha-ra-ni-ia-aš (KUB 41.32 obv. 12 (OH/NS)).
Derivatives: hāranili (adv.) 'in eagle-fashion' (ha-a-ra-ni-li (OH/MS)).
Anat. cognates: Pal. haran- 'eagle?' (nom.sg. ha-ra-a-aš, gen.sg. [ha? -]a-ra-na$a \check{s}$ ); CLuw. harran(i)- (c.), a bird (acc.pl. har-ra-ni-en-za); Lyc. Xerẽi, name of a dynasty.
IE cognates: Gr. őpvıc 'bird', Goth. ara 'eagle', OIc. qrn 'eagle', OIr. irar 'eagle', OCS orblъ 'eagle', Lith. erẽlis 'eagle'.

PIE *h3ér-on-
See $\mathrm{HW}^{2} \mathrm{H}$ : 265f. for attestations. This word is attested with and without the determinative MUŠEN. Usually this determinative follows the word (hāranMUŠEN ) but it does occur preceding the word as well ( ${ }^{\text {MUŠEN }}$ hāran-, especially often in OS texts). The original paradigm must have been nom.sg. hāaraš, acc.sg. hārranan, gen.sg. hāaranaš, dat.-loc.sg. hāarani, nom.pl. hāraneš. These show that
the stem was hāran- (the -n- of which was regularly dropped in front of the nom.sg.-ending $-s$, yielding $h \bar{a} r a \check{s})$. Only sporadically, we find spellings with a different plene vowel (harāš once, haranān once). In the younger texts we find a few times an acc.sg. hāran (also haran, harān), which show a secondary thematic stem h $h \bar{a} r a$ - on the basis of a false analysis of nom.sg. hāaraš.
Already since Mudge (1931), this word is generally connected with Goth. ara 'eagle', Gr. őpvıc 'bird', etc. Although there has been some discussion on the exact reconstruction of these words (initial $* h_{2}$ - or $* h_{3}$-), the non-apophonic $o$ - in my view points to a root $* h_{3} e r$ - (cf. also Kloekhorst fthc.c). Note that Lith. erêlis 'eagle’ must show Rozwadowski’s change from *arêlis (cf. Andersen 1996: 141; Derksen 2002). The Hittite forms go back to an $n$-stem *hér-on- (in Hittite, we see no traces of ablaut anymore), which must be compared to other $n$-stem forms like Gr. őpusc 'bird' and Goth. nom.pl. arans.

The possible CLuw. cognate, harran(i)- (cf. Starke 1990: 76) is treated under the lemma Hitt. harrani-, q.v.
See Starke (1987: $265^{80}$ ) for the convincing identification of the Lycian dynastic name Xerẽi as the word for 'eagle' on the basis of the fact that this dynasty on its coins depicts the goddess Athena together with an eagle instead of with an owl.
harrani- (c.) an oracle-bird: nom.sg. har-ra-ni-iš (NS), har-ra-ni-i-iš (NS), har-ra-ni-eš (NS), acc.sg. har-ra-ni-in (NS), har-ra-ni-i-in (NS), acc.pl. [har-r]a-ni$u s^{\prime}(\mathrm{NS})$.
Anat. cognates: CLuw. harran(i)- (c.) a bird (acc.pl. har-ra-ni-en-za).
PIE ? ${ }^{*} h_{3}$ ér-on-
See $\mathrm{HW}^{2} \mathrm{H}:$ 271-2 for attestations. All attestations are written with the sign HAR, which can be read har as well as hur, which makes a reading hurrani- equally possible. The word denotes an oracle-bird, but it cannot be determined which bird is meant exactly. Because this word is found in NS texts only, and because it is found in CLuwian as well, it is possible that the word is Luwian originally. Starke (1990: 76) suggests to interpret CLuw. harrani- as the Luwian cognate to Hitt. hāaran- 'eagle' (q.v.), explaining -rr-by Čop's Law. The connection would fit even better if we assume that, since harrani- is a commune word, the $-i$ - is due to the $i$-Motion and that the stem actually was harran-. If this etymology is correct (and formally I see no hindrances, pace Melchert (1994a: 235) who believes that * $h_{3} e ́ C$ - did not participate in Čop's Law because of the intemediate stage $* h_{3} o ́ C$-, without offering evidence for this assumption), then we must assume that the Luwian word was not used for the eagle itself, as we can see from contexts like

KUB $18.5+49.13$ i (28) nu EGIR ÍD ÁMUŠEN har-ra-ni-i-in-n=a GUN-an a-ú-me-en 'Behind the river we saw the eagle and the harrani-bird GUN-an'. Such contexts do indicate, however, that the harrani- was an eagle-like bird, which in my view could support the etymology. See for further etymology at hāran(MUŠEN).
${ }^{\left(\mathrm{NA}_{4}\right)}$ hararazi- (n.) '(upper) millstone(?)': nom.-acc.sg. ha-ra-ra-zi.
See Puhvel HED 3: 140 for a treatment of this word. It is attested twice only, in a similar context. Puhvel interprets the forms as a noun denoting 'millstone'. HW ${ }^{2}$ $\mathrm{H}: 263$ interprets the words as verbal forms, however, regarding them as variants of harra- ${ }^{i}$ / harr- 'to grind' (q.v.). This latter interpretation seems improbable to me, and I therefore follow Puhvel. He proposes to etymologically connect hararazi with harra-/harr-, but this is difficult because of the single -r- of hararazi vs. geminate -rr- in harra-/harr-. Moreover, the formation of hararazi is quite intransparent. No further etymology.
-hha(ri), -hhat(i) (1sg.midd.-endings).
In the present, the ending of 1sg.midd. has three forms, namely -hha, -hhari and -hhahari (a hypothetical **-hhaha is unattested as far as I know). The latter variant, which seems to be a staple form, is attested a few times only, exclusively in NS texts. Nevertheless, it must be rather old: on the one hand it shows a lenited - $h$ - in between two unaccentuated vowels (-hhahari $=/$-Hahari/) whereas this lenition has become unproductive in the course of Hittite (so we would have expected -hhahhari $=/$-HaHari/ if the ending were very recent); on the other hand it corresponds exactly to the Lycian 1 sg.pret.midd.-ending - xagã as attested in axagã 'I became' (note that here we find a lenited consonant as well: - $\chi a g \tilde{a}<$ PAnat. */-Haha+/). Perhaps -hhaha(ri) was a marked byform of -hha(ri), which was tolerated in the official language only after the Luwian language, where it must have existed as well (but where it is unattested, unfortunately), exercized more influence on Hittite.
The original distribution between -hha and -hhari must probably have been one similar to the distribution between 3sg.pres.midd. -a vs. -āri, namely *CéC-ha vs. *CC-hári. In OS texts we already find pár-aš-ḩa besides pár-aš-ha $a$-ri, however.

In the preterite, we find four endings: -hhati, -hhat, -hhahati and -hhahat. The latter two forms occur also in NS texts only, but must, just as -hhahari, have been older as well. The fact that we find forms with and without final $-i$ in my view is
best explained by assuming that the original endings were -hhati and -hhahati, the $-i$ 's of which were eleminated because $-i$ had become the main marker of the present tense. It must be noted that such a chronological distribution cannot be supported by the attestations of this ending, however (we find e-eš-ha-at and pa$i s ̌-g a-h a-a t$ in OS texts already, but cf. -a(ri), -at(i)) and -anta(ri), -antat(i).
It is quite clear that all endings have the element -hha in common. According to Kortlandt (1981), who elaborately treats the endings of 1 sg.midd. in several IE languages, the Skt. secondary ending $-i$ shows that the PIE ending was $*-h_{2}$. Because in Anatolian this ending would have been regularly lost in postconsonantal position (cf. mek 'much' < *meǵ $h_{2}$ ), I assume that it was restored with an additional vowel that yielded Hitt. $-a$ and Lyc. $-a$.
$\boldsymbol{\operatorname { h a r }}(\boldsymbol{k})^{z i}$ (Ia4) 'to hold, to have, to keep': 1sg.pres.act. har-mi (OS), 2sg.pres.act. har-ši (OS), har-ti (MH/NS), 3sg.pres.act. h_ar-za (KBo 9.73 obv. 12 (OS)), harzi (OS), 1pl.pres.act. har-ua-ni (OS), har-ú-e-ni (MH/MS), har-u-e-ni (NS), 2pl.pres.act. har-te-ni-i (OS), har-te-ni (often), har-te-e-ni (KUB 14.12 rev .10 (NH)), 3pl.pres.act. ḩar-kán-zi (OS), 1sg.pret.act. har-ku-un (OS), 2sg.pret.act. har-ta, 3sg.pret.act. har-ta, har-da (KBo 18.54 obv. 9), 1pl.pret.act. har-u-en (KUB 21.14, 9), 2pl.pret.act. har-te-en, har-tén, 3pl.pret.act. har-ke-er (MH/MS), har-ker, 2sg.imp.act. har-ak (MH/MS), 3sg.imp.act. har-du (OS), har-tu (KUB 31.81 obv. 3 (OS)), 2pl.imp.act. har-te-en, har-tén, 3pl.imp.act. har-kán-du (MH/MS); 2pl.imp.midd. har-tum-ma-ti (KBo 18.27 obv. 5 (NS).
Derivatives: LỨMUNUS haruant- (c.) 'keeper, caretaker, nurse' (Sum. ${ }^{\text {LÚMUNUSÙ }}{ }^{\text {UnM }}$ MEDA; nom.sg. har-úa-an-za, acc.sg. ha-ru-ua-an-da-an, har-ua$a n-d a-(n)=\check{s} a-a n$, gen.sg. ḩar-ûa-an-da[-aš], har-ua-an-ta-aš, nom.pl. har-ûa-an-te-eš), see pe har $(k) z^{z i}$.

IE cognates: Lat. arcēre 'to shut off, to enclose, to hold off', Gr. ápкé $\omega$ 'to ward off, to protect'.

PIE * $h_{2} e r k^{\prime} k^{\prime}-t i, * h_{2} r^{\prime} k^{\prime}-e n t i$
See $\mathrm{HW}^{2} \mathrm{H}$ : 280f. for attestations: note that no infinite forms of this verb are attested. $\mathrm{HW}^{2}$ cites a 1pl.pres.act.-form har-ru-ua-ni, which in my view does not necessarily mean 'to hold': KUB 23.77 (50) ú-e-š=a šu-ma-a-aš=pát har-ru-ua$n i$, which I would rather translate 'We will crush you' (see under harra- ${ }^{i}$ / harr-).
When used independently, the verb denotes 'to hold, to have, to keep'. When used together with a neuter participle it functions as an auxiliary verb, and the whole construction denotes 'to have ...-ed'. This construction probably developed out of sentences where har $(k)-^{z i}$ was used together with the participle of transitive
verbs in order to denote 'to hold something ...-ed' (e.g. n=a-at kar-pa-an har-zi 'he holds it raised' (KBo 12.126 i 5)). That this formation evolved into something comparable to periphrastic perfects known from many European languages, is visible in the use of $\operatorname{har}(k) z^{z i}$ with the participle of intransitive verbs, which is attested in OS texts already (e.g. pár-ša-na-a-an har-zi 'he has crouched' (KBo 17.15 rev. 16 (OS))).

Already since Sturtevant (1930c: 215) this verb is generally connected with Lat. arceō 'to hold in, to hold off' and Gr. ả $\rho \kappa \varepsilon ́ \omega$ 'to ward off' and reconstructed as * $h_{2}$ er ${ }^{\left(k^{\prime}\right)}$.

In Hittite, the verb shows two stems, namely har- when followed by an ending starting in a consonant (including -u-) and hark- when followed by an ending starting in a vowel or when no ending at all is following (2sg.imp.act. har-ak= /Hark/). This distribution reminds us of the distribution of e.g. li(n) $k-{ }^{z i}$ 'to swear' (link $V^{\circ}$ vs. $l i k C^{\circ}$ ) or $k \bar{i} \check{s}-{ }^{\text {a(ri) }} / k i \check{s}$ - 'to become' ( $k \ddot{s} V^{\circ}$ vs. $k i \check{s} C^{\circ}$ ). It is remarkable that the semi-homophonous verb hark- ${ }^{z i}$ 'to get lost' never loses its $-k$-, however. Different explanations for this situation have been given. Cowgill apud Eichner (1975a: 89-90), followed by Oettinger (1979a: 190) claims that the loss of $-k$ - is due to 'weariness' in an auxiliary verb. This seems unlikely to me as $\operatorname{har}(k)$ - is used independently often enough to preclude any 'weariness'. Puhvel (HED 3: 156) states that the distribution is "due to paradigmatic preconsonantal generalization of the loss of $k$ in the normal assimilation of $* k t$ to $t$ ". The alleged sound law $* k t>t$ has proven to be false, however (cf. Melchert 1994a: 156).
In my view, the difference between har $(k))^{z i}$ 'to hold' and hark- ${ }^{z i}$ 'to get lost' can only be explained by either assuming that in pre-Hittite times both verbs underwent a sound law by which $*-K$ - was lost in consonant clusters $*$ - $R K C$-, after which hark- ${ }^{z i}$ 'to get lost' analogically restored the ${ }^{*}-K$ - by levelling, whereas har $(k)^{z i}$ 'to hold' did not, or by assuming that the (fortis) $* k$ reflected in har $(k)_{-}{ }^{z i}$ 'to hold' $\left(* h_{2} e r^{\prime} k^{\prime}-\right)$ behaved differently from the (lenis) $* g$ reflected in hark- ${ }^{z i}$ 'to get lost' $\left({ }^{*} h_{3}\right.$ erg-). When we would advocate the first possibility, we would expect that no consonant clusters $-R K C$ - are found in Hittite, unless in cases where a scenario can be envisaged according to which the $-k$ - is restored. In my view, hargnau- 'palm, sole', which I reconstruct as *h2erg'-nou-, precludes this: all forms within its paradigm have the cluster /-rgn-/, which shows that *-rǵn- did not regularly lose its *-ǵ-. This would mean that only the second possibility remains, namely assuming that $* R k C$ behaved differently from $* R g^{(h)} C$, in the sense that $* k$ disappeared, but $* g^{(h)}$ did not. This could have a parallel in the difference in outcome between (lenis) ${ }^{*}-d^{(h)} n->$ Hitt. -tn- and (fortis) $*$-tn-> Hitt. -nn- (cf. Puhvel 1972: 112).

All in all, I conclude that $\operatorname{har}(k){ }^{-2 i}$ shows that in a cluster $* R k C$ the fortis $* k$ regularly was dropped, whereas this was not the case with lenis $* g^{(h)}$. See tarna- ${ }^{i}$ / tarn- 'to let (go), to allow', ištar $(k)_{-}^{z i}$ and $\operatorname{tar}(k) u_{-}{ }^{z i}$ for similar scenarios. The latter verb may show that the development of $*-R k C$ - to Hitt. $-R C$ - went through an intermediate stage $*-R P C$ -
The noun ${ }^{\text {LÚ/MUNUS }}$ haruant- 'keeper, caretaker', which is quite obviously derived from har $(k)_{-}{ }^{z i}(\mathrm{cf}$. Melchert 1994a: 164), is regarded by Puhvel (HED 3: 204-5) as cognate with Lith. šérti 'to feed', Gr. корé( 'to clean' < *kerh $h_{1}$, of which he supposes that $* k$ yielded $h$ through assimilation similar to the one in haršar / haršn- 'head' which he derives from *Kerh ${ }_{2} s r$. See for the incorrectness of the latter etymology at its own lemma.
$\boldsymbol{\operatorname { h a r k } -}{ }^{z i}$ (Ia4 > Ic1) 'to get lost, to lose oneself, to disappear, to perish' (Sum. ZÁH, Akk. HALĀQU): 1sg.pres.act. har-ak-mi (KUB 54.1 ii 48 (NS), 2sg.pres.act. har-ak-ši (HKM 35 obv. 9 (MH/MS)), har-ak-ti (OH/NS), 3sg.pres.act. har-ak-zi (OS), 1pl.pres.act. har-ku-e-ni (OH/MS), 2pl.pres.act. har-ak-te-ni (OH/NS), 3pl.pres.act. har-kán-zi (MH/MS), har-ki-ía-an-zi (OH/MS), 3sg.pret.act. har-ak-ta (MH/MS), 3pl.pret.act. har-ke-er, har-ker, har-ke-e-er (OH/NS), 3sg.imp.act. har-ak-tu (OS), har-ak-du, [har-]ki-e-ed-du (MH/NS); 3sg.imp.midd. har-ki-et-ta-ru (KUB 57.60 obv. 4 (NH)), har-ki-ia-it-ta-ru (KUB 57.63 ii $8(\mathrm{NH})$ ); part. har-kán-t-, har-ga-an-t-, har-ki-ía-an-t- (KUB 57.32 ii 2 (NS)); verb.noun. [har-ga-]tar 'destruction', gen.sg. har-kán-na-aš, dat.-loc.sg. har-ga-an-ni, abl. h_ar-kán-na-za; inf.II har-kán-na, har-ga-an-na, har-ka ${ }_{4}-a n-n a ;$ impf. har-ki-iš-ke/a-.
Derivatives: harka- (c.) 'loss, perdition, destruction, ruin’ (Sum. ZÁHु-TI, Akk. ŠAHLUQTI; nom.sg. har-ga-aš, acc.sg. har-ka-an (OH/MS), har-ga-an, har-kán, dat.-loc.sg. har-ki), harni(n)k- ${ }^{z i}$ (Ib3) 'to make disappear, to ruin, to wipe out, to destroy' (Sum. ZÁH, Akk. HULLUQU; 1sg.pres.act. har-ni-ik-mi, har-ni-ik-ki-mi (1x), 2sg.pres.act. har-ni-ik-ši, har-ni-ik-ti, 3sg.pres.act. har-ni-ik-zi, 1pl.pres.act. har-ni-in-ku-[e-ni] (KUB 33.120 iii 3 (MH/NS)), 2pl.pres.act. har-ni-ik-te-ni (MH/MS), 1sg.pret.act. har-ni-in-ku-un (often), har-ni-en-ku-un (1x), har-ni-kuun ( 1 x , see commentary), 2g.pret.act. har-ni-ik-ta, 3sg.pret.act. har-ni-ik-ta (OS), 3pl.pret.act. har-ni-in-ke-er, har-ni-in-ker, 2sg.imp.act. har-ni-ik, 3sg.imp.act. har-ni-ik-du, har-ni-ik-tu ${ }_{4}$, 2pl.imp.act. har-ni-ik-te-en, har-ni-ik-tén, 3pl.imp.act. har-ni-in-kán-du (MH/MS), har-ni-en-kán-du (KUB 26.25, 11 (NH)); part. har-ni-in-kán-t- (MH/MS); verb.noun. har-ni-in-ku-u-ar; inf.I har-ni-in-ku-una-an-zi; impf. har-ni-in-ki-iš-ke/a-, har-ni-in-ki-eš-ke/a-), harknu- ${ }^{{ }^{i}}$ (Ib2) 'to ruin, to destroy' (1sg.pres.act. har-ka ${ }_{4}-n u-m i$, 2sg.pres.act. har-ga-nu-ši, 3sg.pres.act.
har-ga-nu-zi, har-ka ${ }_{4}-n u-z i, 1$ pl.pres.act. har-ka ${ }_{4}$-nu-me-ni, 1sg.pret.act. har-ga-nu-nu-un, 3sg.pret.act. har-ga-nu-ut, 3pl.pret.act. har-ga-nu-er, har-ka4-nu-er, har-ga-nu-e-[e]r, 3pl.imp.act. har-ga-nu-ua-an-du, har-ga-nu-a[n-du], har-kán$n u[-a n-d u]$, part. har-ga-nu-ua-an-t-).

IE cognates: OIr. orgaid 'to kill, to ravage, to devastate', con•oirg 'to smite', ?Arm. harkanem 'to smite, to smash'.

PIE * $h_{3}$ erg-ti, $* h_{3}$ rg-enti
See $\mathrm{HW}^{2}$ H: 297f. for attestations. We find two stems, namely hark- ${ }^{z i}$ and harkiie/a- ${ }^{z i}$. Although the latter stem is only sporadically attested, its oldest form is found in a MS text already. Only once, in a NH text, we find the stem harkiiae${ }^{z i}$ according to the very productive hatrae-class. The derivatives harni(n) $k_{-}^{z i}$ and harknu- ${ }^{z i}$ are semantically identical, both having the causative meaning 'to destroy, to ruin'. The stem harni(n)k- is found in OS texts already, whereas harknu- is only found from the times of Hattušili III onward (cf. Puhvel HED 3: 167).

Already since Cuny (1934: 205) this verb is connected with OIr. orgaid 'to smite, to slay' and Arm. harkanem 'to smite, to smash', which go back to * $h_{3}$ erg-. For hark- ${ }^{z i}$, this means that we have to reconstruct * $h_{3}$ érg-ti, * $h_{3} r g$-énti. In the zero grade forms, ${ }^{*} h_{3}$ should regularly disappear before resonant, but was restored on the basis of the full grade $* h_{3} e r g$ - where $* h_{3}$ is retained as Hitt. $h$ - in front of $* e$ (cf. Kloekhorst fthc.c).
See at har $(k)_{-}{ }^{z i}$ 'to hold, to have' for an account for the difference between the paradigms of hark- ${ }^{z i}$ and har $(k)_{-}^{z i}$.

Note that the form har-ni-ku-un (KBo 2.5a ii 6) may not be linguistically real. On the same tablet we find the form har-ni-in-ku-un multiple times (KBo 2.5 ii 6 , 7, 8,9 (KBo 2.5 and 2.5a are indirect joins)), all written at the beginning of a line, whereas har-ni-ku-un is found on the end of its line, having the signs $k u$ and $u n$ written over the edge. In my view, this indicates that in har-ni-ku-un the sign in was omitted due to lack of space.

## harganau-: see hargnau-

harki- / hargai- (adj.) 'white, bright' (Sum. BABBAR): nom.sg.c. har-ki-iš, harkiš, acc.sg.c. ḩar-ki-in, nom.-acc.sg.n. har-ki, gen.sg. har-ki-i_a-aš, har-ki-aš, dat.loc.sg. har-ki-i्1a, har-ga-i̇ia, har-ga-i-i=̌̌-ta (KBo 34.23, 11), har-ga-a-i, nom.pl.c. har-ga-e-eš, acc.pl.c. har-ga-uš, har-ga-e-uš, nom.-acc.pl.n. har-ga, har-ki, har-ki-i्1a, dat.-loc.pl. har-ki-[a]š (KUB 33.66 + KBo 40.333 ii 18).

Derivatives: hargnu- ${ }^{z i}$ (Ib2) 'to make white' (3sg.pret.act. har-ga-nu-ut; impf. har-ga-nu-uš-ke/a-), harkiięěšs- ${ }^{\text {i }}$ (Ib2) 'to become white' (3sg.pres.act. har-ki-i-e$e s ̌$-zi, har-ki-e-eš-zi, har-ki-eš-zi, har-ki-iš-zi).

IE cognates: Gr. à $\rho \gamma t$-ó $\delta \omega v$ 'white-toothed', à $\rho \gamma o ́ c ~ ‘ w h i t e ', ~ S k t . ~ r j r a ́-~ ' s h i n i n g ~$ reddishly, brightcoloured; quick, hurrying', rjíśvan- 'with fast dogs', TochA ārki, TochB arkwi 'white'.

PIE * $h_{2}(e) r g ́-(e) i-$
See $\mathrm{HW}^{2} \mathrm{H}$ : 307f. for attestations. The word shows the normal adjectival $i$-stem inflection with ablaut (harki-/hargai-). The nom.-acc.pl.n. harga is contracted from *hargaia. Since Kuryłowicz (1927: 101) this word is connected with Gr.
 a Caland-variant of the -ro-stem * $h_{2}$ rǵ-ro- seen in Greek (d̉ $\rho \gamma o ́ s<* \dot{\alpha} \rho \gamma \rho o ́ s$ with dissimilation) and Sanskrit, and is still visible in the compounds $\dot{\alpha} \rho \gamma t-o ́ \delta \omega \nu$ 'white-toothed' and rjíśvan- 'with fast dogs'. Note that an $i$-less form is visible in the causative hargnu- ${ }^{-i}$ 'to make white'.
Puhvel (HED 3: 171) suggests that the logographic spelling of 'silver', KÙ.BABBAR-ant- could stand for *harkant- (*h2rǵ-ent-) and in that way could be cognate with Skt. rajatám, Lat. argentum, YAv. arəzata- and Arm. arcat' 'silver' that reflect *h $h_{2}$ rǵ-ñt-ó-.
See at hargnau- for the possibility that this word is derived from harki-.
harkiie/a- ${ }^{z i}$ : see hark- ${ }^{z i}$
hargnau- (n.) 'palm (of hand), sole (of foot)': nom.-acc.sg.n. har-ga-na-ú (MH/NS), gen.sg. ḩar-ga-na-u-ua-aš (MH/NS), [har-ga-]na-ua-aš, dat.-loc.sg. har-ga-na-ú-i (MH/NS), erg.sg. har-ga-na-u-ua-an-za (MH/NS), nom.pl.c. har-ga-na-u-i-š=a-at (OH/MS).

PIE * $h_{2}$ érǵ-nōu(-s), * $h_{2}$ rǵ-nóu-m, * $h_{2} r$ ǵ-nu-ós
See $\mathrm{HW}^{2} \mathrm{H}:$ 303f. for attestations. Note that Puhvel (HED 3: 168) cites a nom.sg.c. har-ga-na-uš, which is based on KUB 9.34 ii (32) [...]x=kán har-ga-$n[a-\dot{u}-i \ldots]$, where Puhvel reads [harganau] $\check{s}=k a n$. The only trace of the sign before kán is the lower part of a vertical wedge. As this text's duplicate, KUB 9.34 i 15, has har-ga-na-ú=kán har-ga-na-ú-i, and since the trace could fit $\dot{u}$ as well, I would rather read [har-ga-na-]ú=kán. The only assured commune form is nom.pl.c. har-ga-na-u-i-š=a-at, which contrasts with nom.-acc.sg.n. har-ga-na-ú
and erg.sg. har-ga-na-u-ua-an-za that points to neuterness. See at harnau- / harnu- for a treatment of the original gender of diphthong-stems.
Weitenberg (1984: 223-4) provided harganau- with a generally accepted etymology by connecting it with Gr. ó $\rho \varepsilon ́ \gamma \omega$ 'to stretch' and reconstructing * $h_{3} r$ ǵ-nou-. Many scholars regarded this etymology as key evidence for the view that initial $* h_{3}$ was retained in Hittite as $h-$. As I have argued in detail in Kloekhorst fthc.c, it can be established that initial $* h_{3}$ is lost before resonants, and that therefore this etymology cannot be upheld anymore. As an alternative I offered a connection with harki- / hargai- 'white' and subsequently reconstruct *h $h_{2}$ erǵ-nōu. See at harki- / hargai- 'white' for further etymology.
harna- ${ }^{z i}$ / harn- (Ia2 > Ic1) 'to sprinkle, to drip (trans.), to pour': 3sg.pres.act. har-ni-e-ez-zi (VBoT 58 iv 24 (OH/NS)), har-ni-ía-zi (KBo 10.45 ii 15 (MH/NS)), har-ni-ia-iz-zi (KBo 22.125 ii 4 (NS)), 1pl.pres.act. har-na-u-e-ni (StBoT 25.137 ii 17 (OS)), 3pl.pres.act. har-na-an-zi (KBo 24.46 i 6 (NS), KUB 38.32 obv. 10 (NS)), har-ni-ía-an-zi (KBo 31.121 obv. 2 (NS), KUB 9.15 iii 7, 15 (NS), KUB 15.12 iv 4 (NS)), KUB 25.24 ii 8 (NS), KUB 41.30 iii 9 (NS), 3sg.imp.act. ha-ar-ni-ia-ad-du (KUB 56.48 i 18 (NS)); verb.noun har-ni-e-eš-šar (IBoT 3.1, 29 (NS)), ḩar-ni-eš-šar (IBoT 3.1, 31, 31 (NS)), har-na-i-šar (KUB 58.50 iii $8,14(\mathrm{OH} / \mathrm{NS})$ ), har-na-a-i-šar (KUB 58.50 iii $11(\mathrm{OH} / \mathrm{NS}))$.

Derivatives: harnu- ${ }^{z i}$ (Ib2 > Ic1) 'to spray' (3sg.pres.act. har-nu-zi (KUB 47.39 obv. 12 (MH/NS)), ḩar-nu-ú-i-ez-zi (KUB 17.24 ii 4 (NS)), 3pl.pres.act. har-nu-an-zi (KUB 29.7 i 36, 46, 56 (MH/MS)), har-nu-ua-an-zi (KBo 24.45 obv. 22 (MS?), KBo 13.179 ii 10 (MH?/NS)); part. har-nu-ua-an-t- (OH/NS), harnāi(c.) 'tree-sap, resin (?)' (nom.sg. har-na-iš, h har-na-a-iš, har-na-a-i-iš, acc.sg. har-na-in, har-na-a-in, har-na-a-i-in).

PIE * $h_{2} r$-ne- $h_{2 / 3}-t i, * h_{2} r-n-h_{2 / 3}$-enti ??
See $\mathrm{HW}^{2} \mathrm{H}$ : 315 for attestations. Because the verb is almost consistently spelled with the sign HAR, which can be read har as well as hur, there has been some discussion on the question whether we should read harn ${ }^{\circ}$ or hurn ${ }^{\circ}$. The one attestation ha-ar-ni-ia-ad-du solves this question in favour of the reading harn ${ }^{\circ}$ (cf. Neu 1983: $55^{261}$ ). Despite this unambiguous form, many scholars still cite this verb as hurn ${ }^{\circ}$ (e.g. Puhvel HED 3: 402f.; Oettinger 1979a: 307f., etc.), also on the basis of the form hu-u-ur-nu-u-ua-aš (KUB 39.6 obv. 14), which then is interpreted as gen.sg. of a verbal noun *hurnuıar of this verb. As Neu (1.c.) rightly points out, there is not a shred of evidence that this form refers to 'sprinkling': [I-NA UD.1]1.KAM hu-u-ur-nu-u-ua-aš 'on the eleventh day of h.'.

I therefore follow Neu to read this verb as harn ${ }^{\circ}$ (see also $\mathrm{HW}^{2}$ (l.c.) for this interpretation).

The verb is difficult to interpret formally. The oldest attestation, 1pl.pres.act. harnaueni (StBoT 25.137 ii 17 (OS)), shows a stem harna- (note however that I have doubts regarding the reliability of this text: cf. the fully aberrant 1pl.pres.act.-form $i \check{s}-h u-u a-u a-a-n i$ (ibid. 18)). In NS texts, we find the stem harniie/a-, but also 3pl.pres.act. harnanzi that seems to point to a stem harn-. This makes it likely that we are dealing with an original verb harna-z / harn-, which in the course of time was altered to harniie/a- ${ }^{z i}$ (cf. hulle- ${ }^{z i}$ / hull- for a similar development). Note that Oettinger (1979a: 151) cites this verb as hurne-, apparently interpreting the attestation har-ni-e-ez-zi as $/{ }^{\circ}$ net ${ }^{\mathrm{s}} \mathrm{i} /$, but this is incorrect: it must be /Hrniét i i /, as -nezzi would have been spelled har-ne-(e-)ez-zi.
A mi-inflecting stem harna- ${ }^{-i}$ / harn- hardly can reflect anything else than a nasal infixed stem $* h_{2} r-n e-h_{2 / \beta}-t i$, $* h_{2} r-n-h_{2 / 3}$-enti. Unfortunately, I know of no convincing cognate.

The verb harnu- ${ }^{z i}$ is cited by e.g. Puhvel (1.c.) as hurnuuai-, but this is unnecessary: almost all forms point to a plain stem harnu-. The one attestation har-nu-ú-i-ez-zi is probably secondary (cf. e.g. unu- ${ }^{z i}$ 'to decorate' that in NS times occasionally is altered to unuuae- ${ }^{z i}$ ). The fact that harna- ${ }^{z i}$ / harn- and harnu- ${ }^{z i}$ do not seem to differentiate in meaning can be explained by assuming that both suffices (the $n$-infix and the $n u$-suffix) had a transitivizing function (in this case making the intransitive root $* h_{2} r h_{2 / 3^{-}}$'to drip (intr.), to flow' into transitive 'to sprinkle, to drip (trans.), to make flow $>$ to pour').
harnae- ${ }^{z i}$, harniie/a- ${ }^{z i}$ (Ic2 / Ic1) 'to stir, to churn, to ferment, to agitate, to foment': 1sg.pres.act. har-na-mi (KBo 40.272, 6 (MS)), 3sg.pret.act. har-ni-et (KBo 40.272, 9 (MS)), part. nom.-acc.sg.n. ha-ar-na-a-an (KUB 7.1 + KBo 3.8 i 27 (OH/NS)).
Derivatives: harnammar (n.) 'yeast, ferment' (ha-ar-na-am-mar (OH/NS), har-nam-mar (MH/NS), ha-ar-na-am-ma (MH/NS)), harnamniie/a- ${ }^{z i}$ (Ic1) 'to stir (up), to churn, to cause to ferment, to incite’ (2sg.pres.act. har-nam-ni-ia-ši, 3sg.pres.act. har-nam-ni-i्a-zi, har-nam-ni-iaa-az-zi, har-nam-ni-ez-zi, 2pl.pres.act. har-nam-ni-ia-at[-te-ni], 3sg.pret.act. [har-na]m-ni-e-et, har-nam-ni-et, har-nam-ni-i_ia-at; part. har-nam-ni-ia-an-t-; impf. [har-n]am-ni-iš-ke/a-, har-nam-ma-ni$i \check{s ̌-k e / a-, ~ h a r-n a m-n i-e s ̌-k e / a-), ~ h a r n a m n i i a ́ a ̌ ̌ h a-~(c .) ~ ' s t i r, ~ c o m m o t i o n ’ ~(n o m . s g . ~}$ har-nam-ni-ia-aš-ha-aš, acc.sg. [har-nam-]ni-ia-aš-ha-an (MH/MS)).

See $\mathrm{HW}^{2} \mathrm{H}: 315 \mathrm{f}$. for attestations and semantics. The only two finite forms, harnami and harniet, which are from the same context, show two different inflections: harnami points to a stem harnae- ${ }^{z i}$, whereas harniet shows harniie/a${ }^{z i}$. Nevertheless, the derivatives harnammar and harnamniie/a- ${ }^{z i}$ seem to point to a stem *harna-, which would fit harnae- ${ }^{z i}$ better. To my knowledge, there is no convincing etymology.
harnāu- / harnu- (n. > c.) 'birthing seat': nom.sg.c. har-na-a-uš (KBo 5.1 i 44 (MH/NS)), acc.sg.c. har-na-ú-un (ABoT 17 ii 9 (NS)), har-na-a-in (ABoT 17 ii 15 (NS)), nom.-acc.sg.n. har-na-a-ú (KBo 5.1 i 7, 12, 26, 31 (MH/NS)), har-na-$a-u ́-u=a$ (KBo 5.1 i 39 (MH/NS)), gen.sg. har-nu-ua-aš (ABoT 21 obv. 15 (MS)), har-na-ua-aš (KUB 26.66 iii 11 (NS)), har-na-a-ua-aš (KUB 21.27 ii 17 (NH)), har-na-a-u-aš (KUB 21.27 iv 36 (NH)), har-na-a-u-ua-aš (Bo 7953 iii 11, iii 16, KBo 8.63 rev. 3 (NS), KUB 21.27 ii 16 (NH)), har-na-a-ú-ua-aš (MH/NS), dat.-loc.sg. har-na-a-ú-i (KUB 9.22 ii 33, iii 2, 40 (MS), KBo 5.1 i 25 (MH/NS), KBo 27.67 rev. 1 (NS), KBo 21.45 i 5 (NS)), har-nu-u-i (KBo 17.65 rev. 1 (MS)), [har-n]u-u-i=aš=za (KBo 17.65 obv. 2 (MS)), har-na-ú-i (NS), har-na-$u[-i]$ (NS).
Derivatives: harnuunašíi- (adj.) 'of the birthing seat' (dat.-loc.pl. har-nu-ua-<aš-১ši-aš (KBo 17.65 obv. 49 (MS)).

PIE *h $h_{3}$ ér-nōu(-s), * $h_{3} r$-nóu- $m, * h_{3} r$-nu-ós.
See $\mathrm{HW}^{2} \mathrm{H}: 321 \mathrm{f}$. for attestations. In the oblique cases we find the stem harnauas well as harnu-, which both are attested in MS texts already. On the basis of the derivative harnuuašsi- and because harnau- is much easier explained through analogy than harnu-, I assume that harnu- is the original form of the oblique stem. This seems to point to an original hysterodynamic paradigm harnau- / harnu-.

It is not fully clear what the original gender of this word was: we find both commune (nom.sg.c. ȟarnāuš and acc.sg.c. harnaun) and neuter (nom.-acc.sg.n. harnāu) forms. On the basis of the fact that this word seems to have been hysterodynamically inflected originally, I assume that it must have been commune, having an inflection *CéC-nōu, *CC-nóu-m, *CC-nu-ós. The fact that the nom.sg.-form was asigmatic originally (*harnāu) was at a certain point in Hittite not tolerated anymore: either the form was sigmatized to harnāuš in order to specifically mark its communeness, or the form was reinterpreted as neuter (see Weitenberg 1995 for this phenomenon).

Weitenberg (1984: 266) compares the element har- with Hitt. hardu'descendant' (q.v.) and ${ }^{\text {MUNUS }}$ haruant- 'nurse' (q.v.). Although the latter must be regarded as a derivative of $\operatorname{har}(k)^{z i}$ (q.v.), the connection between harnāu- and hardu- is convincing. The word hardu- is compared by Weitenberg with Lat. ortus 'rise, origin, birth'. These connections were elaborated by Ofitsch (1995: 22 ff .), who connects the element har- with PIE * $h_{3} e r$ - 'to start to move (forth)' and reconstructs harnau- as $* h_{3} r-n \bar{o} u-$. As I have argued in Kloekhorst fthc.c, a reconstruction *h $h_{3}$ ér-nōu would be better in view of the fact that initial $* h_{3} r$ yielded Hitt. ar-, whereas *h $h_{3} e>h a-$.
harniie/a- ${ }^{z i}$ : see harna- ${ }^{z i}$ / harn-
harp- ${ }^{\text {tta(ri) }}$; harp- ${ }^{z i}$ (IIIb; Ia4 > Ic1) '(intr.) to separate oneself and (re)associate oneself elsewhere, to change allegiance; to join with, to take the side of; (trans.) to associate (someone) with; (+ anda) to combine, to join together': 3sg.pres.midd. har-ap-ta (OS), 3pl.pres.midd. har-pa-an-ta-ri (OH/NS), har-pa-an-da-ri (NS), 3sg.pret.midd. har-ap-ta-ti (OH/NS), 2sg.imp.midd. har-ap-hu-ut ( $\mathrm{OH} / \mathrm{NS}$ ), har-pí-ia-ah-hu-ut (NH), 2pl.imp.midd. har-ap-du-ma-ti (NS), har-ap-tum-ma-ti (NS); 1sg.pres.act. har-pí-ia-mi (NH), 2sg.pres.act. har-ap-ši (NS), ha$a r-a p-s ̌ i ~(N S), ~ h a r-p i ́-i a-s ̌ i, ~ 3 s g . p r e s . a c t . ~ h a r-a p-z i(O H / N S), ~ 1 p l . p r e s . a c t . ~ h a r-p u-~$ u-e-ni (MH/NS), har-ap-pu-u-e-ni (NS), har-pi-ia[-u-e-ni], 1sg.pret.act. har-pí-ia-nu-un, 2sg.pret.act. har-ap-ta (MS), 3sg.pret.act. har-ap-ta, har-pi-ia-a[t] (NS), 2pl.imp.act. har-ap-te-en, har-ap-tén, har-pí-ia-at-tén; part. har-pa-an-t-; verb.noun. gen.sg. har-pu-u-ua-aš; impf. har-pí-iš-ke/a- (NS), har-ap-pi[-iš$k e / a-]$.
Derivatives: ${ }^{\text {(GIš) } \boldsymbol{h a r p a} / i-~(c .) ~ '(w o o d) p i l e, ~ h e a p, ~ m o u n d ' ~(n o m . s g . ~ h a r-p a-a s ̌, ~}$ har-pa-a-aš, acc.sg. ḩar-pa-an, har-pí-in, gen.sg. har-pa-aš, har-pa-a-aš, har-pí-ía-aš, dat.-loc.sg. har-pí, har-pí-ía, nom.pl. har-pí-i[š], acc.pl. har-pu-uš, har-pí$u s ̌, ~ h a-a r-p i ́-u s ̌, ~ n o m .-a c c . p l . n . ~ h a r-p a, ~ d a t .-l o c . p l . ~[h a] r-p a-a \check{s), ~ h a r p a e--~}{ }^{z i}$ (Ic2) 'to heap up' (1sg.pres.act. har-pa-a-mi, 3sg.pres.act. har-pa-a-iz-zi, 3pl.pres.act. har-pa-a-an-zi, har-pa-an-zi, har-ap-pa-an-zi (KBo 11.52 v 8 (fr.) (OH/NS), KUB 17.28 iii 40 (MH/NS)), harpal(l)i- (n.) 'heap, stack, pile' (dat.-loc.sg. har-pa-li, nom.-acc.pl. har-pa-li, dat.-loc.pl. har-pa-al-li-įa-aš), harpanalla/i- (c.) 'rebel, turncoat' (nom.sg. har-pa-na-al-li-[iš], acc.sg. har-pa-na-al-li-i्ia-an, har-pa-na-al-li-in, gen.sg. har-pa-na-al-la-aš, har-pa-na-al-li-i[a-aš], dat.-loc.sg. har-pa-$n[a-a l-] l i$, nom.pl. har-pa-na-li-e-eš, acc.pl. har-pa-na-al-li-uš, dat.-loc.pl. har-pa-na-al-li-ía-aš), \& harpanalla (adv.) 'disloyally’ (\& har-pa-na-al-la), harpu in the expression ḩar-pu ša-ru-pa le-e i-ía-ši 'do not act helter-skelter'.

IE cognates: Gr. óppavóc, Arm. orb 'orphan', Lat. orbus 'bereft of’, OIr. orb(b) 'heir, inheritance', Goth. arbi 'inheritance'.

PIE * $h_{3}$ erb ${ }^{h}$-to.
See HW ${ }^{2}$ H: 329f. and Puhvel HED 3: 176f. for collections of forms, but see Melchert fthc.a for a semantic treatment. Melchert convincingly argues that the original meaning of this verb is 'to separate oneself and (re)associate oneself elsewhere' (i.e. 'to change allegiance' when used of persons). Often, the first element of this meaning is lost, resulting in 'to join with, to take the side of'. The oldest attestations are middle, but from the MH period onwards, the active inflection is taking over. If the verb is used transitively, it means 'to associate (someone) with' or ( + anda) 'to combine, to join together'. Out of this last meaning, the derivative harpa/i- 'heap, pile' is formed, which itself is the origin of the denominative verb harpae-zi 'to heap up'. In the oldest texts, we only find the stem harp-, whereas harpiie/a- is found in NH texts only (with active as well as middle endings). These latter two stems are occasionally (both once attested) used in the sense 'to heap up', which must be due to confusion of the stems harp-, harpiie/a- and harpae- in younger times.
Melchert convincingly argues that we should follow the etymology of Polomé (1954: 159-60), who connected harp- with PIE * $h_{3}$ erb $h^{h}$ - as found in Gr. óppavós 'orphan', OIr. $\operatorname{orb}(b)$ 'heir; inheritance' etc. Melchert explains that the original meaning of $* h_{3} e r b^{h}$ - must have been 'to change membership from one group/social class to another'. This meaning was also applicable when someone's parents died, which resulted into a shift of meaning to, on the one hand, 'orphan' (Gr. óp $\varphi$ avós, Arm. orb 'orphan': in Latin, this meaning evolved further into orbus 'bereft of') and, on the other, 'heir, inheritance' (OIr. orb(b), Goth. arbi 'inheritance').
For Hittite, this means that we have to reconstruct an original middle $* h_{3} e r b^{h}$-to, after which the stem harp- was brought into the active as well. Note that the bulk of the attestations are spelled with single $-p$-, but a few times we find $-p p$-. In the following context,

KUB 30.36 ii
(7) $n u=m u-u=\check{s}$-ša-an šu-mu-eš-š=a HUR.SAG ${ }^{\mathrm{MEŠ}}$ har-ap-te-en
(8) UM-MA HUR.SAG ${ }^{\text {MEŠ }} l e-e=t a ~ n a-a-h i \quad u ́\langle<-i\rangle-e-e s ̌=t a$
(9) har-ap-pu-u-e-ni
'May you, mountains, too, ally yourselves with me. The mountains speak: "Do not fear. We will ally ourselves with you"',
we find har-ap-pu-u-e-ni with geminate -pp-. In my view, this spelling is caused by the preceding har-ap-te-en, on the basis of which the scribe wrote har-ap-pu-$u$-e-ni instead of expected har-pu-u-e-ni. The geminate in impf. har-ap-pi $[-i s ̌-$ kán-du] (KUB 31.86 iii 6) must be compared to the geminate spelling of etymological lenis stops in e.g. akkuške/a- (impf. of $e k u_{-}^{z i} / a k u$ - 'to drink'), lakkiške/a- (impf. of lag- ${ }^{\text {äri }}$ 'to make lay down'), etc. This leaves us with only two instances of har-ap-pa-an-zi, both in NS texts, which in my view cannot be regarded as phonologically relevant (pace Melchert (1994a: 153) who argues for a development $*-r D->$ Hitt. -rt- (i.e. geminate spelling), but see at both ištar $(k) z^{z i}$ and parkiie $/ a-^{z i}$, the two other alleged examples of this development, for alternative solutions).
h $\bar{a} \bar{r} \check{s ̌}^{i}{ }^{i}$ (IIb > Ic1) 'to till (the soil)': 3sg.pres.act. har-aš-zi (OH/NS), har-ši-$i[-e-] e z-z i$ (NS), 3pl.pres.act. har-ši-i̇ia-a[n-z]i (NS), 3sg.pres.act. ha $a-a-a r-a \check{s}-t a$ (MS); inf.I ḩar-šu-ưa-an-z[i] (NH); impf. har-aš-ke/a- (OH/NS), har-ši-iš-ke/a(NS), har-ši-eš-ke/a- (NS).
Derivatives: ${ }^{(\mathbf{A} .5 ̌ \mathbf{A})} \boldsymbol{h a r s ̌ a ̄ u a r ~ / ~ h a r s ̌ a u n - ~ ( n . ) ~ ' t i l l e d ~ l a n d ’ ~ ( n o m . - a c c . s g . ~ h ु a r - s ̌ a - u - ~}$ una-ar, har-ša-a-u-ar, dat.-loc.sg. ḩar-ša-ú-n[i] (175/w obv. 8), dat.-loc.pl. har-ša-ú-na- $a[\check{s}]$ (KBo 6.34 ii 39 (MH/NS)), see harra- ${ }^{i}$ / harr-.

IE cognates: Gr. ảpów, Lat. arō, OIr. -air, OHG erien, Lith. ariù, árti, OCS orjo, orati 'to plough'.

PIE * $h_{2} o ́ r h_{3}-s$-ei $/ * h_{2} r h_{3}$-s-énti
See $\mathrm{HW}^{2}$ H: 340 for attestations. Because the forms that show a stem haršiye/a- - $^{\text {i }}$ are found in NS texts only, it is likely that these are of a secondary origin. This verb therefore is usually cited as harš- ${ }^{z i}$. The oldest attestation, 3sg.pret.act. hुa-a$a r-a \check{s}-t a$ (MS) shows a peculiar plene spelling, however. Because none of the miconjugated verbs of the structure $C a R C-{ }^{-2 i}$ (class I4a) ever shows plene spelling (except in the verb $\bar{a} r \check{s}^{-2 i} /$ arš- 'to flow', but here the spelling $a$-ar-aš- is used to indicate the full-grade stem /RarS-/, cf. its lemma), it is difficult to assume that this verb belongs to this class originally. I therefore assume that it in fact was hiconjugated originally: h hārš- (note that in verbal stems in -š- the hi-ending 3 sg.pret.act. -s already in OH times has been replaced by the corresponding miending -tta, e.g. hata-aš-ta 'she bore' (OS)). The absence of plene spelling in the NH forms is then due to the development $\mathrm{OH} / \overline{\mathrm{a}} \mathrm{CCV} />\mathrm{NH} / \mathrm{a} \mathrm{CCV} /$ as described in § 1.4.9.3.

The verb denotes 'to till (the soil)' and is often connected with PIE $* h_{2} e r h_{3^{-}}$'to plough’ (since Goetze \& Sturtevant 1938: 70), assuming that we are dealing with an $s$-extension. When $h \bar{a} r \check{s}-$ was still regarded as a mi-conjugated verb harš̌- ${ }^{z i}$, this was formally impossible as a preform $* h_{2} e r h_{3}-s-t i$ should have yielded Hitt. **harre/išzi (due to the sound law *VRHsC > /VRRisC/, cf. damme/išhāa < *demh ${ }_{2} s h_{2} \dot{o}-$, kallišta < *kelh ${ }_{l} s t(o): \S$ 1.4.4.3). With the establishment that hāaršmust have been hi-conjugated originally, the formal side is better explicable. Although it is true that if we compare the expected preform $* h_{2} o ́ r h_{3}-s-e i$ to the development of $* h_{2}$ ómh $h_{1}$-s-ei to Hitt. ānši 'he wipes' (cf. $\bar{a} n s ̌ s^{\prime}$ ) we must assume that $* h_{2} o ́ r h_{3}-s-e i$ would yield Hitt. $* * \bar{a} r s ̌ i$, it is in my view trivial that initial $* h_{2^{-}}$ was restored on the basis of the zero-grade stem $* h_{2} r h_{3}$-s- where it was regulary retained as h- (cf. hān- ${ }^{i}$ / han- 'to draw (water)' < *h $h_{2} o ́ n-/ h_{2} n$ - for a similar restoration). Note that the expected outcome of the zero-grade stem, e.g. 3pl. **hare/iššanzi< * $h_{2} r h_{3}$-s-énti, is thus far unattested and seems to have been fully supplanted by the strong stem hārrš-. The occurrence of the NS mi-conjugated form har-ǎ̌-zi and the stem haršiie/a- is completely parallel to the NS forms $a$ $a n-a s ̌-z i$ and $\bar{a} n s ̌ i{ }^{\prime} e / a$ - in the paradigm of $\bar{a} n s s_{-}{ }^{i}$ 'to wipe'.
From the fact that hārrš- sometimes occurs together with terepp- ${ }^{z i}$ / teripp- 'to plough' (q.v.) in the pair hāršs- ... terepp- 'to till and plough' it is clear that hārǒsitself does not mean 'to plough', but rather 'to till the soil, to crush the land'. With this meaning it nicely corresponds to the verb harra-' / harr- 'to crush' that also goes back to the root $* h_{2} e r h_{3}$-. On the basis of these verbs, we must conclude that the original meaning of $* h_{2} e r h_{3}$ - must not have been 'to plough', as is usually assumed on the basis of the non-Anatolian IE languages (Gr. ápów, Lat. arō, Lith. ariù, árti, etc. 'to plough'), but rather 'to crush'. Yet, the Hittite expression $h \bar{a} r s ̌$ - ... terepp- 'to till and plough' shows that also in Anatolian there are traces of the first steps of a semantical development from 'to crush (the land)' to 'to plough'.
Puhvel (HED 3: 185) assumes that h $\bar{a} r \check{S}^{\prime}{ }^{i}$ must be a loanword, stating that "the probable source of hars- is Akk. harāšu 'plant', or hुarāsu 'dig a furrow', or WSem. ḥaraš-' 'plough'", but e.g. HW ${ }^{2}$ (1.c.) correctly rejects this view.
For the morphological interpretation of haršāuar / haršaun-, see at karāuar / karaun-.
haršar / haršn- (n.) 'head; person; front; beginning' (Sum. SAG[.DU]): nom.acc.sg. h. ha-ar-ša-ar (KUB 57.83, 7), gen.sg. har-aš-ša-na-aš, har-ša-na-aš, dat.loc.sg. har-ša-ni (OS), ha-ar-aš-ni, har-ša-ni-i, har-ša-an-ni (1x), all.sg. har-aš-
ša-na-a, abl. ḩar-ša-na-za, har-ša-an-n[a-az], instr. h[ar-š]a-an-da, har-ša-an-ta, nom.-acc.pl. har-ša-a-ar (OS), har-ša-ar (OS).
IE cognates: Gr. ő $\rho o \varsigma(\mathrm{n}$.$) 'mountain', Skt. rssvá- 'high'.$

$$
\text { PIE * } h_{3} e r s-r, * h_{3} r s-n-o s
$$

See $\mathrm{HW}^{2} \mathrm{H}: 344 \mathrm{f}$. for attestations. The paradigm has to be phonologically interpreted as /HárSr/, /HrSnā́s/ (the zero grade in the first syllable of the oblique cases can be deduced from spellings like har-ša-ni-i /HrSní/ and har-aš-ša-na-a / $\mathrm{HrSnå}$ /.

Already since the beginning of Hittitological studies, haršar / haršn- has been compared with Skt. síras, sírş̣nás 'head' < *k'érh2-s-r, *k'rh2-s-n-ós. Although the semantic side of this etymology is attractive, the formal side is far from. Not only does *k'k not regularly give Hitt. h, a sequence *VRHsC should yield Hitt. /VRRisC/ (cf. demh ${ }_{2} s h_{2}$ ó- > damme/išḩā-). Peters' scenario (1980: 230 ${ }^{176 \mathrm{a}}$ ) in which $* k_{k}^{\ldots} . . h_{2}>* h_{2} \ldots h_{2}$ by assimilation, after which the second laryngeal was lost by dissimilation, is too complex to be believable. The argument that the paradigms of haršar / haršn- and *kerh $h_{2} s r / k ' r h_{2} s n$ - are too similar to be unrelated is useless since $-r / n$-stems are rather common in Hittite.
Already Goetze (1937: 492 ${ }^{3}$ ) suggested another, attractive comparison, namely with Gr. őpos 'mountain', which reflects an $s$-stem of the root 'high', *her-es-, of which also Skt. rẹvá- 'high' is derived. Criticism on this etymology (e.g. Puhvel HED 3: 190) was always directed to the fact that 'high' was derived from the root $* h_{l} e r$-, which cannot explain Hitt. $h$-. In my view, it nowadays has become much clearer that we have to distinguish a root $* h_{l} e r$ - 'to come, to arrive $<*$ to move horizontally' and *her- 'to raise, to rise $<*$ to move vertically' (cf. Kloekhorst fthc.c on the outcomes of different formations with * $h_{3} e r$ - in Hittite:
 'birthchair' $<* h_{3} e r-n o u$ - and hardu- 'descendant' $<* h_{3} e r-t u-$-). In this case, we therefore can safely reconstruct $* h_{3} e r-s-r,{ }^{2} h_{3} r-s-n$-ós, which should regularly yield Hitt. /HárSr/ and /HrSnā́s/ (with restoration of initial h-). See at NINDA harši- / haršai- 'thickbread' for another derivative of the stem *her-s-.
Note that Puhvel (HED 3: 1987) interprets the syntagm ${ }^{\mathrm{d}} \mathrm{U}$ har-ša-an-na-aš as 'Storm-god of the head', on the basis of the sumerographical writing ${ }^{d} U$ SAG.DU. HW ${ }^{2}$ (H: 357) translates 'Wettergod des Gewitterregens', however, and assume that haršannaš is the gen.sg. of a further unattested noun *haršātar, which they etymologically connect with haršiharši 'thunderstorm'. The almost consistent spelling with geminate -nn- in haršannaš (although ${ }^{\mathrm{d}} \mathrm{U}$ hुar-ša-na-aš is attested once), indeed is quite aberrant from the oblique stem of haršar / haršn-
(although spellings with geminate $-n n$ - do occur a few times), but the sumerographic writing ${ }^{\mathrm{d}} \mathrm{U}$ SAG.DU seems to speak in favour of Puhvel's reading $\left(\mathrm{HW}^{2}\right.$ seems to regard this attestation as a scribal mistake where a scribe had to write ${ }^{\mathrm{d}} \mathrm{U}$ hुaršannaš, but thought of haršanaš and subsequently wrote ${ }^{\mathrm{d}} \mathrm{U}$ SAG.DU).
${ }^{\text {NINDA }}$ harši- / haršai- (c.) 'thick-bread' (Sum. NINDA.GUR $\left.4 . R A\right)$ : nom.sg. har-ši$i s ̌$ (OS), acc.sg. hुar-ši-in (OS), gen.sg. hुar-ša-aš (MH/MS), har-ši-i $a-a \check{s}$, hुar-ši$a s ̌, ~ d a t .-l o c . s g . ~ h ̧ a r-s ̌ a-i ~(O S), ~ h a r-s ̌ a-a-i ~(K B o ~ 30.158, ~ 10 ~(M S)), ~ h a r-s ̌ i ~(O H / N S), ~$ har-ša-íc (MH/NS), abl. har-ša-ía-az (NS), har-ši-ía-az (NS), instr. har-ši-it (SBo 4 (2064/g) rev. 3 (MS)), nom.pl. h. har-ša-eš (OS), ḩar-ša-e-eš (OS), har-ša-$a-e s ̌ ~(M S ?), ~ h ̧ a r-s ̌ a-a-e-e s ̌ ~(N S), ~ a c c . p l . ~ N I N D A ~ h ̧ a r-s ̌ a-u ́-u s ̌ ~(K B o ~ 17.4 ~ i i ~ 17 ~(f r) ~$. (OS), KUB 7.8+ ii 11 (NS)), har-ša-uš (OH/MS), har-ša-a-uš (MS), har-ši-uš ( $\mathrm{OH} / \mathrm{MS}$ ), dat.-loc.pl. hुar-ša-aš (OH/MS), h har-ša-íia-aš, har-ši-ía-aš.
Derivatives: (LÚ) haršiiala-, (LÚ) haršǐiialli- (c.) 'bread-server' (Sum.
 GIš haršīiall- (n.) 'breadbox, storage jar' (nom.-acc.sg. hुar-ši-ia-al-li, gen.sg. har-ši-i̇ia-al-li-aš, har-ši-al-li-aš, dat.-loc.sg. h har-ši-i_ia-al-li-ía, abl. har-ši-ía-al-la-az), ${ }^{\text {DUG }}$ harši- (c.) 'jar' (nom.sg. har-ši-iš (OS), acc.sg. har-ši-in, gen.sg. har-ši-aš, har-ši-ía-aš, dat.-loc.sg. har-ši-ia, abl. ḩar-ša-az (KUB 53.13 iv 9 (NS)), har-ši-
 $a s ̌$, dat.-loc.pl. har-ši-aš), ${ }^{\text {DUG }}$ haršiiiallanni- (n.) 'small jar' (nom.-acc.sg. har-ši-ia-al-la-an-ni), ${ }^{\text {DUG }}$ haršiiialli- (n.) 'jar’ (nom.-acc.sg. har-ši-i_ia-al-li, har-ši-al-li, gen.sg. har-ši-ía-al-li-į्a-aš, har-ši-i_ia-al-li-aš, har-ši-íia-al-la-aš, dat.-loc.sg. har-ši-i_ia-al-li-íia, har-ši-i्Ca-al-li, abl. har-ši-al-li-az, har-ši-ía-al-la-az, nom.-acc.pl. har-ši-al-li, har-ši-i_ia-al-li, dat.-loc.pl. hुar-ši-íia-al-li-i_ia-aš, har-ši-al-li-aš).

PIE * $h_{3}$ ers- $i-, * h_{3} r s$-ei-
See $\mathrm{HW}^{2}$ H. 358ff. for attestations. This word shows an ablauting stem harši- / haršai- which is rare for proper nouns (but cf. heu- / he(i) au- and ueši- / uešaifor similar cases). It probably indicates that we are dealing here with a substantivized adjective. The word is clearly the phonetic rendering of the sumerogram NINDA.GUR 4 .RA that is usually translated 'thick-bread'. The original meaning of this word in my view likely was not 'thick', however, but rather 'high' in the sense 'risen'. I therefore wouild like to propose harši- / haršai- to the element harš- as visible in haršar / haršn- 'head' that must be connected with Gr. ő $\rho o s$ 'mountain', Skt. rṣvá- 'high' < *h $h_{3}$ ers-. This means that harši- / haršai- reflects an originally ablauting $i$-stem *hers-i-, * $h_{3} r s$-ei-.

The homophonic noun ${ }^{\text {DUG }}$ harši- 'jar' probably was named after its highness as well.
haršiie/a- ${ }^{z i}$ : see h harrš- ${ }^{i}$
haršiharši- (n.) 'thunderstorm; jar, pithos' (Sum. HुI.Hु): nom.sg. ḩar-ši-har-ši (OS), gen.sg. har-ši-har-ši-ía-aš.

This noun denotes 'thunderstorm' as well as 'jar, pithos'. On the basis of this latter meaning, haršiharši- clearly has to be regarded as a full-reduplication of the noun ${ }^{\text {DUG }}$ harši- 'jar' (see at ${ }^{\text {(NINDA) }}$ harši- / haršai-), although it must be remarked that ${ }^{\text {DUG }}$ hुarši- is a commune word whereas haršiharši- is neuter. The connection between 'thunderstorm' and 'jar, pithos' may lie in the perception of the sound of thunder as resembling the sound of clashing jars.
hartakka- (c.) 'bear' (Sum. UR.MAHु): nom.sg. har-tág-ga-aš, acc.sg. har-tákkán (OS), har-tág-ga-an, gen.sg. har-tág-ga-aš.
Derivatives: ${ }^{\text {LÚ }} \boldsymbol{h a r t a k}(\boldsymbol{k}) \boldsymbol{a}$ - (c.) a cult official, 'bear-man' (nom.sg. har-tág-ga$a s ̌, ~ h a r-t a-g a-a \check{s}$, har-ta-ka-aš (OH/MS), acc.sg. har-tág-ga-an, dat.-loc.sg. har-ta-ak-ki, har-ták-ki, [har-t]a-ki).
IE cognates: Skt. rosṣa-, YAv. arəša-, Gr. äpктоৎ, Lat. ursus, MIr. art, Arm. arǰ 'bear'.

PIE * $h_{2}$ rtkóo-
See $\mathrm{HW}^{2} \mathrm{H}$ : 378 f . for attestations. Although a meaning 'bear' for this word cannot be proven in the strictest sense of the word, the fact that it denotes a large predator and that its outer appearance resembles the other IE words for 'bear' so strikingly, can leave no doubt about this interpretation, which was first given in HW: 61.
Before the appurtenance of Hittite, the word for 'bear' was reconstructed * $h_{2} r$ k'po-, with the PIE 'thorn'. This has now become unnecessary as Hitt. hartakka-/Hrtka-/ clearly shows that we have to reconstruct $* h_{2} r t^{\prime} k^{\prime} o$-. With the disappearence of other cases of PIE 'thorn' (e.g. *g' ${ }^{h}$ em- 'earth' that now has to be reconstructed as $* d^{h} e g^{h}-m$, * $d^{h} g^{h}-m$ - on the basis of Hitt. tēkan (q.v.)), I do not understand why some scholars still regard the 'thorn' as a basic PIE phoneme (cf. the superfluous discussion in Melchert 1994a: 64).
hardu- (n.) 'brood, descendance': nom.-acc.pl. ha-ar-du-ua, har-du-ua, gen.pl. ha-ar-du-ua-aš, har-du-úa-aš.

Anat. cognates: CLuw. hardu- 'descendance' (abl.-instr. har-tu-u-ua-har-tu-uati), harduuatt(i)- 'descendant’ (nom.pl. har-du-ua-at-ti-in-zi); HLuw. hartu- (c.) 'descendant' (nom.sg. ${ }^{\text {INFANS }} h a+r a / i-t u-$-sá (MARAŞ $\left.1 \S 1 \mathrm{~g}\right)$ ).

PIE * $h_{3} e r-t u$ -
See $\mathrm{HW}^{2} \mathrm{H}$ : 379f. for attestations. This word has been connected by Weitenberg (1984: 235) with Lat. ortus 'birth', which would point to a reconstruction * $h_{3} e r$ $t u$ - (cf. Kloekhorst fthc.c). Another Hittite word in which the root $* h_{3} e r$ - is connected with 'giving birth' is harnāu / harnu- 'birthing seat' (q.v.).
-hharu (1sg.imp.midd.-ending)
The 1sg.imp.midd.-ending -hharu is clearly based on the 1 sg.pres.midd.-ending -hhari in which $-i$ was replaced by the imperatival 'suffix' $-u$. See at -hha(ri) and $-u$ for further etymology.
haruua- (c.) 'road, path': abl.pl. ḩa-ru-ua-az (KBo 24.45 rev. 23 (MS?)).
Anat. cognates: CLuw. harua- (c.) 'path' (Sum. KASKAL; nom.sg. ha-ru-ua$a s ̌$, acc.sg. KASKAL-an, nom.pl. KASKAL ${ }^{\text {HI. }}-a n-z i$, acc.pl. KASKAL ${ }^{\text {HI.A }}-u a-$ an-za), harua- 'to send(?)' (3pl.imp.act. har-ua-an-du), haruanna/i- (c.) 'little path' (acc.pl. ha-r[u-ua-an-ni-in-za]), haruanni(ia)- 'to send' (3sg.imp.act. har-ua-an-ni-it-ta); HLuw. harwa(n)- (c.) 'road' (acc.sg.(?) VIA-wa/i-na /harwan/ (KARATEPE 1 §34, İVRİZ fr. 3 line 2), VIA-na /harwan/ or /harwantan/ (KÖTÜKALE §3); harwant- (c.) 'road' (acc.pl. VIA-wa/i-ta-z[i'] /harwantant ${ }^{\text {§ }} \mathrm{i} /$ (TELL TAYINAT 2 fr . 6), dat.-loc.pl. VIA-wa/i-ta-za /harwantant ${ }^{\mathrm{s}} /$ (TELL TAYINAT 2 fr.7)), harwantahit- (n.) 'wayfaring' (abl.-instr. "VIA" $h a+r a / i-w a / i-$ ta-hi-ta $5_{5}$-ti-i /harwantahitadi/ (KARKAMIŠ A15b §21)), harwani- 'to send' (2sg.pres.act. /harwanisi/ VIA-wa/i-ni-si (ASSUR letter d §10, f §26) 2(3?)sg.pret.act. /harwanita/ VIA-wa/i-ni-ta (ASSUR letter a §7), 3sg.pret.act. /harwanita/ VIA-wa/i-ni-ta (ASSUR letter $a$ §7), 3pl.pret.act. /harwaninta/ VIA-wa/i-ni-ta (ASSUR letter $f$ §27), 2sg.imp.act. /harwani/ ${ }^{\mathrm{VIA}} h a+r a / i-w a / i-n i$ (ASSUR letter $d \S 6, \S 7, \S 9$, e §25), VIA-wa/i-ni (ASSUR letter $a \S 11, \S 12, b \S 7$, $\S 10, c \S 8, \S 10, \S 11, d \S 8, e \S 23, \S 27, f \S 19, \S 23, g \S 40)$,VIA-wa $i-n i^{-i}$ (ASSUR letter $a \S 10, e \S 18, \S 28, g \S 31, \S 35, \S 36, \S 44, \S 47)$ ).

See Puhvel HED 3: 203 for the attestation. The word is hapax in a Kizzuwatnean ritual, and therefore it is likely of Luwian origin, where indeed the word harua- is
the normal word for 'road, path' (whereas in Hittite the word for 'road, path' is palša- (q.v.)). Etymologically we could think of the roots $* h_{2} e r$ - 'to join' (roads as joining elements) or the root $* h_{3} e r$ - 'high'.
haru(иa)nae- ${ }^{i}$ (Ic2) 'to get light, to dawn': 3sg.pres.act. ha-ru-ua-na-a-iz-zi, ha-a-ru-ua-na-a-iz-zi, ha-ru-na-iz[-zi], [ha]r-ua-na-iz-zi.

See $\mathrm{HW}^{2} \mathrm{H}$ : 382 for attestations. The verb is always used without a subject and probably means 'it gets light' (just as lukkatta 'it dawns' is used impersonally). Formally, it inflects according to the hatrae-class, which means that it would be derived from a noun haru(ua)na-. Such a noun might be attested in KUB 8.9 ( $\mathrm{OH} / \mathrm{NS}$ ) i (5) ták-ku har-ua-n[a-a]z ITU-aš $t[a-\ldots]$ 'When the moon ...-s from haruana-'. It is certainly not impossible that this haruana- is the source of haru(ua)nae-, but since the meaning of haruana- itself cannot be determined, further etymologizing is difficult.
$\mathrm{HW}^{2}$ (l.c.) assumes a connection with harua- 'road, path', assuming that haruana- literally means 'Sich-auf-den-Weg-machen'. Puhvel (HED 3: 204) proposes a connection with Skt. ravi- and Arm. arew 'sun' that must reflect *h $h_{2}$ reu-i-, assuming that haru(ua)nae- reflects *h2ru(o)no-.
hāǎš- (c.) ‘ash(es); dust; soap’ (Sum. SAHAR): nom.sg. ha-a-aš (OH/NS), ha-aš$\check{s}=a$ (NS), h ha- $a \check{s}-s \check{s} a-a \check{s} \quad(\mathrm{MH} / \mathrm{MS})$, acc.sg. h ha- $a-a \check{s}-5 \check{s} a-a n$ (MS), h ha-aš-ša-an ( $\mathrm{OH} / \mathrm{NS}$ ), dat.-loc.sg. h. ha-aš-ši-i (MS?), instr. h ha-aš-ši-it (NS), nom.pl. haa-a-aš$\check{s} e-\check{s}=a$ (MS), acc.pl. hुa-a-aš-šu-uš (NS), ha-aš-šu-uš (MS), h ha-ǎ̌-uš (OH/NS).
Derivatives: see hāasšā-.
IE cognates: Skt. ása- 'ash', OHG essa 'ash', OIc. aRina 'ash', Lat. ārēre 'to dry', OLat. $\bar{a} s a$ 'altar', TochAB $\bar{a} s-$ 'to dry out', Hitt. ha $\bar{a} s ̌ s \bar{a}-$ 'hearth'.

PIE * $h_{2}$ é $h_{l} s-s, * h_{2} e ́ h_{l} s-m, * h_{2} h_{l} s$-ós
See $\mathrm{HW}^{2} \mathrm{H}: 388 \mathrm{f}$. for attestations and semantics. The basic meaning of the word is 'ash(es), dust', but since a mixture of ashes and oil could be used as soap as well, the word is also attested in the meaning 'soap' (pars pro toto). On the basis of nom.sg. $h \bar{a} \bar{s}$, we must assume that this word originally was a root noun, which was thematicized to $h \bar{a} \check{s} \check{s} s a-$ in MH times already.

The etymological interpretation of this word has been debated. In Hittite, the plene $-a$ - is attested often enougn to secure the reading $h \bar{a} \bar{s} \check{s}-$, the long $-a$ - of which corresponds to Skt. $\bar{a} s a-$ 'ash'. In Germanic, however, we encounter a short a-, namely in OHG essa 'ash' < *ăsiōn and OIc. (Runic) aRina 'ash'. Schrijver
(1991: 53-4) therefore proposes to reconstruct a root $* h_{2} e s$-, the reduplication * $h_{2} e-h_{2} s$ - of which would explain the long $\bar{a}$. Since Hitt. h $\bar{a} s z_{s}-$ cannot reflect $* h_{2} e h_{2} s-$, however, which should have yielded **hahš- (cf. paȟs $<{ }^{*} p e h_{2} s-$ ), this view cannot be correct. A preform $* h_{2} e h_{3} s$ - is impossible as well, because this would have yielded ${ }^{* *} \bar{o}$ - in Latin. All in all, we should reconstruct a root noun $* h_{2} e h_{l} s$-. This noun probably inflected $* h_{2} e ́ h_{l} s-s$, $* h_{2} e ́ h_{l} s-m, * h_{2} h_{l} s$-ós. In Hittite, the full-grade stem was generalized and later on thematicized, in Sanskrit the fullgrade stem was thematicized, whereas in Germanic derivations were formed on the basis of the oblique stem $* h_{2} h_{1} s$ s- $>$ ăs-. In Hittite and Latin a derivative * $h_{2} e h_{1} s-e h_{2^{-}}$'*that of the ashes' yielded Hitt. h $h \bar{a} s ̌ s{ }_{a}-{ }^{-}$- 'heart' and Lat. $\bar{a} r a$ 'altar' (see at $h \bar{a} \bar{s} \check{s} \bar{a}-$-).
A verbal stem *h $h_{2} e h_{l} s$ - 'to dry' is visible in Lat. $\bar{a} r e \bar{e} e$ 'to dry' and TochAB $\bar{a} s-$ 'to dry out'. Often it is claimed that Gr. $\alpha \zeta \omega$ 'to dry' belongs here as well and reflects *ăs- $d-\bar{o}$, but as is stated under hāt- ${ }^{i} /$ hat-, it is rather to be regarded as reflecting $* h_{2} d$-ie/o-.
A further analysis of $* h_{2} e h_{1} s$ - as $* h_{2} e h_{1}-s$ - on the basis of Pal. $h \bar{a}$ - 'to be warm', which then is thought to reflect $* h_{2} e h_{l^{-}}$(thus in $\operatorname{LIV}^{2}$ ), is in my view far from assured.
$\boldsymbol{h} \overline{\boldsymbol{s}} \mathbf{s}^{\mathbf{i}}{ }^{-} / \boldsymbol{h} \boldsymbol{a}$ ̌šs $^{-}$(IIa2) 'to give birth (to), to beget, to procreate': 3sg.pres.act. ha-a-ši (OS, often), ḩa-aš-ši (1x, MS), 3pl.pres.act. ḩa-aš-ša-an-zi (OH/MS), 1sg.pret.act. ḩa-a-aš-hูu-un (OH/MS), h. ha-a-šu-un (1x, NS), 3sg.pret.act. h. $a-a-a s ̌-$ $t a$ (OS), ha-aš-ta, 3pl.pret.act. ḩa-a-še-er (NS), ḩa-a-ši-er (NH), 3sg.imp.act. h ha-$a-s ̌ u(\mathrm{MH} / \mathrm{NS}), ~ h{ }^{2} a-a \check{s}-d u(\mathrm{OH} / \mathrm{NS})$; part. h ha-aš-ša-an-t-, ha-a-ša-an-t-; impf. ha $a-$ aš-ke/a- (OH/MS).
Derivatives: haššātar / haššann- (n.) 'begetting, birth, offspring, family’ (Sum. MÁŠ-tar; nom.-acc.sg. ḩa-aš-ša-tar, ha-ša-a-tar (1x, OH/NS), gen.sg. ḩa-aš-ša-an-na-aš, ḩa-an-ša-an-na-aš (HT 6 i 17 (NS)), dat.-loc.sg. ha haš-ša-an-na-i
 hुa-aš-ša-an-ni-it, gen.pl. h ha-aš-ša-an-na-an, MÁŠ $\left.{ }^{\text {HI.A }}-a \check{s}\right)$, haššumar (n.) 'begetting, genitals’ (nom.-acc.sg. ha-aš-šu-mar, gen.sg. ha-aš-šu-ma-aš), $\boldsymbol{h a s ̌ s ̌ a n n a s ̌ s ̌ a / i - ~ ( c . ) ~ ' f a m i l y ~ m e m b e r ' ~ ( n o m . s g . ~ h ~ h a - a s ̌ - s ̌ a - a n - n a - a s ̌ - s ̌ i - i s ̌ , ~ a c c . s g . ~}$ h $h a-a \check{s}-s \check{a} a-a n-n a<-a \check{s})-s ̌ a-a n$, dat.-loc.sg. h $a-a \check{s}-s ̌ a-a n-n a-a \check{s}-s ̌ i$, nom.pl. h ha-aš-ša$a n-n a-a \check{s}-s ̌ i-s ̌=a), \boldsymbol{h a s ̌ n u - ~}{ }^{z i}$ (Ib2) 'to bring to birth' (3pl.pret.act. ha $a-a \check{s}-s ̌ a-n u-e r$, ha-aš-nu[-er ?]; impf. ha-aš-ša-nu-uš[-ke/a-]), see hanzāšša-, hāǎša- and haššu-.

Anat. cognates: HLuw. has- 'to beget' (3pl.imp.act. /hasantu/ ha-sá-tu-' (KARATEPE 1 §56 Hu.), ha-sa-tù (KARATEPE 1 §56 Ho.)), hasu- 'family' (dat.-loc.sg.(?) ha-su-' (KARATEPE 1 §15)).

PIE * $h_{2}$ óms-ei $/ * h_{2} m s$-énti
See HW ${ }^{2}$ H: 391f. for attestations. The word shows two stems, namely hā̃̌s- in the strong stem forms and haš̌š- in the weak stem forms. The etymology of this verb cannot be described without referring to its Hittite cognates hanzāšša- 'offspring', haāšša- 'descendant' and haššu- 'king' (for the semantic relation between 'to procreate' and 'king' see at hुaššu-). The word haššu- has a direct counterpart in ON áss 'god' < *h $h_{2} e N s u$ - and Skt. ásura- 'godlike, powerful', Av. ahu-, ahura'god, lord' < *h ${ }_{2}$ Nsu-(ro-). The words hanzāšša- 'offspring' and ḩāšša'descendant' are related to, among others, CLuw. hamša/i- and HLuw. hamsa/i'grandchild'. These latter forms, together with ON áss $<* h_{2} e N s u$-, point to a stem *h $h_{2}$ ems-, which must be used as the basis of all these words. Nevertheless, it is not easy to determine the exact preforms of all the related forms.

As a hi-verb, we would expect that hāǎi / haššanzi reflects *h $h_{2}$ óms-ei / * $h_{2} m s$-énti, with the $o / \varnothing$-grade as described in § 2.2.2.2.e. The long - $\bar{a}$ - of $h \bar{a} \bar{s} s ̌ s a-$ 'descendant' seems to reflect an *ó, especially if we compare the consistently non-plene spelled adjective daššu- / daššau- 'heavy, important' that reflects *dens-(e) $u$-. Because *-m- assibilates to *-s- in *VmsV, the form hanzāǎšsa'offspring' hardly can reflect anything else than $* h_{2} m s o$ - (likewise Rieken 1999: 233). To sum up, we would at first sight reconstruct these words as follows:

| haššu- 'king' | $<$ | * $h_{2} \mathrm{emsu}$ - |
| :---: | :---: | :---: |
| hāšša- 'descendant' | $<$ | * $h_{2}$ ómso- |
| haāši '(s)he procreates' | $<$ | * $h_{2}$ óms-ei |
| hāšhun 'I procreated' | < | * $h_{2}$ óms- $h_{2} e+$ |
| hanzzāšša- 'offspring' | $<$ | * $h_{2}$ msó- |
| haššanzi 'they procreate' | $<$ | * $h_{2}$ ms-énti |

Although the outcomes of $* h_{2} e m s V>h a \check{s} s ̌ V$ and $h_{2} o ́ m s C>h a ̄ s ̌ C$ seem certain, the other forms cannot all be phonetically regular: $* h_{2} o ́ m s V$ cannot yield both $h \bar{a} \check{s ̌ s} V$ and $h a \bar{a} \check{s} V ; h_{2} m s V$ cannot yield both hanzV and haššV.

In the case of $* h_{2} m s V$, it is in my view quite probable that the phonetically regular outcome is hanzV. Because haššanzi 'they procreate' is part of a verbal paradigm, it is easily understandable how the phonetic outcome of $* h_{2} m s e ́ n t i>$ *hanzanzi has been secondarily altered to haššanzi under the influence of the full grade stem * $h_{2}$ óms $C>/$ HáSC- $/$. Moreover, we could even assume that already in pre-Hittite times the full grade stem of the singular was taken over into the plural and that haššanzi directly reflects $* h_{2}$ oms-énti.

The case of $* h_{2}$ ómsV is less clear. On the one hand, one could state that the lenition visible in hāaši '(s)he procreated' is analogical to the type aki / akkanzi, ištāpi / ištappanzi, where *ó regularly lenited the following stop. This then would mean that $*_{2} o ́ m s V$ regularly yielded $h \bar{a} \bar{s} \check{s} V$ showing that ${ }^{*}-m s->-\check{s} \check{s}$ - was not lenited by a preceding *ó. On the other hand, there is a possibility that hāǎša'descendant' was not a thematic noun originally. The close cognate hanzāšša-
 in Luw. hamsa/i- (cf. below). This could point to an ablauting root noun. Normally, however, such a root noun would inflect $* h_{2}$ éms-s, *h $h_{2}$ éms-m, * $h_{2} m s$ ós, which does not make it easy to explain the o-grade visible in hāaš̌a-. A possibility remains in assuming that this -ó- was taken over from the verb, and then we could perhaps assume that hāši $*^{*} h_{2} o ́ m s e i ~ d o e s ~ s h o w ~ t h e ~ r e g u l a r ~$ development, and that *-ms->-šš- did get lenited by a preceding *ó.
Note that an initial $* h_{2}$ - would regularly drop in front of $* o$ (so $* h_{2} o->$ Hitt. $a$-, cf. Kloekhorst fthc.c), but in these cases we can easily assume secondary restoration of $* h_{2^{-}}$on the basis of forms with $* h_{2} e m s$ - and $* h_{2} m s$-, where initial * $h_{2}$ - regularly yielded Hitt. $h$-.

A similar problem exists in the Luwian material. Here we find hams- (CLuw. hamša/i-, HLuw. hamsa/i- 'grandchild', CLuw. hamšukkala/i-, HLuw. /hamsk ${ }^{\mathrm{w}}$ ala/i-/ 'great-grandchild') vs. has- (HLuw. /hasantu/ 'they must beget' and hasu- 'family'). On the basis of the Hittite development $* h_{2} m s V>h a n z V$, it seems likely to me that Luw. hams- reflects $* h_{2} m s$-, whereas has- reflects * $h_{2} e / o m s$-. That is why I would reconstruct hamsa/i- 'grandchild' as *h $h_{2} m s-o$ - and has- 'to beget' and hasu- 'family' as $h_{2} e / o m s$ - and $* h_{2} e m s-u$ - respectively. Note that CLuw. ammašša/i- 'to wipe' reflects $* h_{2} o m h_{l} s$ - in which $*-h_{1}$ - prevented assimilation of -mš- to - $\check{s} \check{s}-$.
All in all, I assume that h hā̌si / haš̌̌anzi in one way or another goes back to *h $h_{2}$ óms-ei $/{ }^{*} h_{2} m s$-énti. It is unclear whether the form gen.sg. ha-an-ša-an-na-aš (HT 6 i 17 (NS)) is just a scribal error for h ha-aš-ša-an-na-aš, or really reflects a trace of the original nasalization from $* h_{2} o m s$-. Because of its very late attestation the latter possibility hardy seems viable (cf. also Kimball 1999: 332).
hā̃š- / hašš-, hāšs- / hešš- 'to open' (Akk. PETŪ): 3sg.pres.act. ha-a-ši (KBo 13/35 iii 6 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 7.41 obv. 4 (MH/NS)), ha-aš-zi (IBoT 3.148 iii 13 (MH/NS)), hé-e-eš-zi (KBo 17.94 iii 23 (NS)), 1pl.pres.act. há-aš-šu-e-ni (KBo 19.156 obv. 9 (OS)), hูa-aš-šu-ú-e-ni (KBo 25.139 + KUB 35.164 rev. 1 (OS)), hé-e-šu-u-e-ni (KUB $50.6+16.41+$ iii $44(\mathrm{NH})$ ), 3pl.pres.act. ha $a$-aš-ša-an-zi (KBo 20.10 i 1, KBo 20.23 obv. 5 (OS), KUB 2.6 iii 21 ( OH/NS), KUB 2.13 i 2
(OH/NS), KUB 7.25 i $2(\mathrm{OH} / \mathrm{NS})$, KUB 11.22 i 14, KUB 11.35 i 8 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 20.8 i 2, KUB 20.18, 13 ( $\mathrm{OH} / \mathrm{NS}$ ), IBoT 1.36 i 20, 68 ( OH or MH/MS), KBo 5.1 i 6 (MH/NS), KUB 25.16 i 2 (NS)), he-ša-an-zi (KBo 21.34 ii 3 (MH/NS), KBo 25.183 r.col. 5 (NS)), hé-e-ša-an-zi (KUB 12.2 iv 3 (NS), KUB 15.11 ii 11 (NH), KUB 21.17 iii 13 (NH)), hé-ša-an[-zi] (KUB 27.15 iv 8 (NS)), hé-eš-ša-an[-zi] (KUB 51.69 obv. 4 (NS)), hi-iš-ša-an-zi (Bo 6871 rev. 33 (undat.)), 3sg.pret.act. h ha-a-aš-ta (KUB 17.10 iv 14 (OH/MS)), ha-aš-ta (KUB 33.52 ii $10(\mathrm{OH} / \mathrm{NS})$ ), ḩa-aš-ši-it (KUB 9.39 i 6 (NS)), 1pl.pret.act. hé-e-šu-u-en (KBo 22.116 obv. 14 (NS)), 3pl.pret.act. hé-e-še-er (KUB 29.3 i 5 (OS), KUB 16.48 obv. 16 (NS)), hé-še-er (KBo 10.2 ii 7 (OH/NS)), he-e-še-er (KUB 29.1 i 24 ( $\mathrm{OH} / \mathrm{NS}$ )), hé-eš-šer (KBo 10.2 i $32(\mathrm{OH} / \mathrm{NS})$ ), hé-eš-še-er (KUB 55.37 iii 10 (NS)), ḩa-a-šer (KUB 35.148+ iii 2 (MH/NS)), 2sg.imp.act. ḩa-a-aš (KBo 21.22 obv. 22 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 11.14 iii 27 (MH/NS)), he-e-eš (KBo 18.48 obv. 17 (NS)), ḩé-e-eš (KUB 55.2 obv. 5 (NS)), 3sg.imp.act. ha $a-a-s ̌ u$ (KBo 10.45 i 39 (MH/NS), KUB 29.1 iii 2 (OH/NS)), he-eš-du (KUB 36.89 obv. 19 (NS)), hé-e-eš-du (KUB 36.89 obv. 39 (NS)), 2pl.imp.act. ḩé-e-eš-tén (KUB 33.106 iii 50 (NS)), 3pl.imp.act. héée-ša-an-du (KBo 13.58 ii 26 (MH/NS)); 3pl.pres.midd. haa-$a-s ̌ a-a n-t a(K B o 10.7$ ii $25(\mathrm{OH} / \mathrm{NS})$ ), 3sg.pret.midd. hé-eš-ta-at (KUB 13.34 iv 3 (NS)); part. ḩa-aš-ša-an-t- (KUB 2.6 iii $35(\mathrm{OH} / \mathrm{NS})$, KUB 11.20 ii $20(\mathrm{OH} / \mathrm{NS})$, KBo 4.9 i 29 (NS)), ḩé-e-šau-anヶ-t- (KUB 31.136 iii 5 (NS)); verb.noun. hé-e-šu-u-ar (KUB 3.94 i 25 (NS)), gen. ḩé-e-šu-u_a-aš (KUB 17.35 ii 3, 13, iv 19 (NS)), hé-šu-ua-aš (KUB 27.15 iv 23 (NS)); impf. ha-aš-ke/a- (KBo 11.14 iii 26 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 24.3 i 53 (MH/NS), KUB 30.32 i 17 (NS?)), hé-iš-ke/a- (KBo 13.109 iii 8 (MH/NS)).

See $\mathrm{HW}^{2} \mathrm{H}: 394 \mathrm{f}$. for attestations. There, a form impf.1sg.pres.act. hé-ši-ke-e-mi (KBo $17.3,10$ ) is cited, but this form does not exist. The editors probably have

This verb shows a wild variaty of forms and stems. In OS texts, we find the forms haššu(u)eni, haššanzi and hēēser. On the basis of these forms, one would conclude that we are dealing with a verb that shows a strong stem hēš- and a weak stem hašš-. In MS texts, we find the forms haššanzi, hāašta and hā̄š, which seem to point to an ablauting paradigm h hāš- / haš̌š-. In NS texts, we find, besides the stems ha $\bar{s} \check{s}-$, haš̌ss- and h heš- also forms with a stem hešš-. At this moment, it is impossible to determine what the original inflection was. In my view, it looks like we are dealing with a hi-inflecting verb hāčs-i hašss- (which is homophonic to hā̄s- ${ }^{i}$ / haššs- 'to give birth (to)'), which was crossed with a (mi-inflecting?) stem $h \bar{e} \bar{s}-$. In NH times, almost only forms with the stem h $h \bar{e} \check{s}-$ are found, on the basis of
which an analogical stem hešš- was made. Whereas hā̄š- / hašš- in principle could be of IE origin, the stem $h \bar{e} \bar{s} s$ - shows an $e$ besides $h$, which is difficult to explain from an IE perspective (unless we assume an $i$-diphthong, but in front of $*_{s}$, such a diphthong would not have monophthongized to $-\bar{e}-$ ). Unfortunately, we have no convincing cognates for hāas- / hašš- either. Formally, it should reflect $* h_{2} e s$ - or * $h_{2}$ eNs-.

Within Hittite, one could think of a connection with $\bar{a} s ̌ k a-$ 'gate' (Oettinger, p.c.) if we assume that in $\bar{a} s ̌ k a$ - an initial laryngeal $\left({ }^{*} h_{2}\right)$ was lost in front of $*_{o}$ (for which see Kloekhorst fthc.c), which was retained in hā̄š- / hašš-.
h $\bar{a} \bar{s} \check{s ̌} \overline{\boldsymbol{a}}$ - (c.) 'fireplace, hearth' (Sum. GUNNI): nom.sg. h ha-aš-ša-a-aš, ha $a-a-a s ̌-$ ša<-aš〉, acc.sg. h ha-a-aš-ša-an (OS), h ha-aš-ša-a-an (OS), h ha-aš-ša-an (OS), voc.sg. ḩa-ač-ša-a-aš, gen.sg. h ha-aš-ša-a-aš (OS), h ha-a-ǎ̌-ša-ǎ̌ (OH/NS), h ha-aš-
 $a \check{s}-5 ̌ i-i(\mathrm{OS}, ~ o f t e n), ~ h a-a-a s ̌-s ̌ i-i(\mathrm{OS}, 1 \mathrm{x})$, ha- $a s ̌-s ̌ i(\mathrm{OS}), ~ h a-a-a \check{s}-s ̌ i(\mathrm{OH} / \mathrm{NS})$, [ha-]aš-ša-a-i (KBo 25.36 iii 8 (OS)), all.sg. h ha-aš-ša-a (OS), h ha-aš-ša (OS), abl. ḩa-aš-ša-a-az (OS), hูa-aš-ša-az (OS).

Anat. cognates: CLuw. haššanitt(i)- ‘hearth’ (nom.sg. ha-aš-ša-ni-it-ti-iš, acc.sg. ḩa-aš-ša-ni-it-ti-in).
IE cognates: OLat. $\bar{a} s a$, Lat. $\bar{a} r a$, Osc. AASAÍ' 'altar'.

$$
\text { PIE * } h_{2} e h_{1} s-e h_{2^{-}}
$$

See Puhvel HED 3: 221f. for attestations. Already since Pedersen (1938: 27, 164) this word has been connected with OLat. āsa, Lat. āra 'altar', Osc. AASAÍ 'altar'. The long $\bar{a}$ - in Latin points to $* h_{2} e H-$. The second laryngeal hardly can be $* h_{3}$, because we then would expect $* \bar{o}$-. In Hittite, a preform $* h_{2} e h_{2} s$ - would have yielded $* * h a h \check{s} \check{-}$ (cf. pahšs-<*peh ${ }_{2} s-$ ). So Hitt. h $h \bar{a} s ̌ s ̌ \bar{a}-\sim$ OLat. $\bar{a} s a$ can only reflect * $h_{2} e h_{1} s e h_{2}$-. It is likely that $h \bar{a} \bar{a} \check{s} \check{s} \bar{a}$ - is a derivative of $h \bar{a} \check{a} s \check{s}^{-}$'ashes' (q.v.), which would mean that $* h_{2} e h_{1}$ seh $_{2}$ - is to be analysed as $* h_{2} e h_{1} s$-eh2-.
In PIE, ${ }^{*}-h_{2}$-stems originally showed ablaut:

$$
\begin{array}{lllll}
\text { nom.sg. } & * h_{2} e ́ h_{l} s-h_{2} & \text { cf. } & * g^{w} e ́ n-h_{2} & \text { 'woman' } \\
\text { acc.sg. } & * h_{2} e ́ h_{1} s-h_{2}-m & & * g^{w} e ́ n-h_{2}-m & \\
\text { gen.sg. } & * h_{2} h_{1} s-e ́ h_{2}-s & & * g^{w} n-e ́ h_{2}-s &
\end{array}
$$

It is quite likely that the paradigm of 'hearth' was secondarily altered to $* h_{2} e ́ h_{1} s$ $e h_{2}(-s), * h_{2} e ́ h_{1} s-e h_{2}-m, * h_{2} e h_{1} s-e ́ h_{2}-(o) s$. On the basis of Hitt. eša 'seats himself' < *hé $h_{l} s$-o, we can conclude that a sequence *-é $h_{l} s V$ - yields Hitt. -ešV-. We therefore must conclude that the geminate $-\check{s} \check{s}$ - in $h \bar{a} \bar{s} s z_{\bar{a}}-$ is the regular outcome of
*-eh $s{ }_{l}{ }^{\prime}$ - and that the originally alternating paradigm of 'hearth', *hásas, *hásām, *hassáas, has been normalized to hāǎšsā-.
hāšša- (c.) 'descendant': nom.sg. ha-aš-ša-ač (NH), dat.-loc.sg. ha-a-ač-ši (1x,
 $a \check{s}$-še-et (1x, NS), nom.pl. ḩa-a-aš-še-eš (OS), ha-aš-še-eš (OH/NS), acc.pl. ha ha$a \check{s}-5 ̌ u-u s ̌ ~(O H / M S), ~ h ̧ a-a s ̌-s ̌ u-u s ̌ ~(N H), ~ d a t .-l o c . p l . ~ h ~ h a-a s ̌-s ̌ a-a \check{~(O S) . ~}$
Anat. cognates: CLuw. hamša/i- (c.) 'grandchild' (abl.-instr. hुa-am-ša-a-ti, hुa-am-ša-ti), hamšukkalla/i- (c.) 'great-grandchild' (abl.-instr. ḩa-am-šu-uk-ka ${ }_{4}$-la-$a-t i$, h ha-am-šu-uk-kal-la-a-ti, h ha-am-šu-kal-la-a-ti); HLuw. hamsa/i- (c.) 'grandchild’ (nom.sg. /hamsis/"INFANS.NEPOS"ha-ma-si-sa (MARAŞ 14 §5), ${ }^{\text {INFANS.NEPOS }} h a-m a-s i-s a$ (PORSUK §1), ${ }^{\text {INFANS.NEPOS } h a-m a-s i-s a ́-' ~(M A R A S ̦ ~} 1$ $\S 1 \mathrm{c}),{ }^{\text {INFANS }} h a-m a-s i-s a_{5}$ (ISPEKÇÜR side B §1), ${ }^{\text {INFANs }} h a-m a-s i-s a$ (ISPEKÇÜR side C fr. $\mathrm{c}+\mathrm{d}$ ), ${ }^{\text {NEPOS } h a-m a-s i-s a ́ ~(K O ̈ R K U ̈ N ~ § 6), ~ I N F A N S . N E P O S-s i-i-s a ~}$ (KARKAMIŠ A11b §1), INFANS.NEPOS-si-sa (SHEIZAR §5), INFANS.NEPOS-sa (KARKAMIŠ A11a §1), INFANS.NEPOS-MI-sa (DARENDE §1)), dat.-loc.sg. /hamsi/ NEPOs ha-ma-si (KÖRKÜN §11), ha-ma-si (KARABURUN §7, §9), nom.pl. /hamsant ${ }^{\text {§ }} \mathrm{i}$ / INFANS.NEPOS-zi (SHEIZAR §4), dat.-loc.pl. /hamsants/ INFANS.NEPOS-sa-za (KARKAMIŠ A11b+c §4, §30)), hamsukala-, hamskwala- (c.) 'great-grandson’ (nom.sg. /hamsk ${ }^{\mathrm{w}}$ alas/ ${ }^{\text {INFANS.NEPOS }} h a-m a-s u-k a-l a$-sá (MARAŞ $1 \quad \S 1 \mathrm{~d}$ ), INFANS.NEPOS-ka-la-[sa] (SHEIZAR §5), NEPOS-ka-la-sa (KÖRKÜN §6), "INFANS.NEPOS"-REL-la-sá (MARAŞ $4 \S 10$ ), dat.-loc.sg. /hamsk ${ }^{\mathrm{w}} \mathrm{ala} /{ }^{\text {NEPOS }} h a-m a-s u-k a-l a$ (KÖRKÜN §11), abl.-instr. /hamsk ${ }^{\mathrm{w}}$ ala/ INFANS.NEPOS.REL-la (KARKAMIŠ A4a §12), nom.pl. /hamsk ${ }^{\mathrm{w}}$ alant ${ }^{\mathrm{s}} \mathrm{i} /$ INFANS.NEPOS-ka-la-zi (SHEIZAR §4)); Lyd. eśa'offspring' (dat.-loc.sg. eśav); Lyc. גahba- 'grandchild' (nom.sg. ұahba, acc.sg. ұahbu, acc.pl. ұahbas, dat.pl. ұahba, ұahbe).

PIE * $h_{2}$ éms-o-
See Puhvel HED 3: 224f. for attestations. The word predominantly occurs in the syntagm hāǎša- hanzāǎša- that denotes 'further offspring' as e.g. in KUB 29.1 iv (2) $n u$ DUMU.NITA ${ }^{\text {MEŠ }}$ DUMU.MUNUS ${ }^{\text {MEŠ }}$ ha $a-a s ̌$-še-eš ha ha-an-za-aš-še-eš ma$a k-k e-e s ̌-s ̌ a-a n-d u$ 'May the sons, daughters and further offspring become numerous!'. When used in the all.sg., this expression has an adverbial feeling to it and must be translated 'down all generations', compare e.g. KUB 21.1 i (70) kat$t a=m a$ am-me-el DUMU=IA DUMU.DUMU=İA ha-aš-ša ḩa-an-za-aš-ša pa-ah$\check{s ̌ i}$ 'You must protect my son (acc.) and grandson (acc.) down all generations'. The word $h \bar{a} \bar{s} \check{s} \check{s} a$ - is used separately only once, in KUB 21.27 iii (43) ${ }^{\mathrm{d}} Z i$-in-tu-hi-
 'My Lady Zintuhī, beloved descendant of the Storm-god and the Sun-goddess of Arinna, ...'.
Almost all the oldest attestations of this word (MS and OS) show plene spelling $h a-a-a \check{s}-\check{s}^{\circ}$, whereas the spelling h ha-ǎ̌-šo is predominantly found in NS texts. The plene spelling therefore must reflect the original situation.
 view: they are etymologically related as well. The nasal in hanzā̃̌ša- must be compared to the nasal found in Luw. hamsa/i- 'grandchild'. Within Hittite, hāǎšaand hanzā́šša- obviously belong with the verb hāšs- / hašš- 'to procreate' and therefore also with haš̌su- 'king'. As I have shown in detail under the lemma of $h \bar{a} \bar{s} \check{s}^{i} /$ h hašss- all these words go back to a root * $h_{2} e m s-$. In the case of hāasša-, we would at first sight think that it reflects *h2óms-o-. If, however, hāši '(s)he procreates' regularly reflects * $h_{2}$ óms-ei, it would show that the expected outcome of *h2ómso- would have been $* * h \bar{a} s ̌ a-$. Moreover, since hुanzāšša- must reflect * $h_{2}$ msó-sio- and Luw. hamsa/i- probably goes back to $* h_{2} m s-o-$, it is in my view more likely that this word originally was a root noun *h2éms-s, * $h_{2}$ ems-m, * $h_{2} m s$ ós, which was later on thematicized: in Hittite, the full grade stem was used, whereas in hanzāšša- and Luw. hamsa/i- we find the zero-grade stem. This scenario implies that the *ó as visible in hāasša- has been secondarily taken over from the verb hā̌s- ${ }^{i}$ / hašš-, however.
haššikk- ${ }^{z i}$ (Ib1) 'to satiate oneself, to be satiated': 3sg.pres.act. háaš-ši-ik-zi
 (NS)), 3sg.pret.act. [h]a-aš-ši-kat-ta (KBo 12.3 i 11 (OH/NS)), 3pl.pret.act. ha$a \check{s}$-ši-ik-ke-er (KUB 17.10 i 20 (OH/MS)), 1sg.imp.act. h_a-aš-ši-ik-lu (KUB 24.5 + 9.13 rev. 1 (NS)), ḩa-aš-ši-ig-gal-lu (KUB 36.93 rev. 6 (NS)), ha-ši-ig-gal-lu (KBo 15.14, 4 (NS)), 2sg.imp.act. ha-aš-ši-ik (KUB 33.87+ i 7 (NS)), 3sg.imp.act. ḩa-aš-ši-ik-du (KBo 15.10+ i 37 (OH/MS), KBo 4.1+ obv. 13, 18 (NS)), 2pl.imp.act. ha-aš-ši-ik-tén (KUB 9.26 rev. 7 (NS)), ha-aš-ši-ik-t[e-en] (KBo 22.142 i 6 (NS)), 3pl.imp.act. ha-aš-ši-kán-du (KBo 15.10+ iii 38 (OH/MS)).
Derivatives: haššik(ka)nu- ${ }^{z i}$ (Ib2) 'to satiate, to saturate with, to steep (in)' (3pl.pres.act. h_a-aš-ši-i[g-g]a-nu-an-z[i] (KBo 14.63 iv 35), ha-aš-ši-ig-ga-nu-ua$a n-z i$ (KUB 29.44+ iii 38), ha-aš-ši-ik-nu-an-zi (KBo $8.52+14.63$ i 46),
 tree and its fruit (nom.sg.c. ha-aš-ši-ka ${ }_{4}-a \check{s}$, h ha-ši-ik-ka ${ }_{4}-a \check{s}$, acc.sg. ha $a-a s ̌-s ̌ i-i k-k a-$
an, nom.-acc.sg.n. ha-ši-ik, hha-aš-ši-ik-ka-an, gen.sg. ḩa-aš-ši-ig-ga-aš, ha-ši-ik$\left.k a_{4}-a s ̌, ~ i n s t r . ~ h a-a s ̌-s ̌ i-i k-k i-i t, ~ n o m .-a c c . p l . n . ~ h a-s ̌ i-i g-g a\right) . ~$

See $\mathrm{HW}^{2}$ H: 421f. for attestations and semantic treatment. All spellings seem to point to a phonological interpretation /haSik-/. Such a verbal root is formally quite aberrant and can hardly reflect anything Indo-European. On the basis of the Palaic verb haš- 'to be satiated of drinking' (3pl.pres.act. hašanti, hašānti), one could assume that haššikk- ${ }^{z i}$ shows some verbal extension, but this is formally difficult as well. Puhvel (l.c.) proposes a connection with Gr. ä $\omega$ 'to satiate (oneself)', aor.inf. ã áal, Lat. satis, Lith. sótis, which he reconstructs as $* h_{2} e s$-. These words rather reflect $*^{s e h} 2^{2}$ and etymologically belong with Hitt. šāh- ${ }^{i}$ (q.v.). All in all, haššikk- ${ }^{z i}$ remains without a credible etymology. To what extent the homophonic fruit (tree) ${ }^{\text {(GIŠ) }} h a s ̌ s ̌ i k k(a)$ - is cognate, is unclear.
haštāi / hašti- (n.) 'bone(s); (metaphorically) strength; a length measure (GÌR.PAD.DU)': nom.-acc.sg. h_a-aš-ta-a-i, ha-aš-ta-i, hुa-ǎ̌-da-i, [h] $a-a \check{s}-d a-a-i$, gen.sg. ha-aš-ti-i-ǎ̌ (OS), ha-ǎ̌-ti-i्1a-aš, dat.-loc.sg. ha-aš-ta-i, erg.sg. ha-aš-ti$a n-z a$, abl. [ha-ǎ̌-ti-i] $a-a z$, instr. ha-aš-ti-it, ha-aš-ti-i-it (MH/MS), nom.-acc.pl. ha-aš-ta-i (OS), ha-aš-ta-a-i, ha-aš-ta-a-e, ha-aš-ta-e, ha-aš-da-i, ha-aš-da-a-i,


Derivatives: haštili(ia)- (adj.) 'stout, brave, heroic' (noun) 'hero' (Sum. UR.SAG: nom.sg.c. UR.SAG-li-iš, UR.SAG-liš, acc.sg. ȟa-aš-te-li-į $a-a n$ (NS), nom.(voc.)pl.c. UR.SAG-aš, dat.-loc.pl. UR.SAG-li-ia-aš; broken ha-aš-ti-li-i_ $[a-$ ...] (NS)), hašteliịant- (adj.) 'brave’ (nom.sg.c. ha-aš-te-li-an-za (NS)), haštiliiuatar, haštaliiatar (n.) 'heroic bearing, heroism, bravery' (nom.-acc.sg. ha-
 abl. UR.SAG-an-na-az (NS)), haštalē̌̌š-zi (Ib2) 'to become brave, to turn warlike' (3sg.pres.act. ḩa-aš-ta-le-eš-zi, ha-aš-ta-li-iš-zi), see UZU dānhašiti.

Anat. cognates: CLuw. hā̄š- 'bone' (nom.-acc.sg. ḩa-a-aš-ša, ḩa-aš-ša, abl.instr. h. ha-a-ša-ti, h. ha-ša-a-ti); HLuw. has- 'force(?)' (abl.-instr. "*314" ha-sá-ti-i 'by force' (KARKAMIŠ A11c §30)).

IE cognates: Skt. ásthi, asthnás 'bone', Gr. ỏ $\sigma t \varepsilon \boldsymbol{o}^{\circ}$ 'bone’, Lat. os, ossis 'bone, leg'.

PIE * $h_{3}$ ésth $h_{l}-\bar{o} i, * h_{3}$ esth $_{1}-i-$
See $\mathrm{HW}^{2} \mathrm{H}$ : 425f. for attestations. This word shows a diphthong-stem inflection, on which see Weitenberg 1979. Within IE, we find the clear cognates Skt. ásthi, Gr. óvtéov and Lat. os 'bone'. Especially the neuter root noun Lat. os, in which
we would expect $e$-grade, shows that we are dealing with an initial $* h_{3}$-. On the basis of the aspirated stop in Skt. asth-, we seem to be dealing with a root $* h_{3}$ est $H$-. The colour of the second laryngeal is determined as $* h_{l}$ on the basis of Gr. óøtéov < * $h_{3}$ esth $h_{1}$-ei-. Note that this latter form closely resembles Hitt. haštāi that reflects $* h_{3}$ esth $h_{1}-\bar{o} i$.
The derivative haštili(ia)- and haštiliiatar are derived from the weak stem hašti-. Note that the two forms that are spelled ha-aš-te- probably show the NH mixing up of the signs TE and TI (cf. Melchert 1984a: 137). The derivative haštaliiatar and haštalēšš- ${ }^{z i}$ probably reflect *haštaia-. For a treatment of ${ }^{\text {UZU }}$ dānhašti 'double-bone' $<*$ dunoiom $h_{3}$ esth $h_{1}-i h_{1}$, see there.
In CLuwian, we find the stem hā̃̌s-, without $-t$-. We therefore must assume that here the original root noun $* h_{3}$ ésth $h_{1}$ yielded $h \bar{a} \bar{s} \check{~(w i t h ~ r e g u l a r ~ l o s s ~ o f ~ w o r d-f i n a l ~}$ -th $h_{l}$, compare also Lat. os $<* h_{3} e s t h_{l}$, cf. Schrijver 1991: 50). This hāas then was generalized throughout the paradigm, yielding e.g. abl.-instr. haāšati).
hašter(a)- (c.) 'star' (Sum. MUL, Akk. KAKKABU): nom.sg. ha-aš-te-er-za (NS), MUL-aš, dat.-loc.sg. MUL-i, nom.pl. MUL ${ }^{\text {HI.A }}-e \check{s}$ (OS), acc.pl. MUL ${ }^{\text {HI.A }}-u s ̌$, gen.pl. MUL ${ }^{\text {HI.A }}-a \check{s}$, dat.-loc.pl. MUL ${ }^{\text {HI.A }}-a s{ }^{\text {. }}$.
Derivatives: ${ }^{\text {URU }}$ Hašter(a)- (c.), place-name (Sum. ${ }^{\text {URU }}$ MUL; acc.sg. ${ }^{\text {URU }} \mathrm{Ha}$ a-aš-te-ra-an, ${ }^{\text {URU }} H$ Ha-aš-ti-ra-an, gen.sg. ${ }^{\text {URU }} H a-a \check{s}-t i-r a-a s ̌$, all.sg. ${ }^{\text {URU }}$ MUL-ra).
IE cognates: Gr. à $\sigma \neq \hat{\rho} \rho$, Arm. astl, Skt. stár-, Lat. stēlla 'star', Goth. stairno 'star'.

PIE * $h_{2}$ ster-
The sumerogram MUL 'star' shows phonetic complements that point to an $a$ stem (nom.sg. MUL-aš). The only attested phonetic rendering of the word for 'star', which is found in a vocabulary (KBo 26.34 iv 9) where Akk. kà-aq-qa-bu 'star' is glossed by Hitt. ha-aš-te-er-za, seems to point to a consonant stem hašter-, however. This phonetic writing is supported by the place-name ${ }^{\text {URU }}$ Hašter (a)- (but its attestations do not enable us to decide whether this is a consonant- or an $a$-stem), which is to be equated with ${ }^{\text {URU }}$ MUL (cf. Puhvel HED 3: 238). Although the nom.sg.-form hašterza is found in a NS text, it is likely that it is a more original form, whereas the $a$-stem forms are secondarily created on the basis of acc.sg. *hašteran, gen.sg. *hašteraš, dat.-loc.sg. *hašteri etc.
The etymological connection to Gr. àбтí $\rho$ etc. 'star' was first suggested by Forrer apud Feist (1939: 448) and is generally accepted. The exact interpretation of the word has been subject of some debate. For instance, Puhvel (1.c.) argues in favour of an interpretation * $h_{2}$ esterr-, whereas Watkins (1974: 13-4) reconstructs

* $h_{2}$ ostēr. In my view, the fact that we find Gr. à $\sigma \not \subset \mathfrak{\rho} \rho$ and Arm. astl besides Skt. stár- cannot be interpreted otherwise than that they reflect PIE $* h_{2}$ ster-, which therefore must be the reconstruction of the Hittite word as well. Further analysis of $* h_{2}$ ster- as an agent noun in -ter- of a root $* h_{2} e s$ - is not supported by any evidence: a root $* h_{2} e s$ - is further unattested. The likeliness that hašterza reflects * $h_{2}$ stérr-s implies that it has to be phonologically interpreted as /Hstert ${ }^{\text {s }}$ /.
${ }^{\text {(GIŠ) }}$ hašduer- (n.) 'twig(s), brushwood': nom.-acc.sg. ḩa-aš-du-e-er, ha-aš-du-er, abl. ha-aš-du-er-ra-za.

PIE *h $h_{3}$ esth $h_{1}-g^{w}$ er- ?
See $\mathrm{HW}^{2} \mathrm{H}$ : 438 for attestations. Usually, this word is translated 'twigs, brush(wood)' (cf. e.g. Puhvel HED 3: 239), but on the basis of VSNF 12.57 i (4)
 scraped off of the horn of a mountain goat', $\mathrm{HW}^{2}$ states that hašduer more likely had "eine Grundbedeutung des Zerkleinerten, Abgerissenen". On the basis of this meaning, $\mathrm{HW}^{2}$ suggests an etymological connection with Hitt. hašhašš- 'to scrape, to shave'. This is unconvincing, however: in the above context one could just as well translate 'A little twig, scraped off of the horn of a mountain goat'. Moreover, if hašduer- derives from hašhašš-, what kind of suffix would -duerbe?
Usually, hašduer- is connected with Gr. őऍos 'twig, branch', Arm. ost 'twig, branch' and Goth. asts 'branch', which seem to reflect *Hosd-o-. Although semantically this connection is convincing, formally we are still dealing with an unparalleled suffix -uer-.
Prof. Lubotsky (p.c.) draws my attention to the following groups of words: Skt. ádga- 'knot, sprout (of bamboo)', MP 'zg 'twig', ModP azg 'twig' that seem to reflect $* H^{\prime}{ }^{(w)}{ }^{(w)}$ - and OIr. odb 'knot', MWe. oddf 'knot' that go back to *osbo< *Hosg ${ }^{w}$ o-. Taken together with Gr. őYoৎ, Arm. ost and Goth. asts 'branch' < *Hosdo-, we seem to be dealing with a preform ${ }^{*} H o s d g^{w} o$ - (that has undergone metathesis to ${ }^{*} H o d s g^{w} o$ - in Indo-Iranian). According to Lubotsky, it is attractive to assume that this word ultimately reflects a compound, of which it is likely that the first element goes back to $* h_{3}$ esth $_{l^{-}}$'bone' (see at ḩaštai / hašti- 'bone' for this reconstruction). If Hittite hašduer- belongs here as well, we should reconstruct the word as $* h_{3}$ esth $h_{1} g^{w}$ er-. If the second element $* g^{w}$ er- is to be identified with * $g^{w}$ er- 'summit, peak' (cf. Pokorny 1959: 477-8), the compound * $h_{3}$ esth $_{l}-g^{\text {w }}$ er- may have meant something like 'boney bulge' > 'knot', 'sprout' >
'twig, branch'. The original association with bone may still be visible in the context cited above.

Although it must be admitted that the above account is quite speculative, it is certainly not less convincing than the old interpretation of hašduer-, which saw it as a derivation in -uer- (of which no other examples in Hittite exist) of a stem *Hosd- which was further analysed as *Ho-sd- '(place where birds) sit down' > 'twig'.
haššu- (c.) 'king’ (Sum. LUGAL, Akk. ŠARRU): nom.sg. LUGAL-uš (OS), ḩa$a s ̌-s ̌ u-u s ̌ ~(K U B ~ 31.100 ~ r e v . ~ 9, ~ 10 ~(M S)), ~ v o c . s g . ~ L U G A L-u-e, ~ L U G A L-u-i, ~ a c c . s g . ~$ LUGAL-un (OS), gen.sg. ha-aš-šu-u [a-aš] (KBo 13.165 ii 6), LUGAL-ua-aš (OS), dat.-loc.sg. LUGAL-i (OS), LUGAL-u-i (OS), LUGAL-u-e, ha-aš-šu-u-ú-i (KUB 7.7, 8; interpretation uncertain), abl. LUGAL-ua-az, LUGAL-ua-za, instr. LUGAL-it, nom.pl. LUGAL-u-e-eš, acc.pl. LUGAL ${ }^{\text {MEŠ }}$-uš, gen.pl. LUGAL-uaan (OS), LUGAL-an, dat.-loc.pl. LUGAL ${ }^{\text {MEŠ }}$-aš.
Derivatives: *haššuššara- (c.) ‘queen’ (Sum. MUNUS.LUGAL-ra-; nom.sg. MUNUS.LUGAL-aš, gen.sg. MUNUS.LUGAL-aš, dat.-loc.sg. MUNUS.LUGAL-ri), haššu $\bar{e}^{z i}$ (Ib2) 'to become king' (3sg.pret.act. ḩa-aš-šu-u-$e-e t$, LUGAL-u-e-et), *haššuezzi- (n.) 'royal status' (nom.-acc.sg. LUGAL-u-e$e z-z i$, LUGAL-u-ez-zi, LUGAL-ez-zi, LUGAL-u-e-zi=še-et), *haššuezziie/a- ${ }^{\text {ta(ri) }}$ (IIIg) 'to become king' (1sg.pres.midd. LUGAL-ez-zi-ah-ha-ri, 1sg.pret.midd. LUGAL-ez-zi-ah-ḩa-at, LUGAL-ez-zi-i, $a-a h-h a-h a-a t, 3 s g . p r e s . m i d d . ~ L U G A L-~$ $e z-z i-i=1 a-a t-t a-[a t]$, LUGAL-u-ez-zi-et-ta-at; 3sg.pret.act. LUGAL-ez-zi-at), *haššuezna- 'royalty' (gen.sg. LUGAL-u-e-ez-na-aš, LUGAL-u-ez-na-aš, LUGAL-ez-na-aš, dat.-loc.sg. LUGAL-u-ez-ni, abl. [LUGAL-]u-ez-na-az), *haššueznae- ${ }^{z i}$ (Ic2) 'to be king' (1sg.pret.act. LUGAL-u-ez-na-nu-un), * haššueznatar / haššueznann- (n.) 'kingship’ (nom.-acc.sg. LUGAL-u-ez-na-tar, LUGAL-ez-na-tar, dat.-loc.sg. LUGAL-u-e-ez-na-an-ni, LUGAL-u-ez-na-an-ni, LUGAL-u-ez-za-na<-an〉-ni, LUGAL-ez-na-an-ni, LUGAL-ez-na-ni, LUGAL-an-ni).
IE cognates: Skt. ásura- 'godlike, powerful', Av. ahu-, ahura- 'god, lord', ON áss 'god'.

PIE * $h_{2}$ ems-u-
See $\mathrm{HW}^{2} \mathrm{H}: 439$ f. for attestations. See Weitenberg 1984: $436^{375}$ for the phonetic forms. The interpretation of MUNUS.LUGAL-ra- as *haššuššara- (see at išhā'master, lord' for a similar feminine derivative išhaš̌̌ara- 'lady, mistress') is

attested in the Kültepe-texts. Especially pairs like ${ }^{\mathrm{m}} \mathrm{Ni}-u \boldsymbol{u} a-a h-s ̌ u$ besides ${ }^{\mathrm{f}} \mathrm{Ni}$-ua$a h-s ̌ u-s ̌ a r$ and ${ }^{\mathrm{m}} H i-i \check{s}-t a-a h-s ̌ u$ and ${ }^{\mathrm{f}} \mathrm{H} i-i s ̌-t a-a h-s ̌ u-s ̌ a r$ point to the opposition between male haššu- and female *haššuššara-. To what extent the garden vegetable hašuššarā- (ha-šu-uš-ša-ra-a-an (KUB 7.1 i 21, KUB 24.47 iv 19), ha $\check{s} u$-uš-ša-ra-an (KBo 13.248 i 5)) is identical to the word for 'queen' is unclear. The consistent single spelling of the first $-\check{s}$ - of hašuššarā- is not particularly positive for its equation with *haššuššara-.
Sommer (1920: 9-10) convincingly assumed that haš̌su- is derived from hāassi / hašš- 'to give birth (to), to beget, to procreate', which has a semantical parallel in the Germanic word for 'king', *kuninga- that is derived from the PIE root *g'enh $l_{1}$ 'to give birth to'. In outer-Anatolian languages, hačšu- must be compared with Skt. ásura- 'godlike, powerful', Av. ahu-, ahura- 'god, lord' and ON áss 'god'. This latter word must reflect $* h_{2} e N s-u$-, which determines the preform of Skt. ásura- and Av. ahu- and ahura- as $* h_{2} \mathrm{Ns}-u$-(ro-). As I will show under the lemma of hā̄š-i / hašss-, there is additional evidence that the root was *h2ems-, which makes it likely that haš̌šu-reflects *h $h_{2} e m s-u$-.
$\boldsymbol{h} \boldsymbol{\overline { a }} \boldsymbol{t}^{\mathbf{i}} /$ hat- (IIa2) 'to dry up, to become parched': 3sg.pres.act.? ha-a-ti (KUB 8.3 obv. 12 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pret.act. ha- $a-a z-t a$ (KUB 17.10 i 16, 17 (OH/MS)), ha-a$a z-z a-a s ̌-t a(K U B 29.40$ iv 20 (MH/MS)), ha-za-aš-ta (KUB 12.62 obv. 8, 9, rev. 2 (NS)), ha-az-za-aš-ta (KUB 12.62 obv. 17, rev. 1 (2x), 2 (NS)), 3pl.pret.act. ha a-te-er (KUB 17.10 i 16, 17 (OH/MS)), 3sg.imp.act. ha-a-du (KUB 17.28 ii 44 (MH/NS)), h ha-az-za-du (KUB 60.144, 6 (NS)); 3pl.pres.midd. ha-a-da-an-ta-ri (KBo 10.7 iv 8 ( $\mathrm{OH} / \mathrm{NS}$ )); part. ha-ta-an-t- (KUB 17.28 ii 43 (MH/NS)), ha-da$a n-t$ - (KUB 30.32 iv 7 (MS)), ha-da-a-an-t- (KBo 23.44 i 11 (MH?/NS)), ha-a$t a-a n-t$ - (KBo 17.78 i 8 (MS), KUB 42.107 iii 8, 9 (NS), IBoT 2.93 obv. 12 (NS), KUB 29.46 i 14 (MH/MS)), ha-a-da-an-t- (KBo 21.33 i 12 (MH/MS), KUB 29.50 i 31 (MH/MS), KUB 27.16 iv 6 (NS), KUB 44.63 ii 12 (NS), IBoT 2.93 obv. 11 (NS)).
Derivatives: hatēšs z- ${ }^{i i}$ (Ib2) 'to become dry' (3sg.pres.act. ha-te-eš-zi (KUB 45.58 iii 13 (MH/NS))), hatnu ${ }^{-2 i}$ (Ib2) 'to cause to dry up' (3sg.pret.act. ha-at-nuut (VBoT 58 i 8 (OH/NS)), ha-da-nu-ut (KUB $33.89+36.21$ iii 21 (NS))), see hatantiia-.
IE cognates: Gr. ${ }^{\circ} \zeta \omega$ 'to dry up'.

$$
\text { PIE *h } h_{2} o ́ d-e i, * h_{2} d \text {-énti }
$$

See Puhvel HED 3: 247f. and Oettinger 1979a: 408 for attestations and semantics. This verb shows forms of both the mi- and the hi-conjugation. The first hi-
inflected form, 3sg.pres.act. ha-a-ti (KUB 8.3 obv. 12), is in dispute regarding its reading, however: KUB 8.3 obv. (12) [... $k] a-a-a \check{s}-z a \quad k i-s ̌ a \quad n=a^{\prime}-a p \quad h a-a-t i$ 'hunger will arise and it will become parched' could be read as [... k]a-a-aš-za kiša ${ }^{\mathrm{NA}_{4} \mathrm{KIŠIB}} \mathrm{ZÁ} \mathrm{H}^{T I}$ 'hunger will arise (and) destruction of the seal' as well (cf. Oettinger l.c.). In principle, ${ }^{\mathrm{NA}_{4} \mathrm{KIŠIB}} h a-a-t i$ 'the seal will get dry' is possible as well, of course. The other hi-form, 3sg.imp.act. ha-a-du (KUB 17.28 ii 44), which in principle could alternatively be read ZÁHַ- $d u$ 'it must be destroyed', hardly can be anything else than 'to become parched':

KUB 17.29 ii
(43) ma-ah-ha-an ha-ta-an-za a-pé-el-l=a e-eš-ša-ri
(44) $\mathrm{E}=Z U$ QA-TAM-MA ḩa-a-du
'Just as the image of him as well has become parched (c. instead of n.!),
likewise his house must become parched'.
The form h $h a-a-t i$ is found in an OH/NS text, $h a-a-d u$ in an MH/NS text. Some of the $m i$-forms occur in MS texts already (e.g. 3sg.pres.act. hāzta ( $\mathrm{OH} / \mathrm{MS}$ ), hāzzzašta (MH/MS)). At first sight this seems to point to a situation in which miinflection was original. Nevertheless, because of the fact that all mi-forms are 3sg.pret.act. (beside one 3sg.imp.act. hazzadu that is found in an NS text), and because it is known that $h i$-verbs ending in $-V T$ - replace the 3 sg.pret.-ending $-\check{s}$ with the mi-ending -ta quite early (cf. Oettinger l.c.), these forms cannot be used as a solid argument in favour of original $m i$-inflection.
Of more importance is the fact that we find a stem hāt- (hāti, hāadu, ha $\bar{a} z t a$ ) besides hat- (hatant-), which points to an original ablauting pair hāt-/hat-. Such an ablaut is typical for the hi-inflection. I therefore assume that this verb originally was hi-inflected and showed a paradigm hāti, *hatanzi. These forms can only reflect * $h_{2}$ ód ${ }^{(h)}$-ei, * $h_{2} d^{(h)}$-énti (cf. Oettinger 1979a: 409).
Puhvel (1.c.) convincingly connects this verb with Gr. á $\zeta \omega$ 'to dry up (trans.)', which he reconstructs as $* h_{2}$ ed-ie/o- (although $* h_{2} d$-ie/o- is possible as well).
 hit (a target), to engrave (a tablet)': 1sg.pres.midd. ha-ad-da-ah-ha-ri (KUB 17.28 i 6 (MH/NS)), 3sg.pres.midd. ha-at<-ta>-ri (KBo 25.29 ii 4 (OS)), ha-at-ta (KUB 1.14 ii 11 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 28.96, $14(\mathrm{OH} / \mathrm{NS})$, KUB $41.15+53.15$ i 20, 22, 23 (NS)), ha-at-ta-ri (KBo 29.205, 11 (MS), KBo 11.14 iii 9 (OH/NS), 352/v, 4 (NS), KBo 25.30, 11 (NS)), ha-ad-da-ri (109/u, 3 (NS)), 3pl.pres.midd. hatat-
ta-an-ta (KBo 25.29 ii 6 (OS), KUB 58.14, 4, 6 (OH/NS), HT 1 i 36 (MH/NS)), 3sg.pret.midd. ha-at-ta-at (KBo 32.14 ii 20 (MH/MS)), ha-az-zi-ia-at-ta-at (KBo 13.111, 7 (NS)), [ha-a]z-zi-at-ta-at (KBo 13.111, 14 (NS)), 3pl.imp.midd. ha-at-ta-an-ta-ru (KBo 3.27, 9 ( $\mathrm{OH} / \mathrm{NS}$ )); 3sg.pres.act. ha-az-zi-ez-zi (KBo 3.34 ii 33, $34(\mathrm{OH} / \mathrm{NS})$ ), haa-az-zi-zi (KBo 3.60 ii 14 (OH/NS)), haa-az-zi-az-zi (KUB 58.14 rev.? 27 (NS)), ha-at-ta-i (KBo 11.17 ii 14 (NS), KUB 27.67 ii 48 (MH/NS)), ha$a t-t a-a-i$ (KUB 5.12 rev. 2 (fr.), 4,5 (fr.), 7 (fr.) (NS)), ha-ad-da-i (KBo 2.9 iv 17 (MH/NS)), ha-ad-da-a-i (KUB 10.63 i 20 (NS)), ha-at-zi (KUB 53.12 iii 24 (NS)), 3pl.pres.act. ha-at-ta-an-zi (ABoT 25 obv. 18 (MS), KBo 39.8 ii 32, 39 (MS), KUB 20.88 vi 7 (MS), KUB 2.13 ii 56, iii 6 (OH/NS), KUB 41.8 iii 4 (MH/NS), KUB 41.48 iv 19 (NS), KUB 9.31 iii 61 (NS), KUB 9.32 obv. 37 (NS)), ha-ad-da-an-zi (KUB 39.4 obv. 13 (OH/NS), KBo 2.3 i 43, 52 (MH/NS), KUB 55.45 ii 9 (MH/NS), KUB 9.2 i 9 (NS), KUB 29.4 iv 36 (NS), KUB $34.66+$ 39.7 iii 5 (fr.) (NS)), ha-at-ta-a-an-zi (KBo 15.34 ii 28 (OH/NS)), ha-at-tan $-z i$ (KBo 4.11, 9 (NS)), ha-az-zi-an-zi (KBo $20.14+25.33$ obv. 8 (fr.), 19 (OS), KBo 11.34 i $4(\mathrm{OH} / \mathrm{NS})$, KBo 20.32 iii $11(\mathrm{OH} / \mathrm{NS})$, KUB 43.60 iv $15(\mathrm{OH} / \mathrm{NS})$ ), ha$a z-z i-i a-a n-z i(\mathrm{KBo} 20.40$ v $10(\mathrm{OH} / \mathrm{NS})$ ), 1sg.pret.act. ha-az-zi-ia-nu-un (KBo 4.10 rev. 22 (NH)), 3sg.pret.act. ha-az-zi-e-et (KBo $7.14+$ KUB 36.100 obv. 31 (OS), KUB 31.64 iii 4 (OH/NS)), ha-az-zi-et (KUB 31.64 i 18 (OH/NS)), ha-zi-et (KBo 3.36 obv. 8 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-at-te-eš (KBo 32.13 ii 16, 17 (MH/MS)), 3sg.imp.act. ha-az-zi-e-e[t-tu] (KBo 3.22 obv. 51 (OS)); part. ha-az-zi-an-t- (KBo 22.1, 23 (OS)), ha-at-ta-an-t-; inf.I ha-az-zi-ina-u-una-an-zi (KUB 35.145 ii 6 (NS)); impf. ha a-az-zi-iš-ke/a- (KBo 25.35 ii 5 (OS), KBo 15.33 ii 11, iii 6 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 23.74 iii 10 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 15.34 iv 44 (MH/MS), KBo 10.23+ iii 15 (OH/NS), KBo 40.173 iv 7 (NS), KUB 55.6 ii 10 (NS)), ha-zi-iš-ke/a(KUB 55.31 rev. 4 (MS)), h ha-az-zi-eš-ke/a- (KBo 20.85 iv 12 (NS)), ha-az-zi-i-e$e s ̌-k e / a$ - (KUB 20.16 i 11 (MS)), ha $a-a z-z i-i k-k e / a-(K B o 11.51$ iii 7 (OH/NS), KUB 2.5 i $4(\mathrm{OH} / \mathrm{NS})$, KUB 10.12 iii $10(\mathrm{OH} / \mathrm{NS})$, KUB 20.99 ii $29(\mathrm{OH} / \mathrm{NS})$, KBo 24.13 iv 15 (MH/NS)), ha-az-zi-ke/a- (KBo 39.127 r.col. 7 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 4.9 i 41, 44, vi $31(\mathrm{OH} / \mathrm{NS})$, KUB 25.1 vi $29(\mathrm{OH} / \mathrm{NS})$, KBo 4.13 v $24(\mathrm{OH} / \mathrm{NS})$, KBo 10.25 vi 13 ( $\mathrm{OH} / \mathrm{NS}$ )).
Derivatives: hattanna- ${ }^{i}$ / hattanni- (IIa5) 'id. (impf.)' (3sg.pres.act. hatat-ta-an-na-i (KBo 13.13 obv. 4 (OH/NS)), 3pl.pres.act. ha-at-ta-an-n[i-an-zi] (KBo 20.20 obv. 6 (OS)), 3pl.pret.act. ha-at-ta-an-ni-er (KBo 3.34 i 4 (OH/NS)), impf. ha-ad-da-an-ni-eš-ke/a- (KBo 18.54 rev. 16 (MS?))), hatteššar / hattešn- (n.) 'perforation, hole' (nom.-acc.sg. h.ha-at-te-eš-šar, ha-at-te-eš-ša, hुa-at-ti-eš-šar, gen.sg. hat-at-te-eš-na-aš, dat.-loc.sg. ha-at-te-eš-ni, all.sg. ha-at-te-eš-na, abl.
ha-at-te-eš-na-az), hazziiiaššar (n.) 'perforation' (nom.-acc.sg. ha $a-a z-z i-i{ }_{2} a-a s ̌-s ̌ a r$, h $a-a z-z i-i-s ̌ a r)$.

Anat. cognates: Lyc. $\boldsymbol{\chi t t a}(\boldsymbol{i})-$ 'to harm, to do violence to' (3sg.pres.act. $\chi$ ttadi, 3pl.pres.act. $\chi$ ttaiti, 3sg.pret.act. $\chi$ ttade).

PAnat. *Hat-
PIE * $h_{2}$ ét-o; *h $h_{2} t-i e ́-t i$
See Puhvel HED 3: 248f. for attestations. We find active as well as middle forms that often do not differ in meaning (both transitively 'to pierce (something/someone), to hit (someone, something)'). Occasionally, middle forms are reflexive ('to prick oneself'). The forms that we find in OS texts are 3pl.pres.act. ha-az-zi-an-zi, 3sg.pret.act. ha-az-zi-e-et, 3sg.imp.act. ha-az-zi-$e-e[t-t u]$, 3sg.pres.midd. ha-at<-tar-ri and 3pl.pres.midd. ha-at-ta-an-ta. This seems to point to an original system in which the active paradigm shows a stem hazziie/a- (*hatt-ie/a-) whereas the middle paradigm shows a stem hatt-. Within the middle paradigm, the stem hatt- was altered to hatta- in MH times (yielding 1sg.pres.midd. haddahhari), which stem was taken over into the active paradigm as well, yielding forms like 3sg.pres.midd. hattai (MH/NS) and hattanzi (MS) (according to the $\operatorname{tarn}(a)$-class). In NH times, the stem hazziie/a- is found in the middle paradigm as well (3sg.pret.midd. hazziiattat (NS)). Despite the formal difference between the active and the middle stem, there does not seem to be a semantic difference between the active and middle forms.
Within Anatolian, this verb has been compared with the HLuwian hapax hazi(gerund. ha-zi-mi-na (CEKKE §15)), but the meaning of this latter verb is not ascertained (Oettinger 1979a: $346{ }^{176}$, who first suggested this connection, translates "wir haben besiegt(?)", whereas Hawkins 2000: 150 translates "we engrave", which is seemingly influenced by etymological considerations). Any phonological conclusions based on this form only cannot be substantiated (cf. footnote 196). A better comparandum is HLuw. hat- 'to write', which I treat under the lemma of hatrae- 'to write'. Together with Lyc. $\chi$ tta(i)- 'to harm', these forms all point to a PAnat. root $*$ Hat-
From an IE point of view, PAnat. *Hat- can hardly reflect anything else than PIE *h $h_{2 / 3} e t$-. If Hitt. hazziie/a- goes back to *Ht-ie/o- (in principle *-ie/oderivatives show zero grade of the root), the initial laryngeal must be $* h_{2}$ as $* h_{3}$ would disappear initially before stop (cf. Kloekhorst fthc.c). We therefore should mechanically reconstruct $* h_{2} e t$-, but such a root is further unknown in other IE languages. A comparison with Arm. hatanem 'to pierce, to cut, to slice' is difficult as $* t$ should have given Arm. $t *$ (cf. Puhvel l.c.). Note that $* h_{2} t-$ ie/o- in
principle would yield Hitt. **hazze/a-, but that we must reckon with restoration of the suffix -ie/a- here (similarly in uašše/a- ${ }^{z i}$, which later on is restored as uaššiie/ $a_{-}{ }^{z i}$ ). Possibly the remarkable spelling 3sg.pres.act. ha-az-ZE/I-zi $(\mathrm{OH} / \mathrm{NS})$, cited above as $h a-a z-z i-z i$ is to be read as $h a-a z-z e-z i=/ \mathrm{Ht}^{\mathrm{s}} \mathrm{e}^{\mathrm{s}} \mathrm{i} /$, the regular outcome of $* h_{2} t$-ié- $t i$.

The -ške/a-imperfective shows different spellings. The spellings ha-az-zi-iš$k e / a$ - and ha-zi-iš-ke/a- are found in OS and MS texts, and therefore at first sight seem to be the original ones. They probably represent phonological $/ \mathrm{Ht}^{\text {s}} \mathrm{i}$ ské/á-/. Nevertheless, I think that the forms that show the spellings ha-az-zi-ik-ke/a- and ha-az-zi-ke/a-, which are predominantly attested in OH/NS texts and represent /Htsiké/á-/, must be more original, particularly if we compare the imperfectives $z i-i k-k e / a-=/ t s i k e ́ / a ́-/$ 'to put' $<* d^{h} h_{l}$-ské/ó' and $a z-z i-k e / a-=/$ Rdsiké/á-/ 'to eat' $<* h_{1} d$-ské/ó-. Especially the latter one shows that ha-az-zi(-ik)-ke/a- = /Htsiké/á-/ must be the regular reflex of the morphologically expected preform * $h_{2} t$-skéló-. I therefore assume that already in OH times the phonetically regular form ha-az-zi$i k-k e / a-=/ H t s i k e ́ / a ́-/<h_{2} t-s k e ́ / o ́$ - was altered to háaz-zi-iš-ke/a- $=/ \mathrm{Ht}$ isské/á-/ in analogy to the present-stem hazziie/a- ${ }^{z i}=/ \mathrm{Ht}^{\mathrm{s}} \mathrm{i}$ é/á-/. The influence of this stem is especially apparent in the MS form ha-az-zi-i-e-eš-ke/a-=/Ht ${ }^{\text {si}}$ ieské/á-/.
-hhat (1sg.pret.midd.-ending): see -hha(ri), -hhat(i)
hatta-: see hatt- ${ }^{\text {a(rii) }}$, hazziie/a- ${ }^{-2 i}$
 hat-tal-la-an (KUB 38.2 ii 9), instr. \& ha-at-tal-li-it (KUB 26.25, 12), nom.acc.pl. ha-at-tal-la (KUB 42.35 obv. 5).
Anat. cognates: HLuw. ${ }^{* 274} \boldsymbol{h a t a l ( a ) i -}$ 'to smite' (1sg.pret.act. ${ }^{* 274} h a-t a-l i-h a$ (KARKAMIŠ A25a §1), ${ }^{* 274} h a-t a-l i-i-h a$ (KARATEPE $1 \S 28 \mathrm{Hu}$.), ${ }^{* 274} h a-t a-l i-$ há (KARATEPE 1 §28 Ho.), ${ }^{* 274} h a ́-t a-l i-h a ́ ~(K A R A T E P E ~ 1 ~ § 25 ~ H o),. ~ * 274-t a-l i-~$ ha (KARATEPE 1 §25 Hu.), 3pl.pret.act. ${ }^{* 274} h a-t a-l a-i-t a$ (KARATEPE 1 §26 Hu.), há-ta-la-i-ta (KARATEPE 1 §26 Ho.)).

See Puhvel HED 3: 255 for attestions. This word is likely a derivative in -alla- of the verb hatt- ${ }^{\text {a(ri) }}$, hazziie/a- ${ }^{z i}$ 'to pierce, to hit' (q.v.).
${ }^{\text {(GIŠ) }}$ hattalu- (n.) 'bolt, lock' (Sum. SAG.KUL): nom.-acc.sg. ha-at-ta-lu, ha-ad-da-lu, gen.sg. ha-at-ta-lu-aš (OS), ha-at-ta-lu-ųa-ǎ̌ (OS), ha-at-tal-una-aš, ha-tal-ua-aš, ha-at-ta-al-ua-aš, instr. ha-at-ta-lu-ut.

Derivatives: hattaluuae- ${ }^{i}$ (Ic1) 'to bolt, to lock' (3pl.pres.act. ha-tal-ua-an-zi, 3pl.pret.act. [ha-a]t-tal-ua-er, 2sg.imp.act. ha-at-tal-ua-i, 3pl.imp.act. ha-tal-ua$a n-d u$; part. ha-at-tal-ua-an-t-), LÚ hattaluala- (c.) 'lockman, doorguard' (nom.sg. ha-at-ta-al-ua-la-aš, ha-tal-ua-la-aš, dat.-loc.sg. ha-tal-ua-li, nom.pl. ha-at-tal-ua-al-li-iš, ha-at-tal-úa-la-aš, ha-tal-uূa-le-e-eš).

PIE *h $h_{2} t-o l-u-$ ??
See Weitenberg 1984: 28f. and Puhvel HED 3: 257f. for attestations and semantics. The morphological analysis of this word is difficult. The only other word ending in -alu- is idālu- 'bad', which seems to be an $u$-stem derivative of a stem *idāl- (~ CLuw. adduual-). If we are allowed to compare idālu- to hattalu(but note that idālu- is an adjective whereas hattalu- is a noun), it would mean that we have to reckon with a stem *hattal-. Puhvel (1.c.) compares this *hattalwith e.g. išhiíal- 'bond, belt' that is derived from išhai- ${ }^{i}$ / išhi- 'to bind' (q.v.), and assumes a derivation from hatt- ${ }^{a(r i)}$ 'to pierce, to hit'. Although this indeed is possible, the semantic connection is not self-evident. For an etymological treatment of hatt- see at hatt- ${ }^{\text {a(ri) }}$, hazziie/a- ${ }^{z i}$.
hattant- (adj.) 'intelligent, clever, wise': nom.sg.c. ha-at-ta-an-za, ha-ad-da-an$z a$, acc.sg.c. ha-at-ta-an-ta-an, ha-ad-da-an-da-an, nom.pl.c. ha-ad-da-an-te-eš, acc.pl.c. ha-at-ta-an-du-uš, nom.-acc.pl.n. hha-at-ta-an-ta.
Derivatives: hattahh ${ }^{-i}$ (IIb) 'to make clever, to instruct' (impf.2pl.imp.act. ha-at-ta-ah-hi-iš-ke-te-en), hattātar / hattann- (n.) 'intelligence, counsel, wisdom' (Sum. GALGA-tar; nom.-acc.sg. ha-at-ta-tar, ha-at-ta-a-tar, ha-ad-da-tar, ha-at-ta-ta, ha-at-ta-a-da, ha-ad-da-da, gen.sg. ha-at-ta-an-na-aš (MH/MS), ha-ad-da-an-na-aš, abl. ha-ad-da-na-za).

PIE * $h_{2} t$-ent-
See Puhvel HED 3: 260f. for attestations. Synchronically, all words of this lemma seem to belong with hatt- ${ }^{\text {a(ri) }}$, hazziie/a- ${ }^{z i}$ 'to pierce, to hit'. Already Sommer \& Falkenstein (1938: 97-100) argued that this connection can be supported by assuming a semantic development *'penetration, sharpness' > 'intelligence, wit' (compare Lat. scīre 'to know' and Hitt. šākk- / šakk-'to know' from PIE *sekH'to cut'). See at the lemma of hatt ${ }^{\text {a }}$, hazziie/a- ${ }^{-2}$ for further etymology.
hatantiial- (gender unclear) 'dry land': gen.sg.(?) ha-ta-an-ti-ia-aš (KBo 5.7 rev. 16 (MH/MS), KUB 42.1 iii 4, 18 (NS), KUB 42.4a, 3 (NS)), ha-ta-an-ti-aš (KUB 42.1 iii 7, 11 (NS), KUB 42.4a, 6 (NS), KUB 42.5 obv. 3 (NS)), ha-ta-<an->ti-ía-
$a s ̌$ (KUB 42.1 iii 14 (NS)), dat.-loc.sg. ha-ta-an-ti-ía (KUB 36.75 iii 22 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 31.130 rev. 6 ( $\mathrm{OH} / \mathrm{MS}$ )), ha-da-an-te-ía (KBo 12.38 iii 10 (NH)).

See Puhvel HED 3: 263 for attestations and semantics. According to Puhvel, it is likely that hatantiiia- is a nominal derivative of the part. hatant- of hat ${ }^{i}$ - hat- 'to dry up' (q.v.). If this is correct, we must assume that the derivation took place within Hittite (at least after the assibilation of $* t i$ to $z i$ ) as a pre-Hitt. $* h_{2} d$-ent-icregularly should have given **hatanziial-. See at hāt- ${ }^{i}$ / hat- for further etymology.
${ }^{\text {GIŠ̌ }}$ hattara- (n.) 'prick, awl (vel sim.)': nom.-acc.sg. ḩa-at-ta-ra-a[n] (KUB 33.8 ii 14 ( $\mathrm{OH} / \mathrm{NS}$ )).
Derivatives: hattarae- ${ }^{\text {zi }}$, hattariie/a- ${ }^{\text {ta(ri) }}$ (Ic2 / IIIg) 'to prick, to incise' (1sg.pres.act. ha-at-ta-ra-a-mi (KUB 36.35 i 3 (NS)); 3sg.pres.midd. ha-ad-da-ri-i-e-et-ta-ri (KBo 10.7 iii 14 (OH/NS)), ha-ad-da-ri-i-et-ta-ri (KBo 10.7 iii 18, 22, 26 (OH/NS)); part. nom.-acc.sg.n. ha-at-ta-ra-an (OS)), hattareššar / hattarešn(n.) 'intersection, crossroad' (nom.-acc.sg. ḩa-ad-da-re-eš<-šar> (KUB 7.54 ii 13 (NS)), gen.sg. [ha-at-t]a-ri-iš-na-aš (KUB 20.2 iv 19 (OH/NS)), dat.-loc.sg. ha ad-da-ri-iš-ni (KUB 35.145 ii 10 (NS)), dat.-loc.pl. hha-at-ta-re-eš-na-aš (KUB 10.72 ii $8(\mathrm{OH} / \mathrm{NS})$, ABoT 17 iii 14 (NS), KUB 24.9 ii $37+$ KBo 12.127 ii 4 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-at-ta-ri-iš-na-aš (KUB 24.11 ii $16(\mathrm{OH} / \mathrm{NS})$ ), ha-at-re-eš-na-aš (KUB 9.22 iii 20, 44 (fr.) (MS)), [ha-at-ta-r]i-ša-na-aš (KBo 17.64, 8 (NS)).
 an, ha-at-ta-ra-an, abl.-instr. ha-at-ta-ra-a-ti, ha-<at->ta-ra-ti), hattari(iia)- 'to hoe' (3sg.pret.act. ha-at-ta-ri-it-ta).

See Puhvel HED 3: 263 for attestations and semantics. It is tempting to see hattara- and especially its derivative hattarae- ${ }^{-1}$ as mere variants to hatrae- ${ }^{z i}$ 'to write' and its postulated nominal origin *hatra-, but the slight difference in semantics (hattarae- ${ }^{z i}$ denotes 'to prick, to incise', whereas hatrae- ${ }^{z i}$ means 'to write' only) and the consistent difference in spelling (ha-at-ta-r vs. ha-at-r ${ }^{\circ}$ ) speaks against this. Puhvel (1.c.) assumes a suffix -ara- that is attached to the verbal stem hatt- (see hatt- ${ }^{\text {a(ri) }}$, hazziie/a- ${ }^{z i}$ 'to pierce, to hit'), which then must be different from the suffix -ra- as seen in hatrae-. Rieken (1999a: 390) assumes a Luwian origin of these words (cf. CLuw. ${ }^{\text {GIŠ }}$ hattara-), but the OS attestations of the part. hattaran 'incised' is not favourable to this view. Whatever the case,
hattara- and its derivatives ultimately derive from the verbal stem hatt- ${ }^{a(r i)}$, hazziie/a- ${ }^{z i}$, q.v. for an etymological treatment.
-hhat(i) (1sg.pret.midd.-ending): see -hha(ri), -hhat(i)
hatk- ${ }^{i}$ (IIa2) 'to shut, to close': 3sg.pres.act. ha-at-ki (OH/NS), 1pl.pres.act. ha-at-ku-e-ni (OS), 3pl.pres.act. ḩa-at-kán-zi (OS); part. ha-at-ga-an-t- (undat.); impf. ḩa-at-ga-aš-ke/a- (MS), ha-at-ki-iš-ke/a- (NS).
Derivatives: hatganu- ${ }^{z i}$ (Ib2) 'to make tight, to put pressure on' (3sg.pres.act. ha-at-ga-nu-uz-zi (NH), ha-at-ga-nu-zi (NH)), hatkešnu-zi (Ib2) 'id.' (1sg.pres.act. ḩa-at-ke-eš-nu-mi (NH), 2sg.pres.act. ḩa-at-ki-iš-nu-ši (OH/NS), 3sg.pres.act. ḩa-at-ki-iš-nu-uz-zi (NH), 1sg.pret.act. ḩa-at-ke-eš-nu-nu-un (NH), 3sg.pret.act. ḩa-at-ke-eš-nu-ut (NH), 3pl.pret.act. hatat-keィ-eš>nu-e-er (NH), [ha-at-k]i-iš-nu-er (NH), ha-at-ki-iš-ša-nu-er (NH), 2sg.imp.act. ha-at-ke-eš-nu-ut (NH), part. ha-at-ke-eš-nu-ua-an-t-, ha-at-keš-ša-nu-an-t-; impf. hatat-ki-iš-ša-nu-uš-ke/a-, hatat-keš-ša-nu-uš-ke/a-), hatku- / hatgaul (adj.) ‘tight, pressed, stressful’ (nom.sg.c. ha-at-ku-uš (MH/MS), acc.sg.c. hat-at-ku-un (NH), abl. ḩa-at-ga-u-ua-az (OS), nom.pl.c. [h] a-at-ga-u-e-eš (OH/NS)), hatkuē̌̌š-zi (Ib2) 'to become tight' (3sg.pres.act. ḩa-at-ku-e-eš-zi (NH)).

IE cognates: Gr. ä $\chi$ Өo $\mu a$ 'to be burdened, to be depressed', ä $\chi$ Өos 'pressure, burden'.

PIE * $h_{2} o d^{h} g^{h}-e i / * h_{2} d^{h} g^{h}-e ́ n t i$
See Puhvel HED 3: 266f. for attestations. The verb is attested from OS texts already, and shows the hi-inflection (cf. 3sg.pres.act. hatki). Despite its awkward looking form, it functions as any normal Hittite verb: it forms a causative in -nu-, hatganu- ${ }^{z i}$, it forms a fientive in $-\bar{e} s \check{s}{ }^{-}$-, *hatkēšs ${ }^{z i}$ as visible in hatkešnu- ${ }^{z i}$, and it forms an $u$-stem adjective hatku- / hatgau-. The verb itself denotes 'to shut, to close', but its derivatives all have the connotation 'tight, pressing'. This indicates that the verb originally meant something like 'to press together, to squeeze'. Risch (1964: 78) etymologically connected hatk- with Gr. ä $\chi$ Oo $\alpha$ a 'to be burdened, to be depressed' (cf. ä $\chi$ Өoc 'pressure, burden'), which would mean that we have to reconstruct $* h_{2} e d^{h} g^{h}-$. Note that the fact that neither the $-t$ - nor the $-k$ in Hittite is ever spelled with a geminate (unlike e.g. har-ták-ka- 'bear' < * $h_{2} r t k$ '-$o-$ ) supports this etymology.
Puhvel HED 3: 417 cites a stem hutk- which he equates with hatk-. The words that he regards as showing this stem, hu-ut-ki-iš-na-aš (KUB 36.49 i 3), hu-te-ek$k i-i s ̌-k a ́ n-d u$ (KUB 31.100 obv. 9), huu-u-te-ek-ki-iš-kán-du (ibid. 11), are
(semi-)hapaxes the meaning of which cannot be indenpendantly determined. The form hutkišnaš occurs in a list of evil things, whereas hutekkiškandu is attested twice in a broken context. There is not a shred of evidence that they belong with hatk-.
hatrae- ${ }^{-3}$ (Ic2) 'to write, to report, to declare, to order' (Akk. ${ }^{\text {S }} A P \bar{A} R U$ ): 1sg.pres.act. ha-at-ra-a-mi (MH/MS, often), ha-at-ra-mi, 2sg.pres.act. ha-at-ra-$a-s ̌ i \quad(\mathrm{MH} / \mathrm{MS})$, 3sg.pres.act. h ha-at-ra-a-ez-zi (MH/MS), ha-at-ra-iz-zi, 1pl.pres.act. [ha-]at-ra-a-u-ni (MH/MS), 2pl.pres.act. [ha-at-]ra-at-te-ni, ha-at-ra-a-at-te[-ni] 3pl.pres.act. ha-at-ra-a-an-zi, 1sg.pret.act. ha-at-ra-a-nu-un (MH/MS), ha-at-ra-nu-un, 2sg.pret.act. hुa-at-ra-a-eš, ha-at-ra-a-iš, ha-at-ra-iš, 3sg.pret.act. ḩa-at-ra-et (OS), ha-at-ra-a-et (MH/MS), 2pl.pret.act. ha-at-ra-a-at-te-en (MH/MS), 3pl.pret.act. ha-at-ra-a-er, 2sg.imp.act. ha-at-ra-a-i, 3sg.imp.act. ha-at-ra-a-ú, 2pl.imp.act. ha-at-ra-a-at-tén (MH/MS), 3pl.imp.act. ha-at-ra-a$a n-d u$; impf. hat-at-re-eš-ke/a-(OS).

Derivatives: hatriiieššar (n.) 'written message, decree' (nom.-acc.sg. ha-at-ri-eš-šar, ha-at-ri-i-e-eš-ša).

Anat. cognates: HLuw. hatura- 'letter' (nom.sg. /haturas/ ha-tu+ra-a-sa (ASSUR letters $f+g$ §9), ha-tu<ra+>a-sa (ASSUR letter e §11), acc.sg. /haturan/ $h a-t u+r a / i-n a$ (ASSUR letter $a \S 5, d \S 5, e \S 5, \S 7, \S 9)$ dat.-loc.sg? ha-tu+ra/i-' (ASSUR letter $e \S 3$ )), hat- 'to write' (inf. dat. ha-tu-ra+a (ASSUR letters often)). PIE * $h_{2}$ et-ro-ié/ó-

See Oettinger (1979a: 30f.) and Puhvel (HED 3: 269f.) for attestations (but note that Puhvel cites some wrong forms, e.g. 3sg.pres.act. "ha-at-ra-a-i" (KUB 8.24 iii 3), which in fact is ha-at-ra-a-iz[-zi]). This verb is prototypical for the socalled hatrae-class, which means that it shows a stem hatrāe- or hatrāi- besides hatrā-. As Oettinger (1979a: 357f.) convincingly argues, the verbs of the hatraeclass are denominative derivations in *-ie/o- of $o$-stem nouns that show *-o-ié- > -ae- and ${ }^{*}-o-i o ́->-\bar{a}$ - (see § 2.2.2.1.p for a treatment of this class).
In the case of hatrae- ${ }^{z i}$ itself, this means that we have to assume a basic noun *hatra- 'writing'. It is likely that this *hatra- is derived from the verbal stem hatt- ${ }^{\text {a(ri) }}$, hazziie/a- ${ }^{z i}$ 'to pierce, to hit, to engrave' (q.v. for further etymology).
 prick, to incise', for the semantic and orthographic difference from hatrae-.

Note that in HLuwian the unextended verb hat- means 'to write' and that hatura- 'letter' is a more direct derivative of it.
hatuk- ${ }^{z i}$ (Ib1) 'to be terrible' (Sum. KAL): 3sg.pres.act. hat-tu-uk-zi, 3pl.pres.act. KAL-ga-an-zi.

Derivatives: hatūka-, hatuki- (adj./n.) 'terrible (deed), fearsome' (nom.sg.c. ha-tu-ga-aš (KUB 33.69 iii 7 (OH/NS), KUB 59.66 iv 5 (NS)), ha-du-ga-aš (KBo 26.96, 8 (NS)), acc.sg.c. ha-du-ga-an (KBo 22.107 i 7 (MS)), nom.-acc.sg.n. ha-tu-ga-an (KUB 33.68 ii 19 (OH/NS)), ha-tu-ú-ga-an (KBo 17.6 iii 1 (OS), KBo 17.1 iii 19 (fr.), iv 2 (fr.) (OS)), ha-du-kán (KBo 20.88 iv 9 (NS)), ha-tu-ka-$a(n)=\check{s}$-me-et (KBo 17.1 iii 12 (OS)), ha-tu-ga- $a(n)[=\check{s}$-me-et] (KBo 17.3 iii 12 (OS)), ha-tu-ga (KBo 13.34 iv 12 (OH/NS)), dat.-loc.sg. ha-tu-ga-i (KBo 22.6 i 27 (OH/NS)), ha-du-ga-ía (KBo 15.3, 7 (NS)), abl. ha-tu-ga-ia-az (KBo 5.6 iii 30 (NH)), KAL-ga-za (KUB 7.54 i 3, iv 11 (NS)), KAL-ga-az (KUB 17.16 i 4 (NS)), nom.pl.c. ha-tu-ga-e-eš (KBo 4.2 ii 32 ( $\mathrm{OH} / \mathrm{NS}$ )), ha-du-ga-e-eš (KBo 17.105 iii 31 (MS)), acc.pl.c. ha-tu-ka-uš (KBo 17.5 ii 11 (OS)), ha-tu-ga-uš (KBo 17.4 ii 6 (OS), KBo 4.2 i $16(\mathrm{OH} / \mathrm{NS})$ ), nom.-acc.pl.n. ha-tu-ga (KBo 3.21 ii 24 (MH/NS), KBo 17.78 i 1 (MS), KBo 4.2 iii 41, iv 36 (NH), KUB 12.27, 5 (NH)), ha-du-ga (KBo 17.105 iii 6 (MS)), ha-tu-ga-ía (KUB 19.14, 11 (NH))), hatugātar / hatugann- (n.) 'terror, awesomeness' (nom.sg. ha-tu-ga-a-tar, ha-tu-ga-tar, ha-du-ga-tar, dat.-loc.sg. ha-tu-ga-an-ni), hatukēšs- ${ }^{z i}$ (Ib2 > Ic2) 'to become terrible' (3sg.pres.act. ha-tu-ki-iš-zi, had-du-ki-iš-zi, ha-tu-ki-iš-ša-iz-zi, impf. [ha-]tu-ki-iš-ke/a-), hatuganu- ${ }^{z i}$ (Ib2) 'to terrify' (3pl.pres.act. ha-tu-ga-nu-ua-an[-zi]; verb.noun gen.sg. ha-tu-ga-nu-ua-uиa-ǎ̌).

IE cognates: Gr. àtúそouaı 'to be distraught from fear, to be terrified', ?Skt. tuj'to thrust'.

PIE * $h_{2}$ téug-ti $/ * h_{2} t u g$-énti
See Puhvel HED 3: 274f. for attestations. The adjective (which sometimes seems to be used as a noun 'terrible deed') shows $a$-stem as well as $i$-stem forms, both from OS texts onwards (nom.-acc.sg.n. hatūgan (OS) besides acc.pl.c. hुatukauš (OS)). I have not been able to find a semantic distribution between the two (like, for instance, in šuppištuuara- (adj.) besides šuppišduuari- (c.)).
The most generally accepted etymology is the one first suggested by Benveniste (1937: 497), who connected hatukali- with Gr. àtú̧ouat 'to be distraught from fear, to be terrified' $<* h_{2} t u g$-, which semantically indeed is convincing. The formal aspect of this etymology is more complicated however. If Hitt. hatukindeed reflects $* h_{2} t u g-$, it would mean that the initial cluster $* h_{2} t$ - comes out as Hitt. ha-tV-and not **ha-at-t $V$-, as one could have expected. To my knowledge, there are no other examples of such an outcome in Hittite (the often-cited parallel hapuš- 'penis' < *h ${ }_{3}$ pus- is wrong as the stem actually is h hāpūusa(řš)- (q.v.), which
denotes 'shin-bone' and not 'penis'). On the contrary, forms like happeššar 'limb' $<* h_{2} p$-ésr, hattant- 'clever' $<* h_{2} t$-ent- or appanzi 'they seize' $<* h_{1}$ penti seem to show that initial clusters $/ \mathrm{Hp}-/$, /Ht-/ and /ip-/ are spelled with geminate stop. Nevertheless, all these forms belong to ablauting verbs which could have caused restitution of the voiceless stop.
So, I would like to propose that in $* h_{2} t u g$ - the initial cluster $* h_{2} t$ - regularly lenited to Hitt. /Hd-/, spelled ha-t $V$-, whereas in forms that show $* H T$ - as a zerograde of $* H e T$ - the fortis stop $* T$ was restored, which yielded initial clusters /HT-/ and /RT-/, spelled ha-aT-TV- or $a T-T V-$.
 'to thrust'. Although at first sight this connection is semantically problematic, forms like tujyáte 'he is put to panic' may show that this connection is possible.
Puhvel (l.c.) dismisses the etymological connection with Gr. àtúそouaı (without argumentation) and connects hatuk- ${ }^{z i}$ with Gr. ó $\delta$ v́ $\sigma(\sigma) \alpha \sigma \theta a \mathrm{a}$ 'to be wroth against, to hate'. As this word is connected with Lat. odium 'to hate' (from PIE * $h_{3}$ ed-), it must in his view be analysed as a suffixed form $* h_{3} e d-u$ - or $* h_{3} d-u$-. This does not fit the fact that Hitt. hatuk- clearly functions as a monosyllabic root. Moreover, if the preform were $* h_{3} d-u$-, the initial $* h_{3}$ would regularly in Hittite, namely before stop (cf. Kloekhorst fthc.c).
hāūi- (c.) 'sheep' (Sum. UDU): nom.sg. UDU-iš, nom.pl.(??) ha-a-u-e-eš.
Derivatives: hauiiaš̌ši- (adj.) 'sheep-like' (acc.sg.c. ha-ú-i-aš-ši-in (KUB 32.1 iii 2), ha-ú-i-i्टa-aš-ši-in (KUB 32.1 iii 10), undecl. ha-unis-ia-aš-ši (KBo 21.42 i 11)).

Anat. cognates: CLuw. hāui- (c.) 'sheep' (nom.sg. ha-a-ú-i-iš, acc.pl. UDU-in$z a$ ); HLuw. hawi- (c.) 'sheep’ (nom.sg. ${ }^{\text {OVIS.ANIMAL }}$ há-wálíli-sá (KARATEPE 1 $\S 48 \mathrm{Ho}.),{ }^{\text {ovis.animal }} h a ́-w a / i$-sá (KARATEPE $\left.1 \S 48 \mathrm{Hu}.\right)$, "OVIS.ANIMAL $h a ́-w a / i$-sá (KARATEPE 1 §48 Ho.), OVIS.ANIMAL-wa/i-sa (KARATEPE $1 \S 48 \mathrm{Hu}$., KARKAMIŠ A11 $b+c \S 18 \mathrm{c}, \S 18 \mathrm{e}$ ), OVIS-wa $i$-sa (KARKAMIŠ A11 $b+c \S 18 \mathrm{e}$ ), OVIS-sa (KARKAMIŠ A11b+c §18b), acc.sg. ${ }^{\text {OVIS }} h a-w a / i-n a$ (KULULU lead strips fr. 1), OVIS.ANIMAL-wa/i-na (MARAŞ 11 §8), OVIS.ANIMAL-na (KARKAMIŠ A1 a §31), gen.sg. OVIS.ANIMAL-wa/i-si (KARATEPE 1 §55), OVIS.ANIMAL-si (KARKAMIŠ A1a §30), dat.-loc.sg. ${ }^{\text {ovis.ANIMAL }} h a-w a / i-i$ (AKSARAY §4a), abl.-instr. "ovis.animal" ha-wa/i-ti (KULULU 1 §6)), nom.pl. OVIS.ANIMAL-zi (SULTANHAN §29)); Lyc. $\chi$ awa- (c.) ‘sheep’ (acc.sg. $\chi a w a ̃)$.

IE cognates: Skt. ávi- 'sheep', Gr. őïc, őFıc 'sheep', Lat. ovis 'sheep', TochB $\bar{a}\left({ }_{u}\right) w$, awi (nom.pl.) 'ewe'.

PIE * $h_{3}$ eui-

The word for 'sheep' in Hittite is predominantly written with the sumerogram UDU, which had several phonetic readings. We find the phonetically spelled ${ }^{\text {UDU }}$ iiant- (q.v.), but also an $u$-stem UDU-u- (nom.sg. UDU-uš (MH/MS), acc.sg. UDU-un (OS)), and some $i$-stem forms (nom.sg. UDU-iš (KUB 6.9, 5, 6)). These $i$-stem forms are likely to be read as haui- as is attested in CLuw. hauui- and HLuw. hawi- 'sheep'. A possible phonetic spelling is found in the following context, although its interpretation is far from assured:

KBo 24.26 iii
(3) $[\ldots$ (-)h] $a-a-u$-e-eš la-az-za-an-da-ti-in ha-aš-ta
(4) [... la-az-]za-an-da-ti-iš ${ }^{\mathrm{d}}$ A-i-in-du-pí-in-zu ha-aš-t $[a]$
'[... (-)h]āūess bore lazzandati-. [... laz]zandati- bore ${ }^{\mathrm{d}}$ Aiindupinzu'.
Both lazzandati- and ${ }^{\mathrm{d}}$ Aiindupinzu are hapax. More securely attested is the adjective hauiiáašsi- 'sheep-like', but this is clearly a Luwianism as we can see from the gen.adj.-suffix -ačši-.
Melchert (1993b: 66) states that in view of the $a$-stem as found in Lyc. रawa'sheep', the Luwian forms probably are not inhereted $i$-stems, too, (as one would expect on the basis of the $i$-stem forms in the other IE languages) and that the forms with $-i$ - are all $i$-motion forms. The only attested form in Lycian (acc.sg. $\chi$ awa $(149,10)$ ) is directly preceded by acc.sg. wawa 'cow' and it is likely that this word has had an influence on 'sheep'. In my view, the Luwian gen.adj. hauiiašši- as attested in the Hittite texts, proves that the Luwian forms were really $i$-stem forms.

The PIE reconstruction of the word for 'sheep' has caused much discussion. The basic question is whether we have to reconstruct $* h_{2} O u i-$ or $* h_{3} e u i-$. Scholars in favour of $* h_{2}$ oui- point to the fact that the Tocharian forms seem to show $\bar{a}$ from $* h_{2} e$ - and that $\chi$ - in Lycian is supposed to reflect $* h_{2}$ only, and not $* h_{3}$. Scholars in favour of $* h_{3}$ eui- point to the fact that we would rather expect $e$-grade in such an $i$-stem word and to the absence of Brugmann's Law in Sanskrit (cf. Lubotsky 1990).

As I have tried to show in Kloekhorst fthc.c, the argument depending on Lyc. $\chi$ must be rejected: the assumption that $* h_{3^{-}}>$Lyc. $\varnothing$ - is based on one example only (epirijeti) that is falsely interpreted (see also at hāppar- / hāppir-). I do not have the competence to judge the Tocharian material in detail but I am convinced that the ${ }^{*} o$ - seen in Skt., Gr. and Lat. must reflect ${ }^{*} h_{3}$ eui-.

As I have argued in Kloekhorst fthc.c, * $h_{3} e$ - probably yielded Lyc. $\chi e$ - (cf. Xerẽi < *h $h_{3}$ er-on-, see under hāran- 'eagle'), which means that $\chi$ awa- shows $a$-umlaut from original * $\chi e w a$ - (which replaces original * $\chi e w i$ - on the basis of wawa'cow').
hazziie/a- ${ }^{z i}$ : see hatt- ${ }^{\text {a(ri) }}$, hazziie/a ${ }^{z i}$
-hhe (3sg.pres.act.-ending of the hi-flection): see -hhi

hèiu-: see hēu- / hē(i)au-
${ }^{\mathrm{NA}_{4}}$ hekur (c.) 'rock-sanctuary': hé-kur, hé-gur.
See Puhvel HED 3: 287 for a collection of attestations. The word does not show inflected forms, cf. Weitenberg (1984: 154) who states that "[m]an hat den Eindruck, daß das Wort sich wie ein Sumerogram verhält". Puhvel (1.c.) convincingly argued that the word probably is a loanword, ultimately from Sum. É.KUR 'mountain house', possibly through Hurrian mediation. Herewith, the alleged IE origin of this word (often reconstructed as 'acrostatic' $* h_{2} \bar{e} k$ '-ur with non-colouration of $* \bar{e}$ by $* h_{2}$ because of Eichner's Law) must be rejected.
hen-: see hān- ${ }^{i}$ / han-
he(n) $\boldsymbol{k -}^{\text {tat(ri) }}$, he(n) $\boldsymbol{k -}^{z i}$ : see hai(n) $k-{ }^{\text {tta(ri) }}$
henkan- (n.) 'death, doom, deadly disease, plague' (Sum. $\mathrm{UG}_{6}$ ): nom.-acc.sg. he-en-ka-an (KBo 18.151 obv. 12 (OH/MS)), hi-in-kán (MH/MS, often), hi-in-ga-an (KUB 15.34 ii 47 (MH/MS), KUB 14.8 obv. 29, rev. $9(\mathrm{NH})$ ), he-en-kán (HT 1 ii 29 (NS)), hé-en-kán (KBo 3.28 ii 15 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 3.46 obv. 33 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 3.34 iii 14 ( $\mathrm{OH} / \mathrm{NS}$ )), gen.sg. hi-in-ga-na-aš (KUB 34.58 i 2 (MH/MS), KBo 3.21 ii 25 (MH/NS), KUB 14.12 obv. $8(\mathrm{NH})$ ), hi-in-ka ${ }_{4}-n a-a s ̌$ (KBo 13.8 obv. 11 (NS)), dat.-loc.sg. hi-in-ga-ni (KUB 4.72 rev. 7 (OS), KUB 30.10 obv. 20 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 3.38 rev. $21(\mathrm{OH} / \mathrm{NS})$, KBo 3.1 ii $28(\mathrm{OH} / \mathrm{NS})$, KBo 16.52 obv. 9 (NS), etc.), hé-en-ga-ni (KBo 22.2 rev. 5 (OH/MS)), all.sg. hi-in-ga-na (KUB 30.10 obv. 20 ( $\mathrm{OH} / \mathrm{MS}$ )), erg.sg. hi-in-ga-na-an-za (KUB 24.3 ii 25 (MH/NS)), abl. hi-in-ga-na-az (MH/MS), hi-in-ga-na-za (MH/MS).

See Puhvel HED 3: 296f. for attestations. Already in the oldest texts (OS and $\mathrm{OH} / \mathrm{MS})$ we find the spellings hi-in- $k^{\circ}$, he-en- $k^{\circ}$ and hé-en- $k^{\circ}$ besides each other. Since we know that $*$-enK-develops into -inK-, I assume that henkan- is the original form.
Although this word is attested in the oldest texts already and has an impeccable $n$-stem inflection, its etymological interpretation is difficult. Puhvel (l.c.) suggests a connection with Skt. nas'- 'to perish', but this is abortive: its cognate Gr. vekpós 'corpse' shows that the root was *nek', and not ${ }^{2} h_{2} n e k$ '- as Puhvel must assume. I would rather connect henkan- with Hitt. hai(n) $k-{ }^{\text {tla(ri) }}$, hi(n) $k z^{-z i}$ to bestow (act.); to bestow oneself $>$ to bow (midd.)'. Semantically, we should regard henkan- then as an euphemistic 'that what has been alloted to someone' > 'fate, death, doom' (cf. Oettinger 1979a: 175 and Melchert 1984a: 94 for similar interpretations). This means that the original form must have been *hainkan-, which in OH times contracted to henkan- and almost immediately fell vicitim to the development *-enK- > -inK- and subsequently became hinkan-. See at the lemma of hai(n) - $^{\text {tla(ri) }}$ for further etymology.
h $\bar{e} \check{s}-/$ hešš-: see hāaš- / hašš-, h hēš- / huešss-

GIŠ hešša-: see ${ }^{\text {GIŠ }}$ hišša-
${ }^{\text {É }} \boldsymbol{h} e s ̌ t \bar{a},{ }^{\text {É }} h e s ̌ t \bar{l}: ~ s e e ~{ }^{\text {É } h i s ̌ t} \bar{a},{ }^{\text {É }} h i s ̌ t \bar{l}$
hēeu- / hē(i)au- (c.) 'rain' (Akk. ZUNNU): nom.sg. hé-e-ú-uš (KUB 19.14, 9 (NH)), hé-e-uš (KUB 16.81 rev. 4 (NS), KUB 5.1 iv 77 (NH), KUB 19.50 iv 27 (NH)), ḩé-uš (RS 25.421 obv. 32 (undat.)), acc.sg. ḩé-e-un (ABoT 5 ii 12 (OS), KUB 34.94, 2, 8 (OS?, OH/MS?), KUB 16.29 rev. 3 (NS), KUB 51.84 r.col. 15 (NS), KUB 28.5 obv. 12 (NH)), hé-ú-un (KBo 10.25 ii 3 (OH/NS), KBo 25.176 obv. 12, 14, rev. 20 (OH/NS)), hé-i-ú-un (KBo 3.7 ii 25 (OH/NS)), hé-e-u-un (KBo 3.21 ii 25 (MH/NS)), gen.sg. héee-įa-u-ua-aš (KUB 25.23 iv 52 (NS)), hé-$e-u-u a-a s ̌, ~ h ̌ e ́-e-u a-a s ̌, ~ h ̧ e ́-e-u-a s ̌, ~ i n s t r . ~ h ̌ e ́-e-a-u-i t, ~ n o m . p l . ~ h e ́-e-a-u-e-e s ̌ ~(O S), ~$ hé-e-i $a-u-e-s ̌=a$ (OS), hé-e-ì $a-u-e-e s ̌, ~ h e ́-e-u-e-e s ̌, ~ h e ́-e-m u-u s ̌, ~ h e ́-e-u-u s ̌ ~(K U B ~$ 7.5 i 17 (MH/NS)), hé-e-u[-u]š (KUB 19.50 iv 27 (NH)), acc.pl. he-e-a-mu-uš, ḩé-ía-mu-uš, hee-e-mu-ú-uš, ȟé-u-uš (KBo 3.7 ii $22(\mathrm{OH} / \mathrm{NS})$ ), hृé-e-ú-uš (KUB 16.37 iv $6(\mathrm{NH})$, KUB 28.4 obv. 19 (NS)), hé-e- $\mathfrak{u}-\check{s}=a=\check{s}-s ̌ i$ (KUB $_{28} 28 \mathrm{obv} .13$ (NS)), ḩé-e-uš (KUB 28.4 obv. 19 (NS), KUB 36.12 iii 10 (NS), KUB 36.77, 2, 5
(NS), KUB 36.89 rev. 54, 60 (NS)), dat.-loc.pl.(?) hé-e-u-uš (KBo 13.245 rev. 7 (NS)).
Derivatives: hē(ia)uaniie/a- ${ }^{z i}$ (Ic1) 'to rain' (3sg.pret.act. [hé-]e-ua-ni-ia-at;
 heiaualla/i- 'rain-drain, gutter' (Sum. PISÀN: dat.-loc.sg. ${ }^{\text {GIŠ PISÀN-li, instr. }}$ URUDU hé-ía-ua-al-li-it).
IE cognates: ?Gr. aiová $\omega$ 'to moisten'.

$$
\text { PIE *h } h_{2} e i h_{3}-(e) u-?
$$

See Weitenberg 1984: 30f. and Puhvel HED 3: 301f. for attestations. The word shows many different spellings, but nevertheless it is possible to combine them all into one phonological interpretation. The oldest (OS) attestations, acc.sg. hée-e$u n$, nom.pl. héee-a-u-e-eš, hée-e-i $a-u-e-s ̌=a$ clearly show that in the oldest texts we are dealing with a stem $h \bar{e}(i)$ - followed by an ablauting suffix $-u-/-a u-$. The fact that we find the spelling hé-e-a-u- besides hé-e-ia-u- reminds of OS ne-e-a 'he turns' besides younger ne-e-i ia. These latter forms reflect the situation that OH /néra/ develops into younger /néa/, which then is phonetically realized as [néia], spelled ne-e-ia. This means that in the paradigm of 'rain' we have to reckon with an original OH stem /HéRau-/ that develops into /Héau-/, realized [Hé̉iau-], spelled hé-e-ía-u-. This means that acc.sg. hé-e-un probably represents /HéRun/ or, already with contraction, /Héun/. From MH times onwards, the stem /Héu-/ is spreading over the paradigm, yielding nom.pl. hēuēš and acc.pl. hēmuš.
It is remarkable that this noun originally shows an ablauting suffix, which is normally only found in $i$ - and $u$-stem adjectives. Either this means that hēu- / $h \bar{e}(i) a u$ - originally was an adjective that was gradually being substantivized, or it means that $u$-stem nouns (and subsequently $i$-stem nouns, compare ueši- / uešai'pasture') originally showed ablaut as well, and that hēu- / h $\bar{e}(i) a u$ - is one of the last remnants of this system.
Melchert (1994a: 102) tentatively connects this word with Gr. aiováw 'to moisten', which points to $* h_{2} e i h_{3^{-}}$(although it is problematic whether in $* h_{2} e i h_{3^{-}}$ the yod would remain, yielding Gr. aio-). If the etymon is correct, however, we have to reconstruct nom.sg. *h $h_{2} e ́ i h_{3}-u-s$, nom.pl. * $h_{2} i h_{3}$-éu-ēs, which with generalization of the full grade stem would yield PAnat. */Hái?us/, */HáiRouēs/ that regularly developed into OH /Hé?us/, /Hé?aues/.
Note that Puhvel's unattractive scenario (l.c.: a basic stem *heu- that became an $u$-stem *heu-u-, *heu-au-, after which *heuau- was dissimilated to attested heiau-) seems to be especially based on the etymological presumption that hēu- /
$h \bar{e}(i) a u$ - is cognate with Gr. ứs 'to rain' and TochAB su- 'to rain', which he reconstructs as $*_{s}-E_{2} e w$ -
-hhi (1sg.pres.act.-ending of the hi-flection)
This ending denotes the 1 sg.pres.act. of verbs that inflect according to the hiconjugation (which is named after this ending). Actually, the original shape of this ending was -hhe as is still attested in OS texts (e.g. tar-na-ah-hé, da-a-ah-hé, ga-a-an-ga-ah-hé, me-e-ma-ah-hé, etc.). Nevertheless, already in OS texts we find that this ending is altered to -hhi (e.g. tar-na-ah-hi, da-a-ah-hi, ga-a-an-ga$a h-h i$, me-e-ma-ah-hi, etc. (all OS)), which probably is due to the fact that the element $-i$ had developed as a specific present-marker (cf. pres. -ueni vs. pret. -uen, -tteni vs. -tten, etc.). In the same vein original 3sg.pres.act. -e (of the hiconjugation) was altered to $-i$ and 3 sg .pres.act. $-z a=/-\mathrm{t}^{\mathrm{s}} /$ (of the $m i$-conjugation) was altered to $-z i$.
From the late MH period onwards, we see that -hhi is gradually being replaced by its $m i$-conjugation counterpart $-m i$. This happened predominantly in stems ending in a consonant (e.g. ḩa-ma-an-ga-mi (MS?) instead of hamangahhi, ú-e-ua-ak-mi (MS?) instead of **ueuakhi, a-ak-mi (NS) instead of **ākhi, etc.). A nice line of developmenst is visible in 'I plug up': iš-ta-a-ap-hé $(\mathrm{OS})>i \check{s}$-ta-a$a p-h i(\mathrm{OH} / \mathrm{MS})>i \check{s}$-ta-ap-pa-ah-hi $(\mathrm{OH} / \mathrm{NS})>i s ̌-t a p-m i(\mathrm{NS})$. I know of only one example of this replacement in a verb ending in a vowel, namely še-eš-ha-mi (KUB 14.19, 10 (NS)) instead of še-eš-ha-ah-hi 'I decide' (see at šišha- / šišh-). It must be noted that $m i$-inflecting verbs never use the ending -hhi. So in the competition between -hhi and $-m i$ it is clear that $-m i$ was the winning party.
For the etymological interpretation of -hhe, we must first look at the other Anatolian languages. In Luwian we find 1sg.pres.act. -ui that corresponds with Lyc. -u, but that cannot be cognate with Hitt. -hhe. In the preterite, we find in Luwian 1sg.pret.act. -(h)ha, however, which corresponds to Lyc. 1sg.pret.act. - $\chi a$. These forms point to PAnat. */-Ha/ (with an $-a$ as visible in Lyc. $-a$ ), which indicates that Hitt. -hhe must go back to PAnat. */-Hai/ (note that the Hittite 1 sg .pret.act.-ending of the hi-conjugation is -hhun which is a conflation of PAnat. */-Ha/ with Hitt. -un, the corresponding mi-ending). This PAnat. */-Hai/ can only reflect QIE *- $h_{2} e-i$.

The furter etymology of -hhe depends on ones interpretation of the hiconjugation as a whole. In my view, it is quite clear that formally the hiconjugation must be cognate with the category that yielded the perfect in the other IE languages. I therefore directly compare Hitt. -hhe that must reflect *-h2e-
$i$ with the 1 sg.-ending of the PIE perfect that is usually reconstructed as $*-h_{2} e$ (Skt. -a, Gk. - $\alpha$, Goth. - , etc.).
 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 8.30 rev .19 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 7.41 i 21 (MH/NS), KBo 4.9 i 28 (NS)), hi-la-aš (KUB 17.10 iv 10 (OH/MS), KBo 10.45 i 12 (MH/NS)), [hi-]la-aaš (KUB 34.13 obv. 8 (NS)), acc.sg. hi-i-la-an (IBoT 1.36 i 6 (MH/MS)), hi-laan (KBo 23.23 obv. 63 (MH/MS), KUB 27.29 i 21 (MH/NS)), gen.sg. hi-i-la-aš (IBoT 1.36 i 4 (MH/MS), KUB 20.10 iv 8 (OH/NS), KUB 9.31 i 25 (MH/NS), KUB 29.4 i 35 (NS)), hi-e-la-aš (HT 1 i 18 (NS)), dat.-loc.sg. hi-i-li (KBo 25.56 iv 17 (OS), IBoT 1.36 i 9, iv 29, 32 (MH/MS), KBo 22.189 ii 12 (OH/NS), KUB 11.35 i 24 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 33.24 ii 11 ( OH/NS), KUB 7.41 obv. 22 (MH/NS), KBo 4.9 v 18, 32 (NS), KUB 20.35 iii 15 (NS), KUB $36.17+33.107$ i 5 (NS), etc.), hi-li (KUB 33.19 iii 6 (OH/NS), KBo 10.45 i 13 (MH/NS), IBoT 3.69 i 15 (NS)), all.sg. hi-i-la (KBo 25.48 iii 10 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 21.90 obv. 14, 21 ( $\mathrm{OH} / \mathrm{MS}$ )), abl. hi-i-la-az (IBoT 1.36 i 74 (MH/MS)).
Derivatives: hilae- ${ }^{z i}$ (Ic2) 'to be haloed, to have a halo' (3sg.pres.act. hi-la-iz-zi, hi-la-a-iz-zi), hilatar / hilann- (n.) 'yard' (gen.sg. hi-l[ $a-a] n-n a-a s ̌$ (KBo 6.3 iv
 KI.LAM; nom.-acc.sg. hi-lam-mar (KBo 5.2 iv 5 (MH/NS), KUB 45.12 iii 11 (MH/NS), KBo 10.45 ii 34 (MH/NS), IBoT 1.36 iv 15 (fr.) (MH/MS)), gen.sg. hi-lam-na-aš, dat.-loc.sg. ḩi-lam-ni (OS), all.sg. hi-lam-na (OS), erg.sg. hi-lam-na$a n-z a$ (KUB 17.10 iv 11 (OH/MS)), abl. hi-lam-na-az (OS)), ${ }^{\text {LU }}$ hilammi- (c.) 'courtier' (nom.sg. hi-lam-mi-iš, nom.pl. hi-lam-mi-e-eš), ${ }^{\text {LÚ }}$ hilammatta- (c.) a functionary (nom.pl. hi-lam-ma-ti-eš, hi-lam-ma-at-ti-eš, hi-lam-ma-at-ti-iš, hi-lam-ma-di-iš, hi-lam-ma-at-ta-aš), hilammili (adv.) 'in a h. fashion' (hi-lam-mili), hilam(min)ni- (c.) 'courtier(?)' (nom.sg. h్i-lam-mi-in-ni-iš, acc.sg. hai-lam-niin).
Anat. cognates: HLuw. PORTA-lana- (n.) 'gate-house' (abl.-instr. PORTA-la$n a-r i+i$ (KARATEPE 1 §63 Hu.), nom.-acc.pl. "PORTA"-la-na (KARATEPE 1 $\S 66, \S 69, \S 72 \mathrm{~b}$ ), "PORTA"-la/i/u-na (KARKAMIŠ A11a §13), "PORTA"-na (KARKAMIŠ A11a §16), dat.-loc.pl. PORTA-na-za (KARKAMIŠ A11a §20), gen.adj.acc.pl.c. PORTA-la/i/u-ni-si-i-zi (KARKAMIŠ A11b+c§34)).

See Puhvel HED 3: 305f. for attestations. Note that there a form hi-i-e $[l-l] i(\mathrm{KBo}$ 19.145 iii 44) is cited, which is wrongly read: the form in fact is $\rangle=$
 $l^{\circ}$ is attested multiple times as well. A spelling hi-e-l $l^{\circ}$ is attested only once in a

NS text (HT 1 i 18), which therefore may not have much phonetic value. The original form therefore is hīla-.
The word denotes 'courtyard', but in the expressions 'hīla- of the moon' and 'hāla- of the sun' it probably denotes 'halo'. The word ${ }^{\text {Éhilammar / hilamn- }}$ 'gatehouse' is generally seen as a derivative of ${ }^{\text {Éh}} \bar{l} l a-$ (because it denotes a portal leading to a courtyard), and Melchert (1983: 12-13) states that it shows a suffix $*_{-m r} / *_{-m n}$ (with -mn- assimilating to -mm- in hilammi-, hilammatta- and hilammili, on the basis of which expected *hilamar was altered to hilammar). Note however that the phonetic resemblance to its Sumerian counterpart KI.LAM is remarkable and that we therefore must not rule out the possibility that it is a loanword.

Within Anatolian, Hitt. hylla- often is compared to Lyc. qla- 'precinct', but this is formally impossible. The Lycian sign $q$ denotes a labialized consonant (possibly $\left[\mathrm{k}^{\mathrm{w}}\right]$ ) that reflects PAnat. */ $\mathrm{H}^{\mathrm{w}} /$ (see Kloekhorst fthc.c). I would therefore rather reconstruct Lyc. qla- as *h2 $u$-leh $h_{2}$, comparable to Gr. aủ入ท́ 'courtyard, precinct' $<* h_{2}$ eu-leh $2_{2}$.
As an inner-Hittite comparandum, the noun hāli- 'pen, corral' often is mentioned, and Rieken (1999a: 226, 246) therefore reconstructs hāli- as *h2ól-iand hīla- as *h $h_{2} \bar{e} l-e ́ h_{2}$ - from a root * $h_{2} e l$ - 'to surround' that further only is attested in the root-extension *h2elk- / *h2lek-s- 'to protect' (OE ealgian, Gr. á $\lambda \varepsilon ́ \xi \omega$, Skt. raks- 'to protect'). She states that in the case of hīla- "der $i$-Vokalismus der Wurzel von hīla- als Vorstufe langes *e voraus[setzt], das in Nachbarschaft des Laryngals zunächst bewahrt und später in unbetonter Stellung zu $i$ geschwächt wurde" (1999a: 248-9). This scenario is based on Melchert (1984a: 111f., 135f.) who describes a development $* h_{2} \bar{e}>$ Hitt. hi. In 1994a: 143, Melchert explicitly withdraws this development, however, and therewith the formal basis under the reconstruction of hilla- as $* h_{2} \bar{e} l$ - has vanished. Moreover, as I have stated in $\S$ 1.4.9.2.b, I do not believe in Eichner's Law (i.e. the non-colouration of ${ }^{\bar{e}} \bar{e}$ by an adjacent $* h_{2}$ or $* h_{3}$ ). Furthermore, reconstructing a root $* h_{2}$ el- 'to surround' on the basis of these two Hittite words only seems unwarranted to me. All in all, I reject Rieken's etymology.

Already early in Hittitology (e.g. Friedrich 1927: 180), it has been assumed that hāla- should be connected with Akk. bīt hilāni, pointing to an areal Wanderwort.
himma- (c.) 'imitation, substitute, replica': nom.sg. hi-im-ma-aš, acc.sg. hi-im$m a-a n$, gen.sg. hi-im-ma-aš, nom.pl. hi-im-mi-ẹ[-eš], acc.pl. hi-im-mu-uš, hi-mu$u s ̌$.
Derivatives: ${ }^{\text {LÚ }}$ himmalli- (c.) 'imitator, vel sim.' (nom.sg. hi-im-ma-al-li-iš).

IE cognates: Lat. imitor 'to copy, to imitate', imāgō 'copy', aemulus 'rival'.
PIE * $h_{2}$ im-no
See Puhvel HED 3: 314f. for attestations. Since Neumann apud Oettinger (1976a: 64) this word is generally connected with Lat. imitor 'to imitate', imāgo 'copy', aemulus 'rival' from *h2 (e) im-. The geminate -mm- in Hittite must be the product of an assimilation, possibly $* h_{2}$ im-no-.
hin-: see hān- ${ }^{i}$ / han-
hinik- ${ }^{\text {tat(ri) }}$ (IIIh) 'to pour?': 3sg.pres.midd. hi-ni-ik-ta.
In 1976, Hart was the first to separate the forms that were spelled hi-ni-ik-ta from the verb 'hink-' (see at the lemma hai(n)k- ${ }^{\text {tla(ri) }}$, hink- ${ }^{\text {arri }}$; hi(n) $k^{-z i}$ ) because of their aberrant spelling: hi-ni-ik-C vs. hi-in-ik-C. On the basis of the two contexts in which hi-ni-ik-ta occurs, namely

## KBo 3.7 ii

(21) ${ }^{\text {HUR.SAG }} Z a-l i-i$ ia-nu-ú hu-u-ma-an-da-aš ha-an-[te-ez-zi-ia-aš?]
(22) ma-a-an I-NA ${ }^{\mathrm{URU}}$ Ne-ri-ik hééu-uš
(23) hi-ni-ik-ta nu ${ }^{\mathrm{URU}}{ }^{N}$ e-ri-ik-ka $a_{4}-a z$
(24) [L]Ú GIŠ GIDRU ${ }^{\text {NINDA }}$ har-ši-ịin pé-e-da-a-i
'The mountain Zaliianū was fi[rst?] of all. When in Nerik rain h.-s / is h.-ed, the staff-bearer brings away thick-bread from Nerik'
and

KUB 34.16 iii
(3) [ ... ]x una-an-nu-pa'-aš-ta-li-eš ha-la-li-ez-zi
(4) [(ut-ne-ìa)- ..] héee-a-u-it hi-ni-ik-ta
// KBo 14.61
(6) $[\ldots$ (ua-an-na-p)]a-aš-ta-lu-uš[ ]
(7) $[($ ha-la-li-ez-z)]i ut-ne-íia[(-)]
(8) $[($ héée-a-u-it hi-) $] n i-i k-[(t a)]$
'... the morningstar? cleans ... on? the earth (it?) h.-s / is h.-ed with rain'

Hart assumes that hinik- may mean "wet, pour, deluge" and therefore proposes an etymological connection with Skt. siñcati 'to pour', interpreting hinik- as a nasalinfixed form of a root $*(s)$ Heik- which can directly be compared to Skt. si-ñ-c-. This idea has been taken over by e.g. Puhvel (HED 3: 315, reconstructing "* $\left.(s) H_{l} e y-k^{(w)}{ }_{-} "\right)$ and Kimball (1999: 382, who for reasons unclear to me insists on a reconstruction with $* h_{3}$ ). The preform of Skt. siñcati, which belongs with OHG sīhan 'to filter', seihhen 'to urinate', SerbCS sbcati 'to urinate' and Gaul. Séquana 'Seine', must contain a *- $k^{w}$-, however, *seikw-, which does not fit Hitt. hinik-. Moreover, there is no indication for a laryngeal in any of the other languages. All in all, I reject the connection between hinik- ${ }^{\text {tla(ri) }}$ and Skt. siñcati.
hink- ${ }^{a(r i)}, \boldsymbol{h i}(n) k_{-}^{z i}$ : see hai(n)k- ${ }^{\text {tla(ri) }}$
hinkan-: see henkan-

LÚ hippara- (c.) 'serf' (Akk. ${ }^{\text {Lú }}$ ASIRUM): nom.sg. hi-ip-pár-aš (OS), dat.-loc.sg. hi-ip-pa-ri (OS).

For the semantics of this word we must compare the following context:

$$
\begin{aligned}
& \text { KBo } 6.2 \text { ii } \\
& \text { (49) }{ }^{\text {L }} \text { hi-ip-pár-aš lu-uz-zi kar-pí-i-ez-zi nu }{ }^{\text {LÚ }} \text { hi-ip-pa-ri ha-a-ap-pár le-e }
\end{aligned}
$$

$$
\begin{align*}
& \text { una-a-ši } \\
& \text { (51) }[k u-i] s ̌=z a{ }^{\text {LU }} \text { hi-ip-pa-ri ȟa-a-ap-pár i-ez-zi } n=a \text {-aš=kán ha-a-ap-pa-ra-az } \\
& \text { (52) [ša-me-e]n-zi }{ }^{\text {LÚ }} \text { hi-ip-pár-aš ku-it ha-ap-pa-ra-a-et ta-a=z a-ap-pa da-a-[i] } \\
& \text { (53) [ták-ku }{ }^{\text {LÚ }} \text { hi]-ip-pár-aš ta-a-i-ez-zi šar-ni-ik-zi-il NU.GÁL } \tag{54}
\end{align*}
$$

'A $h$. shall perform corvée. No-one shall do business with a $h$.. No-one shall buy his child, his field (or) his vineyard. Whoever does do business with a $h$. forefeits his right to the trade. Whatever the $h$. traded, he shall give it back. When a $h$. steals, there is no restitution. (...) His body alone shall restitute (it)'.

From this text, it is clear that hippara- is some sort of outcast that is not allowed to do any trade. Even when a hippara- has stolen, he is not supposed to perform any trading, i.e. restituting what was stolen: only his body can be used for the restitution. In a duplicate of this text, KBo 6.4 iv 36-41, ${ }^{\text {LÚ }}$ hippara- is
akkadographically written ${ }^{\text {Lú }} A-S I-R U M$, which literally means 'locked up'. Friedrich (1959: 98) states: "Es muss sich um eine sehr unzuverlässige Gattung von Menschen handeln, die eingesperrt gehalten wurde und mit der man auch keinen Handel treiben durfte".
Despite the difficulty regarding the semantic interpretation of this word, Güterbock (1972: 96) suggested an etymological tie-in with hāppar- / hāppir'trade, business', which was codified by Eichner (1973a: 72) who reconstructed * $h_{2} \bar{e} p(o) r o ́-~ ' K a ̈ u f l i n g ' ~(f o l l o w e d ~ b y ~ e . g . ~ M e l c h e r t ~ 1994 a: ~ 76, ~ w h o ~ a s s u m e s ~ a ~$ basic meaning 'bought'). There is not a shred of evidence, however, that a ${ }^{\text {LÚ }}$ hippara- was subject to being sold and bought. On the contrary, the fact that a ${ }^{\text {LÚ }}$ hippara- could own fields or vineyards (which he is not allowed to sell) in my view indicates that he cannot be some sort of slave, but must be a free man, albeit of a very low status. This, together with the fact that it is forbidden to do business (hāppar- / hāppir-) with a ${ }^{\text {LU }}$ hippara-, in my opinion shows that an etymological connection between hāppar- / hāppir- and ${ }^{\text {LÚ }}$ hippara- is very unlikely.
${ }^{\text {GIš̌ }}$ hišša- (c.) 'carriage pole': acc.sg. hi-iš-ša-an (KBo 13.119 iii 10 (NS)), dat.loc.sg. hi-iš-ši (KUB 30.32 i 3 (MS), KUB 34.16 ii 7 (OH/NS), Bo 4929 v 17-20 (NS)), he-eš-ši (KBo 12.123, 15 (NS)).

IE cognates: Skt. īṣáa 'pole, shaft', Slov. ojê 'carriage pole', dial.Russ. vojë 'carriage pole', Gr. oi'ịíov 'handle of rudder', Gr. oľa $\xi$ 'handle of rudder, tiller'.

PIE * $h_{2} i h_{1 / 3} S-e h_{2-}$
See Puhvel HED 3: 318f. for attestations. Almost all attestations (including the oldest (MS) one) are spelled $h i-i \check{s}-\check{s}^{\circ}$. Only once, we find a spelling $h e-e s ̌-s^{\circ}$, in an NS text, which must be due to the NH lowering of $\mathrm{OH} / \mathrm{i} /$ to /e/ before $-s{ }^{-}$- (cf. $\S 1.4 .8 .1 . d)$. The word denotes the pole of a cart.
Since Sommer (1949: 161) this word is generally connected with Skt. $\bar{t} s \bar{a}$ ' 'pole, shaft'. Combined with the Hittite evidence, we must reconstruct $* h_{2} i H s$-é $h_{2}$. In other IE languages, we find e.g. Slov. ojê, gen. ojęsa 'carriage pole', which seems to point to an $s$-stem $* h_{2}$ eih $h_{1 / 3}$-es- or $* h_{2} o i h_{1 / 3}$-es-, dial.Russ. vojëe 'carriage pole', Gr. oíṅïov 'handle of rudder' and Gr. ola $\xi$ 'handle of rudder, tiller', the preforms of which are less clear. On the basis of Gr. ó-, Kimball (1999: 386) reconstructs * $h_{3^{-}}$, but this does not seem obligatory to me.

According to Dercksen (fthc.), the noun hišša- is attested in OAssyrian texts from Kültepe as well, namely as hiššannum.
 gen.sg. hi-iš-ta-a-aš (OS), hi-iš-ta-ǎ̌ (MS), hé-eš-ta-a-aš (MS), hé-eš-ta-aš (NS), ḩi-iš-ta-a (OS), hi-iš-da-a (OH/MS), hé-eš-ta-a (OH/MS), hé-eš-da-a (NS), hé$e \check{s}-t i-i(\mathrm{OH} / \mathrm{NS})$, he-eš-ti-i (NS), dat.-loc.sg. hi-iš-ti-i (OS), hé-eš-ti-i (OH/NS), hé-iš-ti-i (NS), hi-iš-ta-a (OS), \& hi-iš-da-a (OH/NS), hé-eš-ta-a (OH/MS), abl. hé-eš-ti-i (NS).
Derivatives: ${ }^{\text {LÚ }}$ hištum(n)a- (c.) 'person pertaining to the hištal' (nom.sg. hi-iš-tu-um-ma-aš, hi-iš-tu-u-ma-aš, hé-eš-tu-um-na-aš, hé-eš-tu-u-ma-aš, dat.-loc.sg. hé-eš-tu-u-um-ni, nom.pl. hé-eš-tu-u-um-ni-eš).

See Puhvel HED 3: 319f. for attestations. The oldest attestations (OS) are all spelled $h i-i s ̌-t^{\circ}$, whereas spellings with $-e$ - (hée $e s ̌-t^{\circ}$, hé- $i s ̌-t^{\circ}$ and $h i-e s ̌-t^{\circ}$ ) occur from MH times onwards only. This must be due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to NH /e/ before $-s ̌$ - as described in $\S$ 1.4.8.1.d. The word denotes a cultic building that is connected with death-rituals and ancestor cult, but its exact function is unclear. The sumerographic writing of this word seems to be É.NA N 'house of stones'. $_{\text {' }}$
Since Götze (1925: 104), ${ }^{\text {Éh } h i s ̌ t a ̄, ~}{ }^{\text {Éhišt }}$ h has been connected with ha-aš-ti-i $a-a \check{s}$ É-er 'house of bones' that is mentioned by Hattušili III (KUB 1.1 iv 75), on the basis of which an etymological connection between ${ }^{\text {Éh }}$ hišt $\bar{a}$, ${ }^{\text {É }}$ hišt̄̄ and haštai'bone' (q.v.) has been assumed. For instance, Eichner (1973a: 72) reconstructs * $h_{2}$ ēstoícó- (followed by e.g. Melchert 1994a: 76), whereas Puhvel (l.c.) reconstructs * $h_{3}$ stoió- (with anaptyctic e/i).

If we look at the paradigm of ${ }^{\text {É }}$ hišt $\bar{a}$, ${ }^{\text {Éh }}$ hišitu, however, we see that it hardly shows any inflected forms. Only in the genitive we occasionally find an ending $-\check{s}$, but everywhere else the word remains uninflected and shows only hišt $\bar{a}$ or hišt $\bar{\imath}$. In my view, this strongly indicates that this word is not genuinely Hittite, but must be a foreignism (cf. ${ }^{\mathrm{NA}_{4}}$ hekur for a similar uninflectedness). This would fit the fact that cultic buildings often have non-IE names (e.g. ${ }^{\text {Éhalent(i)u-, }{ }^{\text {E }} m a \bar{a} k(k i z) z i(i a)-\text {, }}$ ${ }^{\text {É }}$ karimmi-, etc.). This view was also advocated by Kammenhuber (1972: 300), who explained haštiiaš É-er 'house of bones' as a folk etymology.
huek- ${ }^{z i}$ / huk- (Ia1) 'to conjure, to treat by incantation': 1sg.pres.act. hu-e-ek-mi (KBo 22.107 i 14 (MS)), hu-ek-mi (KBo 22.107 i 11 (MS), KBo 17.61 rev. 7 (MH/NS), KUB 17.28 i 28 (MH/NS)), hu-uk-mi (KUB 17.28 ii 3, 8 (fr.) (MH/NS), KBo 27.134 i 20 (MS)), hu-u-uk-mi (KBo 11.19 obv. 1 (NS)), 2sg.pres.act. hu-i<-ik>-ši (KUB 45.21, 1 (MH/MS)), 3sg.pres.act. hu-e-ek-zi (OS, often), hu-ek-zi (OS, often), huu-uk-zi (KUB $44.4+$ KBo 13.241 rev. 18 (NS), KUB 24.13 iii 17 (NS), KUB $7.52+12.58$ i 57, 62, 64, ii 54 (NS), VBoT 58 iv 38
(OH/NS)), hu-u-uk-zi (KBo 12.112 obv. 13 (NS)), 1pl.pres.act. hu-e-ku-ua-ni (KBo 15.28 obv. 7 (MH/MS)), 3pl.pres.act. hu u-kán-zi (KBo 2.12 ii 34 (NS)), hu-u-kán-zi (MH/MS, often), 1pl.pret.act. ḩu-u-ga-u-en (KUB 18.12 obv. 13 (NS)), 3sg.imp.act. huu-ek-du (KUB 7.1 iii 12ff. (OH/NS)); part. ḩu-u-kán-t-, hu-u-ga-an-$t$-; verb.noun gen.sg. hu-u-kán-na-aš (KUB 16.47, 12 (NS)), hu-u-ga-an-na-aš (KUB 18.12 obv. 7 (NS)); inf.II hu-u-kán-na (KUB 17.24 ii 14 (NS)); impf. hu$u k-k i-i s ̌-k e / a$ - (often), hu-uk-ki-eš-ke/a-, hu-u-uk-ki-iš-ke/a-, ḩu-u-ki-iš-ke/a- (KBo 15.33 iii 28 (OH/MS)), KUB 20.48 i 5 (NS), VSNF 12.20 i 12 (NS)).

Derivatives: hukmai- / hukmi- (c.) 'conjuration' (Akk. ŠIPTU; acc.sg.c. hu-uk-ma-in (KUB $7.52+12.58$ i 57, 62, 64 (NS), KBo 15.1 iv 40 (NS), Gurney 6, 6 (NS)), hu-u-uk-ma-in (KBo 27.134 i 19 (MS)), nom.-acc.sg.n. hu-uk-ma-i (KUB 9.34 iii 6 (NS)), gen.sg. hu-uk-mi-ia-aš (KBo 17. 62+63 i 13 (MS?)), acc.pl.c. hu$u k-m a-u s ̌$ (KUB 27.29 i 7 (MH/NS)), hu-uk-ma-a-uš (VBoT 58 iv 37 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 36.44 i 6 ( $\mathrm{OH} / \mathrm{MS}$ )), h hu-u-uk-ma-a-uš (KUB 14.4 iii 8 (NH))), LÚ hukmatalla- (c.) ‘conjurer’ (Sum. ${ }^{\text {LÚ }} \mathrm{KAxLI} ; ~ n o m . p l . ~ h u u-u k-m a-t a l-l i[-e-e s ̌] ~$ (KUB 12.61 ii 7 (NS))), huganna- ${ }^{\text {i }}$ / huganni- (IIa5) 'to conjure (impf.)' (inf.I hu-u-ga-an-ni-i_ia-u-ua-an-zi (313/z rev. 6)).
IE cognates: ?Gr. aú $\chi \varepsilon ́ \omega$ 'to boast, to brag'. PIE * $h_{2} u e g^{h}$ - or $* h_{2} u e g^{h}-$ ?

See Puhvel HED 3: 323f. for attestations. As the sign IG can be read $i k$ as well as $e k$, all cases where we find $h u$-IG- are, just as $h u-e-I G-$, to be interpreted as /Hoeg-/ (cf. § 1.3.9.4 for the phoneme /o/). The verb clearly shows an original ablaut huekzi / hukanzi and therewith is homophonic to the verb huek-zi /huk- 'to slaughter, to butcher'. In MH times we see that the strong stem huek- is used in 1pl.pres.act. huekuuani as well (replacing original *hukueni), which is normal in $e / \varnothing$-ablauting $m i$-verbs. Remarkable is the fact that the weak stem huk- seems to have become productive in NH times. This can be explained in view of the fact that the bulk of the cases of hukmi and hukzi are found in the syntagm hukmain huk- 'to conjure a conjuration'. It is likely that here the use of the weak stem hukin the verbal form is due to analogy to the noun hukmai-.

The single writing of -k- (huekuuani, hukanzi, hukant-, huganna, etc.) points to etymological $* g$ or $* g^{h}$ (or $* g^{(h)}$ ). Note that the imperfective is predominantly spelled with geminate $-k k$-, which is due to fortition of original lenis stops before the *-sk'e/o-suffix (similarly eku-zi/aku- 'to drink' with akkuške/a-, lāk- ${ }^{i} /$ lak- 'to make lie down' with lakkiške/a-, etc.). Mechanically, huek-zi / huk- must go back to a root $* h_{2} u e g^{(h)}$ - or $* h_{2} u e \dot{g}^{(h)}$ - (the initial laryngeal must be $* h_{2}$ because $* h_{3}$ would regularly drop in this position). Nevertheless, the etymological
interpretation is difficult. Puhvel (1.c.) argues in favour of a connection with Gr. عú $\chi o \mu a \iota$ 'to pray: to declare solemnly'. Although semantically this would be attractive, it cannot be correct on formal grounds. Gr. عűXo $\mu \alpha$ belongs with Lat. voveo 'to vow', which means that we have to reconstruct a root $* h_{1} u e g^{w h}$-, with عű $\chi$ - reflecting *h $e-h_{l} u g^{w h}-:$ this has the wrong velar as well as the wrong laryngeal.
Oettinger (1979a: 103) connects huek- ${ }^{z i} /$ huk- with Gr. aúXé $\omega$ 'to boast, to brag', which could point to a root $* h_{2} u e g^{h}$ - or $* h_{2} u e g^{h}-$. Apart from the fact that the semantic connection is not self-evident, the formation of the Gr. verb is not unproblematic: it is probably derived from the last parts of compounds in - $\alpha v \chi \eta, \varsigma$ and may therefore not represent an original verbal stem.
huek- ${ }^{z i} /$ huk- (Ia1) 'to slaughter, to butcher': 1sg.pres.act. hu-e-ek[-mi] (KBo 17.3 iii 14 (OS)), hau-ek-mi (KBo 17.1 i 41 (OS)), 3sg.pres.act. hu-ek-zi (KBo 20.39 1.col. 12, 14, 15 (OH/MS), KUB $51.1+53.14$ ii 11 (MS), KBo $11.45+$ IBoT 3.87 ii 5 ( $\mathrm{OH} / \mathrm{NS}$ )), hu-u-e-ek-zi (KUB 17.24 iii 3 (NS)), hu $u-u k-z i$ (KUB 41.8 i 18 (MH/NS)), hu-u-uk-zi (KBo 10.45 i 35 (MH/NS), KUB 53.12 iii 21 (NS)), 3pl.pres.act. ḩu-kán-zi (OS, often), ḩu-u-kán-zi (OS, often),3sg.pret.act. hu-e-ek-ta (OS), hu-u-e-ek-ta (KBo 22.6 i 18 (OH/NS)), hu-ek-ta (KBo $11.45+$ IBoT 3.87 ii 17 ( $\mathrm{OH} / \mathrm{NS}$ )); 3pl.pres.midd. hu-u-kán-ta (KUB 55.28 ii 12 (MH/NS)); part. hu-ga-an-t- (OS), hu-ga-a-an-t- (OS); verb.noun. hu-u-ga-tar; inf.II hu-ga-an-na, hu-u-ga-an-na, hu-u-kán-na; impf. hu-uk-ki-iš-ke/a- (MS), hu-$u$-uk-ki-iš-ke/a- (NS), hu-u-ki-iš-ke/a- (MS), hu-ki-eš-ke/a- (NS), hu-u-ki-eš-ke/a(NS).

Derivatives: hukeššar / hukešn- (n) 'slaughtering' (nom.-acc.sg. hau-ke-eš-šar, hu-u-ke-eš-šar, hu-ge-eš-šar, dat.-loc.sg. hu-u-ke-eš-ni), see huni(n)k- ${ }^{z i}$.

IE cognates: OP vaj- 'to stab'.

$$
\text { PIE } * h_{2} u e g^{(h)}-
$$

See Puhvel HED 3: 327f. for attestations. Note that Puhvel cites "1pl.pres.act. (?) ]hu-e-ik-ku-[e-ni" (KBo 17.4 iii 19) (with reference to Otten \& Souček 1969:34), but I do not think that this interpretation is likely: huek- ${ }^{z i}$ / huk- is in all other instances consistently spelled with single $-k$-, which would make this form totally aberrant. Because the form is found in such a broken context that its reading or meaning cannot be ascertained, I leave it out of consideration here.

The sign IG can be read $i k$ as well as $e k$ and therefore all cases where we find $h u$-IG- are, just as $h u-e-I G-$ and $h u-u$ - $e$-IG-, to be interpreted as /Hoeg-/ (cf. § 1.3.9.4 for the phoneme /o/). The verb clearly shows an original ablaut huekzi /
hukanzi and therewith is homophonic to the verb huek- ${ }^{z i}$ / huk- 'to conjure'. The consistent spelling with single $-k$ - points to an etymological $* g$ or $* g^{h}$ (or $* \dot{g}^{(h)}$ ). Note that the imperfective is spelled with geminate $-k k$ - (although spellings with single $-k$ - occur as well: these are probable secondary) which is due to fortition of the lenis velar before the suffix $*_{-s k}{ }^{\prime} / o$ - (compare $e k u$ - $^{z i} / a k u-$ 'to drink' and akkuške/a-, lāk-' / lak- 'to make lie down' and lakkiške/a-, etc.). Mechanically, huek ${ }^{z i} /$ huk- must go back to a root $* h_{2} u e g^{(h)}$ - or $* h_{2} u e g^{(h)}$ - (the initial laryngeal must be $* h_{2}$ because $* h_{3}$ would regularly drop in this position).
Strunk (1979: 254) connects huek- ${ }^{z i} /$ huk- with OP vaj- 'to stab' (1sg.pret.act. avajam), which is widely followed. Puhvel (lc.) proposes to further adduce Gr. (F)ỏ $\varphi$ ví¢, OHG waganso 'ploughshare', but these forms must reflect $*$ ueg $^{w h}$-, which is the wrong velar from a Hittite point of view. Eichner's suggestion (1982: 18) to connect huek- with Skt. vec- 'to sieve' is, apart from the semantic problems, formally impossible: Skt. vec- reflects *ueik- with an -i- that is not found in Hittite as well as with a $*_{-} k$ - that does not fit Hitt. single $-k-<*_{-} g^{(h)}-$.
hueš-: see ḩuiš- / haš-
huett $^{\text {ta(ri) }} /$ huetti- ${ }^{\text {a(ri) }}$; huttiie/a- $\boldsymbol{-}^{\text {zi }}$ (IIIa/b $>$ IIIg; Ic1) 'to draw, to pull, to pluck' (Sum. SUD. Akk. $\check{S} A D \bar{A} D U$ ): 1sg.pres.midd. hu-it-ta-ah-ha-ri (KBo 11.11 i 4 (NS)), 2sg.pres.midd. hhu-e-ez-ta (KUB 17.10 iv 1, 2 (OH/MS), KUB $33.54+47$ ii 15 (fr.) ( $\mathrm{OH} / \mathrm{NS}$ )), h $h u-i z[-t a]$ (IBoT 4.8 obv. $2(\mathrm{OH} / \mathrm{NS})$ ), hu-it-ti-at[-ta] (KUB $21.19+1303 / \mathrm{u}$ ii $18(\mathrm{NH})$ ), 3sg.pres.midd. hu-et-ti-i_ia-ri (KBo 17.92, 15 (MS)), 3pl.pres.midd. hu-e-et-ti-an-ta (KUB 29.30 iii 6 (OS)), hu-et-ti-ita-an-ta (KUB 29.35 iv 15 (OS), KBo 19.152 i 6 (MS), KUB 29.37, 8 (fr.) (OH/NS)), hu-it-ti-an-ta (KBo 6.26 i 41 (OH/NS)), hu-u-it-ti-an-ta (KBo 6.26 i 42 (OH/NS)), hu-u-it-ti-ia-an-ta (KBo 6.26 iv 5, $21(\mathrm{OH} / \mathrm{NS})$ ), 1sg.pret.midd. hu-it-ta-ah-ha-at (KBo 11.11 i 9 (NS)), 3sg.pret.midd. hau-et-ti-ía-ti (KBo 3.22, 54 (OS), KUB 26.71 i 3 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 43.75 obv. 19 (NS)), hu-it-ti-et-ti (KUB 26.71 i 3 ( $\mathrm{OH} / \mathrm{NS}$ )), hu-it-ti-ia-at-ta-at (KUB 19.67 i $2(\mathrm{NH})$ ), hu-u-it-ti-ía-at-ta-at (KUB 1.7 ii $10(\mathrm{NH})$ ), hu-iz-za-aš-ta-ti (KUB 43.74 obv. 11 (NS)), 3sg.imp.midd. hu-et-ti-ia-ru (Bo 6472, 10 (undat.)); 1sg.pres.act. hu u-u-it-ti-i_a-mi (VBoT 24 iii 13, iv 10 (MH/NS)), 2sg.pres.act. hu-it-ti-ía-ši (KUB 7.53 iii 2, 4 (NS), KBo 5.3 ii 29 (NH)), 3sg.pres.act. hu-et-ti-ia-zi (KUB 15.34 iii 56 (MH/MS), KBo 3.2 rev. 59 (MH/NS), KBo 3.5 iv 26 (MH/NS), KBo 21.10, 4 (MH/NS), KUB 1.13 i 45 (MH/NS), KUB 44.61 rev. 26 (fr.) (NS)), hu-it-ti-ia-az-zi (KBo 22.102 rev. 10 (NS), KUB 29.4 ii 21 (NS)), hu-u-it-ti-i-ia-zi (KUB 15.31 i 28 (MH/NS), KBo 8.90 ii 9 (NS)), hu-u-it-ti-ia-az-zi (KBo 23.1 i 18 (NS)), hu-it-ti-e-iz-zi (KUB 1.13 i 12
(MH/NS)), hau-it-ía-az-zi (KUB 33.43 ii 57 (NS)), hu-it-ti-ía-i (KUB 27.67 ii 17, 18, iii 21, 22 (MH/NS), KBo 5.2 iii 20 (MH/NS)), 2pl.pres.act. hu-u-it-ti-at-te-ni (KUB 13.5 ii 26 (OH/NS)), hu-u-it-ti-i_a-at-te-ni (KUB 13.6 ii 9 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. hu-et-ti-an-zi (KBo 15.33 ii 14 (OH/MS), KUB $29.7+$ KBo 21.41 rev. 6 (MH/MS), KUB 9.3 i 17 (MS), KBo 3.2 obv. 8, 16 (MH/NS), KBo 3.5 iii 6, 13 (MH/NS), KUB 1.13 iii 59 (MH/NS), etc.), hu-it-ti-i, $a-a n-z i$ (often), hu-u-it-ti-ía-an-zi (less often), hu-u-i-it-ti-ia-an-zi (KUB 2.5 i 8 (NS)), 1sg.pret.act. hu-et-ti-i̇a-nu-un (HKM 71 rev. 28 (MH/MS)), KUB $29.7+$ KBo 21.41 obv. 65 (MH/MS), KBo 2.5 iii 50 (NS), KBo 4.4 iii 32 (NH)), hu-u-i-it-ti-i-ia-nu-un (KBo 2.5 ii 3 (NS)), 3sg.pret.act. hu-et-ti-ia-at (KUB 17.10 iv 14 (OH/MS), KBo 3.64 i $10(\mathrm{OH} / \mathrm{NS})$, KBo 3.66, $6(\mathrm{OH} / \mathrm{NS})$, KBo $19.90+3.53$ obv. $6(\mathrm{OH} / \mathrm{NS})$, KBo 4.12 obv. 17 (NH)), hu-it-ti-et (KUB 33.120 i 24 (MH/NS)), hu-it-ti-at (KBo 32.14 iii 10, 28 (MH/MS), Bronzetafel i 23 (NH)), hu-u-it-ti-ia-at (KUB 14.4 iv $15(\mathrm{NH})$ ), 1pl.pret.act. hu-u-it-ti-ia-u-en (KUB 13.4 iv 72 (OH/NS)), 3pl.pret.act. hu-et-ti-er (KUB 29.54 iv 15 (MH/MS)), 2sg.imp.act. hu-et-ti (KUB 17.10 iv 3 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 36.75 + 1226/u iii 13 ( OH/MS), KUB 29.1 ii 11 ( $\mathrm{OH} / \mathrm{NS}$ )), hu-it-ti-ía (KUB $33.54+47$ ii 19 (OH/NS), KUB 7.53 iii 8 (NS)), 2pl.imp.act. hu-et-ti-ía-at-tén (HKM 25 obv. 14 (MH/MS)), hu-u-e-za-at-tén (KUB 58.77 obv. 27, 28 (NS)), 3pl.imp.act. hu-u-it-ti-ida-ad-du (KBo 10.45 iv 27 (MH/NS)); part. hu-et-ti-an-t- (OS), hुu-et-ti-i_ia-an-t- (MH/MS); verb.noun. hu-it-te-eš-šar (KUB 27.67 i 19, iii 25 (MH/NS)), hu-it-ti[-ía-]aš-šar (KUB 27.67 ii 20 (MH/NS)); verb.noun. hu-et-ti-ia-u-ar (KUB 29.7 + KBo 21.41 obv. 60, rev. 4, 16 (MH/MS)), hu-it-ti-ia-u-ua-ar (KUB 10.92 i 18 (NS)), gen.sg. hau-it-ti-ía-u-aš (KUB 29.4 ii 18 (NS)), hu-u-it-ti-i_ia-u-ưa-aš (KUB 29.4 i 73 (NS), KUB 42.106 rev. 10 (NS)), dat.-loc.sg. hu-et-ti-ìa-u-ni (KUB 15.34 iv 61 (MH/MS)); inf.I hu-it-ti-ía-u-una-an-zi (KUB 21.19+ ii 20 (NS), KUB 29.4 iii 38, 49 (NS)), hu-it-ti-ia-u-an-zi (KUB 12.23, 20 (NS)), [hu-]u-it-ti-ia-u-ua-an-zi (KBo 15.29 iii 8 (NS)), hu-u-it-ti-ia-u-an-zi (KUB 15.31 i 33, ii 41, 48 (MH/NS)); impf. hu-it-ti-eš-ke/a- (KBo 13. 64 obv. 12 (NS)).
Derivatives: huttiianna- ${ }^{\boldsymbol{i}}$ / huttiianni-, huittiianna- ${ }^{i}$ / huittiianni- (IIa5) 'id. (impf.)' (1sg.pres.act. hu-it-ti-ía-an-na-ah-hi (KBo 2.9 iv 21 (MH/NS)), 3sg.pres.act. hu-ut-ti-an-na-i (KBo 17.18 ii 12 (OS)), hu-ut-ti-an-na-a-i (KBo 17.43 i 3 (fr.), 11 (OS)), hu-et-ti-ia-an-na-i (KBo 22.42 obv. 10 (MH/MS)), hu-u-i-it-ti-ìa-an-na-i (KUB 32.18 iii $8(\mathrm{OH} / \mathrm{NS})$ ), 1pl.pres.act. [hu-et-]ti-i्रa-an-ni-ú-e$n i$ (KBo 15.10 iii 15 (OH/MS)), 3sg.imp.act. [hu-]et-ti-ia-an-na-ú (KUB 36.55 ii 18 (MH/MS?)); impf. hu-it-ti-i_ia-an-ni-iš-ke/a-, hu-it-ti-ia-an-ni-eš-ke/a-),
 $d u-u l-l i, ~ a b l . ~ h u-u d-d u-u l-l i-i a-a z$, instr. ha-ut-tu-ul-li-it, hu-ud-du-ul-li-it).

PIE * $h_{2}$ ueTH-to, *h $h_{2}$ uTH-ie/o-
See Puhvel HED 3: 343f. for attestations. First it should be noted that the sign IT can be read it as well as et. So the many forms that are spelled $h u-\mathrm{IT}-t^{\circ}$ can stand for both huitt- as well as huett-. There are a few forms that show plene spellings: $h u-u-i-\mathrm{IT}-t i-i$ /Hoit-/, whereas hu-e-IT-ti-an-ta (OS), hu-e-IZ-ta (OH/MS) and hu-u-e-za-at-tén (NS) show unambiguously /Hoet-/ (note that the phoneme /o/ is the automatic outcome of $* u$ when adjacent to $/ \mathrm{H} /$, cf. § 1.3.4.9.f). To explain the occurrence of /Hoit-/ besides /Hoet-/, we can use the sound law as cited by Melchert (1994a: 101): *ue > Hitt. ui before dental consonants. This means that huett- is the original form, and that the stem huitt- is a later development. In the above overview of forms, I have chosen to cite all MS and OS attestations as hu-et- and the NS attestations as hu-it-, without claiming that these readings can be proven.
We encounter active as well as middle forms, which do not seem to differ semantically: both are used transitively 'to draw (someone / something), to draw (someone / something)'. Occasionally, a middle form is reflexive and denotes 'to recede < *to pull oneself (away)'. Formally, we encounter three stems: huettiie/a-, huett- and huttiie/a-. The stem huettiie/a- is found in both active and middle forms, in early times already (3pl.pres.act. huettianzi ( $\mathrm{OH} / \mathrm{MS}$ ) and 3pl.pres.midd. huettianta (OS)). The stem huett- is found much less often, also in both active and middle forms (2pl.imp.act. hūezatten (NS) besides 2sg.pres.midd. huezta (OH/MS), 3sg.pret.midd. huezzaštati (NS)). It should be noted that in the active, it occurs only once (in a NS text), whereas we find several middle forms, most of which are attested in OH compositions. The stem huttiie/a- is found in the impf. huttiianna/i- only, but is attested in OS texts. Although the evidence is scanty, I think that we have to assume that, originally, the middle paradigm used the stem huett-, whereas in the active the stem huttiie/a- was used (cf. hatt- ${ }^{a(r i)}$, hazziie/ $a_{-}{ }^{z i}$ for a similar distribution). Already in pre-Hittite times, the full grade of the middle was taken over into the active, yielding the stem huettiie/a- (with huttiie/a-surviving in the imperfective only), which stem was subsequently taken over into the middle paradigm as well. If the noun huttulli- indeed is derived from this verb (which semantically is likely: a 'strand' is something that has been pulled out of the wool, cf. the figura etymologica in VBoT 24 iii (13) nu-u=̌̌$\check{s i} i=k a ́ n{ }^{\text {SÍG }} h u-u t-t u-u l-l i \quad h u-i t-t i-i a-m i$ 'I pluck a strand from it (viz. sheep)'), it would show another instance of the zero grade stem hutt-.
The consistent spelling with geminate $-t t$ - seems to point to an etymological *-t-. Nevertheless, the fact that we do not find assibilation of the dental consonant
before $*-i$ - in the stems huttie/a- and huettiie/a- show that -tt- cannot reflect $*-t$ just like that. It is likely that some laryngeal stood between the dental consonant and ${ }^{*}-i$-. As Melchert (1984a: $88^{16}$ ) rightly points out, a sequence ${ }^{*}-d^{(h)} H$ - would yield Hitt. -tt- as well (cf. mekki- < *meǵ $h_{2}-$ ), which means that we can mechanically reconstruct huett- / hutt- as *h $h_{2}$ ueTH- (initial $* h_{2}$ because $* h_{3}$ would be lost in this position, cf. Kloekhorst fthc.c).
The etymological interpretation of this verb is in debate. Melchert (1984a: $88^{16}$ ) connects huett- with the root that traditionally is reconstructed $* u^{h} d^{h}$ - 'to lead' (OIr. fedid 'leads', Goth. ga-widan 'to bind', Lith. vedù 'to lead, to marry', OCS vedo 'to lead', YAv. vāßaiieiti 'to lead', Skt. vadhū́- 'bride') which he now reconstructs as $* h_{2} u e d h_{2^{-}}$. According to him, the initial laryngeal is visible in
 the dental consonant was $* d$ and that the $-d h$ - in Skt. vadh $\frac{u}{u}$ - therefore reflects ${ }^{*}-d h_{2}$-, which then is proof for the second laryngeal as well. There are some flaws in this reasoning. First, the circumflex stems Lith. vedd- 'to lead, to marry' and Slav. *ved- 'to lead' clearly point to *ued'- (absence of Winter's Law points to * $D^{h}$ ). Semantically, these must belong with OIr. fedid 'leads', Goth. ga-widan 'to bind', YAv. vāßaiieiti 'leads' and Skt. vadhúu- 'bride', which therefore all must go back to *ued ${ }^{h}$ - as well. This means that Hom. ává $\varepsilon \delta v o \varsigma$, which unambiguously points to a ${ }^{*}-d$-, cannot be cognate (but rather belongs with OE weotuma 'brideprice' and PSI. *věno 'bride-price' that does show Winter's Law and therefore must reflect *- $d$-; the simplex form nom.-acc.pl.n. है $\varepsilon \delta v a$ (Hom.) 'bridal gifts' rather points to a root with an initial $* h_{l^{-}}, * h_{l} u e d-$, which indicates that ává $\varepsilon \delta v o \varsigma$ must be a secondary remodelling of original $* \nu \eta \dot{\eta} \delta v o \varsigma<* n-h_{1}$ ued-no-, p.c. prof. Kortlandt). Note that in the reflexes of $* u e d^{h}$ - 'to lead', there are no indications whatsoever for an initial or root-final laryngeal.

An alternative etymology could be a connection with Skt. vadh'- 'to slay', Gr. $\dot{\omega} \theta \dot{\varepsilon} \omega$ 'to push' that up to now are reconstructed $* u e d^{h} h_{l}$-. If, however, Gr. $\dot{\omega} \theta$ é $\omega$ could reflect *̉̉o日é $\omega$ < *h $h_{2}$ uod ${ }^{h} h_{l}$-éie-, then we may be allowed to connect this with huett- (which then would show that a sequence ${ }^{*}-d^{h} h_{l^{-}}$yields -tt-, but compare $\left.k a-r a-a-p i ́<g^{h} r o ́ b h_{l}-e i\right)$. Semantically, we should especially compare Gr. $\omega \theta \varepsilon ́ \omega$ 'to push' with Hitt. huett- 'to pull, to draw'.
LIV $^{2}$ assumes that huett- stands isolated in IE and mechanically reconstructs *h2 $h_{2}$-. Note however, that this is incorrect: *h $h_{2} u t-i e / o$ - should have yielded **huzziie/a-.
All in all, I do not dare to take a final decision.
huettiie/a-: see huett- ${ }^{\text {(ti)a }}$; huttiie/a- ${ }^{-i}$
huhha- (c.) 'grandfather' (Akk. $A B B A$ ABBA, $A B I A B I$ ): nom.sg. hu-uh-ha-aš, acc.sg. hu-uh-ḩa-an, gen.sg. huu-uh-ha-aš (MH/MS), hu-u-uh-ha-aš, hu-ha-aš (KUB 19.5 obv. 12 (NS)), hu-u-h[a-aš] (KUB 11.10, 7 (NS)), dat.-loc.sg. hu-uhhi, abl. hu-uh-ha-az, nom.pl. hu-uh-he-e-eš, hu-uh-hi-iš, acc.pl. hu-uh-hi-iš, hu-uh-ḩe-eš, dat.-loc.pl. hu-uh-ha-aš.
Derivatives: huhhant- (c.) '(great)grandfather' (nom.pl. hu-uh-ha-an-te-eš, hu-$u$-ha-an-te-iš).
Anat. cognates: CLuw. hūha- 'grandfather' (abl.-instr. hu-u-ha-ti), huhatalla/i'ancestral' (nom.-acc.pl.n. hu-ha-da-al-la, hu-u-ha-da-al-la); HLuw. huha- (c.) 'grandfather' (nom.sg. /huhas/ AVUS-ha-sá (MARAŞ 4 §9), acc.sg. /huhan/ AVUS-ha-na (MARAŞ 4 §11), dat.sg. /huha/ AVUS-ha (MARAŞ 4 §8, KARKAMIŠ A2 §4), nom.pl. /huhant ${ }^{\text {}} \mathrm{i} / \mathrm{AVUS}-h a-z i ~(K A R A B U R U N ~ § 1, ~$ KARKAMIŠ A14a §5, BOHÇA §6, §10, ÇİFTLİK §3), ${ }^{\text {AVUS }} h u-h a-z i$ (KARKAMIŠ A26a §d)), huhant(i)- (c.) '(great)grandfather(?)' (acc.sg. /huhantin/ AVUS-ha-ti-na (MARAŞ 4 §11), dat.-loc.sg. /huhanti/ AVUS-ha-ti (KARKAMIŠ A1a §14), nom.pl. /huhantint ${ }^{\mathrm{i}} \mathrm{i} /$ AVUS-ha-ti-zi (KARKAMIŠ A11b §8), dat.-loc.pl. /huhatants/ AVUS-ha-ta-za (HAMA 4 §10)), *huhantia(adj.) 'of the grandfather' (nom.-acc.pl.n. AVUS-ti-ia (KARKAMIŠ A11a §8, 13)), huhantul(i)- (c.) 'greatgreatgrandfather(?) (acc.sg. /huhantulin/ AVUS-ha-tu-li-(ha) (MARAŞ 4 §11)); Lyc. גuge- 'grandfather' (gen.adj.nom.-acc.pl.n. xugaha).

IE cognates: Lat. avus, Arm. haw 'grandfather', OIc. \&́e 'greatgrandfather', Goth. awo 'grandmother', SCr. üjāk 'uncle on mother's side', Lith. avýnas 'uncle on mother's side'.

PIE * $h_{2}$ éu $h_{2}-s, * h_{2}$ éu $h_{2}-m, * h_{2} u h_{2}$-ós
See Puhvel HED 3: 355f. for attestations. In Hittite, this word is almost consistently spelled $h u-u h-h V^{\circ}$, with geminate $-h h-$, whereas in CLuwian, we find $h u-u-h V^{\circ}$ and $h u-h V^{\circ}$ with single $-h-$, which corresponds to Lyc. $\chi u g e-$, the $-g$ - of which reflects a lenited */-h-/.
Since Sturtevant (1928c: 163), these words are generally connected with Lat. $a v u s$, Arm. haw, etc. 'grandfather'. It is clear that Lat. $a$ - and Arm. ha- must reflect $* h_{2} e-$, which corresponds to Hitt. $h$-. The second -hh- in Hittite corresponds to the acute intonation in SCr. üjāk which points to a laryngeal. Because * $h_{3}$ was lost intervocalically (cf. Melchert 1987b: 23f.), it is likely that we must reconstruct $* h_{2}$ here as well. All in all, we arrive at a stem $* h_{2} e u h_{2}$ - The question remains why Hittite shows geminate $-\underline{h} h$ - where the Luwian languages
show single $-h$-. In my view, this problem can only be solved by assuming that this word originally was a root noun. If we reconstruct $* h_{2}$ éu $h_{2}-s$, $* h_{2}$ éu $h_{2}-m$, * $h_{2} u h_{2}$-ós, we can explain that on the one hand we find the thematicized stem *h $h_{2}$ éu $h_{2}-o$ - in CLuw. hūhha-, Lyc. ұuge-, but also Lat. avus, Arm. haw, Goth. awo, etc., but on the other a thematicized stem $* h_{2} u h_{2}-o ́-$ which regularly yields Hitt. huhha- without lenition of $*_{-} h_{2}$ - Compare šūh̆h-, šuhha- for a similar thematization.
huie/a- ${ }^{z i}$ : see huuai- ${ }^{i} /$ hui-
huiš- ${ }^{z i} /$ huš- (Ia1) 'to live; to survive' (Sum. TI): 3sg.pres.act. hu u-iš-zi (KBo 12.81 ii 5 ( $\mathrm{OH} / \mathrm{NS}$ )), h hu-i-iš-zi (KUB 6.46 iv $10(\mathrm{NH})$ ), TI-eš-zi (KUB 15.30 iii 5 (NS), KUB 57.116 obv. 18 (NS), KUB 17.12 ii 26 (NS), KUB 15.1 iii 50 (NH), KBo 23.117 rev. 14 (NS)), TI-iš-zi (KUB 6.45 iii 41 (NH)), 2pl.pres.act. hu-i-iš-te-ni (KUB 1.16 iii 37 ( OH/NS)), 2sg.imp.act. hu-e-eš (ABoT 44 i $56(\mathrm{OH} / \mathrm{NS})$ ); part. TI-eš-ša-an-t- (KUB 31.77 i 9 (NH)); impf. h. hu-eš-ke/a- (KUB 49.1 iv 17 (NS)).
Derivatives: hušnu- ${ }^{z i}$, huišnu- ${ }^{-{ }^{i}}$, hиešnu- ${ }^{z i}$ (Ib2) 'to make recover; to rescue; to spare' (1sg.pres.act. hูu-iš-nu[-mi] (KBo 39.223 rev. 3), 3sg.pres.act. huu-iš-nu-zi ( $\mathrm{OH} / \mathrm{NS}$ ), h $h u-i s ̌-n u-u z-z i(\mathrm{OH} / \mathrm{MS})$, hu-u-iš-nu-zi, 1pl.pres.act. hu-iš-nu-mé-ni (KBo 32.15 ii 18 (MH/MS)), hu-iš-nu-e-ni (KUB 36.32, 15), 3pl.pres.act. hu-iš$n u-a n-z i$, 1sg.pret.act. h. hu-iš-nu-nu-un (MH/MS), 3sg.pret.act. h. hu-e- eeš->nu-ú-ut (KBo 3.28 ii 19), hu-iš-nu-ut (MH/MS), hu-uš-nu-ut (KBo 3.36 obv. 9 (OH/NS)), 3pl.pret.act. hu-iš-nu-e-er, 2sg.imp.act. hu-iš-nu-ut, h hu-u-iš-nu-ut, 3sg.imp.act. ȟu-iš-nu-ud-du, 2pl.imp.act. ḩu-uš-nu-ut-tén (KUB 32.64 ii 14 (MH/NS)); part. TI-nu-an-t-; impf. hu-iš-nu-uš-ke/a-), huišu- / huišaur-, huešu- / huešaū-, hušu'fresh, raw' (nom.-acc.sg. and pl. hुu-e-šu, hुu-e-šú, hुu-u-e-šu, hुu-i-šu, ḩu-u-i-šu, hुu-šu (1x), abl. ḩu-e-ša-ua-az, hu-e-ša-ua-za, h. hu-e-ša-u-ua-az, hu-e-ša-u-ua-za,


 $u-e-e s ̌, ~ h u-u-u i_{5}-\check{s} a-u-e-e \check{s}$, dat.-loc.pl. hu-i-šu-ua-aš, hुu-i-šau-ua)-aš), hušue/a- ${ }^{z i}$, huišue/a- ${ }^{z i}$ (Ic4 > Ic2) 'to stay alive, to be alive, to survive' (3sg.pres.act. ḩu-iš-ú-$e-e z-z i$, ḩu-iš-ú-ez-zi, ḩu-iš-šu-ez-zi, h hu-u-iš-šu-u-ez-zi, 1pl.pres.act. [h]u-šu-e-ua$n i, 3$ sg.pret.act. h $h u-i s ̌-u{ }_{2} a-i t, ~ h u-i s ̌-u a-a-i s ̌, 2 p l . p r e t . a c t . ~ h u-i s ̌-u ́-e-t e-e n ~(M H / M S)$, 3pl.pret.act. h. hu-iš-šu-er (HKM 50 obv. 5 (MH/MS)), h hu-u-i-šu-er, hu-šu-e-er; part. hu-šu-ua-an-t-(OS), hu-uš-ua-an-t-, hu-iš-ưa-an-t- (OS), hu-i-šu-u्रa-an-t(OS), hu-iš-šu-ua-an-t- (OS), hu-u-iš-ua-an-t-, hu-u-i-iš-ua-an-t-; verb.noun hu-
$i s ̌-u a-a-t a r, ~ h u-i s ̌-u a-t a r, \quad h u-u-i s ̌-u a-t a r, ~ g e n . s g$. hu-e-eš-ua-an-na-aš, hu-iš-ua$a n-n a-a s ̌, ~ d a t .-l o c . s g . ~ h u-i s ̌-u a-a n-n i, ~ i n s t r . ~ T I-a n-n i-i t) . ~$

Anat. cognates: HLuw. hwisar (n.) 'game, wild beasts' (nom.-acc.sg. ${ }^{\text {BeStia }} H W I-s a ̀+r a / i-s a$ (ALEPPO 2 §5), "ANIMAL.bESTIA" HWI-sa $+r a / i$ (BOHÇA §5), HWI-sa ${ }_{5}+r a / i^{-}$' (BULGARMADEN §7))), hwisnamaia (n.?) '?’ (nom.acc.pl.(?) $\left.{ }^{\text {BESTIA }} H W I-s a ́-n a-m a-i ् 2 a ~(A S S U R ~ l e t t e r ~ a ~ § 10)\right) . ~$

IE cognates: Gr. ı̉av́ $\omega$, aor. ả $\varepsilon \sigma \alpha$ 'to spend the night', Skt. vásati 'to dwell', TochB wäs- 'to rest, to reside', Goth. wisan 'to be'.

PIE * $h_{2}$ ues-, * $h_{2} u s$ -
See Puhvel HED 3: 332f. for attestations. Witihin the verb, we find the stems huiš- and hueš-. Weitenberg (1984: 108f.) shows that spellings with -e- occur in young texts only, which fits our establishment that $\mathrm{OH} / \mathrm{i} /$ is lowered to $\mathrm{NH} / \mathrm{e} /$ before $-\check{s}$ - (cf. § 1.4.8.1.d). In the derivatives of this verb, we find a third stem, namely huš̌-, especially in several OS attestations of hušuant- (besides huišuant-). I therefore cite this lemma as huiš- ${ }^{z i}$ / huš-.
Already since Kuryłowicz (1927: 102) this verb is generally derived from the PIE root * $h_{2}$ ues- as reflected in e.g. Gr. ár $\sigma \alpha$ 'to spend the night', Skt. vásati 'to dwell', Goth. wisan 'to be'. Formally, the development of *h2ues-> OH huiš- can be understood if we apply the sound law as formulated by Melchert (e.g. 1994a: 101), namely $* e$ between $* u$ and dental consonant $>i$ (also in uitt- besides uett-).

Opponents against this etymology (e.g. Weitenberg 1984: 108f., Tischler HEG A: 265) point to the Luwian stem huit- 'to live' (see under the lemma huitar / huitn-), and raise the possibility that Hitt. -š- reflects *-di-. Apart from the fact that the sound law $* d i$ connection with Luw. huit- is difficult morphologically. We would have to assume a basic stem *hued-, of which a derivative *hued-iu- (but what kind of suffix is this *-i $u-$ ?) yielded Hitt. *huešu-, out of which a verbal stem hueš- was back-formed. This does not seem appealing to me. Moreover, the root huiš- is attested in HLuwian as well, which cannot be explained by an assibilation of *hued-
huitar / huitn- (n.) 'game, wild animals': nom.-acc.sg. [hu]-i-ta-ar (StBoT 25.19 obv. 15 (OS)), [hu-i]-ta-ar (StBoT 25.19 obv. 14 (OS)), hu-i-ta-ar (KBo 4.2 i 59 (OH/NS)), hu-u-i-tar (KUB 3.94 ii 18 (NS), KUB 8.62 i 2 (NS), etc.), hu-u-e-daar (KUB 36.67 ii 9 (NS)), gen.sg. hुu-it-na-aš (KUB 6.45 iii 16 (NH)) // hu-it-ta$a \check{s}$ (KUB 6.46 iii $56(\mathrm{NH})$ ), [h]u-it-na-aš (KUB 2.1 ii $16(\mathrm{OH} / \mathrm{NS})$ ), hu-u-it-na-aš (KBo 11.40 ii 5 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 33.57 ii 11 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 25.180 rev. 10
( $\mathrm{OH} / \mathrm{NS}$ )), erg.sg. hu-it-na-an-za (KBo 9.114, $7(\mathrm{OH} / \mathrm{MS})$ ), instr. hu-u-it-ni-it (KUB 24.2 ii 15 (NS)), nom.-acc.pl. hu-i-ta-a-ar (ABoT 5+ ii 17 (OS)), hu-i-da-$a[-a r]$ (KBo 22.224 obv. $3(\mathrm{OH} / \mathrm{MS})$ ), [ $h u$-]i!-da-a-ar (KUB 8.1 iii $10(\mathrm{OH} / \mathrm{NS})$ ), hu-u-i-ta-a-ar (KBo 10.23 iii 9 (OH/NS), KBo 10.24 i 11 (OH/NS)).

Derivatives: huitnaima- '?’ (gen.sg. hu-i-it-na-i-ma-aš (KUB 44.61 rev. 17 (NS))).
Anat. cognates: CLuw. huitar / huitn- (n.) 'game, wild animals' (nom.-acc.sg. huu-u-i-tar-ša), huitumar / huitumn- (n.) 'life' (nom.-acc.sg. hu-i-tu-mar-ša, hu-i-du-mar-ša), huitumnāhit- (n.) 'vitality: liveliness' (abl.-instr. hu-i-tum-na-a-hi-ta-ti, hu-i-tum-ma-na-hi-ta-ti, hu-u-tu ${ }_{4}$-um-na-hi-ta-ti), huitual(i)- (adj.) 'alive, living' (nom.sg.c. hu-i-du-ua-li-iš, hu-i-it-ua-li-iš, hu-it-ua-a-li-iš), huitualāhit(n.) 'life’ (nom.-acc.sg. hu-u-it-una-la-a-hi-ša, abl.-instr. hu-u-i-du-ua-la-a-hi-ta$t i$, hu-i-it-ua-la-hi<-tar-ti, hu-it-ua-la-hic-tar-ti), huitualiia- (adj.) 'of a living person' (nom.sg.c. [hu-]i-it-ua-a-li-i-iš, hu-it-ua-li-iš, nom.-acc.sg.n. hu-u-i-it-ua-
 nom.-acc.pl.n. hu-u-i-it-ua[li-i्1a]), huitualuuar (n.) 'being alive' (nom.-acc.pl.n. hu-u-i-du-u-ua-lu-ua-ra); HLuw. hwitar (n.) 'game, wild animals' (nom.-acc.sg. ${ }^{\text {Bestia }}$ HWI-tara/i (MARAŞ 1 §11)), hwitnia- (adj.) 'of the wild animals(?)' (nom.-acc.sg.n. HWI-tà-ni-ia-za (ŞIRZI §4))).
IE cognates: ON vitnir 'creature'.

$$
\text { PIE * } h_{2} u e ́ i d-r / * h_{2} u i d-n \text {-ós. }
$$

See Puhvel HED 3: 352f. for attestations. Puhvel cites the word as "huedar, huitar", but in the overview above we can see that almost all words are spelled with - $i$ - (note that the sign IT can be read it as well as et and therefore is nonprobative), including OS ones. The only form with -e-, hu-u-e-da-ar (KUB 36.67 ii 9) is found in a NS text and therefore may not be phonetically relevant. Puhvel cites another form with -e-, namely gen.sg. "hu-ú-e-id-na-as" (KUB 1.16 ii 46 $(\mathrm{OH} / \mathrm{NS})$ ), but it should be noted that this form is crucially broken ([...]ú-e-et-na$a \check{s} \ldots$..., and that its context is not fully clear. Moreover, it would be one of the very few examples where we would find the sign HU followed by Ú in Hittite (cf. § 1.3.9.4.f), and I therefore do not follow Puhvel's restoration.
This word is remarkable because it inflects huitar / huitn-, showing a cluster -tn- whereas in e.g. abstract nouns in -ātar / -ānn- the cluster *-tn- assimilated to $-n n$-. It therefore has been claimed that the word in fact is a Luwianism. Because of the OS attestations, this seems unlikely to me. Puhvel (1.c.) ingenuously remarks that in huitar / huitn- the cluster -tn- must reflect *-dn- (with *-d- as
visible in nom.-acc.sg. huitar, CLuw. huitumar, huituali-, etc.) and that *-dn-did not assimilate (unlike *-tn->-nn-), as is clear from utn $\bar{e} /$ utni- 'land' (q.v.).
In Hittite, the word huitar / huitn- does not have cognates (apart perhaps from the unclear hapax hu-i-it-na-i-ma-aš), whereas in CLuwian the root huid- is wider spread, and seems to denote 'life, to live' (cf. e.g. huitumar 'life', huitual(i)'alive, living'). This meaning resembles the meaning of Hitt. huiš- 'to live' a lot, and it therefore has been assumed that huid- and huiš- in fact are cognate. See at huišz- ${ }^{-i}$ / huš- for the problems regarding this assumption. It cannot be denied, however, that at least in HLuwian the roots hwit- and hwis- were synchronically connected, as is apparent from the fact that we find hwisar / hwisn- besides hwitar / hwitn-, both meaning 'game, wild animals'.
Puhvel (HED 3: 355) etymologically connects huitar / huitn- with ON vitnir 'creature', which would point to a root $* h_{2} u e i d-$. For Hittite, this means that we can reconstruct a formation *h $h_{2}$ uéid-r $/ * h_{2}$ uid-n-ós.
huitt(iie/a)-: see huett(iie/a)-, huttiie/a-
hulla-: see hulle- ${ }^{z i}$ / hull-

Derivatives: huläliie/a- ${ }^{z i}$ (Ic1) 'to entwine, to encircle' (1sg.pres.act. hu-la-a-li-e-mi (OS), h. hu-la-a-li-i्2a-mi (OS), 3sg.pres.act. hu-la-a-li-e-z[i] (OS), hau-la-a-li$e z-z i$ (OS), hu-la-a-li-az-zi, hau-la-li-ia-az-zi, hu-u-la-li-e-ez-zi, hu-u-la-li-ez-zi, hu-u-la-a-li-ez-zi, [hu-]ul-la-li-ia-az-zi (1x), 3pl.pres.act. hau-la-li-an-zi, hu-u-la-
 3sg.pres.midd. hu-la-li-ia-at-ta-ri, 3sg.pret.midd. hu-u-la-li-et-ta-at (MH/MS); part. hu-la-li-an-t- (OS), hu-u-la-li-an-t-; verb.noun hu-u-la-li-įa-u-úa-ar (MH/MS); impf. hu-u-la-a-li-eš-ke/a-, hu-u-la-li-iš-ke/a-), hulalieššar / hulaliešn- (n.) 'encirclement' (nom.-acc.sg. ḩu-la-li-eš-šar (OH/NS), dat.-loc.sg. hu-u-la-li-eš-ni), hulhuliie/a- (Ic1) 'to embrace, to wrestle' (3sg.pres.act. hu-ul-hu-li-ia-zi, 3sg.pret.act. huu-ul-hu-li-ia-at, 3pl.imp.act. huu-ul-hu-li-an-du; part. hu-ul-hu-li-ía-an-t-; verb.noun hu-ul-hu-li-ịa-ua-ar), hulhul(ii)a- 'wrestling' (dat.loc.sg. hu-ul-hu-li-i्1a, hu-ul-hu-liliz-ia, hu-ul-hu-la).

See Puhvel HED 3: 361f. for attestations. The interpretation of Giš hulāli- as 'distaff' is especially based on the fact that it is used in combination with GIšhueša- 'spindle', e.g. in KBo 6.34 ii (42) nu TÚG ŠÁ MUNUS GIšhu-la-a-li GIŠh $h u-e-s ̌ a-a n-n=a$ (43) $u$-da-an-zi 'They bring a woman's clothe, a distaff and a
spindle'. For formal reasons, it is obvious that the verb hulāliie/a- ${ }^{z i}$ 'to entwine, to enwrap' is derived from it, which is supported by the figura etymologica KUB
 the distaff is the staff around which the wool was wound from which a thread was spun that then was wound around the spindle, it is likely that hulali is cognate with the root *hul- 'wool' as visible in hulana- 'wool' and huliia- 'wool'. See under hulana- for further etymology.
hulana- (c.) 'wool' (Sum. SÍG): acc.sg. SÍG-an, dat.-loc.sg. hu-u-la-[n(i)] (KBo 3.8 iii 8), [(hu-u-la-)n]i (KBo 3.8 iii 26), instr. SÍG-ni-it.

Derivatives: huliia- (c.) 'wool' (nom.sg. hu-li-ia-aš).
Anat. cognates: CLuw. *hulana/i- (c.) 'wool' (nom.sg. SÍG-la-ni-iš, abl.-instr. SÍG-ti).

The word for 'wool' is almost always spelled sumerographically with the sign SÍG. On the basis of parallel texts, two phonetic spellings have been discovered. On the one hand, the parallel texts KBo 11.10 ii (29) UDU ${ }^{\text {HI.A }}$-aš hu-li-i-ia-aš // KBo 11.72 ii (33) UDU ${ }^{\text {HI.A }}$-aš SÍG-aš 'wool of the sheep', show a spelling huliia-. On the other, the parallel texts KUB 26.50 i (25) KỤR URU? ${ }^{\text {ÍD }}$ SÍG-na ${ }^{\text {URU }} I r-h a-a n-t a\left[\left(-a s ̌{ }^{\text {URU }}\right.\right.$ Ki-) $] i g-g i-i p-r a-a s ̌ / / ~ K U B 26.43$ i (31) KUR URU ${ }^{1}\left[{ }^{\mathrm{D}}\right] H u-$
 This latter reading also fits the occasional phonetic complements to SÍG: instr. SÍG-ni-it (KUB 24.10 iii 13, KUB 24.11 iii 11). A full phonetic spelling hulanamay be visible in the following difficult passage, if a translation 'wool' would be justified here.

KBo 3.8 iii

$$
\begin{equation*}
\text { pár-ti-an-za ha-a-ra-aš[ } \left.{ }^{\text {MUŠ̌EN? }}\right] \tag{6}
\end{equation*}
$$

(7) ḩa-mi-ik-ta $[\check{s} a-m] a-a n-k u-u ́ r-u{ }_{2} a-d u-u s ̌=k a ́ n ~ M U S ̌{ }^{\text {HI.A }}-u s ̌$
(8) an-da hu-u-la-[n(i)]ha-mi-ik-ta
(25) $\left[h a-a-r a-a \text { ̌ }^{\mathrm{M}}\right]^{\mathrm{UŠEN}}$ la-a-at-ta-at ša-ma-an-ku-úr-ua-an-te-eš MUŠ ${ }^{\text {HI.A }}$
(26) $[(h u-u-l a-) n] i l a-a-a t-t a-a t$
'He bound the $p$. eagle, he bound the bearded snakes in $h . \ldots$ He released the $p$. eagle, he released the bearded snakes in $h$.'

In CLuwian, we find a nom.sg. SÍG-la-ni-iš (KUB 25.39 iv 6) that seems to belong with Hitt. hulana- and then must be read as hulaniš.

All in all, we must assume two words for wool, namely huliia- and hulana-. Because of their formal similarity, it is likely that both are derived from a root hul- 'wool', which then possibly also underlies hulāli- 'distaff' (q.v.) and its derivatives hulaliie/a- ${ }^{z i}$ 'to entwine'.
Since Friedrich (1961), hulana- has been compared with the words for 'wool' in the other IE languages: Skt. $\frac{\bar{u} r n ̣ a ̄-, ~ G r . ~}{\text { n }} \boldsymbol{\eta} v o c$, Lat. lāna-, Goth. wulla, Lith. vilna, etc. If we leave the Anatolian forms out of consideration, these forms point to *ulh ${ }_{1} n e h_{2}$. On the basis of Hitt. hulana- this reconstruction is now widely adapted to $* h_{2} u l h_{1} n e h_{2}-$. There are some problems, however. First, the development of $* h_{2} u l h_{1} n$ - to Gr. $\lambda \tilde{\eta} v o s$ is not easy to explain. If the form vocalized as $* h_{2} u l h_{l} n-$, we would in principle expect $* * \dot{\alpha} \lambda \tilde{\eta} \nu-$. Secondly, if Hitt. hulana- reflects *h $h_{2}$ ulh $n$-, the $-a$ - is unexpected. It has been claimed that hulanastands for /Holna-/ (cf. Melchert 1994a: 65), but then we should rather expect a spelling **hu-ul-na-. Thirdly, if hulana- and huliia- together with hulali- point to a root hul-, this hul- does not fit *h2ulh $h_{l^{-}}$, which should have yielded **hull-. So, all in all, if the PIE word for 'wool' was $* h_{2} u h_{1}$ neh $_{2}$-, I would have rather expected Hitt. /huLna-/, which should have been spelled either **hu-ul-na- or **hu-ul-la-na- but not hu-la-na- as attested.

Kronasser (1967: 45) rather connects hul- with a Hurrian noun *hul(a)- 'wool' which is only attested as a loanword in Akk. hul(l)anu, a piece of clothing made of wool, which is used in texts from Nuzi and Alalah.
hulle- ${ }^{z i}$ / hull- (Ia1 > Ic1, IIa1 $\gamma$ ) 'to smash, to defeat': 2sg.pres.act. hu-ul-la-ši (KUB 37.223 rev. 5 (OS)), 3sg.pres.act. hu-ul-le-ez-z[i] (KUB 29.32, 4 (OS)), hu-ul-le-ez[-zi] (KUB 29.32, 5 (OS)), hu-ul-le[-ez-zi] (KBo 3.22 obv. 35 (OS)), hu-ul-le-ez-zi (KUB 34.53 rev. 9 (MS), KUB 40.54 rev. 2 (NS), (IBoT 3.131, 5 (NS)), hu-ul-le-zi (KBo 20.82 ii 27 (OH/NS)), huu-ul-la-az-zi (KUB 37.223 obv. 4 (OS)), hu-u-ul-la-az-zi (KBo 6.26 ii 11 (OH/NS)), hu-ul-[(le-e-ez-zi)] (KBo 3.22 obv. 34 (OS) // ḩu-ul-le-e-ez-zi KUB 36.98a obv. 5 (OH/NS))), hau-u-ul-li-ía-az-zi (KBo 6.26 ii 12 ( $\mathrm{OH} / \mathrm{NS}$ )), hu-ul-li-ía-az-zi (KBo 4.10 obv. 46 (NH)), hu-ul-la-i (KBo 6.28 rev. 29 (NH), KUB 31.59 iii 26 (NS)), hu-ul-la-a-i (KBo 6.29 iii 42 (NH), KUB 26.50 rev. $9(\mathrm{NH})$ ), 2pl.pres.act. [ $h u^{?}$-] $u l$-la-at-te-ni (KUB 26.34 rev. 5 (NH)), 3pl.pres.act. hau-ul-la-an-zi (KUB 17.21 iv 19 (MH/MS), KBo 6.3 ii 12 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 35.148 iv $7(\mathrm{OH} / \mathrm{NS})$ ), hu-u-ul-la-an-zi (KBo 6.5 iii $8(\mathrm{OH} / \mathrm{NS})$ ), 1sg.pret.act. hu-ul-la-nu-un (KBo 3.22 obv. 11, 15 (OS), KUB 31.64 iii 10 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 2.5 ii $11(\mathrm{NH})$, KBo 5.8 iii $29(\mathrm{NH})$, KUB 33.106 iv $13(\mathrm{NH})$ ),
hu-ul-la-a-nu[-un] (KUB 23.21 iii 28 (MH/NS)), hu-ul-li-ía-nu-un (KBo 10.2 i 35, ii 16 (fr.) (OH/NS), KUB 23.33, 5 (OH/NS), KBo 3.6 ii 9 (NH), KUB 1.1 ii $25(\mathrm{NH})$, KUB 14.3 i $25(\mathrm{NH})$ ), 3sg.pret.act. hu-ul-le-et (KUB 36.99 rev. 4 (OS), KBo 3.38 obv. 15 (fr.), 31 (OH/NS), KBo 22.2 rev. 8 (OH/MS), KBo 3.1 i 29 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 3.46 obv. 25 (OH/NS), KUB 12.26 ii 23 (NS), KUB 19.11 iv 39 (NH)), hu-ul-li-i-e-et (KUB 14.15 i $29(\mathrm{NH})$ ), hu-ul-li-ía-at (KBo $2.5+16.17$ iii $40(\mathrm{NH})$, KBo 14.3 iv $33(\mathrm{NH})$, KUB 14.22 i $6(\mathrm{NH})$, KUB 19.18 i $28(\mathrm{NH})$ ), hu-u-ul-li-ia-at (KUB 19.8 iii $30(\mathrm{NH})$ ), hu-ul-li-iš (KBo 3.38 rev. $24(\mathrm{OH} / \mathrm{NS})$ ), hu-ul-la-aš (Bronzetafel i 98 (NH)), 1pl.pret.act. hau-ul-lu-mé-en (KUB 23.21 obv. 29 (MH/NS)), hu-ul-lu-um-me-[en] (KBo 3.15, 6 (NS)), hu-u-ul-li-ia-u-en (KUB 23.16 iii 9 (MH/NS)), 3pl.pret.act. hu-ul-le-er (KUB 31.124 ii 12 (MH/MS), KBo 3.18 rev. 8 (OH/NS), KBo 3.38 obv. 32 (OH/NS)), hu-ul-li-e-er (KBo 3.16 rev. 2, 3, 4 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.imp.act. hu-ul-la-ad-du (KUB 35.148 iv 8 ( $\mathrm{OH} / \mathrm{NS}$ )); 3pl.pres.midd. huu-ul-la-an-ta-ri (KUB 17.28 iv 45 (MH/NS)), 3sg.pret.midd. [hu-ul-]la-at-ta-ti (KBo 3.29, 14 ( $\mathrm{OH} / \mathrm{NS}$ )) // hu[-ul-la-at-ta-ti] (KBo 8.41, 4 ( $\mathrm{OH} / \mathrm{NS}$ )), hu-ul-la-ta-at (KUB 14.17 ii 29 (NH)), 3sg.imp.midd. hu-la-da-ru (KBo 3.29, 15 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 8.41, $5(\mathrm{OH} / \mathrm{NS})$ ); part. hu-ul-la-an-t- (KUB 24.8 ii 18 (OH/NS)); impf. huu-ul-li-iš-ke/a-.
Derivatives: hullātar (n.) 'infliction' (nom.-acc.sg. hu-ul-la-a-tar, hu-ul-la-tar), hullumar (n.) 'defeat' (nom.-acc.sg. hu-u-ul-lu-mar (KBo 14.4 i 28 (NH)), hullanza- (c.) 'defeat' (acc.sg. hu-ul-la-an-za-an (OS)), hullanzai- (c.) 'infliction, defeat' (nom.sg. ḩu-ul-la-an-za-iš, hul-la-an-za-iš, acc.sg. hu-ul-la-an-za-in), hullanzatar / hullanzann- (n.) 'infliction, defeat' (nom.-acc.sg. huu-ul-la-an-za-tar, hu-u-ul-la-an-za-tar, hu-ul-la-a-an-za-tar, dat.-loc.sg. hu-ul-la-an-za-an-ni), hullanzeššar / hullanzešn- (n.) 'infliction’ (dat.-loc.sg. hu-ul-la-an-zi-eš$n i$, abl. hu-ul-la-an-zi-eš-na-az).

PIE * $h_{2}$ uelh $h_{1}$-: * $h_{2} u l-n e ́-h_{1}-t i, * h_{2} u l-n-h_{1}$-énti
See Puhvel HED 3: 363f. for attestations. In the oldest texts (OS), we often find the spelling $h u-u l-L I-I Z-z i$ and $h u-u l-L I-I T$, which are ambiguous regarding their interpretation. Because the sign LI can be read $l i$ as well as $l e$, the sign IZ can be $\operatorname{read} i z$ as well as $e z$ and the sign IT can be read it as well as et, the spelling hu-ul-LI-IZ-zi could in principle be read hullizzi, hulliezzi or hullezzi, and similarly hu-ul-LI-IT as hullit, hulliet or hullet. A reading hullie- (i.e. /HoLie-/) in my view is not likely, as there are no other examples of the stem hulliie/a- in OS or MS texts (but note that in NS texts we do find hulliie/a- and the corresponding unambiguous spellings hu-ul-li-i-e-et /HoLiét/). The choice between hulli- and hulle- is difficult, however. On the basis of the fact that hulle/i- seems to alternate
with hulla-, I assume that we have to read hulle- since an alternation $e: a$ is better understandable than an alternation $i: a$.
As already mentioned, this verb shows quite a wide variaty of stems. Already in OS texts, we find different stems: 3sg.pres.act. hullezzi and 3sg.pret.act. hullet show a stem hulle- ${ }^{z i}$, whereas 2sg.pres.act. hullaši, 3sg.pres.act. hullazi and 1sg.pret.act. hullanun show a stem hulla- ${ }^{z i}$. A stem hulliie/a- ${ }^{z i}$ is found in NS texts only, and clearly must be secondary. The same goes for the occasional hiinflected forms 3sg.pres.act. hullāi, 3sg.pret.act. hullaš and hulliš (all based on the stems hulla- and hulli-). A stem hull- is found in 1pl.pret.act. hullumen (MH/NS), hullumme[ $n$ ] (NS) and derivative hullumar (NH), which are all from NS texts and therefore at first sight do not seem to be of much value. The interpretation of 3pl.pres.act. hullanzi $(\mathrm{OH} / \mathrm{MS})$ is less certain. It could in principle show a stem hulla-, but in my view, a stem hull- is much more likely, which would give more value to the forms hullumen and hullumar as well. So all in all, I regard the stems hulle- ${ }^{z i}$, hulla- ${ }^{z i}$ and hull- as original, but it should be noted that in OS texts the stem hulle- ${ }^{z i}$ is more numerous than hulla- ${ }^{z i}$. This situation reminds of the verb zinni- ${ }^{z i} /$ zinn- 'to finish' that also occasionally shows a stem zinna- in OS texts already. I therefore think that it is possible that hulle-/hulla-/hull- should be judged similar to zinni- ${ }^{z i} /$ zinn-, which would mean that the original ablaut is hulle- ${ }^{z i}$ / hull- (which is the reason for me to cite this verb thus in this lemma). The stem hulla- probably arose in analogy to stems in -ie/a- or -ške/a- where -e- alternates with -a-.
As I have argued in detail under its own lemma, zinni- ${ }^{z i} /$ zinn- reflects an $n$ infixed stem of the root *tieh $h_{1^{-}}: * t i-n e-h_{l^{-}} / * t i-n-h_{l^{-}}$. Applying this structure to hulle- ${ }^{z i}$ / hull-, we have to reconstruct *hul-ne- $h_{l^{-}} / * h u l-n-h_{l^{-}}$. Because the cluster *-ln- assimilates to Hitt. *-ll- (cf. Melchert 1994a: 81f.), the regular outcomes are Hitt. hullē- / hull- (note however, that in the case of zinni- that unambiguously must have $-i$-, the vowel $*-\bar{e}-<*$-eh $h_{1}$ apparently was raised to $-i$-).
All these considerations lead to reconstructing the root as *h2 $h_{2}$ lh $_{l^{-}}$(the initial $* h_{2}$ is obligatory because $* h_{3}$ would not have been retained as $h$ - in this position, cf. Kloekhorst fthc.c). Note that this reconstruction precludes a connection with ualh- 'to hit, to strike' (q.v.), which must reflect *uelh ${ }_{3}$-.
As cognates, one could think of OIr. follnadar 'to rule' $(*(H) u l-n e-H-)$, Lat. ualeō 'to be powerful' $(*(H) u l H-i e / o-)$ and, with a *- $d^{h}$-extension, Lith. véldu 'to own', Goth. waldan 'to rule' and OCS vlado 'to rule'.
hulli-: see halle- ${ }^{z i} /$ hull-
huliia- 'wool': see at hulana-
hulliie/a- ${ }^{z i}$ : see hulle- ${ }^{z i}$ / hull-
huldalae- ${ }^{z i}$ : see huuantalae- ${ }^{z i}$
 hu-lu-ka-an-ni-in (OH/NS), hu-u-lu-ka-an-ni-in (OH/NS), hu-lu-ga-an-ni-in (MS), hu-u-lu-ga-an-ni-in (OH/NS), hu-lu-ga-an-ni-en (OH/NS), gen.sg. hu-lu-ga-an-na-aš (MH/MS), dat.-loc.sg. hu-lu-ka-an-ni-i̇a (OS), hu-lu-ga-an-ni-ia (OS), h hu-u-lu-ga-an-ni-ia (OH/NS), hu-lu-ka-an-ni (MS), hu-lu-ga-an-ni (MH/MS, OH/NS), hu-u-lu-ka-an-ni (OH/NS), hu-u-lu-ga-an-ni (NS), abl. hu-lu-ga-a[n-ni-a]z (OS), hu-lu-ga-an-ni-ía-az (MS), hu-u-lu-ga-an-ni-az (NS), hu-lu-ka-a-an-na-az (MH/MS), ḩu-lu-ga-a-an-na-za (MH/MS), hu-lu-ga-an-na-az (OH/NS), hu-lu-ga-na-az (MH/MS), hu-u-lu-ga-an-na-az (OH/NS), hu-lu-ga-an$n a-z a(\mathrm{OH} / \mathrm{NS})$, hu-lu-ga-an-na-az-za (OH/NS), instr. hu-lu-ga-an-ni-it (NS), hu-u-lu-ga-an-ni-it (OH/NS).

See Puhvel HED 3: 370f. for attestations. All attestations are spelled with either $h u$-lu- or $h u-u-l u$-, but on the tablet KBo 22.181 we come across a spelling ha-lutwice, namely rev. 2 and 4 . In my view, both forms must be regarded as copy mistakes (possible reading a squeezed $\mathrm{HU}+\mathrm{U}\left(\mathrm{H}_{4}\right)$ as HA (表) , cf. the incorrect PÍ ( ) instead of GA (2) [...] ${ }^{\text {GIŠh } h a-l u-p i-a n[-. . .], ~ w h i c h ~ c l e a r l y ~}$ must be ${ }^{\text {GIŠ }}$ ha-lu-ga'-an[-...]).

The oldest forms of this word show an $i$-stem hulukanni-, but we encounter $a$ stem forms as well, from the MH period onwards already. In an OAss. text from Kültepe, AKT 1.14, we come across the forms acc. pl. hu-lu-kà-ni and gen.sg. hi-lu-kà-ni-im, which would seem to point to a pronunciation [hlu-]. According to Puhvel (l.c.), this speaks in favour of Laroche's derivation (1960: 125) from haluga- 'message', of which an interpretation /Hluga-/ seems certain. Note that on the basis of this derivation, Laroche translates hulukanni- as "voiture de poste". First it should be noted that there is no contextual evidence that hulukanni- has anything to do with postal services. Secondly, the OAssyrian forms cannot be equated with hulukanni- on semantic grounds (cf. Dercksen (fthc.), who assumes that these words are the OAssyrian adaptations of Hitt. haluga- (q.v.)). Moreover, it is in my view hard to explain why haluka- is consistently spelled with ha- whereas hulukanni- is always spelled with hu- if both words would have the same phonetic shape, namely $/ \mathrm{Hlu} \%$ I therefore do
not accept this etymology. In my view, it is likely that hulukanni- is of a non-IE origin.
hṻmant- (adj.) 'every, each, all; whole entire': nom.sg.c. hu-u-ma-an-za (OS), acc.sg.c. hu-u-ma-an-da-an (OS), hu-u-ma-an-ta-an (MH/MS), nom.-acc.sg. hu-u-ma-an (OS), hu-ma-an (KBo 3.7 i 15, KBo 10.45 iii 54, KBo 18.72 l.edge 5), ḩu-ma-a(n)=š-ša-an (KBo 5.1 iii 16), gen.sg. ḩu-u-ma-an-da-aš (OS), hu-u-ma-an-ta-aš, [h]u-u-ma-an-da-a-aš (KUB 24.4 rev. 5), dat.-loc.sg. hu-u-ma-an-ti (OS), hu-u-ma-an-ti-i (KBo 4.4 iv 13, VBoT 120 ii 22), hu-u-ma-an-te (KUB 24.9 ii 31, KUB 13.2 iv 10, KUB 13.1 iv 14), hu-u-ma-an-ti-ía, abl. hu-u-ma-an$d a-a z$, hu-u-ma-an-da-za, hu-u-ma-an-ta-az, hu-u-ma-an-ta-za, instr. hu-u-ma-an-te-et (OS), hu-u-ma-an-ti-it (OS), nom.pl.c. hu-u-ma-an-te-eš (OS), hu-u-ma$a n-t e-e \check{s}_{17}$, hu-u-ma-an-ti-iš, acc.pl.c. ḩu-u-ma-an-du-uš (OS), nom.-acc.pl.n. h. hu-u-ma-an-da (OS), hu-u-ma-an-ta (OS), hu-u-ma-an-ti (KUB 32.123 ii 41), gen.pl. hu-u-ma-an-da-an (KUB 10.15 iv 29 (OH/NS)), hu-u-ma-an-da-aš, hu-u-ma-an$d a-a-a \check{s}$, dat.-loc.pl. hu-u-ma-an-da-aš, hu-u-ma-an-ta-aš, hu-u-ma-an-da-a-aš; broken hu-ma[-an-...] (KBo 39.58, 4 (MS)).
IE cognates: ?Skt. ubhá- 'both'.
PIE * $h_{2} u$-uent-?
See Puhvel HED 3: 373f. for attestations. The adjective is almost consistently spelled with plene $-u$-. In my files, I have found only 5 instances of a spelling $h u$ $m a$ - (of which the forms of KBo 10.45 iii 54 and KBo 18.72 l.edge 5 are written on the edge of the tablet, which makes it possible that they are reduced spellings due to lack of space) vs. 846 instances of the spellings $h u-u$-ma-. This seems to point to a phonological form /Hómant-/. The word denotes 'every, each' but also 'whole, entire'.
An etymological interpretation of this adjective is difficult. If we analyse the word as containing the suffix -ant- (like e.g. dapiant- besides dapi- 'all, every, each'), we are left with a stem hūm-. This hūm- has been etymologically connected with Lat. omnis (first by Holma 1916: 54-5), but formally this connection does not work. If we analyse hūmant- as having a suffix *-uant-, however, we could assume that it goes back to *hu-uant- 'having hu-'. Puhvel (l.c.) proposes to connect this hu- with Skt. ubhá- 'both' and reconstructs $* h_{2} u$ -uent- '*having both > having all'. Semantically as well as formally, this etymology is certainly possible. It remains awkward, however, that no other cognates of the element $* h_{2} u$ - are known.

This ending is normally spelled ${ }^{\circ} \mathrm{C}-h u-u n$ and ${ }^{\circ} V h-h u-u n$, but we encounter a spelling -ḩu-u-un several times ([a]r-ȟu-u-un (KBo 19.76 i 15), hal-zi-ih-hुu-u-un (KUB 6.46 iii 62), šu-up-pí-ia-ah-ḩu-u-un (KBo 12.85+ i 26), da-ah-hnu-u-un (ibid. i 34), tar-na-ah-hu-u-un (KUB 31.52 obv. 13)), which indicates that phonologically this ending was /-Hon/. This ending belongs to the hi-conjugation and therewith stands in contrast to the mi-ending -(n)un. In the younger texts we find a few original hi-verbs in which ending -hhun has been replaced by the miending -(n)un: a-an-šu-un (MH/NS) instead of **ānšhun, ha-ma-an-ku-un (MH/NS) instead of **hamankhun, ha-a-šu-un (NS) instead of ha-a-aš-hu-un. If $l a-a-h u-u n(M S)$ 'I poured' is to be regarded as such a case as well (so instead of expected **lāhuhhun, although we cannot rule out the possibility that this latter form regularly yielded lāhun anyway), then we must conclude that this development started in MH times already. It must be noted that no mi-inflecting verb ever shows the ending -hhun.
If we compare the 1 sg.pret.act.-endings in the other Anatolian languages, where we find Pal. -hha, Luw. -(h) ha and Lyc. - $\chi a$, it is clear that we must reconstruct a PAnat. ending */-Ha/ (with $-a$ because of Lyc. $-a$ ). In Hittite, we are apparently dealing with a conflation between this PAnat. */-Ha/ and the mi-ending -un < ${ }^{*}{ }^{\circ} C$ - $m$.

It should be noted that the ending -hhun always shows geminate $-h h-$, whereas the corresponding Luwian ending shows -hha as well as -ha, depending on whether or not the -hh-stood in leniting position. In Hittite, the unlenited variant was generalized.
huni(n)k- ${ }^{z i}$ (Ib3) 'to batter, to bash, to crack': 3sg.pres.act. hu-u-ni-ik-zi (OS, often), hau-ú-ni-ik-zi (KBo 6.2 i 16 (OS)); 3sg.pres.midd. h. hu-ni-ik-ta-ri, hu-u-ni$i k-t a-r i, 3 \mathrm{sg} . p r e t . m i d d$. hu-u-ni-ik-ta-at, hu-ni-ik-ta-at; part. hu-u-ni-in-kán-t(OS), hu-u-ni-kán-t- (KBo 6.2 i 15 (OS) // KBo 6.5 i 3 (OH/NS)); verb.noun $h u$ - $u$-]ni-ki-iš-ša-[ar] (KBo 1.51 rev. 15 (NS)).

PIE * $h_{2} u-n e-g^{(h)}$ -
See Puhvel HED 3: 381 for attestations. The verb clearly belongs to the nasal infix verbs that show the element -nin-. As with all these verbs, the original distribution is that the second $-n$ - drops in front of $-k C$-. It is odd, however, that the OS attestation hu-u-ni-kán-za (KBo $6.2 \mathrm{i} \mathrm{15)} \mathrm{does} \mathrm{not} \mathrm{follow} \mathrm{this} \mathrm{rule:} \mathrm{the}$ regular form hu-u-ni-in-kán-za is found in the same paragraph (KBo 6.2 i 14).

Possibly, the spelling hu-u-ni-kán-za was caused by lack of space (in the handcopy we can see that the last words of the sentence that it occurs in are squeezed onto the tablet to fit the line). The NS attestation hūnikiššar does not fit the rule either, but this is probably due to the fact that the original distribution (-inkV- vs. -ikC-) was lost in NH times (cf. the paradigm of $\left.l i(n) k-{ }^{z i}\right)$.
The word is occasionally spelled with plene $-u$-, which points to a phonological interpretation /Honink-/ (with the phoneme /o/ that is the regular outcome of $* u$ adjacent to $/ \mathrm{H} /$ ). Once, it is spelled with plene $-u$ - , namely hu-ú-ni-ik-zi (KBo 6.2 i 16 (OS)). Apart from the fact that on the same tablet the verb occurs spelled $h u$ -$u$-ni- as well (hu-u-ni-kán-za and hu-u-ni-in-kán-za as cited above), this form is the only instance known to me in all the Hittite texts where we find a sequence $h u$-ú- (vs. 2127 cases of $h u$ - $u$ - in my text files). It is remarkable that on this same tablet we find a spelling a-pu-ú-un 'him' (KBo 6.2 ii 32), which is the only spelling with plene $-u$ - known to me instead of normal $a-p u-u-u n$ ( 154 x in my files). Apparently, the scribe of KBo 6.2 occasionally mixed up the signs $U$ and Ú. These spellings with plene $-u$ - therefore do not have any value.
The verb denotes 'to bash (trans.)' when active, and 'to crack (intr.)' when middle, and therefore seems to be derived from huek- ${ }^{z i}$ / huk- 'to slaughter, to slay'. It is remarkable, however, that huni(n) $k^{z i}$ does not have a causatival meaning, as the other nasal infix verb with -nin- seem to have. See § 2.2.4 for the prehistory of this type of nasal-infixed verbs. See at the lemma of huek- ${ }^{\text {zi }}$ / hukfor further etymology.
huntariia(i)- ${ }_{-}^{\text {tu(ri) }}$ (IIIg $>$ IIIh) 'to break wind, to fart': 3sg.pres.midd. hu-un-ta-ri-ia-it-ta (KUB 17.28 ii 8 (NS)); verb.noun hu-un-tar-ri-ia-u-ua-ar (KBo $1.44+$ 13.1 iv 29 (NS)).

Derivatives: huntarnu- ${ }^{z i}$ (Ib1) 'to grunt (of pigs)' (3sg.pres.act. hu-un-tar-nu-uz-zi), huntarriamma- (adj.) 'grunting (of pigs)' (abl. hu-un-t[ar-r]i-am-ma-za).

PIE * $h_{2} u h_{1}$-nt-r-ie/o-
See Puhvel HED 3: 382f. for attestations and semantic discussion. He convincingly connects these words to huuant- 'wind' (q.v.), which means that we are dealing with a denominative in -ariie/a- (cf. gimmantariie/a- ${ }^{z i}$ 'to spend the winter', nikumandariie/ $a_{-}{ }^{z i}$ 'to denude' (Eichner 1979a: 56)). See at huuant- for further etymology.

```
hupp-: see huuapp-- / hupp-
```

hurrani-: see harrani-
 ki-in, gen.sg. hur-ki-aš, dat.-loc.sg. hur-ki, acc.pl. hur-ki-uš.
IE cognates: Skt. varj- 'to turn (around)', Lat. vergere 'to incline', OE wrencan 'to turn, to wring'.

PIE * $h_{2}$ urg-i-
See Puhvel HED 3: 399f. for attestations. Since Kronasser (1957: 121) this word is connected with Skt. varj- 'to turn (around)', which then must go back to $* h_{2}$ uerg- (with initial $* h_{2}$ - since $* h_{3}$ would not have been retained as $h$ - in this position, cf. Kloekhorst fthc.c). Note that the initial larygneal of this root is also
 $h_{2} \operatorname{urg}$-). This means that Hitt. hurki-must reflect ${ }^{2} h_{2} u r g-i$.
hurkil- (n.) 'perversity': nom.-acc.sg. hu-ur-ki-il (OS), hu-ur-ki-i-i[l] (KBo 46.17 obv.? 5 (MS)), hu-u-ur-ki-il (OH/NS), hur-ki-il (MH/NS), hur-ki-el (KUB 30.67, 9 (NS)), gen.sg. huu-ur-ki-la-aš (OH/MS), hur-ki-la-a-aš (KBo 31.121 obv.? 15 (NS)), abl. hur-ki-la-za, \& hu-úr-ki-la-za.
Anat. cognates: CLuw. hurkil- 'perversion’ (gen.adj.acc.pl.c. hur-ki-la-aš-ši-in$z a)$.

PIE * $h_{2} u r g-i l-?$ or $* h_{2} u r g^{h}-i l-$ ?
See Rieken 1999a: 477f. for attestations and discussion. The word refers to sexual offences like incest and bestiality, and may therefore be translated 'perversity'. The etymological interpretation of this word has been in debate. On the one hand, scholars have connected hurkil- with hurki- 'wheel', through '(wrong) twist' (see the literature in Tischler HEG 1: 302f.), but this does not seem very attractive to me semantically. On the other hand, Puhvel (l.c.) connects hurkil- with the root *(H)uerg' ${ }^{h}$ - 'to strangle' (OE wyrgan 'to strangle', Lith. veržiù 'to tie in', OCS $-v r b z Q$ 'to bind'). This root seems to be restricted to the north-western European languages, however (unless Alb. zvjerdh 'to disaccustom' is connected), which does not make it an evident etymology either. Both solutions would imply that the Luwian word is borrowed from Hittite, as PAnat. lenis velars are lost in Luwian.
hurn- 'to hunt': see huuarn- / hurn-
hurna-, hurne-, hurniie/a- 'to sprinkle': see harna- ${ }^{\text {zi }}$ / harn-
hurt(a)-: see huuart ${ }^{i}$ / hurt-
huš-: see huiš- ${ }^{z i} /$ huš̌-
huške/a- ${ }^{z i}$ (Ic6) 'to wait for, to linger': 2sg.pres.act. h hu-u-uš-ke-ši, 3sg.prs.act. ḩu$u s ̌-k e-e z-z i, 3$ pl.pres.act. ḩu-uš-kán-zi, 3sg.pret.act. hu-uš-ke-et, 2pl.pres.act. hu-u-uš-ke-et-tén, 2sg.imp.act. hu-u-uš-ke; verb.noun hu-uš-ke-u-ưa-ar.
Derivatives: huškeuant- (c.) 'dawdler' (nom.pl. hu-uš-ke-ua-an-te-eš).
PIE *h $h_{2} u$-sḱé/ó- (or *h2us-ské/ó-)
See Puhvel HED 3: 410 for attestations. See $a u u^{i} / u$ - for my suggestion that this verb reflects $* h_{2} u$-skéló- and therewith is a petrified imperfective of the root * $h_{2}$ eu- 'to see' that is the predecessor of $a u^{-}{ }^{i} / u$ - 'to see'. Alternatively, one could assume that it is a petrified imperfective of huiš- ${ }^{z i}$ / hلuš- 'to live' and reflects * $h_{2} u s$-skéló- (for the semantics compare Skt. vāsáyati 'to make wait' < * $h_{2}$ uros-éie-).
-hhut (2sg.imp.midd.-ending)
The exact origin of this ending is unclear. It does not match its functional correspondants like Skt. -sva, Gr. -( $\sigma$ )o, Lat. -re, etc.
$\boldsymbol{h} \overline{\boldsymbol{u}} \boldsymbol{d a}-(\mathrm{c} . / \mathrm{n}$.$) 'readiness, ability to act swiftly': nom.sg. c. hu-u-da-aš (MH/MS),$ hu-u-ta-aš (NH), nom.-acc.pl.n. ḩu-u-da (MH/NS).

Derivatives: hudāk (adv.) 'straightaway, immediately, suddenly' (hu-da-a-ak (OS), hu-u-da-a-ak (MH/MS, often), hu-u-da-ak (often), hu-u-ta-ak, hu-u-ta-a$a k)$.
Anat. cognates: CLuw. hutarl(ii)a- (c.) 'servant' (acc.sg. hu-tar-li-i-i-ia[-an], hu-$u$-tar-la-a-an).

PIE * $h_{2} u h_{1} d-o-$
See Puhvel HED 3: 414f. for attestations. Although the adverb hudāk is attested far more often than the noun $h \bar{u} d a$-, it is likely that $h u d \bar{a} k$ is derived from $h \bar{u} d a$-. The exact formation is unclear however (no other known adverbs in $-k$ are known: the one attestation ap-pi-ía-ak (IBoT 1.19, 8) is to be emended to ap-pi-ía-aku-ku>, cf. $\left.\mathrm{HW}^{2} \mathrm{~A}: 185\right)$ ).

Puhvel (l.c.) suggests to connect these words with Gr. عv́Өv́c 'immediately', but this is formally impossible (Hitt. h- vs. Gr. ع-). Starke (1990: 359-65)
convincingly argues for a connection with hufai- ${ }^{i}$ / hui- 'to run, to hurry' (q.v.), which is derived from $* h_{2} u h_{1^{-}}$'to blow (of the wind)'. In his view, h $\bar{u} d a$ - and hudā̄k reflect $* h_{2} u h_{l} d$-, a formation with $-d$ - that he compares with Lith. védinti 'to air, to cool' and OHG wäzan 'to blow (of the wind'). Nevertheless, I do not know whether Starke is correct in his assumption that the CLuw. word hūtarl(ii)a- 'servant' is cognate as well.
huttiie/a-: see huett- ${ }^{(t) a(r i)}$, huttiie/a- ${ }^{z i}$
huиai- ${ }^{\text {i }}$ / hui- (IIa4 > Ic1, Ic2) 'to run, to hurry; to spread (of vegetation); (+ $=k a n)$ to escape; (+ appan) to run behind, to back up': 1sg.pres.act. hu-i-ih-hi (KBo 11.19 obv. 14 (NS)), hu-u-i-ía-mi (KUB 1.1 iv 10 (NH), Bo 69/256, 5 (NH)), 2sg.pres.act. hu-u-i-ịa-ši (KUB 5.1 iii $55(\mathrm{NH})$ ), hu-u-e-ia-ši (KUB 15.23, $9(\mathrm{NH})$ ), [h]u-u-ia-ši (KUB 48.126 i 21 (NH)), 3sg.pres.act. hu-ua-a-i (OS, often), hu-u-ua-a-i (often), hu-ua-i (KBo 27.42 i 24 (OH/NS)), hu-u-ua-i (KBo 27.42 ii 17 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 2.3 i 43 (OH/NS), KBo 4.9 iv 14, 33 (NS)), hu-u-ua$i z-z i(\mathrm{KBo} 5.9$ ii $40(\mathrm{NH})$ ), $h u-u[a-] i z-z i(\mathrm{KBo} 10.12+13$ iii 41 (NH)), hu-u-ia-zi (KUB 14.3 iii 51 (NH)), 1pl.pres.act. hu-u-i-ia-u-e-ni (KUB 23.83 obv. 5 (NS)), 3pl.pres.act. hu-ía-an-zi (OS, often), hu-u-ia-an-zi, hu-u-i-ía-an-zi, hu-u-i-an-zi (KBo 11.32 obv. 15 (OH/NS)), hu-u-ua-an-zi, hu-u-ua-ía-an-zi (KUB 57.84 iii 16 (NS), Bo 6570 ii 4 (undat.)), 1sg.pret.act. hu-e-eh-ḩu-un (KUB 33.57 ii 3 (OH/NS)), hu-u-i-i्ca-nu-un (KUB 14.15 iii 44 (NH)), hu-ia-nu-un (KUB 19.39 ii 4 (NH)), 3sg.pret.act. hu-ua-iš (MH/MS, often), hu-u-ưa-iš, hu-u-ua-a-iš, hu-ua-iiš (KUB 17.10 i $13(\mathrm{OH} / \mathrm{MS})$ ), hu-ua-aš (KBo 2.6 iii $56(\mathrm{NH})$ ), hu-ua-i[t] (KUB 23.72 i 17 (MH/MS)), 2pl.pret.act. [hu-]u-i-ia-at-tén (KUB 36.6 i 9 (NS)), 3pl.pret.act. hu-ua-a-er (MH/MS), hu-uа-e-er (MH/MS), hu-u-ua-er, hu-i-e-er, hu-u-e-er, hu-u-i-e-er, 2sg.imp.act. hu-u-i-ia (KBo 10.24 iii 16 (OH/NS)), 3sg.imp.act. hu-u-ua-a-ú (KUB 43.38 rev. 22 (MH/MS)); 3sg.pres.midd. hu-u-i-i-at-ta[(?)] (KUB 21.1 iii 65 (NH)), 2pl.pres.midd. hu-ia-ad-du-ma (KUB 23.72 rev. 20 (MH/MS)), 3pl.pres.midd. hu-ua-ia-an-da-ri (KUB 33.88, 11 (MH/NS), IBoT 2.135, 10 (fr.) (MH/NS)), hu-ía-an-da (KBo 8.102, 11 (NS)); part. hu-íia-an-t- (OS), hu-u-i_ia-an-t-, hu-u-i-ia-an-t-, hu-u-ua-ia-an-t-, hu-u-ua-an-t-; verb.noun gen.sg. hu-u-i-ịa-u-ua-aš (KUB 2.1 ii 25 (OH/NS)); impf. hu-ua-iš$k e / a$-, hu-u-e-eš-ke/a-, hu-eš-ke/a-, hu-ua-a-i-iš-ke/a-.
Derivatives: huinu- ${ }^{z i}$, hunu- ${ }^{z i}$ (Ib1) 'to make run' (1sg.pres.act. hu-i-nu-mi (KBo 7.14 obv. 18 (OS), KUB 35.148 iii 20 (OH/NS)), 3sg.pres.act. hu-i-nu-zi (KUB 5.1 i 19 (NH)), hu-u-i-nu-zi (KUB 9.4 ii 12 (MH/NS)), hu-u-i-nu-uz-zi (KUB 29.1 i 41 (OH/NS)), hu-u-e-nu-uz-zi (KUB 4.47 obv. 34 (undat.)),

1pl.pres.act. hu-i-nu-me-ni (VBoT 24 i 31 (MH/NS)), hu-i-nu-um-me-ni (KUB 17.28 i 15 (NS)), 3pl.pres.act. hu-i-nu-an-zi (KUB 53.14 iii 8 (MS)), hu-i-nu-ua$a n-z i(\mathrm{KUB} 10.91$ ii 7 (OH/NS)), hu-u-i-nu-ua-an-zi (KUB 53.6 ii 12 (NS)), 1pl.pret.act. hau-u-i-nu-nu-un (HKM 89 obv. 10 (MH/MS), KUB 9.4 ii 18, 20 (MH/NS)), 3sg.pret.act. hu-i-nu-ut (HKM 13 obv. 10 (MH/MS), HKM 89 obv. 13 (MH/MS), KUB 14.1 obv. 63 (MH/MS)), hu-u-i-nu-ut (KBo 3.6 ii 32 (NH), KUB 1.1 ii $51(\mathrm{NH})$, KBo 3.4 ii $69(\mathrm{NH})$ ), ḩu-e-nu-ú-ut (KBo 3.28, 19 (OH/NS)), 2sg.imp.act. hu-u-i-nu-ut (KBo 5.4 obv. 19, 20, 22 (NH)), hu-u-e-nu-ut (KBo 4.3 iii $7(\mathrm{NH})$ ), hu-u-nu-ut (KUB 21.1 ii $66(\mathrm{NH})$ ), hu-nu-ut (KUB 21.1 ii $72(\mathrm{NH})$ ), 2pl.imp.act. hu-i-nu-ut-tén (HKM 41 obv. 14 (MH/MS), KUB 7.41 iv 20 (MH/MS?)), 3sg.imp.act. hu-i-nu-ud-du (KBo 32.14 iii 46 (MS)) 3pl.imp.act. hu-u-e-nu-ua-an-du (KUB 40.57 i 6 (MH/NS)); verb.noun gen.sg. hुu-u-e-nu-ma-aš (KBo 24.14 v 7 (MH/NS)); inf.I hu-i<-nu? ${ }^{\prime}-m a-a n-z i$ (KUB 15.33 iii 13 (MH/NS)); impf. h.u-i-nu-uš-ke/a-, hu-u-i-nu-uš-ke/a-), peran hūiiiatalla- (c.) 'head marcher, helper' (nom.sg. hu-u-i-ía-tal-la-aš, acc.pl. hu-u-i-i-ia-tal-lu[-uš], hu-u-i-ia-at-tal-lu-uš), see huıantalae-.
Anat. cognates: CLuw. hui(ia)- 'to run' (1pl.pres.act. hu-u-i-un-ni, 3sg.pret.act. hu-u-i-ịa-ad-da), hu(i)huiia- 'to run' (3pl.pret.act. hu-u-hu-i-ía-an-da,
 huia- 'to run, to march' (3sg.pret.act. /huiata/ ${ }^{\mathrm{PES}_{2}} \mathrm{HWI-ia-ta}$ (KARKAMIŠ A6 §23), 3pl.pret.act. /huianta/ ${ }^{\mathrm{PES}_{2}} H W I-i a-t a$ (KARKAMIŠ A11b §11)), huihuia- 'to run, to march' (3sg.pret.act. /huihuita/ ${ }^{\mathrm{PES}_{2}}$ HWI-HWI-ta (KARKAMIŠ A6 §9), impf.3pl.pret.midd. /huihuisantasi/ ${ }^{\mathrm{PES}_{2}}$ HWI-HWI-sà-tá-si (KARKAMIŠ A11b §8)).
IE cognates: Skt. vấti, Gr. ảך $\sigma$, Slav. *vějati 'to blow (of wind)'.
PIE * $h_{2} u h_{1}$-ói-ei, * $h_{2} u h_{1}$-i-énti
See Puhvel HED 3: 419f. for attestations. The oldest attestations clearly show a dāi/tiiianzi-class inflection: 3sg.pres.act. huuāi (OS) besides 3pl.pres.act. huíanzi (OS). That the weak stem is hui- and not huia- as is often cited (e.g. Puhvel l.c.), is visible in the causative huinu- (and not **huianu-). In younger times (from MS texts onwards) we find some forms that inflect according to the hatrae-class: huuaizzi ( NH ) and huuait (MH/MS). In NH texts we find many forms that show the mi-inflected stem huia- (usually spelled hu-u-i-i, $a-$ ), which is common in dāi/tiianzi-class verbs. The point of departure for this secondary stem is 3pl.pres.act. haianzi that was reanalysed as huia-nzi.

The spelling with plene $-u$-, which is found often from MH times onwards is due to the fact that an old $* u$ generally is lowered to $/ \mathrm{o} /$ when adjacent to $/ \mathrm{H} /$. So, phonologically, this verb is to be interpreted as /Hoai- / Hoi-/ (cf. § 1.4.9.3.f).
Couvreur (1937: 119-120) connected huuai- ${ }^{i}$ / hui- with the PIE root *h $h_{2} u h_{l^{-}}$ 'to blow (of wind)' (see also at hufant-), which is semantically plausible (cf. ModEng. blow that can be used as 'to move as if carried or impelled by the wind' or 'to go away, to leave hurriedly' (both meanings in the Oxford English Dictionary)). As I have explained in Kloekhorst fthc.a, the verbs of the dāi/tiiianzi-class have to be analysed as formations in which the zero grade of the root is followed by an ablauting suffix $*_{\text {-oi-/-i-. In }}$. this case, we have to reconstruct *h $h_{2} u h_{l}$-ói-ei, * $h_{2} u h_{l}$-i-énti, which by regular sound law indeed would yield Hitt. huuuāi, huianzi.
Puhvel (l.c.) objects to this etymology, stating that we do not find the syntagm **huuanza huuāi 'the wind blows', but this hardly can be seen as a serious objection. He rather connects huuai- ${ }^{i}$ / hui- with Skt. vay ${ }^{i}$ - 'to pursue, to seek, to strive after, to fall upon, to take hold of'. This latter verb probably reflects *ueih $2^{-}$, however (see at ueh- ${ }^{z i}$ /uah-), which cannot explain Hitt. huuai- ${ }^{i}$ / hui-.
The causative huinu- occurs in NS texts as huenu- as well, which is due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-n-$ (cf. § 1.4.8.1.d). The two NH attestations $h u-u-n u-u t$ and $h u-n u-u t$ hardly can be regarded as showing a linguistically real stem hunu-. Possibly both forms are scribal errors for hu-u-<e-»nu-ut and hu-<e->-nu-ut.
huuant- (c.) 'wind' (Sum. IM): nom.sg. hu-ua-an-za (KBo 17.62+63 iv 8 (MS?)), ḩu-u-ua-an-za (KUB 8.65, 4 (MH/NS)), gen.sg. hu-ua-an-da-aš (KUB 17.28 ii 7 (NS)), hu-u-ua-an-da-aš (KBo 10.37 ii 31 ( $\mathrm{OH} / \mathrm{NS}$ )), dat.-loc.sg. hu-una-an-ti (VBoT 58 i 9 (OH/NS)), hu-u-ua-an-ti (KBo 22.6 i 27 (OH/NS)), nom.pl. huu-u-ua-an-te-eš (KUB 6.46 iii 49 (NH)), hu-u-ua-an-te-eš 17 (KUB 7.5 i 17 (MH/NS)), hu-u-ua-du-uš (KUB 24.2 rev. 17 (NS)), acc.pl. hu-ua-an-du-uš (KUB 24.3 iii 38 (MH/NS)), hुu-u-ua-ta-aš (KUB 28.4 obv. 20b (NS)).
Derivatives: see huıantalae- ${ }^{\text {i }}$.
IE cognates: Skt. vắnt- 'blowing’, váta- 'wind’, Gr. ảévt- 'blowing', Lat. ventus, Goth. winds, TochA want-, TochB yente.

PIE * $h_{2} u h_{1}$-ent-
See Puhvel HED 3: 428 for attestations.The etymological interpretation of this word is generally accepted. It derives from the PIE root $* h_{2} u e h_{l^{-}}$'to blow (of wind)' and belongs with the many other words for 'wind' in IE languages. Hitt.
huuant- can hardly reflect anything else than $* h_{2} u h_{1}$-ent-, which matches Gr. áév $\tau$-, which synchronically functions as the participle of the verb 'to blow'. The other IE languages have words that go back to the ablaut-variant * $h_{2} u e ́ h_{1}-n t-(o-):$ Skt. vắnt-, vắta-, Lat. ventus, Goth. winds, TochA wänt-, TochB yente. This seems to point to an original paradigm * $h_{2} u e ́ h_{1}-n t-s, * h_{2} u h_{1}$-ént-m, $* h_{2} u h_{1}-n t$-ós, which must have been to original inflection of participles in *-ent-, cf. at -ant-.
(A) huuantalae- ${ }^{z i}$, hultalae- ${ }^{-i}$ (Ic2) 'to spare': 1sg.pret.act. hu-ul-da-la-a-nu-un (KUB 19.37 iii (NH)), 3sg.pret.act. [hu-u-u] $a$-an-ta-la-a-it (KUB 21.8 ii 10 (NH)), \& hu-u-ua-an-ta-la-[a-it] (KUB 21.8 ii 4 (NH)).

See Puhvel HED 3: 429 for attestations. Note that Puhvel cites [hu-u-u]a-an-ta la-a-it (KUB 21.8 ii 10) as if there is a space between $t a$ and $l a$, but on the photograph of this tablet (available through Hetkonk) we can clearly see that that
 has been assumed that huuantalae ${ }^{z i}$ is to be regarded as a compound of huuanta $+l a e-^{z i}$ (see $l \bar{a}-{ }^{i} / l$ - 'to let go'). Eichner (1979c: 205) analysed huuanta as nom.acc.pl.n. of the participle of huıai- ${ }^{i}$ / hui- 'to run', so therefore 'to let escape'. Puhvel (l.c.) suggests to interpret huuanta as the all.sg. of huuant- 'wind', however, so 'to set loose to the wind'. According to Puhvel, huldalānun is an assimilated form of hu(ua)ndalae- ${ }^{z i}$. See at $l \bar{a}^{-}{ }^{i} / l-$, huuai- ${ }^{i} /$ hui- and huuant- for further etymologies.
huиарр- ${ }^{i} /$ hupp- $(\mathrm{IIa} 1 \alpha>\operatorname{IIa} 1 \gamma)$ 'to hurl, to throw (+ acc.)': 1sg.pres.act. hu-ua-ap-pa-ah-hi (KUB 7.57 i 7 (OH/NS)), 3sg.pres.act. hu-ua-ap-pí (KBo 17.88++ ii 8, 9, 30, 52 (fr.), 61 (OH/MS), KBo 20.67 ii 61 (OH/MS), KBo 11.33 obv!! 4 (fr.) ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 10.63 ii 8 (fr.) (NS)), [hu-ua-ap-p]a-a-i (KBo 6.34 iii 25 (MH/NS)), 3pl.pres.act. hu-up-pa-an[-zi] (KBo 8.68 i 20 (NS)), 2pl.imp.act. hu-u-ua-ap-tén (KUB 9.1 iii 28 (MH/NS), meaning unascertained), 3pl.imp.act. hu-u$u p[-p a-a n-d u$ ] (IBoT 3.114 rev. 3 (NS)), hu-u-ua-ap-pa-an-du (KUB 7.46 rev .12 (NS)); part. hu-u-up-pa-an-t- (KBo 3.21 ii 16 (MH/NS)); broken: hu-u-u_a-ap[-...] (KUB 28.100 obv. 12 (NS), meaning unascertained).
Derivatives: hūppa- (gender unclear) 'heap' (dat.-loc.sg. hu-u-up-pi-i=̌̌-ši (KUB 43.30 iii 17 (OS)), ḩu-u-up-pé-e=š-ši (KUB 27.29 iii 7 (MH/NS))), huppae- ${ }^{z i}$ (Ic2) 'to heap, to pile up' (1sg.pres.act.(?) hu-u-up-am-mi (KUB 33.67 iv 18 (OH/NS)), 3sg.pres.act. hu-up-pa-ez-zi (KBo 24.115 i 20 (MS), hu-up-pa-a$i z-z i(\mathrm{KUB} 59.22$ iii $26,28(\mathrm{OH} / \mathrm{NS})$ ), hu-u-up-pa-a-iz-zi (KUB 27.29 iii 8 (MH/NS), 819/u, 4 (NS)); part. hu-u-up-pa-an-t- (VBoT 24 ii 20 (MH/NS), KBo
10.27 iv 32 (OH/NS))), \& hūpala- 'fish-net' (abl. \& hu-u-pa-la-za (KBo 6.29 ii 34 (NH)).

IE cognates: Skt. vap- 'to strew (out), to scatter (seed)', GAv. vīuuāpat 'strews apart, plunders, destroys', Goth. ubils 'evil'.

PIE * $h_{2}$ uóp $h_{1}$-ei, * $h_{2}$ uph $h_{l}$-énti
See Melchert fthc.c for the establishment of the semantics of this verb and the view that the noun hūppa- 'heap' (which is the source of huppae- ${ }^{z i}$ 'to heap, to pile up') has been derived from it through a meaning 'what has been thrown (on the ground)'. Melchert also shows that synchronically we can distinguish between two homophonous verbs huuapp- / hupp-, namely one that denotes 'to hurl, to throw (down) (+ acc.)' and another that means 'to be hostile towards, to do evil against (+ dat.-loc.)'. His claim that the latter verb is originally mi-conjugated and therefore formally distinct from the former which is hi-conjugated cannot be substantiated: both forms show hi-conjugated forms in the oldest texts and must be regarded formally identical. Moreover, as I have shown under its lemma, the meaning of huuapp- ${ }^{\text {i }}$ hupp- 'to be hostile towards, to do evil against' can be derived from an original meaning 'to hurl, to throw (down)'. I therefore regard these two verbs as originally identical. For a treatment of its etymology, see under huuapp- ${ }^{i}$ / hupp- 'to be hostile towards, to do evil against'.
huцарр- ${ }^{\boldsymbol{i}}$ / hupp- (IIa1a) 'to be hostile towards, to do evil against (+ dat.-loc.)': 2sg.pres.act. hu-ua-ap-ti (KUB 26.1 iii 43 (NH), KUB 26.8 iii 5 (fr.) (NH)), 3sg.pres.act. hu-ua-ap-zi (KUB 26.43 obv. 62 (NH)), 3sg.pret.act. hu-u-ua-ap-pí$i s ̌$ (KUB 43.75 obv. 19 (OH/NS)), hu-ua-ap-ta (KUB $13.34+40.84$ i 14 (NS)), 3pl.pret.act. hu-u-up-pé-er (KBo 3.34 i 3 (OH/NS)), hu-u-ua-ap-pé-er (KUB 1.5 i $9(\mathrm{NH})$, KBo 3.6 i $30(\mathrm{NH})$ ); impf. hu-ua-ap-pí-iš-ke/a- (KUB 21.17 i $9(\mathrm{NH})$ ).

Derivatives: huuappa- (adj.) 'evil, ill, bad' (Sum. HUL; nom.sg.c. hu-ua-ap-paaš (KUB 15.32 i 48 (MH/NS)), HUL-pa-aš (KBo 19.101, 2 ( $\mathrm{OH} / \mathrm{NS}$ )), acc.sg.c. hu-ua-ap-pa-an (KBo 3.21 ii 9 (MH/NS)), nom.-acc.sg.n. hu-u-ua-ap-p[a-an] (KUB 1.5 i 21 (NH)), dat.-loc.sg. ha-ua-ap-pí (KBo 15.25 obv. 34 (MH/MS), KUB 1.1 iv $12(\mathrm{NH})$ ), hu-u-ua-ap-pí (KUB 1.1 i $40(\mathrm{NH})$, KUB 1.10 iii $31(\mathrm{NH})$, etc.), nom.pl.c. hu-u-ua-ap-pa-e-eš (KUB 46.54 obv. 11 (NS)), acc.pl.c. hu-u-ua-
 ( $\mathrm{OH} / \mathrm{NS}$ )), gen.pl. hu-u_a-ap-pa-aš (KUB 30.11 obv. 5 (OH/MS)), hu-u-ua-ap-paaš (KUB $31.127+36.79$ i $45(\mathrm{OH} / \mathrm{NS})$ )), huuappanatar / huúappanann- (n.) 'evilness' (nom.-acc.sg. hu-ua-ap-pa-na-tar (KBo 8.70, 10 (MH/MS)), dat.loc.sg. hu-u-ua-ap-pa-na-an-ni (KUB 36.86 obv. 4 (NS))).

Anat. cognates: HLuw. hwapasanu- 'to cause harm' (2sg.imp.act. "SIGILLUM" HWI-pa-sa-nu (ASSUR letter $f+g \S 13)$ ).
IE cognates: Goth. ubils 'evil', Skt. vap- 'to strew (out), to scatter (seed)', GAv. vīuuāpat 'strews apart, plunders, destroys'.

PIE * $h_{2}$ uóp $h_{1}$-ei, * $h_{2}$ uph $h_{l}$-énti
Although Puhvel (HED 3: 430f.) cites only one verb "huwapp-" that he translates as "ill-treat, harrow, harass, disfigure, spoil", Melchert (fthc.c) clearly shows that in fact we are dealing with two verbs. When transitive with an accusative-object, huuapp- denotes 'to hurl, to throw (down)'; when construed with the dat.-loc., it means 'to be hostile towards, to do evil against'. Melchert even claims that the verbs should be formally distinguished as well: " $[\mathrm{t}]$ he verb huwapp- 'to do evil' is an athematic $m i$-verb [...] while the other verb [...] is an originally athematic hiverb". I do not agree with him on this: the two specific mi-conjugated forms of huuapp- 'to do evil', 3sg.pres. huuapzi and 3sg.pret. huuapta (note that the meaning of 1 sg.pres.act. hu-u-ap-mi (KUB 35.148 iii $42(\mathrm{OH} / \mathrm{NS})$ ) cannot be determined), are attested in NH texts and both are forms in which the mi-ending has become productive (3sg.pres. $-z i$ is spreading at the cost of its corresponding $h i$-ending $-i$; 3 sg.pret. $-t t a$ is spreading at the cost of its corresponding hi-ending $\check{s}$, cf. their respective lemmas). Moreover, the 3sg.pret.-form hu-u-ua-ap-pi-iš (KUB 43.75 obv. 19 (OH/NS)), which Melchert takes as belonging with 'to hurl down', makes more sense when translated as 'did evil against' (as Melchert himself admits as well; cf. also Hoffner 1977a: 106):

KUB 43.75 obv.
(18) $\quad . . .{ }^{\mathrm{d}}$ LAMMA-aš=(š)ta ${ }^{\text {GIš }}$ MAR.GÍD.DA ${ }^{\text {HI.A }}$ iš-pár-ri-iš
 (20) $[u] a$-al-hi-iš-ke-et
'The tutelary deity trampled the wagons and did evil against the country. He drew his knife and started to chop its firewood'.

Since this form is the only form that occurs in an OH composition, it must be regarded as significant, and I therefore assume that also 'to do evil' originally was hi-conjugated: huuapp- ${ }^{i}$ / hupp-.

Herewith, the verbs huuapp- ${ }^{i}$ / hupp- 'to do evil against' and huuapp- ${ }^{i}$ / hupp'to hurl, to throw (down)' are formally identical. I think that they semantically they can be united as well. The two meanings of huuapp- ${ }^{i}$ / hupp- are clearly distributed: when transitive the verb means 'to throw (down), to hurl' and when
intransitive it denotes 'to be hostile towards, to do evil against', the patient of which is in dative-locative. This situation is completely compatible with e.g. the English verb to throw, for which the Oxford English Dictionary cites the following meanings: '(trans.) to project (anything) with a force of the nature of a jerk, from the hand or arm, so that it passes through the air or free space, to cast, hurl, fling; (intr.) to go counter, to act in opposition, to quarrel or contend with' (compare also to throw oneself upon 'to attack with violence or vigour'). Similarly for English to fling: '(trans.) to throw, cast, toss, hurl; (intr.) to make an onset or attack, to aim a stroke or blow (at)'.
We must conclude that the homophonous verbs huuapp- ${ }^{\text {/ / hupp- '(trans.) to }}$ hurl, to throw (down); (intr. + dat.-loc.) to be hostile towards, to do evil against' in fact are identical and that the latter meaning has developed out of the former. Note that this development must have taken place in pre-Hittite times already, as can be seen by the derivative huuappa- 'evil' that is attested in OH compositions already. If HLuw. hwapasanu- 'to cause harm' is cognate, it would show that the semantical development had taken place at least in PAnatolian already.
Mechanically, huıappi / huppanzi must go back to *h2uóph $h_{1}$-ei / *h $h_{2} u p h_{1}$-énti. The initial laryngeal must be $* h_{2}$ because $* h_{3}$ would drop in this position. A rootfinal laryngeal is needed to explain the -pp- in huuappi, because a preform *h2 uóp-ei should have given **huıāpi with lenition of *p due to *ó. The choice for root-final $* h_{l}$ is based on the fact that $* h_{2}$ and $* h_{3}$ would have caused the verb to inflect according to the $\operatorname{tarn}(a)$-class (cf. § 2.2.2.2.d). Juret (1942: 71) connected huuapp- ${ }^{i}$ / hupp- with Goth. ubils 'evil', which, if correct, would show that the semantical development as described above had taken place in PIE already. Melchert (1988b: 233) further adduces Skt. vap- 'to strew (out), to scatter (seed)', which would be a witness of the original meaning 'to throw'. Note that its Avestan cognate vīuuāpat 'strews apart, plunders, destroys', vīuuāpa'plundering, destroying' shows that also in Indo-Iranian the two meanings that can be found in Hittite are attested. Note that the argumentation that huuappmust reflect a root $* h_{2}$ uap- with $*$-a-because it is mi-conjugated (thus Eichner 1988: 133; Melchert fthc.c, note 4) has now been eliminated since the $-a$ - in huıapp- is perfectly explicable as the reflex of the $*_{O \text {-grade }}$ that is morphologically expected in a hi-conjugated verb (cf. also note 11).
huuarn- / hurn- 'to hunt': inf.I hu-ur-nu-ua-an-zi (KUB 33.121 ii 8); impf. 3sg.pres.act. [h]u-u-ua-ar-ni-iš-ke-ez-zi (KBo 12.59 i 7), hu-ur[-ni-iš-ke-ez-zi] (KBo 12.59 i 2 ).

PIE *h $h_{2}$ uerH- ??

See Puhvel HED 3: 433 for attestations. Because of the rarity of forms of this verb, it is difficult to decide its inflection class. On the one hand, we seem to deal with an ablauting stem huuarn- besides hurn-. From an IE point of view, a stem *Huern- would be strange, however, in view of the rootfinal cluster -rn- which is impossible according to PIE root constraints. It therefore might be better to assume that this verb goes back to a nasal infixed stem. This means that it could either belong to the $\operatorname{tarn}(a)$-class (when hi-conjugated) or inflect similarly to tuuarni- ${ }^{z i}$ / tuuarn- 'to break' and zinni- ${ }^{z i}$ / zinn- 'to finish' (when mi-conjugated). The alternation huuarn ${ }^{\circ}$ besides hurn $^{\circ}$ then cannot be ablaut, but must be the result of different vocalizations of *Hurn-: *HurnV would regularly yield hurnV, whereas *HurnC would give huuarnC (cf. Kloekhorst fthc.e for this distribution).
So, all in all, if this verb is of IE origin, it can only go back to a nasal infixed stem of a root $* h_{2} u r H$ - (the initial laryngeal must be $* h_{2}$ because $* h_{3}$ would not be retained as $h$ - in this position (cf. Kloekhors fthc.Lar.)). If it were hi-conjugated, we would expect a paradigm **hurnāi, **huuarnanzi (with rootfinal $* h_{1}$ or $* h_{3}$ : rootfinal ${ }^{*} h_{2}$ would yield $\left.{ }^{* *} h u r n a h h i\right)$. If it were $m i$-conjugated, we would expect **hurnizzi, **huuarnanzi (with rootfinal *h ) or **hurnāzzi, **huuarnanzi (with rootfinal $* h_{2}$ or $* h_{3}$ ).

Čop (1954b: 230-3, 237) suggested an etymological connection with Lith. varýti 'to drive, to chase' and Latv. vert 'to run', but these verbs go back to *(H)uer-, and do not show a trace of a rootfinal laryngeal (absence of acute intonation).
huиart- ${ }^{i}$ / hurt- (IIa1a > IIa1 $\gamma$ ) 'to curse': 1sg.pres.act. hu-u-ua-ar-ta-ah-hi (KUB 33.117 iv 8 (NS)), 3sg.pres.act. hur-da-a-i (KUB 9.15 ii 15 (NS)), 1sg.pret.act. hu-u-ua-ar[-ta-ah-hu-un] (KUB 26.71 i $7(\mathrm{OH} / \mathrm{NS})$ ), hur-ta-ah-huun (KUB 23.45, 15 (NS)), hur-da-ah-hu-un (KUB 36.47, 5 (NS)), 3sg.pret.act. hu-ua-ar-za-aš-ta (KBo 32.14 ii 11 (MS)), \& hu-ua-ar-ta-aš (KUB 22.70 obv. 86 (NH)), ḩur-ta-aš (KUB 22.70 obv. 8 (NH)), hur-za-aš-ta (KBo 10.45 i 4 (MH/NS)), ḩur-za-ta (KUB 5.6 iv 22 (NS)), 3sg.imp.act. ḩur-za-aš-du (KUB 17.27 iii 20 (MH/NS)), 3pl.imp.act. hur-ta-an-du (KBo 6.34 iv 12 (MH/NS)); part. hu-ua-ar-ta-an-t- (KBo 32.14 ii 21, iii 5 (MS)), hur-ta-an-t- (KUB 30.45 iii 17 (NS), KUB 30.44, 13 (NS), KUB 22.70 rev. 14 (NH), KUB 14.17 ii 12 (NH)); impf. hu-u-ur-za-ke/a- (KBo 39.8 ii 2 (MH/MS), KBo 32.14 ii 54, iii 43, 45, 1.edge 2 (MS)), hu-ur-za-ke/a- (KBo 32.14 ii 5, 13, 46 (MS), KUB 32.113 ii 16 (fr.) (MH/MS)), hur-za-ke/a- (ABoT 48, 6 (OH/NS), KUB 33.120 iii 69, 70, 71 (MH/NS), KUB 36.1, 7, 9 (MH/NS), KUB 12.34 i 17 (MH/NS), KBo 1.45 ii 6
(NS), KUB 14.4 iii 19 (NH), KBo 4.8 iii 16 (NH), KBo 18.28 obv. $6(\mathrm{NH})$ ), hur$z a$-aš-ke/a- (KUB 17.27 iii 18 (MH/NS)), hu-u-ua-ar-za-ke/a- (KBo 1.45 ii 2 (NH)); broken hu-u-ua-ar-za-a[š(-)...] (KUB 35.92 iv 23 (MS)).

Derivatives: hurtāi- / hurti- (c.) 'curse' (nom.sg. hur-ta-iš, hu-u-ur-ta-iš, hur-da-a-iš, acc.sg. hu-ur-ta-in, hur-ta-in, hur-da-a-in, gen.sg. hur-ti-ia-aš, hu-ur-di-
 $a z, ~ h u u-u r-d i-i a-a z, ~ n o m . p l . ~ h u r-d a-a-e-e s ̌, ~ a c c . p l . ~ h u r-t a-u s ̌, ~ h u r-t a-a-u s ̌, ~ h u-u-u r-~$ ta-a-uš, hur-da-a-uš, hu-u-ur-ta-uš, hur-ti-ica-aš).
IE cognates: ?OPr. wertemmai 'we swear'.
PIE *h $h_{2}$ uórt-ei / *h2urt-énti?
See Puhvel HED 3: 433f. for attestations. The oldest attestations, 1sg.pret.act. huūuar[tahhun] (OH/NS), 3sg.pret.act. huunarzašta (MS) and impf. hurzake/a(MS), clearly show that originally this verb was hi-conjugated and showed an ablauting pair huuart-/hurt-. The original ablaut-pattern got blurred in younger times, however, yielding forms like 3sg.pret.act. hurzašta, part. huuartant- and impf. huuarzake/a-. In NH texts, we find a few forms that inflect according to the tarn(a)-class: 3sg.pres.act. hurdāi, 3sg.pret.act. hurtaš, huuartaš (note that Friedrich HW: 76 wrongly cites this latter stem, "hurta- (huuarta-)", as the primary one).
Sturtevant (1930d: 128) connected this verb with Lat. verbum 'word', Lith. var̃das 'name', OPr. wirds 'word', Goth. waurd 'word'. Puhvel (l.c.) rejects this etymology because he assumes that these latter words are derived from the root visible in Gr. $\varepsilon^{\prime \prime} \rho \omega$ 'to speak' and Hitt. ueriie/a-z 'to call, to name': because Hitt. ueriie/a- does not show an initial laryngeal whereas Hitt. huuart- ${ }^{i}$ / hurt- does, he claims that the connection cannot be correct. This reasoning is questionable, however, in view of the fact that Hitt. ueriie/a- ${ }^{z i}$ must reflect *uerh $l_{l^{-}}$(because of Gr. $\varepsilon \rho \varepsilon ́ \omega$ (fut.)), which is impossible for Lith. var̃das that must reflect *uord ${ }^{h} o$ - (a preform **uorh $d^{h} o$ - would have yielded Lith. **várdas). So, formally, Sturtevant's connection between huuart- / hurt- and Lat. verbum etc. is still possible: it would mean that we have to reconstruct a root $* h_{2} u e r d^{h}-$. The semantic connection between 'to curse' and 'name, word' is not very compelling, however.
Puhvel (l.c.) proposed a different etymology, namely a connection with OPr. wertemmai 'we swear'. This connection is semantically more likely and would point to a root $* h_{2}$ uert-. The absence of any other IE cognates is unpleasant, however.
$i^{z i}(\mathrm{Ib} 1)$ 'to go': 3pl.pres.act. $\underset{\sim}{i a-a n-z i}$ (KBo 22.2 obv. 7 (OH/MS)), 2sg.imp.act. $i$ it (OS), 2pl.imp.act. i-it-te-en (OS), i-it-tén (MH/MS).

Derivatives: iiannna- ${ }^{i}$ / iianni- (IIa5 > Ic1) 'to march' (1sg.pres.act. i-ía-an-na-
 an-ni-i्2a-az-zi (KUB 18.68 i 7), i-ía-an-ni-az-zi (KUB 5.1 i 24), i-ía-an-ni-ez-zi (VBoT 111 iii 4), 3pl.pres.act. i-ia-an-ni-[an]-z[i] (OS), i-ia-an-ni-ia-an-zi, 1sg.pret.act. i-ía-an-ni-ia-nu-un (KBo 3.4 ii 9, KUB 14.15 i 8, KBo 4.4 iv 17, KBo 5.8 i 15, iii 24, KUB 23.13, 6, etc.), 3sg.pret.act. ía-an-ni-iš (KBo 22.2 rev.
 33.102 ii 20), i-ia-an-ni-a[t] (KBo 12.26 iv 10), 3pl.pret.act. i-ía-an-ni-er, 2sg.imp.act. $\underset{\sim}{a} a-[a] n-n i(K U B 43.23$ rev. 14), i-ina-an-ni, 2pl.imp.act. i-íia-an-ni-ía-at-tén (KUB 8.51 ii 16), i-i्रa-an-ni-ía-tén (KUB 7.60 ii 29); part. i-i_ia-an-ni-i_ia-an-$t$-; inf.I i[-i]a-an-ni-ia-u-ua-a[n-zi] (KUB 8.53 ii 18); sup. i-ia-an-ni-ua-an (MH/MS)), see antiiiant-, iidant-, ie/a- ${ }^{\text {tua(ri) }}$, itar, iuar.
Anat. cognates: CLuw. i- 'to go' (3sg.pres.act. i-ti, 1pl.pres.act. [i-ú]-un-ni, 3sg.pret.act. i-i-ta, 3sg.imp.act. i-du, 3pl.imp.act. i-ía-an-du), iunāhit- (n.) 'mobile wealth' (nom.-acc.sg. i-ú-na-a-ḩi-ša, i-ú-na-hni-ša); HLuw. i- 'to go' (Hawkins 2000: 62: 1sg.pres.act. /iwi/ i-wa/i (KULULU $1 \S 15$ ), 1sg.pret.act. /iha/ ${ }^{\mathrm{PES}_{2 i}-h a}$ (BOYBEYPINARI 2 §9), 3sg.pret.act. /ida/ "PES" ${ }^{2} i$-tà (KAYSERİ §19), ${ }^{" P E S}{ }_{2}{ }^{i} i+r a / i($ CEKKE $\S 20$, TOPADA $\S 13), 3 \mathrm{sg} . / \mathrm{pl} . i m p . a c t . / \mathrm{i}(\mathrm{n}) \mathrm{tu} / i-t u-u$ (TELL AHMAR fr. 5, line 4), inf. /iuna/ "PES" ${ }_{2} i-u-n a$ (KARATEPE 1 §34)).
IE cognates: Skt. éti 'to go', Gr. عĩut 'to go', Lat. īre 'to go', Lith. eĩti 'to go', OCS iti 'to go'.

PIE * $h_{l} e i-/ * h_{l} i-$

See Puhvel HED 1/2: 325f. for attestations. In the Hittite texts, we find a few traces of an active verb $i_{-}{ }^{z i}$ 'to go', which on the one hand is supplanted by its univerbated forms paii- ${ }^{z i} /$ pai- 'to go' $\left(* h_{1} p o i+* h_{l} e i-\right)$ and ue-zi/uua- 'to come' $\left({ }^{*} h_{2} \mathrm{Ou}+* h_{l} e i-\right)$, and on the other hand by its middle counterpart ie/a- ${ }^{\text {nta(ri) }}$ 'to go'. In the OH text about Zalpa we find 3pl.pres.act. íanzi which must be translated 'they go' (and not 'they make' as Otten 1973: 7 translates in the edition of this text: "[sie] machen (sich auf den Weg)"). The imperative-forms 2sg. ìt and 2pl. itten are used throughout the Hittite periode, but synchronically function as imperatives to paii- ${ }^{z i}$ / pai-. In the Luwian languages, however, the active stem $i$ 'to go' has not died out: it is still used, although here we find univerbated forms as well (CLuw. aui-, HLuw. áwi- (see under uez-zi uua-) and HLuw. pa- (see under paiiz- ${ }^{z i}$ pai-)).
The etymon has since Hrozný (1917: 173) been clear: PIE *h $e i-$ 'to go'. Hitt. 3pl.pres.act. $\underset{\sim}{i a n z i}$ is therewith a direct counterpart to e.g. Skt. yánti, Gr. ľa $\begin{aligned} & \text { l, etc. }\end{aligned}$ from *hil-énti, whereas 2 sg.imp.act. it /Ríd/ generally is reconstructed $* h_{1} i \underline{i} d^{h} i$

For the formation of the "imperfective" iianna- ${ }^{i}$ / iianni- see at the treatment of the suffix -anna-/anni-.
$\boldsymbol{- i}$ (dat.-loc.sg.-ending)
The usual ending of dat.-loc.sg. is $-i$, which is found in all types of nominal stems (consonant-, $i$-, $u$ - and thematic stems). Occasionally, we come across an ending -ai (la-bar-na-i (KUB 2.2 iii 9 ( $\mathrm{OH} / \mathrm{NS}$ )), la-bar-na-i=a (KUB 36.89 rev. 61 (OH?/NS)), ta-bar-na-i (KUB 44.60 iii 15 (NS)), $a-s ̌ a-u-n a-i$ (Bo 6002 obv. 7 (undat.)), ha-aš-ša-an-na-i (KBo 3.1 ii 49 (OH/NS)), [ha-]aš-ša-a-i (OS), píd-du-li-ịa-i (OH or MH/MS), ták-na-i (KUB 24.9+ ii 22 ( $\mathrm{OH} / \mathrm{NS}$ )), ua-ap-pu-ua-i (KBo 9.106 ii 15 (MH/NS)), which CHD (L-N: 41) calls "old dat." (note that in $i$ stem adjectives the dat.-loc.sg.-forms in -ai, like šuppai, rather reflect $* /$-aii/ < *-ei-i).
From an IE point of view, we have to reckon with a dat.sg. in *-i (in static root nouns and proterodynamic consonant-, $i$ - and $u$-stem nouns), ${ }^{*}-e i$ (in mobile root nouns and hysterodynamic consonant-, $i$ - and $u$-stems) and *-ōi (in $o$-stem nouns). It must be noted that although word-final $*_{-i}$ would regularly have been lost in Hittite (cf. i-it 'go!' < * $h_{1} i-d^{h} i$ ), the ending *-i was restored (which implies that the moment of loss of word-final $*_{-i}$ depended on the preceding consonant). The regular outcomes of these three PIE endings must have been $-i, *^{*}-e$ and $-a i$. As we see, the former and the latter are attested as such. The second ending, *-ei,
has been replaced by -i in pre-Hittite times already (cf. e.g. ták-ni-i /tgní/ << * $d^{h} g^{h} m e ́ i$ or $k a r-t i-i / \mathrm{krd} i^{\prime} \ll{ }^{*} k^{\prime} r d$-éi). The ending -ai is found in OH texts only, but is rare at that point already. In younger times it is fully taken over by $-i$ as well.
-i (voc.sg.-ending): LUGAL-u-i (KBo 25.122 ii 9 (OS)), LUGAL-u-e (KUB 31.127 i $2(\mathrm{OH} / \mathrm{NS}) / / \mathrm{KUB} 31.128$ i $2(\mathrm{OH} / \mathrm{NS})$, KUB 31.127 i $15(\mathrm{OH} / \mathrm{NS}) / /$ KUB 31.129 obv. 4 (OH/NS), KUB 31.127 i 18, 22, 58 ( $\mathrm{OH} / \mathrm{NS}$ )) 'O king!'; ${ }^{\mathrm{d}}$ UTU-ú-i (KUB 41.23 ii 18 (OH/NS)), ${ }^{\mathrm{d}} \mathrm{UTU}-i(\mathrm{KUB} 30.10 \mathrm{rev} .10(\mathrm{OH} / \mathrm{MS})$, KUB 7.1 i 6, 8, 15 (OH/NS)), ${ }^{\text {d }}$ UTU-e (KUB 31.127 i 1 ( $\mathrm{OH} / \mathrm{NS}$ )) 'O Sun-god!’; pé-e-ta-an-ti (KUB 31.137 ii 2 (MH/NS) 'O place!'; šar-ku-i (KUB 31.127 i 15 ( $\mathrm{OH} / \mathrm{NS}$ )) 'O eminent ...!'.

The vocative of the singular can be expressed in different ways. Either the nom.sg.-form is used: ḩa-aš-ša-a-aš 'O hearth!', ${ }^{\mathrm{d}} \mathrm{UTU}-u s ̌$ 'O Sun-god!'; or the stem-form is used: iš-ha-a 'O lord!', ne-ek-na 'O brother!', šar-ku 'O eminent ...!', ua- $a p-p u$ 'O riverbank!'; or we find an ending $-i$ or $-e$. As we can see from the attestations cited above, the ending $-e$ is found in one text (and its duplicates) only, whereas $-i$ is found in several texts, including an OS and OH/MS one. This clearly indicates that $-i$ is the regular form, and $-e$ must be regarded as a specific feature of the language of the scribe of KUB 31.127.
Etymologically, it is clear that $-i$ must be compared with the voc.sg.-'ending' $*_{-e}$ as found in the other Indo-European languages, like Gr. $-\varepsilon$, Skt. $-a$, Lat. $-e$, OCS $-e$ and Lith. $-e$. Because unaccentuated word-final *-e in principle would be dropped (cf. § 1.4.9.1.b), we must assume that in pre-Hittite the ending *-e was accentuated. Moreover, as we see from e.g. uš-ki-i 'see' < *Hu-ské, the raising of word-final accentuated $*-e ́$ to $-i$ has several parallels in Hittite (cf. § 1.4.9.1.a). For an account of the prehistory of the PIE vocative-'ending' *-e, cf. Beekes (1985: 99f.).
-i (nom.-acc.pl.n.-ending)
Some neuter nouns in $-r$ and $-l$ as well as the noun aniiatt- show a nom.-acc.pl.form in -i: a-ni-ina-at-ti (from aniíatt- 'work, task'), hi-in-ku-una-ri (from hinkur / hingun- 'gift'), iš-hi-ú-li (from išhiul 'binding'), ku-uš-ša-ni (from kuššan / kušn'salary, fee'), me-h̆ur-ri (from mēḩur / mēhun- 'time, period'), pár-šu-ul-li (from paršul 'crumb'), etc. Most of these forms are from NH texts, but Prins (1997: 215) adduces OH hu-hu-pa-al-li to show that this ending existed in OH times as
well. Gertz (1982: 312f.) mentions the forms ku-u-ru-re-e (KBo 44.10, 11 (NS)) and a-ni-ia-at-te (KBo 30.80 rev. 5 (MH/MS), which seem to show an ending -e, and points to the fact that in many of the words that are usually thought to show the ending $-i$, a reading with $-e$ is possible as well because they are spelled with signs that are ambiguous regarding their vowel (e.g. hu-hu-pa-al-le, hi-in-ku-ua$r e, ~ i s ̌-h i-u ́-l e, ~ m e-h u r-r e, ~ p a ́ r-s ̌ u-u l-l e) . ~ N e v e r t h e l e s s, ~ o n ~ t h e ~ b a s i s ~ o f ~ f o r m s ~ l i k e ~ a-~$ ni-i ia-at-ti, which unambiguously shows $-i$, she concludes that the ending must have been $-i$. She does not seems to have noticed, however, that $a$-ni-i ia-at-te is attested in a MS text, whereas all examples of $a$-ni-ia-at-ti are from NS texts. So perhaps we must assume a chronological distribution: anizatte $(\mathrm{MS})>$ anizatti (NS). The change of $-e$ to $-i$ likely is analogical (cf. the replacement of OH nom.acc.pl.n. ke-e 'these' by its corresponding singular-form ki-i in NH times).

The prehistory of this ending is in debate. E.g. Milewski (1936: 32f.) argues that $-i$ must reflect the PIE dual-ending $*-i h_{l}$, but Gertz (1982: 320f.) rejects this because words where a dual-ending is to be expected do not show traces of this $-i$. If we are really allowed to conclude that the ending $-i$ is the NH replacement of original $-e$ in analogy to the fact that the function of $\mathrm{OH} k e-e$ 'these' is in NH times taken over by the singular form ki-i, then this ending -e may be compared with the ending $-e$ as visible in $k e-e$ 'these', but also in $a-p e ́-e$ 'those', $=e$ 'these' and ku-e 'which ones', of which I have suggested that they might show the phonetical outcome of ${ }^{*}-\mathrm{Cih}_{2}$ (comparable to the fact that $*$ - $\mathrm{Cu} h_{2}$ is lowered to Hitt. /-Co/).
-i (3sg.pres.act.-ending of the hi-flection)
In the hi-conjugation the ending of 3sg.pres.act. usually is $-i$, which contrasts with $-z i$ of the $m i$-conjugation. Nevertheless, there are two forms from OS texts where we find an ending $-e$, namely in $m a-a z-z e ́ ~ ' h e ~ r e s i s t s ' ~ a n d ~ u n a-a r-a \check{s}-s ̌ e ~ ' h e ~ w i p e s ', ~$ which are normally spelled $m a-a z-z i$ and $u a-a r-s ̌ i$ respectively. We must therefore conclude that the original ending was $-e$, which is being replaced by $-i$ from preHittite times onwards, probably on the basis of the fact that $-i$ has become the specific marker of present forms in Hittite.

In younger texts we see that sometimes $-i$ is being replaced by its $m i$ conjugation counterpart $-z i$. This happens predominantly in stems ending in $-\check{s}-$ and -ḩ- (pa-ap-pár-ši $(\mathrm{MH} / \mathrm{MS})>$ pa-ap-pár-aš-zi $(\mathrm{MH} / \mathrm{MS}), a-a n-s ̌ i>a-a n-a \check{\text { š-zi }}$ (NS), una-ar-ši > una-ar-aš-zi (NS); ma-ni-i̇ia-ah-hi> ma-ni-ia-ah-zi (NH), la-a-hu$i>l a-h u-u z-z i(\mathrm{NH}), z a-a-h i>z a-a h-z i(\mathrm{NS}))$, but occasionally occurs in stems in


It should be noted that no mi-conjugation verb ever takes over the hi-ending $-i$ (alleged ku-er-ri 'he cuts' instead of normal ku-er-zi in my view is a scribal error (see at kuer- $^{z i} / k u r-$ ); 3sg.pres.act. ha-an-da-a-i (KBo 5.2 iv 16) must be a mistake, compare correct [ha-a]n-da-a-iz-zi in ibid. 10; 3sg.pres.act. "ha-at$r a-a-i$ " (KUB 8.24 iii 3), cited thus by Puhvel (HED 3: 269f.), is in fact ha-at$r a-a-i z[-z i])$.
The ending -e can only reflect $*_{-e-i}$ or $*_{-o-i}$. Because the other hi-conjugation endings -hhe $<*_{-} h_{2} e-i$ and ${ }^{* *}$-tte $<{ }^{*} t h_{2} e-i$ clearly correspond to the PIE perfect endings, I compare Hitt. $-e$ with the PIE 3 sg.perf.-ending $*_{-e}$ as attested in e.g. Skt. $-a$, Gk. $-\varepsilon$, Goth. $-\varnothing$, etc.
$=(i) a$ (enclitice conjunctive particle) 'and, also': $C C=a, V=i a, V=e-a$ (OS).
Derivatives: see kui- + =(i) a under kui- / kuua-.
Anat. cognates: Pal. =(i)a 'and’ (non-geminating), kuiš=a 'everybody'; CLuw. $=\boldsymbol{h a} \boldsymbol{a}$ 'and, also', kuiš=ha 'some/any(one)'; HLuw. =ha 'and', REL(-i)-sa-ha /kuisha/ 'someone'; Lyd. qid=a 'whatever'; Lyc. =ke 'and', ti=ke 'someone'; Mil. $=k e$ 'and'.

PAnat. *= Ho
PIE * $=h_{3} e$
This enclitic particle can be used as a clause conjunctive, but can be used on word level as well. It is always attached to the second element: $A \ldots B=i a$ ' A and B '. When used on both elements, $A=i a \ldots B=i a$, it denotes 'both A and B'. Formally, it shows the following distribution: if the word to which it is attached ends in a consonant, the particle turns up as $=a$ and causes gemination of the preceding consonant ("geminating $=a$ ", which contrasts with "non-geminating $=a$ " 'but' $($ see $=(m) a)$ ). If the preceding word ends in a vowel or is written with a logogram, the particle turns op as =in (rarely spelled $=e-a$ ). The particle loses its vowel when a particle follows that ends in a vowel. Since almost all these particles start in $-a$-, this loss is only visible in cases like $\check{s} u$-me-e $\check{s}-\check{s}=u$ - $u \check{s}$ (StBoT 25.4 ii 7 $(\mathrm{OS}))=\check{s} u m e \check{~} \check{+}=($ i $) a+=u \check{s}$ (otherwise we would expect $\check{s} u-m e-\check{s}=u-u \check{s}$, cf. e.g.
 particular use is its attachment to the relative pronoun kuiš, which makes it a generalizing pronoun: $k u i s ̌ s ̌=a$ 'everyone'.

The particle has cognates in all Anatolian languages, which clearly show that we have to reconstruct a form with an initial $* H$ (CLuw. =ha, HLuw. =ha). This means that in Hittite an original laryngeal was lost and that $=$ (i) $a$ cannot be derived from a particle $*=i o$ vel sim. (pace Puhvel HED 1/2: 8). The Lycian form
$=k e$ is significant as this form points to PAnat. $*=H o$ (and not $*=H a$ ). A PAnat. form $*=H o$ can either reflect $*=h_{2} O$ or $*=h_{3} e$. In my view, the first option is unlikely as a sequence $* V=h_{2} o$ should have yielded Hitt. $* * V=h h a$, and not $V=i a$ (which seems to derive from a hiatus $* V P a$ ). I would therefore rather reconstruct the particle as $*=h_{3} e$ : we know that intervocalic $* h_{3}$ is lost through hiatus in Hittite. This means, however, that in Luwian and Lycian $*=h_{3} e$ shows the development as if it was a separate word, with preservation of initial $* h_{3}$ in front of $* e$. In function and use the particle $*=h_{3} e$ acts identical to PIE $*=k^{w} e$ 'and, also'. If $* h_{3}$ was a labialized consonant, then the formal similarity between $*=h_{3} e$ ( $\left[=\bigcap^{\mathrm{w}} \mathrm{e}\right] ?$ ) and $*=k^{w} e$ is striking.
iia $a^{\text {tta(ri) }}$ : see $\underset{\sim}{i e / a-{ }^{\text {HIa(ri) }}}$
iina $a^{-{ }^{i}}$ : see $i e / a-{ }^{z i}$
${ }^{\text {UDU }}$ iiant- (c.) 'sheep' (Sum. UDU): nom.sg. i-ina-an-za, acc.sg. i-i-ia-an-ta-an, gen.sg. i-ía-an-ta-aš.

PIE *h il-ent-
See Puhvel HED 1/2: 347f. for attestations and discussion. Since Pedersen (1938: 148), this word is generally regarded as derived from the participle of $i i^{z i}$ 'to go' or $i e / a$ - $^{\text {Ila(ri) }}$ 'to go, to march' and semantically comparable to Gr. $\pi \rho o ́ \beta \alpha \tau o v$ 'sheep', which is derived from $\beta$ aív $\omega$ 'to go'. So originally it meant 'walking (cattle)'. See at $i_{-}^{z i}$ and $i e / a-^{\text {Ita(ri) }}$ for further etymology.
iìāta, iaiatar / iidatn- (n.) 'growth, fertility, prosperity': nom.-acc.sg. i-ía-a-ta (KUB 12.63 rev. 29 ( $\mathrm{OH} / \mathrm{MS}$ )), i-i ia- $a-d a(\mathrm{KBo} 3.7$ i $18(\mathrm{OH} / \mathrm{NS})$ ), i-i $a-t a(\mathrm{KUB}$ 2.2 iii 28 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 12.42 rev. 4 (MH/NS), KUB 8.22 iii 3 (fr.) (NS), KUB 53.1 i 4 (NS)), i-ia-da (KUB 12.63 rev. 16 (OH/MS), KUB 4.4 obv. $13(\mathrm{NH})$ ), $i$ -ia-tar (KUB 23.40 obv. 3 (MS), KUB 43.60 i 11 (OH/NS), KBo 11.1 obv. 15 (NH)), gen.sg. i-ịa-at-na-aš (KUB 39.7 i 11, ii $10(\mathrm{OH} / \mathrm{NS})$, KUB 13.33 ii 5 (NS)), i-įa-at-na<-aš> (KUB 39.7 ii 20 (OH/NS)), i-i्Ca-ta-aš (KBo 18.133 obv. 8 (NS)), abl. i-i-ia-at-na-za (KUB 31.71 iv 30 (NH)).
Derivatives: iidatnuuant- (adj.) 'growing, luxuriant' (nom.-acc.sg.n. i-i,ia-at-nu-ua-an (KUB 29.7 rev. 18 (MH/MS))), iiatniiant- (adj.) 'growing' (nom.-acc.sg.n.
 (KBo 6.11 i $8(\mathrm{OH} / \mathrm{NS}))$ ).

See Puhvel HED 1/2: 350f. for attestations. This word has two stems, namely iiäta besides iilatar / iĩatn-. That the first variant is not a mere $r$-less variant of the second is apparent from the gen.sg. iíataš as visible in the expression i-į्a-ta-aš $m e-h u-n i$ (KBo 18.133 obv .8 ) 'in the time of fertility'. Moreover, iilata is attested in an $\mathrm{OH} / \mathrm{MS}$ text already, which may indicate that we rather should assume that the stem iizatar / iiatn- is a secondary rebuilding of an original stem iĩata. This could possibly explain the remarkable retention of the cluster -tn- that contrasts with the normal oblique stem of abstracts nouns in -ātar, which is -ānn-. Rieken (1999a: 255-6) therefore reconstructs $i \stackrel{i}{2} a ̈ t a$ as $* h_{1} i$-eh $h_{2}$-teh ${ }_{2}$, ultimately from the root *h $h_{l} e i$ - 'to go', through 'moveable wealth', cf. Watkins (1979: 282-3).
ie/a- ${ }^{\text {tta(ri) }}$ (IIIg) 'to go, to come, to walk, to proceed, to stride, to march' (Sum. $\mathrm{DU}): 1$ sg.pres.midd. $i$-ina-ah-ha-ri (NH), 2sg.pres.midd. i-ia-at-ta-ri (OH/NS), $i$ -ia-at-ta-ti (NH), 3sg.pres.midd. í ia-at-ta (KUB 36.106 obv. 2 (OS)), i-íia-at-ta, i-ía-ad-da, i-ìia-at-ta-ri (MH/MS, often), i-at-ta-ri (KUB 43.38 rev. 24 (MH/MS)), $i-\frac{1}{i} a-a d-d a-r i, i-\frac{1}{2} a-a t-t a-a-r i(K U B 2.5 v 5(N S))$, $i-i a-a d-d a-a-r i$, $1 \mathrm{pl} . \mathrm{pres} . m i d d . ~ i-$ ía-u-ua-aš-ta, 2pl.pres.midd. i-ia-ad-du-ma, 3pl.pres.midd. i-e-en-ta (KBo 22.1 obv. 14 (OS)), i-en-ta (IBoT 2.12 i 6 (NS)), i-en-ta-ri (KBo 14.129 rev. 11 (MS)), $i$-íia-an-ta-ri (MH/MS, often), i-ía-an-da-ri (MH/MS), i-ia-an-ta (often),
 3sg.pret.midd. i-íia-at-ta-at, 3pl.pret.midd. i-íia-an-ta-at, 2sg.imp.midd. i-ia-ah-hu-ut (OS), i-e-hu-ut (KBo 8.66 obv. 8 (NS)), 3sg.imp.midd. i-ia-at-ta-ru (MH/MS), 2pl.imp.midd. i-i्Ca-ad-du-ma-at, 3pl.imp.midd. i-ia-an-ta-ru; part. i-i्व $a n-t$-.

PIE *hil-ie/o-
See Puhvel HED 1/2: 330f. for attestations. The bulk of the attestations show a stem iida- (rarely spelled $\underset{\sim}{ } a$-), but we find a stem $\underset{\sim}{i e} e$ - a few times, of which the OS attestation i-e-en-ta is significant. We therefore are clearly dealing with an original thematic inflection ie/a-. This verb is middle, but compare the occasional active forms that are gathered under the lemma $i^{z-}$. The connection with the PIE root *h $h_{1} e i$ - was made from the beginning of Hittitology onwards, but the exact formation of this verb is in debate. In my opinion, assuming a formation $* h_{l} i$ -ie/o- would explain the attested paradigm best (i.e. belonging to class IIIg, cf. $\S$ 2.2.3.4). See at paiiz- ${ }^{z i} /$ pai- 'to go' and ue- ${ }^{z i} /$ uua- 'to come' for other verbs that go back to $* h_{1} e i-$.
$i e / a_{-}^{z i}(\mathrm{Ic} 1)$ 'to do, to make' (Sum. DÙ): 1sg.pres.act. $i$-i-ia-mi (OS, often), $i-e-m i$ (OS, 1x), i-ía-am-mi (KUB 1.16 iii 24 (OH/NS)), 2sg.pres.act. i-e-ši (OS), i-ia-ši (MH/MS), 3sg.pres.act. i-e-ez-zi (OS, often), i-e-zi (OS), i-ez-zi (OS), ia a-az-zi (KUB 36.108 obv. 12 (OS)), i-i-ia-az-zi, i-i-ia-zi, 1pl.pres.act. i-i-ia-u-e-ni (MH/MS), i-ía-u-ua-ni (KBo 3.8 ii 24 ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.pres.act. i-ia-at-te-ni (MH/MS), 3pl.pres.act. ía-an-zi (OS), i-i̇a-an-zi (OS, often), i-an-zi (KUB 32.130, 24 (MH/MS)), i-en-zi (MH/MS, often), i-e-en-zi, 1sg.pret.act. i-i ia-nu-un (MH/MS), 2sg.pret.act. i-e-eš (KUB 23.117, $2(\mathrm{OH} / \mathrm{NS})$, KUB 31.110, $12(\mathrm{OH} / \mathrm{NS})$, KUB 36.103, 6 ( $\mathrm{OH} / \mathrm{NS}$ )), i-i-ia-aš (MH/MS), i-ía-at, 3sg.pret.act. i-e-et (OS, often), e-et (KUB 36.41 i 5 (MS)), i-ia-at (MH/MS, often), 1pl.pret.act. i-ia-u-en (MH/MS), i-ia-u-e-en (MH/MS), 2pl.pret.act. i-ia-at-te-en (OH/NS), i-ia-at-tén (OH/NS), 3pl.pret.act. i-e-er (OS, often), i-ia-er (KUB 34.90, 7 (NS)), 2sg.imp.act. i-ía (MH/MS), 3sg.imp.act. i-e-ed-du (MH/MS), i-ia-ad-du (MH/MS), i-ad-du (MH/MS), 2pl.imp.act. i-ía-at-tén (MH/MS), 3pl.imp.act. i-ia-an-du (often), i-en$d u$ (KBo 6.34 ii 48, 49 (MH/NS)); part. $i$-ina-an-t-; verb.noun i-ia-u-ua-ar; inf.I $i$ -ia-u-ua-an-zi; inf.II i-i,ia-u-ua-an-na; impf. e-eš-ke/a- (KUB 12.63 obv. 5 (OH/MS), KBo 5.3 iii $64(\mathrm{NH})$ ), iš-ke/a- (KUB 4.1 i 15 (MH/NS)).

Anat. cognates: CLuw. $\overline{\boldsymbol{a}}(\boldsymbol{i} \boldsymbol{a})$ - 'to do, to make' (1sg.pres.act. $a-u i_{5}, 2 \mathrm{sg}$. pres.act. $a-a-i a-s ̌ i, 3 \mathrm{sg} . p r e s . a c t . ~ a-t i, 1$ sg.pret.act. $a-h a, 3 \mathrm{sg} . p r e t . a c t . ~ a-i d a-t a, ~ a-a-t a, a-a-d a$, $a-t a, \quad a-d a$, 3pl.pret.act. $\quad a-a-i a-a n-t a, \quad a-i-i a-a n-d a$, 2sg.imp.act. $a-a-i a$, 3sg.imp.act. $a-a-d u$, 3sg.pres.midd. $a-a-i a-r i$, 3 sg .imp.midd. $a-a-i a-r u$, part. $a-i-$ ia-am-mi-in-zi); HLuw. á(ia)- 'to do, to make' (1sg.pres.act. /Rawi/ á-wa/i-' (HİSARCIK 1 §5), 3sg.pres.act. /Raiadi/ á-ia-ti-i (SULTANHAN §25), 1sg.pret.act. /Raha/ á-ha (HİSARCIK 1 §2), 3sg.pret.act. /Rada/ á-tà-' (SULTANHAN §13), á-tà (SULTANHAN §45), á-ra+a (MARAŞ 2 §3), á $+r a / i$ (?) (EĞREK §3)); Lyd. i- 'to make?' (3pl.pret. il); Lyc. a- '(act.) to do, to make; (midd.) to become' (3sg.pres.act. adi, edi, 3pl.pres.act. aiti, 1sg.pret.act. a $\quad$ a, a $\chi \tilde{a}$, agã, 3sg.pret.act. ade, adẽ, ede, 3pl.pret.act. aitẽ; 1sg.pret.midd. aұagã; inf. ẽñne, ẽñne(i)).

PIE *HH-ie/o- ?
See Puhvel HED 1/2: 335 for attestations. Note that 3pl.pres.act. e-en-zi (Bo 2599 i 23) cited in HW (Erg. 2: 13) is incorrect: we should read $u$-en-zi (KUB 56.46 i 23). The OS attestation $i-\mathrm{IZ}-z i$ is to be read as $i-e z-z i / i e e^{\mathrm{s}} \mathrm{i} /$ and does not show a stem $i$ - (pace Puhvel 1.c.).
This verb inflects according to the $-i e / a$-class. The oldest attestations closely reflect the PIE situation:

| present | preterite |
| :---: | :---: |
| iinami | ii̇anun |
| ieši | iess |
| iezzi | iet |
| iiaueni (OH/NS) | iiauen |
| [*iettani] | [*ietten] |
| iianzi | ier |

In the $\mathrm{OH} / \mathrm{MH}$-period, we see that the stem $i e$ - receives some productivity (yielding iemi ( 1 x in an OS text vs. iiami 7 x in an OS text), ienzi and iendu), but from the MH period onwards it is clear that the stem iia- is winning the
 we find a stem aida- that occasionally contracts to $a$-. This $a$ - is the predecessor of Lyc. $a$ -

The etymological interpretation of this verb is quite difficult. Kronasser (1966: 74) connected $i i e / a a^{z i}$ with Lat. $i \bar{e} c \bar{l}$ 'I threw' and Gr. $\bar{\eta} \kappa \alpha$ 'I sent, I threw' $<*_{i} \bar{e}-$ (i.e. * Hieh $_{1}$-), which is followed by e.g. Watkins (1969a: 71) and Melchert (1994a: 75, 129). This etymology is problematic, however. First, the semantics do not fit: I do not see how 'to do, to make' matches 'to send, to throw'. Secondly, the formal side is wrong. If the etymon really were *Hieh $l^{-}$, we would expect Hitt. **ie ${ }^{2}$ - throughout the single forms. In the 1 sg . of 'to make, to do', the original forms are iĩami and iĩanun and not iemi and **ienun. The form iemi 'I make' is indeed attested, but occurs only thrice in one text (KBo $17.1+25.3$ ii 9 (fr.), iii 21, 23 (fr.) (OS)), which makes it far less attested than iiami, which is attested 7 x in OS texts and 90x in total in my files. A form ${ }^{* *}$ ienun is not attested at all, which is remarkable, especially if we compare the verbs peie--zi pei- 'to send away' and uie- ${ }^{z i} / u i-$ ' 'to send (here)', which indeed are derived from the root * Hieh $_{l^{-}}$'to send'): they show 1sg.pret.act. peienun (MH/MS) and uienun (MH/MS). Together with the fact that *Hieh ${ }_{l}$ - in my view would not yield Luw. aida-, I therefore reject the reconstruction that involves the root $*$ Hieh $_{l^{-}}$(but see at peie-/pei- and uie-/ui- for real descendants of this root).

Oettinger (1979a: 349), too, rejected the connection with $*$ Hieh $_{l^{-}}$and reconstructed, primarily on the basis of Luw. aida-, a thematic verb *héei-e/o-. For Hittite, he assumes that * $\breve{e}^{-}$yields $i$ - and that *héé-e/o- yields Hitt. /iie/a-/. Apart from the fact that the supposed development $*^{c} \check{c}->i$ - is incorrect (e.g. $\bar{e} \check{s} z i<$ *h $h_{1}$ és-ti, éšhar < * $h_{1}$ és $h_{2} r$, etc.), Melchert (1984a: 14f.) rightly points out that

Hitt. $i$-e-ez-zi probably denotes /iet ${ }^{5} \mathrm{i} /$, which is supported by the OS spelling $i a-$ $a n-z i / \mathrm{iant}^{\mathrm{s}} \mathrm{i}$, and that we have to reckon with a stem /ie/a-/.
In my view, the only way to connect Hitt. /ie/a-/ with Luw. aida-, is to assume a preform *HH-ie/o- (note that there is no further evidence for active verbs that show a thematic vowel in Hittite). In Hittite, *HH-ie/o- yielded ie/a- (cf. inu- ${ }^{z i}<$ * $h_{1} h_{3} i$-neu- (see under $\bar{a}(i){ }^{\text {ari }} / i$-), whereas in Luwian, it yielded /? ${ }^{\text {aia-/ (through }}$ *HH-ie/o-, cf. Kloekhorst 2004 for the interpretation of the HLuwian sign á as $/\left\{(\mathrm{a}) /\right.$ ). Unfortunately, I know of no IE cognates. See at $\bar{l} s \check{s} a^{-}{ }^{i} / \bar{l} s \check{s} s$ - for a treatment of the imperfective of this verb.
ieezššar / īēšn- (n.) something evil: nom.-acc.sg. i-e-eš-šar (KUB 24.13 ii 24, KUB 41.21 iv 4, KBo 19.145 iii 7, KUB 9.39 ii 2, KUB $8.39,2,4,5$, KUB 59.11 vi 4, 6 ), gen.sg. i-e-eš-na-aš (KUB 17.18 ii 31).

This word only occurs in lists of evils, e.g. in the following contexts:

KUB 24.13 ii
(23) $a n-s ̌ u-n=a=t a ́=k$-kán NÍ.TE-z $a$
(24) HUL-lu ud-da-a-ar al-ua-an-za-tar i-e-eš-šar-r $=a$
'I have wiped from your body evil words, witchcraft and $i$ ieššar';
KBo 19.145 iii

'..., witchcraft, iēěšar, defilement, ...'.
Often, this word is regarded as a spelling variant of 'ēššar / éěnn-', which is supposed to be the $h$-less variant of éshar / išhan- 'blood' (e.g. Puhvel HED 1/2: 305f.). Although it is true that $\overline{e s h} h a r$ / išhan- can occur in lists of evils as well, then denoting 'bloodshed', there is one context in which it is clear that $i \underline{i} \bar{e} \check{s} s{ }^{s} a r ~ / ~$ iēěn- and ēšhar / išhan- cannot be identical:

KUB 17.18 ii
(29) [(a-pé-e-)da-aš i-da-la-u-]una-aš ud-da-a-na-aš iš-ha-a-na-aš
(30) $[(i s ̌-h 2-a h-r u-u a-a s ̌ ~ l i-i n-k)] i-i a-a s ̌ ~ h u-u-u r-t i-i a-a s ̌$
(31) $[a(l-u a-a n-z e ́-) n a-a s ̌ ~ p a-a p-)] r a-a n-n a-a s ̌ ~ i-e-e s ̌-n a-a s ̌ ~$
'.. to these evil words of bloodshed, of tears, of curses, of conjurations, of sorcerors, of defilement (and) of $i \bar{e}$ ěšar'.

Since both $i \bar{e}$ ěšsar and ēšhar are mentioned here, they cannot be the same word.
Because the exact meaning of ieeššar / ieešn- cannot be determined, it is hard to etymologize it. Formally it looks like an abstract noun in -ēšsar / -ēšn- of a root $i$ or $i e / a$. The only verbs that formally would fit are $i_{-}^{z^{z i}}$ 'to go' / ie/a- ${ }^{\text {la(riri) }}$ 'to go' and $i e / a_{-}{ }^{z i}$ 'to do'. The semantic connection between one of these verbs and 'something evil' is not clear, however.
ikniiant- (adj.) 'lame': nom.sg.c. ik-ni-ia-an-za (NS). PIE *ig-n-ient-?

This word is hapax in the following context:
KUB 12.62 rev.

(8) $a$-ša-an-zi ta-aš-ua-an-za a-uš-zi le-e du-ud-du-mi-i̇a-an-za iš-ta-ma-aš-zi
(9) le-e ik-ni-ia-an-za pád-da-i le-e
'A šišiamma stands in the meadow. Underneath it a blind and a deaf man sit. The blind man cannot see, the deaf man cannot hear and the ikniïant- man cannot run'.

From this context, it is clear that ikniiant- must mean something like 'lame' or 'paralysed'. Puhvel (HED 1-2: 354) connects the word with Hitt. eka- 'ice', so originally meaning 'frozen, paralysed'. If correct, we might have to compare $n$ stem forms like MiCorn. yeyn 'cold’ (*ieg-n-) and ON jaki 'ice-floe' (*ieg-(e)n-). See at eka-for further etymology.
ikt-: see ekt-
${ }^{\text {muš }}$ illuíanka-, ${ }^{\text {Muš }}$ elliịanku- (c.) 'snake, serpent': nom.sg. $i l-$ lu-ia-an-ka-aš (KBo 3.7 i 9, 11, KUB 17.5 i 9), il-lu-i-ia-an-ka-aš (KUB 36.5 ii 28, KUB 17.6 i 4 (fr.)), $[i l-l]$ i-un-k[i-is] (KBo 12.83 i 7 (OH/NS)), acc.sg. il-lu-ia-an-ka-an (KUB 17.5 i 5 (fr.), 15, 17 (fr.), KBo 3.7 iii 24), il-li-i-ia-a[n-ka-an] (KBo 3.7 iii 31), [e]l-li-i̇ia-an-ku-un (KBo 26.79, 17), gen.sg. il-lu-ia-an-ka-aš (KBo 3.7 iii 7, 26), acc.pl. el-li-i̇ia-an-ku-uš (KUB 24.7 iii 70).

See Puhvel HED 1/2: 358-9 for attestations. This word shows several different stems, namely illuianka-, illiianka-, elliianku- and (possibly) illiunki-. To my mind, these alterations clearly point to a non-IE origin of this word. I therefore reject Katz' attempt (1998) to explain this word as reflecting "**eel-snake", i.e. a
compound of the elements illui- and anka/u- of which the former is supposed to be cognate to PGerm. *ēela- 'eel' and the latter to Lat. anguis, Gr. ő $\varphi \stackrel{\text {, etc. }}{ }$ 'snake'.

GIšilzi-: see ${ }^{\text {GIŠ }}$ elzi-
imma (adv.) 'truly, really, indeed': im-ma (OS).
Anat. cognates: CLuw. imma (adv.) 'indeed’ (im-ma); HLuw. ima (adv.) 'indeed' (i-ma).
IE cognates: Lat. immō (particle) 'indeed'.
See Puhvel HED 1/2: 359f. for attestations and Melchert 1985 for semantics, who states that the basic function of imma is indicating asseveration and emphasis. Goetze \& Pedersen (1934: 77-9) connected imma with Lat. immō 'indeed’. Although semantically and formally this comparison is convincing, it is not fully clear how to reconstruct these forms. Melchert (o.c.) reconstructs *id-moh (with nom.-acc.sg.n. $* i d$ of the demonstrative pronoun $* h_{l} e-, *\left(h_{l}\right) i-$ ) but Kimball (1999: 299), pointing to the fact that $* V d m V$ would probably have been preserved in Luwian (cf. Luw. katmarši- ~ Hitt. kammaršiie/a- ${ }^{z i}$ ), rather reconstructs *im$m o h_{2}$, with acc.sg.c. ${ }^{*} i m$. According to her, ${ }^{*} m o h_{2}$ may be compared with Gr. $\mu \alpha{ }^{\prime}$ $<* m h_{2}$. Within Hittite, one could consider a connection with namma 'then, in addition' (q.v.).
imiie/a- ${ }^{z i}$ (Ic1) 'to mingle, to mix': 1sg.pres.act. i-mi-ia-mi (KUB 24.14 i 4 (NS)), i-im-mi-ia-mi (KUB 24.15 obv. 10 (NS)), im-mi-ia-mi (KUB 24.14 i 10 (NS)), 2sg.pres.act. im-me-ia-ši (KBo 21.20 rev. 17 (NS)), im-me-at-ti (KUB 21.5 iii 15 (NH)), 3sg.pres.act. im-mi-ia-zi (KUB 11.20 i 10 (OH/NS)), im-mi-ia-az-zi (KUB 7.1 i 27 ( $\mathrm{OH} / \mathrm{NS}$ ), VBoT 120 ii 3 (MH/NS)), 3pl.pres.act. i-mi-ia-an-zi (KBo 14.63 iv 14 (fr.) (MH/MS), KBo 6.34 ii 22 (MH/NS), KUB 29.4 iv 26 (NS)), $i$ -im-mi-an-zi (KUB 29.48 rev. 16 (MH/MS)), im-mi-ia-an-zi (KUB 1.11 iv 12 (MH/MS), KBo 6.34 i 32 (MH/NS)), im-mi-an-zi (KBo $3.5+$ IBoT 2.136 iv 65 (MH/NS)), 1sg.pret.act. i-mi-e-nu-un (KBo 3.46 obv. 13 (OH/NS)), 1pl.pret.act. i-mi-į्a-u-en (KUB 43.74 obv. 13 (NS)), 3pl.imp.act. im-mi-i्ia-an-du (KUB 36.12 iii 3 (NS)); 3sg.pres.midd. i-mi-i a-at-ta-ri (KUB 32.135 i 9 (fr.), iv 8 ( $\mathrm{OH} / \mathrm{MS}$ )), im-mi-ia-ad-da-ri (KUB 29.8 ii 21 (MH/MS)), im-me-ia-ta-r[i] (KBo 18.62 rev. 10 (NS)), 3pl.pres.midd. i[-im-mi-i]a-an-ta-ri (KBo 20.63 i 7 (OH/NS)), 3pl.pret.midd. im-mi-ia-an-da-at (KBo 14.50 obv. 6 (MS?)), 3pl.imp.midd. im-me-at-ta-ru (KUB 43.38 rev. 20 (NS?)); part. i-mi-ía-an-t- (KBo 21.34 ii 19, 54,

56, iii 34, 51 (MH/NS), KUB 15.31 iii 53 (MH/NS), KBo 11.19 obv. 12 (NS)), $i$ -im-mi-ia-an-t- (KUB 15.34 i 15, i 25, iii 30 (MH/MS)), im-mi-ia-an-t- (KUB 15.34 ii 42 (MH/MS), KUB 1.11 i 35, ii 30, iii 37 (MH/MS), KUB 1.13 iv 39, ii 58 (MH/NS), KUB 15.32 iv 11 (MH/NS), KUB 33.120 i 40 (MH/NS), KUB 24.14 i 15 (NS)), im-mi-an-t- (KBo 47.37, 8 (MH/NS), KUB 1.13 i 10 (MH/NS)), im-me-ía-an-t- (KUB 28.102 iv 12 (OH/NS), KUB 24.15 obv. 15 (NS)); impf. im-m[i-i]š̌-ke/a-(KBo 23.27 ii 29 (MS)).

Derivatives: imiul- (n.) 'grain mix, horse feed' (nom.-acc.sg. i-mi-ú-l=a-a=š-ma-aš (KUB 29.41, 8 (MH/MS)), i-mi-ú-ul (KBo 12.126 i 29 (OH/NS)), im-mi-ú$u l$ (KBo 4.2 ii 33 (OH/NS), KUB 7.54 ii 17 (fr.) (NS)), im-mi-i-ú-ul (KBo 10.37 ii $15(\mathrm{OH} / \mathrm{NS}))$ ).
IE cognates: Skt. yamá- 'twin', Latv. jumis 'two joined into a unite, things grown together, dubblefruit(?)', MIr. emon 'twins'.

PIE *im-ie/o-
See Puhvel HED 1/2: 361f. for attestations. The verb and its derivative are spelled $i$-mi-, $i$-im-mi-, $i m-m i$ - and $i m-m e-$. Of these four possibilities, the spelling im-meis found in NS texts only, whereas $i$-mi-, $i$-im-mi- and $i m-m i$ - are all attested in MS texts already. Of these spellings, i-mi-ia-at-ta-ri ( $\mathrm{OH} / \mathrm{MS}$ ) is the oldest one and determines that the original spelling of this verb was $i-m i$-, which was altered to im-mi- through an intermediate stage i-im-mi- (compare the spelling chronology of amiiant-: original $a$-mi- changed to am-mi- through a stage $a$-am$m i-$ ). This means that we are dealing with an original verb imiie/a ${ }^{z i}$.
Usually, this word is etymologically interpreted as *en-mei- 'to mix in' (~ Skt. máyate 'to exchange') as first suggested by Sturtevant (1933: 133, 224), cf. e.g. Puhvel (l.c.), Melchert (1994a: 101) and Rieken (1999: 463). The fact that the original spelling of this verb is with single $-m$ - is not very favourable to this etymology, however. We would expect that *en-mei- (or even better *en- $h_{2}$ mei-, cf. Gr. à $\mu \varepsilon i \beta \omega$ 'to exchange') would surely yield geminate -mm- (note that this was noticed by Rieken (o.c.: 464) as well, but she nevertheless sticks to the etymology under the totally ad hoc assumption that the OH and MH scribes did not care about writing geminates as much as their NH colleagues did). I therefore reject the etymology, also because a verbal univerbation with the element $* h_{l}$ en'in' is unparalleled in Hittite.
In my view, imiie/a- ${ }^{z i}$ can hardly reflect anything else than *(H)im-ie/o-, derived of a root * $(H)$ iem-. Although I know no verbal examples of such a root (Skt. yam'to hold, to stretch out' remains semantically far), a nominal cognate may be found in Skt. yamá- 'twin' (cf. Eichner apud Oettinger 1979a: 345), Latv. jumis
'two joined into a unite, things grown together, dubblefruit(?)', MIr. emon 'twins' $<*$ iem-. The original meaning of this root then must have been 'to mingle, to unite'.
inan- (n.) 'illness, ailment' (Sum. GIG): nom.-acc.sg. i-na-an, gen.sg. i-na-na-aš, dat.-loc.sg. i-na-ni, dat.-loc.pl. i-na-na-aš.

See Puhvel HED 1/2: 365f. for attestations. The word shows an $n$-stem inflection and is semantically comparable to erman / armn- (q.v.). Mechanically, inan- can hardly reflect anyhting else than *(H)in-on-, but it is difficult to find IE cognates. Usually, inan- is connected with Skt. énas- 'mischief, crime, misfortune', GAv. aēnah- 'crime, wrong, mischief' (cf. Puhvel (1.c.) for references). Apart from the semantic problems ('mischief, crime' is quite different from 'illness, ailment'), this is formally unattractive, however, because we then would have to reconstruct a root *Hein-, which is impossible according to the PIE root constraints. Moreover, no other cognates for énas- are found outside of Indo-Iranian. I would rather derive inan- from a root $*(H)$ ien-, but such a root is further unknown to me.
inarā- (stem) 'vigor'.
Derivatives: innarā (adv.) 'explicitly, willfully, purposely' (in-na-ra-a (IBoT 1.36 i 48 (fr.) (MH/MS), KBo 10.45 i 46 (MH/NS), KUB 13.7 i 18 (MH/NS), KUB 31.68 rev. 44 (NS), KUB 54.1 ii 48 (NS), KUB 21.33 iv 20 (NH), KUB 26.1 iii $43(\mathrm{NH})$, KUB 26.32 i $14(\mathrm{NH})$ ), in-na-ra=ma (IBoT 1.36 i 49 (MH/MS)), in-na-ra=ua=kán (KUB 31.68 rev. 32 (NS)), in-na-ra=uuna=mu=kán (KUB 54.1 i 36 (NS), in-na-ra=u-ua- $a=s ̌-m a-a s ̌$ (KUB 1.8 iv 8 (NH))), in(n)arahh- ${ }^{i}$ (IIb) 'to make strong, to strenghten' (3sg.pres.act. $i$-na-ra-ah-hi (KUB 36.110 rev. 12 (OS)); 1sg.pret.midd. in-na-ra-ah-ha-at (KUB 30.10 obv. 18, 19 ( $\mathrm{OH} / \mathrm{MS}$ )); verb.noun in-na-ra-ah-hu-ar (KBo 17.60 rev .10 (MH/MS))), innarauauar (n.) 'strength' (nom.-acc.sg. in-na-ra-u[a-u-]a-ar
 (nom.sg.c. i-na-ra-u-an-za (KUB 36.110 rev. 11 (OS)), in-na-ra-u-ua-an-za (KUB 17.20 ii 3 (NS), Bo 6044, 4 (undat.), KUB 55.39 iii 30 (NS), VBoT 24 i 29 (MH/NS)), acc.sg.c. in-na-ra-u-ua-an-da-an (VBoT 24 ii 30 (MH/NS)), dat.loc.sg. in-na-ra-ua-an-ti (FHG 1, 19 (OH/NS), VBoT 24 ii 34 (MH/NS)), in-na-ra-a-u-una-an-ti (KUB 30.10 obv. 8 (OH/MS)), nom.pl.c. in-na-ra-u-ua-an-te-eš (KBo 17.88 iii 22 (OH/MS), KUB 15.34 i 48 (MH/MS), HT 1 i 43, 46 (MH/NS)), in-na-ra-ua-an-ta-aš (HT 1 i 29 (MH/NS)), in-na-ra-u-u_a-an-ta-aš (KUB 9.31 i

36 (MH/NS)), in-na-ra-u-ua-an-da-aš (HT 1 i 59 (MH/NS)), in-na-ra-ú-ua-an-da-aš (KUB 9.31 ii 6 (MH/NS))), innaraūātar / innaraúann- (n.) 'strength, force, vigor' (Sum. KAL-tar; nom.-acc.sg. in-na-ra-u-ua-tar (MH/MS), in-na-ra-u-una-a-tar, in-na-ra-ua-tar, dat.-loc.sg. in-na-ra-u-ua-an-ni, instr. in-na-ra-u-ua-an-ni-it), innarauuahh- ${ }^{i}$ (IIb) 'to make strong, to strengthen' (verb.noun gen.sg. [in-n]a-ra-u-ua-ah-hu-u-ua-aš (KUB 2.1 ii 17 (OH/NS))), innaraūěšš- ${ }^{z i}$ (Ib2) 'to become strong' (3sg.pres.act. in-na-ra-u-e-eš-zi (KUB 8.35 obv. 9 (NS)).

Anat. cognates: CLuw. $\overline{\boldsymbol{a}} \boldsymbol{n n a r a / i -}$ (adj.) 'forceful, virile' (acc.sg.c. an-na-ri-in), $\boldsymbol{a n n a r a}(i)-$ 'to be forceful' (Hitt. verb.noun gen.sg. an-na-ra-u-ua-[aš]), $\overline{\boldsymbol{a}} \boldsymbol{n n a r i -}$ (c.) 'forcefulness, virility' (nom.sg. a-an-na-ri-iš, an-na-ri-iš, acc.sg. an-na-ri-in, an-na-ri-en; case? an-na-ri), annarumm(i)- (adj.) 'forceful, virile' (nom.pl.c. an-na-ru-um-mi-in-zi, an-na-ru-um-mi-en-zi, an-na-ru-um-me-en-zi, асс.pl.c. an-na-ru-um-mi[-in-z]a), $\overline{\boldsymbol{a}} \boldsymbol{n n a r u m a ̄ h i t - ~ ( n . ) ~ ' f o r c e f u l n e s s , ~ v i r i l i t y ' ~ ( n o m . - a c c . s g . ~ a n - n a - ~}$ ru-ma-a-hi, abl.-instr. a-an-na-ru-um-ma-hi<-tà-ti, an-na-ru-um-ma-hi-ta-ti, gen.adj.nom.sg.c. [an-na-r]u-ma-hi-ta-aš-ši-iš), annarumāi- 'to display forcefulness' (2sg.imp.act. an-na-ru-ma-a-i).

See Puhvel HED 1/2: 366f. for attestations. In Hittite, we find several words that are derived from a stem inarā- or innarā- that have a basic meaning 'vital strength, vigor' (cf. Puhvel o.c.: 372). Although the bulk of the attesations are spelled with geminate -nn- (in OH/MS-texts already), the two OS attestations inarahhi and inarauuanza show that the original spelling must have been with single $-n$ - (cf. amiiant- and imiie/a- ${ }^{z i}$ for similar distributions), which is the reason for me to cite this lemma as inarā-. The CLuwian counterpart of this stem is annar-, sometimes spelled ānnar-. The situation that Hitt. inara- corresponds to CLuw. ănnar- reminds us of Hitt. idālu- ~ CLuw. adduual- 'evil', which is explained by assuming that the Hitt. word reflects * $h_{1}$ eduól-u-, whereas the CLuw. word goes back to *héduol- (showing Čop's Law). This means that for inar $\bar{a}-\quad \sim \bar{a} n n a r-$, we have to assume a difference in accentuation as well. Mechanically, we should reconstruct *h enoró- for Hittite, and *hénor- for CLuwian.
Since Hrozný (1917: 74), this word is generally connected with PIE * $h_{2}$ ner'man' and reconstructed as * $h_{1}$ en- $h_{2}$ nor-o- 'having virility inside' (compare for this formation antuuahhaš- / anduȟ̌s- 'man, person' < *'having breath inside'). Apart from the fact that it is awkward that the root $* h_{2}$ ner- is not found anywhere else in the Anatolian language group, I think that the OS spellings with single -nstrongly speak against this reconstruction, which I therefore reject. Unfortunately, I have no better alternative, however.
ini : see aši / uni / ini
inu $-^{i}$ caus. of $\bar{a}(i)-{ }^{\text {a/ri) }} / i$ - 'to be hot' (q.v.)
irh(a)-: see erh- / arah- / arh-
 $e s ̌ s ̌ a-): 1$ sg.pres.act. [i-i]š-ša-ah-ȟi (KUB 1.16 ii 43 (OH/NS)), iš-ša-ah-ḩi (HKM 21 rev. 21 (MH/MS), HKM 52 obv. 9 (MH/MS), KBo 16.97 obv. 15 (MS), KUB 27.38 i 19 (MS), KUB 7.5 ii 5, $20(\mathrm{MH} / \mathrm{NS})$, KBo 5.3 iv $30(\mathrm{NH})$ ), e-eš-ša-ah-hi (KUB 48.123 iv 21 (NS), KBo 4.8 iii 7 (NH), KBo 11.1 obv. 18, 22, 24, 27, 43 (NH), KUB 14.8 rev. $20(\mathrm{NH})$, KUB 14.14 obv. $7(\mathrm{NH})$, KUB 21.27 iv $45(\mathrm{NH})$ ), 2sg.pres.act. iš-ša-at-ti (KUB 30.10 ii 23 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 14.1 obv. 86 (MH/MS)), KUB 26.22 ii 5 (MH/MS), KBo 5.3 i 35 (NH)), e-eš-ša-at-ti (KBo 5.13 iv 2 (NS), KBo 18.79 obv. 5, 8 (NS), KUB 2.11 rev. 6 (NH), KUB 6.41 iv 10 (NH)), 3sg.pres.act. $i$-iš-ša-i (KBo 6.2 ii 25 (OS), KBo 22.1 rev. 32 (OS)), iš$s ̌ a-i(K U B 1.11$ i 42, iii 31 (MH/MS), HKM 52 obv. 14 (MH/MS), KBo 40.140, 2 (MS?), KBo 5.2 iv 45, 46 (MH/NS), KBo 19.44 rev. 1,8 (NH), KBo 6.3 ii 46
 KUB 55.5 iv 23 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 8.69 iii 12 (NS), KUB 24.1 iv 21 (NS), KUB 42.100 iv 23 (NS), KUB 42.87 v 8, 13, 18, 23 (NS), ABoT $14+$ KBo 24.118 iv 25 (NS), KuSa I/1.5, obv. 5 (NS), KBo 5.13 iii 24 (NH), KUB 6.41 iii 43 (NH)), $e-e \check{s}-s ̌ a-a-i(\mathrm{KBo} 6.4$ iv 13 ( $\mathrm{OH} / \mathrm{NS}$ )), e-eš-še-eš-z[i] (KUB 9.16 iv 9 ( $\mathrm{OH} / \mathrm{NS}$ )), 1pl.pres.act. iš-šu-ú-e-ni (KUB 23.115, 5 (MH/NS)), e-eš-šu-u-e-ni (KUB 30.27 rev. 1 (NS)), 2pl.pres.act. i-iš-te-e-ni (KBo 22.1 rev. 27 (OS)), i-iš-te-ni-i (KBo 22.1 rev. 33 ( OS )), iš-ša-at-te-ni (KBo 5.3 iv 29 (NH)), e-eš-ša-at-te-ni (KUB 13.4 i 47, ii 55 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. iš-ša-an-zi (KBo $21.89+\mathrm{KBo} 8.97$ iv 8 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 31.101 obv. 11 (MS), KUB 29.1 ii $5(\mathrm{OH} / \mathrm{NS})$, KUB 17.28 iv 56 (NS)), e-eš-ša-an-zi (OH/NS), eš-ša-an-zi (IBoT 3.148 i 69 (NS)), 1 sg.pret.act. iš$\check{s} a-a h[-h u-u n]$ (KUB 30.10 ii 24 ( $\mathrm{OH} / \mathrm{MS}$ )), iš-ša-ah-ḩu-un (HKM 52 rev. 39 (MH/MS)), e-eš-ša-ah-ḩu-un (KUB 14.10 obv. 19, 24 (fr.) (NH), KUB 14.11, 13 (NH), KUB 23.105, $12(\mathrm{NH})$, KUB 31.66 iii $18(\mathrm{NH})$ ), 3sg.pret.act. $i s ̌-s ̌ i-i s ̌-t a$ (KBo 15.10 i 14, 31, ii 14, iii 56 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 15.13 i 35 (fr.) (NS)), e-eš-še$e \check{s}-t a(\mathrm{KUB} 24.13$ ii 9 (MH/NS), KUB 15.19 obv. 12 (NS), KBo 5.8 ii 28 (NH), KUB 15.1 ii 47 (NH), KUB 21.40 iii 11 (NH)), e-še-eš-ta (KUB 5.6 ii 14 (NS), KUB 22.7 obv. 3 (NS)), e-eš-še-iš-ta (KUB 17.27 ii 29 (MH/NS), KUB 41.19 rev. 3 (MH/NS)), e-eš-ši-eš-ta (KUB 21.33 iv 18 (NH), KUB 22.70 obv. 13, 15,
$22(\mathrm{NH})$ ), e-eš-ši-iš-ta (KUB 24.13 ii 28 (MH/NS), KBo 2.6 i 8 (NH)), 1pl.pret.act. iš-šu-u-en (KBo 12.126 i 23 (OH/NS)), e-eš-šu-u-en (KUB 19.71, 10 (NH)), 2pl.pret.act. e-eš-ša-at-te-in (KUB 21.42 ii 5 (NH)), 3pl.pret.act. $i$-iš-še-er (KBo 6.2 iii 15 (OS)), i-e-eš-šer (KBo 17.105 ii 18 (MH/MS)), e-eš-še-er (KBo 6.6 i 23 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 31.66 ii $24(\mathrm{NH})$ ), e-eš-ši-er (KUB 24.11 iii $3(\mathrm{OH} / \mathrm{NS})$ ), $e$-eš-šer (KBo 6.26 i 40 ( $\mathrm{OH} / \mathrm{NS}$ )), 2sg.imp.act. $i$-iš-ša (KUB 13.2 iii 28 (MH/NS)), iš-ša (KUB 26.22 ii 6 (MH/NS)), e-eš-ša (KBo 5.4 obv. 26 (NH), KBo 5.13 iv $5(\mathrm{NH})$ ), e-iš-ši (KUB 1.16 iii 63 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.imp.act. e-eš-ša-ú (KUB 1.1 iv $80(\mathrm{NH})$ ), 2pl.imp.act. $i-i \check{s}-t e-e[n]$ (KBo 22.62 + 6.2 iii 20 (OS)), iš-ša-at-tén (KUB 13.20 i 19 (MH/NS)), e-eš-te-en (KBo 6.3 iii 22 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.imp.act. iš-ša-an-du (KUB 4.1 i 41 (MH/NS), KUB 13.2 ii 43 (MH/NS), KUB 55.56 rev. ${ }^{?} 6$ (NS)), e-eš-ša-an-du (KUB 13.2 ii 44, iii 5 (MH/NS), KBo 4.4 ii 11 (NS), KUB 26.43 obv. 58 (NS)); part. e-eš-ša-an-t- (KUB 18.20, 9 (NS), KUB 31.66 ii $29(\mathrm{NH})$ ); verb.noun. e-eš-šu-mar (KBo 1.35, 14 (NS)); sup. i-iš-šu-ua-an (KBo 8.42 rev. 2 (OS), KUB 1.16 ii 25 (OH/NS)), e-eš-šu-ưa-an (KBo 3.1 i $22(\mathrm{OH} / \mathrm{NS})$ ), e-eš-šu-u-ua-an (KUB 29.24, $2(\mathrm{OH} / \mathrm{NS})$, KUB 15.3 i 12 (NH)); impf. e-še-eš-ke/a- (KUB 5.22, 21 (NS)), e-eš-ši-ke/a- (KBo 3.34 ii 7 ( $\mathrm{OH} / \mathrm{NS}$ )).

See Puhvel HED 1/2: 300f. for attestations. This verb functions as the imperfective of $i e / a^{z i}$ 'to do, to make', and is one of the few imperfectives that do not show the suffix -ške/a-, but -šš(a)- (the other ones are halzišša- ${ }^{i}$ / halzišš-,
 is important as it is the best and oldest attested one.
The verb shows a wild variaty of forms, for instance in the spelling of the initial vowel. We find $i-i \check{s}-\check{s}^{0}$, $i \check{s}-\breve{s}^{0}$, $e-e \check{s}-\breve{s}^{\circ}$ and $e \check{s}-\check{s}^{\circ}$. In OS texts we only find the spelling $i-i \check{s}-s^{\circ}$. In MS texts, this spelling is altered to $i \check{s}-s^{\circ}$, wheres the spellings $e-e \check{s}-s^{\circ}$ and $e s ̌-s^{\circ}$ are found in NS texts only. The unique spelling i-e-eš-šer (KBo 17.105 ii 18 (MH/MS)) may be seen as a mixed spelling between MH išš- and NH $\bar{e} \check{s} s \check{S}_{-}$. The development of $\bar{l} \check{s} \check{s}->i \check{s} \check{s}->\bar{e} s \check{s}^{s} \check{S}_{-}$is due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to NH /e/ before -š- as described in § 1.4.8.1.d (also in e.g. halzišš(a)-> halzešš(a)-, šišš(a)-> šešš(a)-, ${ }^{\text {É }}$ hištā $>{ }^{\text {Éh }}$ heštā, etc.).
The original paradigm of this verb must have been (note that the initial plene $i$ -

 means that this verb inflects according to the $\operatorname{tarn}(a)$-class. The prehistory of this verb is in debate. In my view, this verb cannot be treated separately from the other imperfectives in -šš(a)-, and therefore etymologies that treat $\bar{l} \check{s} \check{s} a-/ \check{l} \check{s} \check{s}-$ as if
it were an isolated verb do not have any merit (e.g. Jasanoff 1988: 235, who reconstructs $\bar{l} \check{s} s \check{s} a-/ \bar{l} \check{s} \check{s}-$ as $*(H) i i-(H) i h_{1}-s-$, a reduplication of the root $*(H) i e h_{1-}$ (but note that $*_{i} e^{\prime} a_{-}{ }^{z i}$ (q.v.) cannot reflect $* H_{i e h} l^{-}$) followed by an "iterative"suffix" *-s-, without explaining halzišš(a)- and uarrišš(a)-). See at $\underset{\sim}{i e / a-}{ }^{z i}$ 'to do, to make' and $-\check{s} \check{s}(a)$ - for further etymological treatments.
-išš(a)- ("imperfective"-suffix): see -š̌(a)-
ǐšana-: see $i s ̌ n \bar{a}-$
išh्̄̄̄a (c.) 'master, lord, owner; lady, mistress' (Sum. EN, Akk. BELU, BELTU): nom.sg. $i s ̌-h a-a-a \check{s}$ (OS, often), iš-ha-aš (OS, less often), e-eš-ha-aš=ši-iš (KUB 41.8 iii 21 (MH/NS)), acc.sg. iš-ha-a-an, voc.sg. iš-ha-a (OH/MS), iš-ha (1x: $\mathrm{OH} / \mathrm{NS}$ ), gen.sg. $i s ̌-h a-a-a \check{s}$ (OS), dat.-loc.sg. $i s ̌-h i-i=s ̌-s ̌ i(\mathrm{OS}), i s ̌-h i-e=s ̌-s ̌ i(\mathrm{KUB}$ 41.1 i $6,10,14(\mathrm{OH} / \mathrm{NS})$ ), iš-hi-i (KUB 33.62 ii 18 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 26.17 ii 5 (MH/MS)), eš-hé (KBo 3.34 i 25 ( $\mathrm{OH} / \mathrm{NS}$ )), nom.pl. iš-he-e-eš (KUB 30.68 obv. 6 (MS)), iš-hé-eš (KBo 3.46 obv. $38(\mathrm{OH} / \mathrm{NS})$ ), dat.-loc.pl. iš-ha-aš (OH/NS).

Derivatives: išhaššara- (c.) 'lady, mistress' (Sum. GAŠAN, Akk. BELTU; dat.loc.sg. iš-ḩa-aš-ša-ri (KUB 33.62 ii 18 ( $\mathrm{OH} / \mathrm{MS}$ ))), išhaššaruant- (adj.) 'practising lordliness' (nom.sg.c. iš-ha-aš-šar-una-an-za, acc.sg.c. iš-ha-aš-šar-una$a n-t a\left[n_{x}\right]$, dat.-loc.sg. iš-ha-aš-šar-ua-an-ti), išhaššarū̄̄tar / išhaššaruann- (n.)
 ha-aš-šar-una-an-na-aš, instr. iš-hुa-aš-šar-ûa-an-ni-t=a-at=kán), išhaššarūēšš-zi (Ib2) 'to become a lord(?)' (broken: iš-ha-aš-šar-u-e-e[š-...]), išhaššaruahh ${ }^{i}$ (IIb) 'to make lordly' (impf.3sg.imp.act. iš-ḩa-aš-šar-ua-ah-hi-eš-ki), išhezziie/a${ }^{z i}$ (Ic1) 'to dominate' (3sg.pres.act. iš-he-ez-zi-ia-zi; 3sg.pret.midd. iš-he-ez-zi-ta), *išheznatar / išheznann- (n.) 'lordship' (dat.-loc.sg. EN-ez-na-an-ni).

IE cognates: Lat. erus 'master'.

$$
\text { PIE } * h_{1} e s h_{2}-o ́-
$$

See Puhvel HED 1/2: 385f. for attestations. The bulk of the attestations are spelled with a plene vowel in the second syllable: nom.sg. iš-h $a-a-a \check{s}$, acc.sg. $i \check{s}-$ ha-a-an, voc.sg. $i s ̌-h a-a$, gen.sg. $i s ̌-h ̧ a-a-a \check{s}$, dat.-loc.sg. $i \check{s}-h i-i$. The rare spellings with initial $e-e \check{s}-h^{\circ}$ or $e \check{s}-h^{\circ}$ are all NS and are due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to NH le/ before -š- as described in § 1.4.8.1.d.
The etymological interpretation of this word has been in debate. Nevertheless, Ribezzo's suggestion (1920: 128) to connect išhāa with Lat. erus 'master' remains the most attractive. This would imply a reconstruction $* h_{1} e s h_{2}-\delta$ ó-

Puhvel (l.c.) rejects this etymology (for unclear reasons) and rather connects išh $\bar{a}$ - to Luw. úašha-, which he translates as 'master'. As Melchert (1993b: 263) states, CLuw. uašha-rather denotes 'sacralized object', whereas the interpretation of HLuw. washa- remains unclear (nom.sg. "*419"wa/i-sa-ha-sa (TÜNP 1 §6), acc.pl. "*419"wa/i-sa-ha-i-za (BABYLON §2); case unclear ${ }^{* 420}$ wa/i-sa-ha-sa (ASSUR letter $f$ §27)). As an alternative to the connection with Lat. erus, Oettinger (1979a: 499) suggests an inner-Hittite connection with šišha- ${ }^{i}$ / šišh- 'to ordain', which he cites as $\check{s} e s ̌ h(a)$ - and reconstructs as ${ }^{s} s e-s h_{2} o h_{1}-e i$. For $i s ̌ h \bar{a}-$, this would mean a reconstruction $*_{s} h_{2} o ́ h_{l}-s$. Although semantically not unattractive, the formal side of this alternative etymology is difficult. As I show in the lemma of šišha- ${ }^{i} /$ šišh-, this verb rather reflects $*_{s i-s h_{2} \text {-oi-ei, }{ }^{\text {s }} \text { si-sh } h_{2}-i \text {-enti, }}$ a reduplicated form of $i s ̌ h a i-{ }^{i} /$ išhi- 'to bind, to impose upon', which makes the reconstruction with a root $* s h_{2} e h_{1}$ - impossible. Moreover, the prothetic $i$ - that arises in the initial cluster $* s h_{2}$ - does not participate in the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-s \check{ }$ - as we see happening in $i s ̌ h \bar{a}->$ ešha-.
išhahru- (n.) 'tear(s)': nom.-acc.sg. iš-ha-ah-ru (often), e-eš-ha-ah-ru (KUB 7.41 obv. 19 (MH/NS)), gen.sg. iš-h̃a-ah-ru-ua-aš (KUB 31.77 i 7), e-eš-ha-ah-ru-uaaš (KBo 31.121, 11 (NS)), dat.-loc.sg. iš-ḩa-ah̆-ru-ú-i (KBo 11.1 obv. 45), erg.sg. [iš-ha-a]h-ru-ua-an-za (KBo 53.29, 9), abl. iš-ha-ah-ru-ua-az, iš-ha-ah-ru-ua-za, instr. iš-ha-ah-ru-it (KUB 43.60 i 21), nom.pl. iš-ha-ah-ru.

Derivatives: išhahruula/a- ${ }^{\text {tra(ri) }}$ (IIIg) 'to weep' (3sg.pret.midd. iš-ha-ah-ru-ua-at-ta-at; part. iš-ḩa-ah-ru-una-an-t-).

IE cognates: Skt. áśru-, TochA ākär, ākrunt (nom.pl.), TochB akrūna* (nom.pl.), Lith. ãšara, ašarà 'tear'.

PIE * $s+h_{2}$ éḱ-ru- ??
See Puhvel HED 1/2: 390f. for attestations. The word is almost consistently spelled $i s ̌-h a-a h-r u$-. The spelling e-eš-ha-ah-ru- occurs twice only, and these instances are clearly due to the vicinity of the word éšhar 'blood'.

Semantically as well as formally, the word cannot be separated from the words for 'tear' that are found in the other IE languages, Skt. áśru-, TochA ākär, n.pl. $\bar{a} k r u n t$, TochB $a k r u ̄ n a *$, Lith. ãšara, ašarà 'tear', and, more distantly, Gr. $\delta$ ák $\rho v$, OHG zahar, Arm. artawsr, OHG trahin, Lat. lacrima 'tear'. The exact interpretation of the words that show an initial $* d$ is severely in debate (solutions vary widely, see the list in Puhvel (1.c.)), but the interpretation of the unextended forms as reflexes of $* h_{2} e k$-ru-, a derivative of the root $* h_{2} e k$ ' 'sharp, bitter', seems generally accepted. For Hittite, this would mean that we have to assume a
prothetic $*_{S}$ - (an $s$-mobile?, cf. šankuuai- 'nail' $<{ }^{*} s-h_{3} n g^{h}-u$ - $)$ and assimilation of $* h_{2} e k^{\prime}-$ to $* h_{2} e h_{2}$. Unfortunately, such an assimilation is further unknown in Hittite (for my rejection of alleged *kerh $h_{2} s r>*_{2} e r h_{2} s r>$ haršar 'head', see there). Moreover, there is evidence that the word for 'tear' originally was a *-ur/-uen-stem in PIE ( $n$-stem-forms in Germanic, absence of Weise's Law in Sanskrit), of which it is difficult to explain why it did not turn up as a -ur/-uenstem in Hittite (like e.g. pahhur / pahhuen- 'fire', zama(n)kur 'beard'), but showed the metathesis to -ru- that we know from the other IE languages. All in all, the derivation of $i s ̌ h a h r u$ - out of PIE * $h_{2}$ ékr $r u$ - remains quite intricate.
išhai- ${ }^{i}$ / išhi- (IIa4 > Ic1) 'to bind, to wrap; to obligate with, to impose upon' (Akk. RAKĀSU): 1sg.pres.act. iš-he-eh-hi (KUB 55.3 obv. 3, 4 (fr.) (OH/MS?), KBo 18.74, 2 (NS)), 3sg.pres.act. iš-ḩa-a-i (KUB 29.30 ii 16 (OS), KUB 13.15 rev. 4 (OH/NS), KBo 10.45 ii 12 (MH/NS), KBo 40.338 rev. 5 (NS), KUB 12.58 iii 26 (NS), KUB 17.27 ii 5, 12 (NS)), iš-hi-i-e-ez-zi (KUB 33.67 i 5 (OH/NS)), $i s ̌-h i-i a-z i(K B o 21.34+$ IBoT 1.7 i 58 (MH/NS)), iš-hi-i ia-az-zi (KBo 14.3 iv 41 (NH), KUB 34.26, 16 (NH)), 2pl.pres.act. iš-hi-ia-at-te-e-ni (KUB 14.8 ii 35 (NH)), 3pl.pres.act. iš-hi-an-zi (KBo 6.2 iv 42, 43, 46 (OS)), iš-hi-ia-an-zi (KUB 9.22 ii 21 (fr.) (MS), KBo 25.138 i 3 (OH?/NS), KUB 17.12 iii 18 (NS), KUB 36.83 i 4 (NS)), iš-ḩi-an-za (KBo 6.26 i $7(\mathrm{OH} / \mathrm{NS})$ ), 1sg.pret.act. iš-he-eh-ḩu-un (KBo 3.4 iii 26, $31(\mathrm{NH})$, KBo 5.8 ii $3(\mathrm{NH})$ ), iš-ḩe-hu-un (KUB 21.48 rev. 7 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-hูi-i_ia-nu-un (KUB 9.32 i 14 (NS), KBo 3.3 i 18 (NH), KBo 12.38 i $9(\mathrm{NH})$, KUB 21.29 i $10(\mathrm{NH})$ ), 3sg.pret.act. iš-hi-i_ia-at (KBo 6.29 ii $35(\mathrm{NH})$, KBo 14.12 iv $31(\mathrm{NH})$ ), 2pl.pret.act. iš-ḩa-iš-te[-en] (KBo 12.22, 11 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pret.act. iš-hi-i-e-er (KBo 6.34 i 26 (MH/NS)), 2pl.imp.act. iš-hi-i_̨a-at-tén (KBo 10.45 ii 8 (MH/NS)), 3pl.imp.act. iš-ḩi-an-du (KBo 6.34 i 24 (MH/NS)), iš-hi-i-ia-an-du (KBo 6.34 i 28 (MH/NS)); part. iš-hi-i.ia-an-t- (OS), iš-hi-an-t-;
 1.42 ii 3 (NS)); impf. iš-hi-iš-ke/a- (OS).

Derivatives: ${ }^{(K U S ̌)}$ išhiman- / išhimen- (c.) 'string, line, cord, rope, strap' (nom.sg. iš-hi-ma-a-aš (KBo 17.15 rev. 11 (OS)), acc.sg. iš-hi-ma-na-an (KBo 20.40 v 9 (OH/NS)), [i]š-hi-me-na-an (988/u, 7 (NS)), abl. iš-hi-ma-na-az (KUB 36.55 ii 16 (MH/MS)), instr. iš-hi-ma-an-ta (KUB 17.5, 15 (OH/NS)), iš-hi-ma$a n-d a$ (KUB 17.28 i 31 (NS)), iš-hi-ma-ni-it (KBo 17.60 obv. 3 (MH/MS)), nom.pl. iš-ȟi-ma-a-ne-eš (KBo 17.15 obv. 10 (OS))), išhamin- (c.) 'cord’ (acc.sg. iš-ha-mi-na-an (KUB 17.27 ii 31, 34 (MH/NS))), išhiie/ani- (c.) '(body)hair' (nom.pl. iš-hi-e-ni-uš (KUB 13.4 iii 62 (OH/NS), iš-hi-i ia-ni-uš (KUB 13.19, 5 $(\mathrm{OH} / \mathrm{NS}))$ ), ${ }^{(\mathbf{T U ́ G})}$ išhíiial- (n.) 'bond, band, belt' (nom.-acc.sg. iš-hi-al, abl. iš-hi-i-ia-
la-az), išhiul- (n.) 'binding; obligation, injunction; statute, treaty’ (nom.acc.sg./pl. iš-ḩi-ú-ul, gen.sg. iš-hi-ú-la-aš, nom.-acc.pl. iš-hi-ú-li), išhiulahh- ${ }^{i}$ (IIb) 'to bind by treaty' (3pl.pres.act. iš-hi-ú-la-ah-ha-an-zi, 1sg.pret.act. iš-hi-ul-la-ah-hu-un; part. iš-hi-ú-la-ah-ha-an-t-), išhuzzi- (c.) 'band, belt, girdle' (nom.sg. iš-hu-zi-iš, acc.sg. iš-hu-uz-zi-in, gen.sg. iš-hu-uz-zi-aš, iš-hu-uz-zi-ịa$a s ̌), ~ i s ̌ h u z z i i j e / a-{ }^{z i}$ (Ic1) 'to gird' (3sg.pres.at. iš-hu-uz-zi-ịa-iz-zi, 3sg.imp.act. iš-hu-zi-ed-du, part. iš-ȟu-uz-zi-į्a-an-t-), išhieššar / išhiešn- (n.) 'binding' (nom.acc.sg. $i s ̌-h i-e s ̌-s ̌ a=m i-i t-t=a(K U B 30.10$ obv. $7(\mathrm{OH} / \mathrm{MS}))$, $i s ̌-h i-e s ̌-s ̌ a-a=\check{s}-$ ši-it (KBo 21.22 rev. 45 (OH/MS)), instr. iš-hi-eš-ni-it (473/t obv. 14 (NS)), erg.pl. iš-hुi-iš-na-an-te-eš (473/t obv. 11 (NS))), GIšišhāūar (n.) 'yoke-plough-set(?)' (nom.-acc.sg. iš-ḩa-a-u-una-ar, iš-ḩa-u-ua-ar, iš-ha-a-ur-r=a), see išhamai- ${ }^{i}$ / išhami- and šišha- ${ }^{i} /$ šišh.-
Anat. cognates: CLuw. hišhiia- 'to bind' (3pl.pres.act. hi-iš-hi-ia-an-ti), hišhiša/i- ‘spell’ (< *‘binding'?) (gen.adj.acc.sg.c. hi-iš-hi-ša-aš-ši-in, gen.adj.acc.pl.c. hi-iš-hi-ša-aš-ši-in-zi); HLuw. hishi- 'to bind' (gerund Pugnus.pugnus hi-sà-hi-mi-na 'is to be bound' (CEKKE §13, cf. Melchert 2004b: $\left.360^{7}\right)$ ).

IE cognates: Skt. $s \bar{a}-$, $s i-$ 'to bind', Lith. siẽti 'to bind'.
PIE *sh ${ }_{2}$-ói-ei, *sh $_{2}$-i-énti
See Puhvel HED 1/2: 398f. for attestations. The oldest attestations of this verb clearly show that it inflects according to the dāi/tiiianzi-class (išhāi, išhianzi, both OS). Like all other dāi/tiíanzi-class verbs, išhai- ${ }^{i}$ / išhi-, too, is taken over into the $m i$-conjugating -ie/a-class in NH times, on the basis of the false analysis of išhi$a n z i$ as išhiía-nzi.
Since Kuryłowicz (1927: 101) this verb is generally connected with e.g. Skt. $s \bar{a}$ 'to bind' and Lith. siẽti 'to bind'. The exact reconstruction of the root is difficult, however: e.g. Oettinger (1979a: 461) reconstructs a root ${ }^{*}$ seh $_{2}$, LIV a root * $\operatorname{seh}_{2}(i)$ - and $\mathrm{LIV}^{2}$ a root ${ }^{*} \mathrm{sh}_{2}$ ei-. Apparently there is no consensus whether or not the $-i$ - is integral part of the root.
In Hittite, išhāi / išhianzi must go back to $* \operatorname{sh}_{2} o ́ i e i, ~ * s h_{2} i e ́ n t i . ~ A s ~ I ~ h a v e ~ s h o w n ~$ in Kloekhorst ftch.a, most of the the dai/tiiianzi-class verbs go back to a structure *CC-oi-, ${ }^{*} C C$ - $i$-, i.e. the zero-grade of the root followed by an ablauting suffix *-oi-/-i-. For $i s ̌ h a i-/ i s ̌ h i-, ~ t h i s ~ m e a n s ~ t h a t ~ w e ~ e i t h e r ~ a r e ~ d e a l i n g ~ w i t h ~ a ~ r o o t ~ * s h ~ e i-~$ or with a root $* \operatorname{seh}_{2}$ - which shows a stem $*_{s h_{2}-(o) ~} i$-. In my view, this question is settled by looking at the derivatives in Hittite. On the one hand we find derivatives that show išhi- < *sh2 ${ }_{2}$ - (e.g. išhiman- / išhimen-, išhiųal-, išhiul-), but we also find derivatives that show a stem išh- < *sh $2^{-}$(e.g. išhamin-, išhuzzi-).
 shows a root ${ }^{*}$ seh $_{2}$ -
This also fits the Sanskrit evidence. There we find the verbal forms (all in Vedic): pres. ${ }^{\circ}$ syáti, sinátí; perf. siṣāya; aor. sāt. On the basis of aor. sāt it is clear that the root must have been $*^{\text {sen }} h_{2}$ ( note that $\mathrm{LIV}^{2}$ states that $s \bar{a} t$ actually belongs with another root, namely $*_{s e h}^{l}(i)-$ 'to release': this has now become unnecessary because of the Hittite material that unambiguously shows that we can reconstruct a root $*^{\text {seh }} 2_{2}$ ). It is remarkable that the Skt. "perf." siṣāya (although usually called "perfect" is shows quite an aberrant form; reduplication with $-i$ - and an extra $-i-$ suffix: the normal perfect would have been $*_{\text {se-sóh }}^{2}$-e $>$ sasāu as attested in Classical Sanskrit) can be directly equated with Hitt. išhāi< *(si-)sh $h_{2}$-ói-e. Just as in Hittite išhiiezzi is a secondary form on the basis of the zero-grade $*_{s h} h_{2}-i$-énti, it is likely that Skt. ${ }^{\circ}$ syáti is secondary as well (both reflecting virtual ${ }^{*} s h_{2} i e ́ t i$ ). The Skt. nasal-present sináti reflects virtual $*_{s i-n e ́-~}^{h_{2}-t i}$ and must be a backformation to the zero-grade stem $* s h_{2}-i$ - that yielded $* s i h_{2}$ - through metathesis.
The stem ${ }^{\text {s }} h_{2}$-oi- is also visible in Lith. siẽti 'to bind', Skt. setár- 'binder', etc.
The Luwian forms, with the stem hishi-, must reflect reduplicated forms: * $(s) h_{2} i-s h_{2} i$ - and could possibly be directly equated with Skt. sisāaya. Note that HLuw. hishimin shows that the stem must have been hishi- and not hishiia- as often stated.
Note that the derivative ${ }^{\text {GIš }}$ išh̆ ${ }_{\text {anur }}$ does not reflect $*_{\text {sh }}^{2}$ óur (thus Puvhel HED 1/2: 397-8), but just reflects *išhāuur < *sh $h_{2}$ ói-ur, the verbal noun of išhai-/išhi-.
 become sullen'.
išhamai- ${ }^{i}$ / išhami- (IIa4 > Ic1) 'to sing' (Sum. SİR, Akk. ZAMARU): 1sg.pres.act. iš-ḩa-mi-ih-ḩi (KUB 33.96 i 4 (NS)), 3sg.pres.act. iš-ha-ma-i (KUB 58.30 ii 6 (MS)), 3pl.pres.act. iš-ȟa-mi-an-zi (OS, often), iš-ha-mi-ia an-an-zi (often), iš-ḩa-mi-en-zi (KUB 59.19 ii 3 (OH/NS)); inf.I iš-ha-mi-ia-u-an-zi (KUB 25.37 i 40 (NS)), iš-ḩa-mi-ia-u-ua-an-zi (KUB 27.1 iv 12 (MH/NS)); impf. iš-ḩa$m i-i s ̌-k e / a$ - (OS, often), iš-h $a-m i-e s ̌-k e / a$-, $i \check{s}-h a-m a-i s ̌-k e / a$-.

Derivatives: išhamai- (c.) 'song, melody' (Sum. SÌR; acc.sg. iš-ha-ma-in (KUB 12.11 iii 31 (MS?)), iš-ha-ma-a-in (VSNF 12.118, 2 (NS)), acc.pl. iš-ha-ma[-uš] (KUB 10.7, 14 (NS))), ${ }^{\text {LÚ }}$ išhamatalla- (c.) 'singer' (Sum. ${ }^{\text {LÚ }}$ SÌR; nom.pl. iš-ḩa-ma-tal-le-eš (KUB 17.21 ii 11, iii 19 (MH/MS)), acc.pl. iš-ha-ma-a-tal-lu-uš (KUB 31.124 ii 17 (MH/MS)), iš-ha-ma-tal-«li-»>lu-uš (KUB 17.21 iii 5 (MH/MS))).
IE cognates: Skt. sáman- 'song, hymn'.

PIE $*_{s h} h_{2}$ m-ói-ei, ${ }^{*}{ }_{s h}{ }_{2} m$-i-énti
See Puhvel HED 1/2: 394f. for attestations. The verb inflects according to the dāi/tiíanzi-class (the forms that show a stem $i s ̌ h C_{\text {hamiiel }}^{\text {a }}{ }^{z i}$ occur in NS texts only). As I have shown in Kloekhorst fthc.a, this class consists of verbs that show a formation $* C C$-oi- $/ * C C-i$-, i.e. the zero-grade of a root followed by an ablauting suffix $*_{\text {-oi-/-i-. In }}$ § 2.2.2.2.h, I have shown that polysyllabic dāi/tiizanzi-class verbs (reduplicated verbs and univerbations with $p e$ - and $u$-) are secondarily taken over into the $\operatorname{tarn}(a)$-class through the intermediate méma/i-class. This development started in pre-Hittite already. In the case of išhamai-/išhami-, this means that we have to assume that its stem was monosyllabic, so the phonological interpretation of this verb should be /sHmai- / sHmi-/ (and not /isHamai-/).

Etymologically, this verb is ultimately derived from the root $*_{s^{2}} h_{2^{-}}$'to bind' (attested in Hitt. išhai- ${ }^{i}$ / išhi- (q.v.)), and shows a root-extension with -m-. The formation $*_{\text {sh }}^{2}$ em- (not $* *$ seh $_{2} m$-, see below for argumentation) and the meaning 'to sing' must have been of PIE date already, as can be seen by Skt. sắman'song, hymn' < *sh ${ }_{2}$ óm-en-.
In Hittite, the preform $*_{s h_{2} m-o i-} / *_{s h_{2} m-i-}$ should regularly have yielded **smai-/smi- (loss of interconsonantal laryngeal), which means that a full-grade form $*_{s h_{2} e m-~ m u s t ~ h a v e ~ b e e n ~ a v a i l a b l e ~ i n ~ H i t t i t e ~ t o ~ m a k e ~ r e s t o r a t i o n ~ o f ~}^{*} h_{2}$ possible. In my view, this full-grade form is visible in išhamai- 'song' < *sh ${ }_{2}$ ém$\bar{o} i$ - (which determines the root as ${ }^{*}$ sh $_{2}$ em-: a formation $* *{ }^{*}$ séh $h_{2}$ m-oi- should have given Hitt. ${ }^{* * s ̌ a ̄ m a i-~ o r ~ * * s ̌ a h m a i-~(i f ~ w o r d-i n t e r n a l ~} h_{2}$ was indeed retained in front of resonant, cf. the discussion at ${ }^{\text {GIŠ }}$ māhla-, ${ }^{\mathrm{UZU}}$ muhrai-/mahrai- and GIŠ zahrai-)).
The alleged Greek cognate, oíhóc 'song' (thus Benveniste 1954: 39f.) cannot reflect $*_{s h_{2}}$ Om-io- (because $*_{-V m i} V$ - should have given Gr . -VıvV-, cf. Beekes 1972: 127) and therefore this connection must be given up.
išhanittar (c.) 'relative by marriage': nom.sg. iš-ḩa-ni-tar, gen.sg.(?) iš-ȟa-ni-it-ta-ra-aš, dat.-loc.sg. iš-ḩa-ni-it-ta-ri.

Derivatives: išhanittarātar (n.) '?’ (nom.-acc.sg. iš-ha-ni-it-ta-ra-a-tar), išhanattalla- (c.) '?' (nom.sg. iš-ḩa-na-at-tal-la-aš, acc.sg. iš-hुa-na-at-tal-la-an), išhanalla- (c.) '?' (nom.sg. iš-ha-na-al-liš).

PIE *sh ${ }_{2}$-en- ?

See Rieken 1999a: 283f. for attestations and semantic treatment. According to her all these forms are found in contexts referring to marriage, which would indicate that they are all related. On the basis of the supposed meaning 'relative by marriage' for išhanittar, Rieken argues that ultimately these words must be connected with the root $*$ seh $_{2^{-}}$'to bind'. In her view, we are dealing with a stem $*_{s h} h_{2}$-en-, which she further connects with šahhan- 'feudal service' < *seh ${ }_{2}$-en(q.v.). See it $i s ̌ h a i-{ }^{i} / i s ̌ h i$ - for the basic root ${ }^{*}$ seh $_{2}-$.
išhiiela- ${ }^{-{ }^{i}}$ : see išhai- ${ }^{i} /$ išhi-
išhunau- (c. > n.) 'arm, upper arm': nom.sg.c. iš-ȟu-na-ú-uš (KBo 32.14 ii 49 (MH/MS)), iš-ḩu-nạ-a-uš (KBo 32.14 rev. 44, l.edge 1 (MH/MS)), iš-ḩu-na-uš! (text: -aš, KUB 9.34 ii 25 (MH/NS)), nom.-acc.sg.n. iš-hu-na-a-u=š-mi-it (KUB 7.58 i 11 (MH/NS)), iš-hu-na-u-ưa-aš! (KBo 10.37 ii 32 (OH/NS)), gen.sg. iš-hu-u-na-u-ua-aš (KUB 9.4 i 25 (MH/NS)), iš-hu-na-u-ua-aš (571/u, 8 (NS)), dat.loc.sg. iš-ḩu-na-u-i (KUB 25.37 ii 8 (NS)), [iš-]hu-na-úu-i> (KUB 55.20 + KUB 9.4 i 6), erg.sg. iš-hu-na-u-ua-an-za (KUB 9.4 i 25), dat.-loc.pl. iš-hu-u-na-u-ua$a \check{s}$ (KBo 46.62 ii 7 (NS)); case? iš-hu-na-u-uূa<-aš? $($ KUB 56.60 iv 5 (NS)).

PIE *sh ${ }_{2}$ u-nou-
See Puhvel HED 1/2: 403f. for attestations. The interpretation of this word has always largely depended on the form iš-hu-na-u-ua-ar (KBo 10.37 ii 32). Since Laroche (1962: 31), this išhunauuar is generally regarded cognate with Skt. snắvan-, Gr. vevpá, Lat. nervus 'sinew' and therefore translated as 'sinew' as well. An exact reconstruction of these forms was quite difficult, however (for instance, the $-h$ - in Hittite does not match Gr. - $\varepsilon$-). Weitenberg (1984: 224-5) convincingly argues that besides the form išhunauuar, all other forms of the paradigm rather point to a stem išhunau- and that these forms are better translated 'upper arm' and hardly can have anything to do with the 'sinew'-words. He therefore proposes to separate the stem išhunau- 'upper arm' from the hapax išhunauuar 'sinew'. The fact that we indeed are dealing with a stem išhunau- is supported by the quite recent publication of the 'Song of Release' (KBo 32.14 $(\mathrm{MH} / \mathrm{MS})$, see Neu $1996=\operatorname{StBoT} 32)$, in which nom.sg.c. išhunāuš is attested several times. Although Neu (1996: 152, 191) still adheres to the old translation '(Arm-)Sehne', it is in my view clear that here išhunau- denotes 'upper arm' as well. Moreover, the forms show that originally išhunau- was a commune noun and that the NS attestation nom.-acc.sg.n. išhunau=šmit must be a secondary form (see also the discussion on the gender of these kind of nouns at harnau-).

Rieken (1999a: 360-1) follows Weitenberg in translating išhunau- as 'upper arm', but also connects the form išhunauuar with it. She translates the context that it occurs in as follows:

KBo 10.37 ii
(32) ... nu-u=š-ši iš-ḩu-na-u-ua-ar ši-ia-u-ua-ar
(33) pé-eš-tén
‘Gebt ihm das Schießen des Oberarmes!'.

According to Rieken, išhunauuar is a falsely back-formed nom.-acc.sg.n. on the basis of gen.sg. išhunauaš. In my view, this is not necessary: I think it is quite possible that $i s ̌-h u-n a-u-u a-a r$ must be regarded as a mere scribal error for $i \check{s}$ - $h u$ $n a-u-u a-a \check{\text { s }}$, with AŠ mistakenly written as $\operatorname{AR}$ due to anticipation to the following ši-ia-u-ua-ar 'shooting'. So I would suggest to read $i s ̌-h u-n a-u-u a-a s ̌ '$ si-i-ia-u-una-ar, which indeed must mean 'shooting of the upper arm'. Whatever interpretation one chooses to follow, it is clear that in any way the Hittite word išhunauuar 'sinew' does not exist anymore. Therewith the words for 'sinew' in the other IE languages (Skt. snắvan-, Gr. vevpá, Lat. nervus, Arm. neard, TochB ṣñaura ( pl.$)$ ) can now safely be reconstructed as *snéh $h_{1}$-ur $/ *_{\text {snh }}^{1}$-uén-
For the etymological interpretation of išhunau- I follow a suggestion of Weitenberg (1.c.) who hesitatingly connects it with Hitt. išhuuai- ${ }^{\text {i }}$ / išhui- 'to throw' (q.v.). This would mean that išhunau- reflects *sh ${ }_{2} u$-neu- and originally denotes 'throwing-arm'. See at $i s ̌ h u u a i-{ }^{i} / i s ̌ h u i-$ for further etymology.
Note that KUB 9.34 ii 25 actually has a form $i s ̌-h u-n a-a s ̌=m a=k a ́ n$, but because of the many corrupt forms in this texts, I have taken the liberty to read this form as nom.sg.c. $i \check{s}-h u-n a-u s s^{!}=m a-k a ́ n$, which is supported by the commune forms from KBo 32.14. The assumption that this form shows a secondary stem išhuna(thus Weitenberg 1984: $457^{603}$ ) is improbable; note that Puhvel (l.c.) interprets this form as gen.sg. or pl. (implying a reading ǐ̌-hu-na<-ual-ǎ̌) despite the fact that it clearly must be nom.sg. here.
išhunauar: see išhunau-
išhuuai- ${ }^{i}$ / išhui- (IIa4 > IIa1 $\gamma$, Ic2) 'to throw, to scatter, to pour': 1 sg.pres.act. $i \check{s}$ -huu-uh-hi (KUB 31.84 iii 63 (MH/NS)), iš-hu-ua-ah-hi (KUB 9.25 + 27.67 i 3 (2x) (MH/NS), KUB 15.11 ii 9 (NH)), 3sg.pres.act. iš-hu-ua-a-i (e.g. KUB 32.138 ii 12 (OH/MS), IBoT 2.39 rev. 26, 27 (MH/MS), KBo 23.10 iv 22 (MS), etc.), iš-
hu-ua-i (e.g. KBo 15.31 i 11, iv 11 (OH/MS), KUB 15.34 iii 45 (MH/MS), etc.), $i[\breve{s}-h u-] u ̛ ́-a-i$ (KBo 23.23 obv. 59 (MH/MS)), iš-hu-u-ua-i (OH/NS), iš-hu-u-ua-a$i$ (OH/NS), iš-ḩu-a-i (KBo 39.189 i 7 (NS), KUB 41.17 i 28 (NS)) iš-ḩu-i (KBo 2.3 ii 32 (MH/NS)), iš-hu-u-i (KUB 6.46 iv $54(\mathrm{NH})$ ), iš-hu-u-ua-a-iz-zi (HT 5, 6 (NS)), 1pl.pres.act. iš-[h]u-ua-ua-a-n[i] (StBoT 25.137 ii 18 (OS)), 3pl.pres.act. $i s ̌-h u-u a-a n-z i$ (e.g. KBo 15.32+ ii 5 (OH/MS), KUB 15.34 iv 45 (MH/MS), etc.), $i s ̌-h u-u-u a-a n-z i(\mathrm{OH} / \mathrm{NS})$, iš-hu-ua-a-an-zi (OH/NS), 1sg.pret.act. iš-huu-u-eh-huun (KUB 17.10 iii 7 (OH/MS)), [(iš-h)]u-eh-hu-un (KUB 15.34+ ii 44 (MH/MS)), 2sg.pret.act. iš-hu-ua-a-it-ta (HKM 5 obv. 6 (MH/MS)), 3sg.pret.act. iš-hu-ua-iš (KUB 49.60 ii 11 (NS), KBo 14.3 iv 35, 36 (NH)), iš-hu-ua-aš (KBo 37.1 ii 4 (NS)), iš-hu-u-ua-aš (KUB 33.53, 13 (OH/NS)), 3pl.pret.act. iš-hu-ua-a-er (KUB 29.54 iv 5,11 (MH/MS), KUB 26.84 ii 9 (NH)), [i]š-hu-u-ua-[a-er] (KBo 14.1 ii 14 (NH)), 3sg.imp.act. iš-hu-ua-a-ú (KUB 33.93 iii 35 (NS)), 2pl.imp.act. iš-hu-u-it-tén (HKM 18 l.edge 5 (MH/MS)), 3pl.imp.act. iš-hu-u-an-du (HKM 24, 52 (MH/MS)); 3sg.pret.midd. [iš-hu]-una-it-ta-a[t] (KBo 8.96 obv. 1 (MS)), [i]š-hu-ua-it-t $[a-a t]$ (KBo 8.96 obv. 2 (MS)); part. iš-hu-ua-an-t- (OH/MS), iš-hu-u-ua$a n-t-$ (MH/NS), iš-hu-ua-a-an-t- (MH/NS); verb.noun gen.sg. iš-hu-ua-ua-aš (KUB 55.60 iv 12 (NS)), iš-hu-ua-u-ua-aš (KUB 12.2 ii 6 (NS)), iš-hu-u-ua-u-ua-aš (KUB 10.92 vi 13 (NS)); sup. iš-ḩu-u-una-u-u[a-an] (KBo 14.1 ii 13 (NH)); impf. iš-ḩu-iš-ke/a-(MH/MS), iš-hu-eš-ke/a- (MH/MS), iš-hu-u-ua-a-iš-ke/a-.
Derivatives: išhuēššar / išhuēšn- (n.) 'heap’ (nom.-acc.sg. [iš-h]u-u-e-eš-šar (119/w rev. 6), i[š-h] $u$-e-eš-šar (KUB 31.84 iii 63), iš-hu-eš-šar (KBo 32.15 ii 15), dat.-loc.sg. iš-ȟu-eš-ni (KBo 16.60 rev. 5, KUB 14.1 obv. 7, 8), instr. iš-h $u$-e-eš-ni-it (KUB 13.2 iii 37)), išhuunanna- ${ }^{i}$ / išhuunanni- (IIa5) 'to throw (impf.)' (1sg.pres.act. iš-hुu-u-una-an-na-ah-hi (KUB 7.5 ii 30), iš-hu-una-an-na-ah-[hi] (KUB 12.44 iii 17), 3sg.pres.act. [iš-hu-ua-an-]na-an-zi (KUB 12.58 iii 16)).
IE cognates: Gr. $\bar{v} \omega$ 'to rain', TochAB $s u-/ s w a \bar{s}$ - 'to rain'.

$$
\text { PIE } *_{s h}{ }_{2} u \text {-ói-ei } / *_{s h} u \text {-i-énti }
$$

See Puhvel HED 1/2: 404f. for attestations. In StBoT 25.137 ii 18, a text that is usually dated as OS, we find a form $i s-[h] u-u a-u a-a-n[i]$ that must be regarded as a 1 pl.pres.act.-form because of the 1 pl.-forms la-hu-e-ni (ibid. 15), da-a-[u-]e-ni (ibid. 16) and har-na-u-e-ni (ibid. 17) in the preceding lines. In my view, this form is so aberrant (cf. the totally unexpected plene spelling -ua-a-ni), that I severely doubt the reliability of this form or even the text in which it is found (compare also $d \bar{a}[u] e n i$ instead of expected tumēni). I will therefore disregard this form in this discussion.

It is not easy to determine the original inflection of this verb. The oldest forms (OS and MS) are: 3sg.pres.act. išhuūāi, išhuuai, 3pl.pres.act. išhuunanzi, 1sg.pret.act. iš-hu-u-Vh-hu-un, iš-hu-Vh-hu-un, 2sg.pret.act. išhuūaitta, 3pl.pret.act. išhuūāer, 2pl.imp.act. išhuuitten, 3pl.imp.act. išhuuandu. The forms išhuûitten and išhuuāitta can only belong to the dāi/tizanzi-class inflection (išhuuai- ${ }^{i}$ / išhui-). The forms išhuūāi, išhuunanzi, išhuūāir and išhuuandu can either belong to the $\operatorname{tarn}(a)$-inflection, or to the däi/tiianzi-inflection (if we assume that *išhuianzi $>$ išhuuanzi). In principle, the forms išhuuanzi and $^{\text {and }}$ išhuuandu could belong to an inflection similar to that of $a u-{ }^{i} / u$ - 'to see' as well (cf. uuanzi 'they see'), but because of the total absence of forms with a stem **išhau-, this option is very unlikely. The forms 1 sg.pret.act. iš-hu-u-Vh-hu-un and $i s ̌-h u-V h-h u-u n$ are multi-interpretable. The sign AH can be read $a h, e h, i h$ as well as $u h$, which means that we could be dealing with $i s ̌-h u(-u)-a h-h u-u n, i s ̌-h u(-$ $u)-i h-h u-u n$, $i s ̌-h u(-u)-e h-h u-u n$ or $i s ̌-h u(-u)-u h-h u-u n$. If we should read išhuahhun, the word would belong to the $\operatorname{tarn}(a)$-class (cf. the NS attestation iš-hu-ua-ah-ḩi); if the forms represent išhuihhun or išhuehhun, they would belong to the dāi/tiiianzi-class. I must admit, however, that in these cases we would rather have found plene spelling of the specific vowel (cf. e.g. hu-i-ih-hi 'I run', hu-e-eh-hu-un 'I ran', iš-hu-ua-ah-hi). Nevertheless, an analysis išhuhhun is quite improbable, because this form could only belong to an inflection similar to $a u-/ u$ 'to see' (cf. ūhhun 'I saw'), of which we already have determined that it is a very unlikely option. So, all in all, the oldest forms seem to point to either a dāi/tiianzziclass or a $\operatorname{tarn}(a)$-class inflection.
Since the dāi/tiianzi-class is a closed, unproductive class within Hittite, whereas the $\operatorname{tarn}(a)$-class is very productive, I assume that the dāi/tiiianzi-class inflection is more archaic and consequently the original one. I therefore cite this verb as išhuuai- ${ }^{i} / i s ̌ h u i-$, and the attestations $i \check{s}-h u-u-V h-h u-u n$ and $i s ̌-h c^{\prime} u-V h \underline{-h u} u-u n$ as $i s ̌-$ $h u-u$-eh-hu-un and $i s ̌-h u-e h-h u-u n$ (the NS attestations $i s ̌-h u-u h-h c^{2}$ may be viewed as belonging with 3sg.pres.act. išhui (see below)). The fact that the 3pl.-forms are išhuuanzi and išhuuandu, whereas e.g. huuai- / hui- 'to run' has huianzi (OS) 'they run', in my view is explained by the difference in preforms: išhuuanzi reflects $*_{s h}$ uiénti (see below for etymology), whereas huianzi reflects * $h_{2} u h_{1} i e ́ n t i$. Intervocalic - $i$ - in $* s h_{2} u i e ́ n t i$ was lost in pre-Hittite already, yielding a
 of * $h_{2} u h_{1} i e ́ n t i$ 'they run', we are dealing with intervocalic $*-h_{l} i-$, which yielded $-i$ - in that same period ( $\mathrm{OH} /$ Hoiánt $^{\mathrm{s}} \mathrm{i} /$, spelled $h u-i a-a n-z i$ ), which was lost in the


This means that the OH paradigm of išhuuai- ${ }^{\text {i }}$ / išhui- must have been *išhuehhi, *išhuuaitti, išhuuāi, *išhuiueni, *išhuišteni, išhuuanzi. On the basis of 3sg. išhuıāi and 3pl. išhuuanzi, in younger times forms were created that inflect according to the $\operatorname{tarn}(a)$-class (1sg.pres.act. išhuuahhi (MH/NS), 3sg.pret.act. išhuuaš (OH/NS) and verb.noun gen.sg. išhuuauaš (NS)). In NH times, we find some forms that inflect according to the hatrae-class (išhūūāizzi (NS), išhuûānt(NS)), and some forms in which the stem išhu- has been generalized (3sg.pres.act. išhui (NS)). For the cognate verb šuhh $a_{-}{ }^{i} /$ šuhh - , see at its own lemma.

As I have shown in Kloekhorst fthc.a, the Hittite dāi/tiiianzi-class consists of verbs that reflect a formation $* C C-o i-$, ${ }^{*} C C-i$-, i.e. the zero-grade of the root followed by an ablauting suffix *-oi-/-i-. In this case, the root must have been $i s ̌ h u$-. In the course of Hittitology, different etymological proposals have been suggested (see Puhvel (l.c.) for a summary), but the best one in my view is given by Jasanoff (1978: $90^{11}$ ), who connects išhuuai-/išhui- with Gr. ü $\omega$ 'to rain', TochAB su-/swās- 'to rain' < *suH-, which is now codified in LIV ${ }^{2}$. Formally, this connection is justified by assuming that a full-grade root $*_{s h_{2}} e u$ - had a zerograde form *sh ${ }_{2} u$ - (still visible in Hitt. išhuuai-/iš̌hui-) that metathesized already in PIE to ${ }^{*}$ suh $_{2^{-}}$(Gr. $\dot{\mathbf{v}}-$, TochAB su- and Hitt. šuhha ${ }^{-}{ }^{i} /$ šuhh $^{\prime}$ ' to scatter, to pour' (q.v.)). Semantically, we have to assume that the PIE root denotes 'to pour', which in Hittite (where išhuuai-/išhui- still means 'to pour' as well) developed into 'to throw' (cf. ModDu. gooien 'to throw' $<*^{\prime} g^{h} e u$ - 'to pour'), whereas in Greek and Tocharian the meaning shifted to 'to rain'. The full-grade $*{ }_{s} h_{2} e u$ - may still be visible in Hitt. šlšȟau- 'sweat' (although its spelling with ${ }^{\circ} a-u$ is highly aberrant, q.v.).
As said above, within Hittite, a close cognate is the verb šuhha- / šuhh- 'to scatter, to pour'. In some cases, išhuuai- ${ }^{i} /$ išhui- and šuhhha- ${ }^{i}$ / šuhh - are used interchangeably in duplicates (cf. Puhvel HED 1/2: 408), and their connection is suported by a hybrid form like šu-uh-hu-ưa-i (KBo 30.115 rev.? 5). Nevertheless, the exact formal interpretation of šuhha- ${ }^{i} /$ šuhh- is not fully clear. See at its own lemma for a full discussion.
iškalla- ${ }^{i}$ / iškall- (IIa1 $\gamma$ ) 'to slit, to split, to tear': 3sg.pres.act. iš-kal-la-i (KBo 6.4 i 39 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-gal-la-i (KBo 6.4 i 37 (OH/NS)), iš-kal-la-a-i (KUB 58.81 ii? 6 (NS)), iš-kal-la-i-iz-zi (KUB 12.58 ii 17 (NS)), 3pl.pres.act. iš-kal-la-an-zi (KUB 30.22, 8 ( $\mathrm{OH} / \mathrm{NS}$ )), 1sg.pret.act. iš-kal-la-ah-hu-un (KUB 13.35 iv 24, 31 (NS)), 2sg.imp.act. iš-kal-li (HKM 24, 51 (MH/MS), KBo 37.1 ii 16 (NS)), 3sg.imp.act. iš-kal-la-úu (KUB 30.36 ii 10 (MH/NS)), 3pl.imp.act. iš-kal-la-an-du (156/v, 7 (NS)); 3sg.pres.midd. iš-kal-la-ri (KBo 6.3 i 39 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-kal-la-a-ri (KBo
6.5 i 16, 18 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 6.3 i 37 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pret.midd. iš-kal-la-at-ta (KBo 8.37 obv. 9 (MH/NS), KUB 23.7 ii 12 (MH/NS)); part. iš-kal-la-an-t-; inf.I $i s ̌-k a l-l i-i, ~ i a-u-a n-z i ~(K B o ~ 43.61 ~ i ~ 13 ~(N S)) ; ~ i m p f . ~ i s ̌-k a l-l i-i s ̌-k e / a-, ~ i s ̌-g a l-l i-e s ̌-~$ ke/a-
Derivatives: ${ }^{\text {TúG }}$ iškalleššar (n.) 'slit dress' (nom.-acc.sg. iš-kal-le-eš-šar, iš-kal-li-iš-šar, [i]š̌-gal-le $e_{12}$-eš-šar).
IE cognates: Gr. $\sigma \kappa \alpha ́ \lambda \lambda \omega$ 'to hoe', Lith. skélti 'to split'.

$$
\text { PIE } * s k o ́ l h_{2 / 3}-e i, *_{s k l h_{2 / 3}-e ́ n t i}
$$

See Puhvel HED 1/2: 413f. for attestations. The verb inflects according to the tarn(a)-class, i.e. iškallai, iškallanzi. Usually, $\operatorname{tarn}(a)$-class verbs go back to roots that end in a laryngeal (*(Ce)CoH-, *(Ce)CH-enti or *CRnoH-, *CRnH-enti), but there are a few $\operatorname{tarn}(a)$-class verbs that reflect the structure $* \mathrm{CeCh}_{2 / 3}$. As I have shown under § 2.2.2.2.d, the 3sg.pres.-form of roots of this structure, ${ }^{*} \mathrm{CóCh}_{2 / 3}$-ei, regularly yielded ${ }^{*} \mathrm{CaCai}$ (and not ${ }^{* * C a C i}$ ), on the basis of which these verbs were taken over into the $\operatorname{tarn}(a)$-class (see harra- ${ }^{i} /$ harr- 'to grind', išparra- ${ }^{i}$ / išparr- 'to trample', malla- ${ }^{i} /$ mall- 'to mill', padda- ${ }^{i} /$ padd- 'to dig' and šarta- ${ }^{i}$ / šart- 'to wipe, to rub' for the same phenomenon). In the case of iškall(a)-, this means that we have to reconstruct $*_{s}$ Kelh $_{2 / 3}{ }^{-}$. Already since Hrozný (1917: 71), this verb is connected with Gr. $\sigma \kappa \alpha ́ \lambda \lambda \omega$ 'to hoe' and Lith. skélti 'to split'. Especially the latter form supports the reconstruction of the root-final laryngeal, which yielded acute accentuation in Balto-Slavic. I therefore reconstruct the root as $*_{s k e l h_{2 /-}-}$ and the Hittite formation as $*_{s k o ́ l h_{2 / 3}}$-ei, $*_{s k l h_{2 / 3} \text {-énti (note that this }}$ latter form regularly should have yielded Hitt. **iškalhanzi, but the geminate -llof the singular was generalized throughout the verb).
išg $\overline{\boldsymbol{a}} \mathbf{p}^{i}$ / išgap- (IIa2) '?’’: 3sg.pres.act. iš-ga-a-pí (KUB 10.63 i 26).
Derivatives: išgapuzzi- (n.) a cult object (nom.-acc.sg. iš-ga-pu-uz-zi (KUB 12.8 i 16)).

This verb is hapax in the following context:

```
KUB 10.63 i
(17) \(n=a\)-aš-ta MUNUS.LUGAL pa-ra-a ú-ez-zi nu=kán \({ }^{\text {LÚ }} \mathrm{HAL}\)
(18) A-NA PA-NI \({ }^{\mathrm{d}} U-m a-r a-a p-s \check{i}{ }^{\mathrm{d}} A-a-p i ́-i n ~ k i-n u-z i\)
(19) \(n=a-a s ̌-t a{ }^{\text {LÚ }} \mathrm{AZU} 1\) UDU \(A-N A{ }^{\mathrm{d}} U\)-ma-ra-ap-ši ši-pa-an-ti
(20) \(n=a\)-an \(=k a ́ n{ }^{\text {LÚ }} \mathrm{AZU} A-N A{ }^{\mathrm{d}} A\)-a-pí kat-ta-an-da ha-ad-da-a-i
(21) nu=kán e-eš-ḩar A-NA GAL kat-ta tar-na-i n=a-at ták-ni-i
```

(22) A-NA PA-NI ${ }^{\mathrm{d}}$ U-ma-ra-ap-ši da-a-i nu=kán ${ }^{\text {LÚ }} \mathrm{AZU}$
(23) $A$-NA ${ }^{\text {UZU }}$ NÍG.GIG ${ }^{\text {UZUŠÀ }}$ ḩu-u-i-š̌u nu te-pu ku-er-zi
(24) $e$-eš-har-r=a te-pu da-a-i $n=a-a t=k a ́ n ~{ }^{\mathrm{d}} A-a-p i ́$
(25) kat-ta-an-da da-a-i
(26) $n=a$ - $a \check{s}$-ta ${ }^{\mathrm{d}}$ A-a-pí-in še-er $I \check{S ̌}$-TU NINDA.GUR 4 .RA $i s ̌$-ga-a-pí
(27) UDU = ma=kán pa-ra-a pé-e-da-an-zi
(28) $n=a$-an $=k a ́ n ~ L U ́ M ~ M E S ̌ ~ E N ~ D I N G I R ~ M E S ̌ ~ m a r-k a ́ n-z i ~$
'The queen comes forth and the priest opens up a pit for the god Umarapši. The magician sacrifices one sheep to Umarapši. The magician stabs it (= the sheep) alongside the pit and let its blood flow in a cup and places it on the ground for Umarapši. The magician cuts of a little of raw entrails and heart and takes a little blood and places it down into the pit. Then he $i$.-s (on top of?) the pit with thickbread. They bring the sheep forth and the men butcher it for the lord of the gods'.

Because in this context a meaning 'fills up' is quite possible, it has been suggested that we should not read $i s ̌-g a-a-p i ́$, but rather $i s ̌-t a!-a-p i ́$, belonging to the verb ištāp- ${ }^{i}$ / ištapp- 'to plug up, to block' (q.v.). Nevertheless, the attestation of išgapuzzi- in KUB 12.8 i 16 in a list of implements, between ta-pu-ul-li ZABAR 'bronze cutter' and ua-ar-pu-zi ZABAR 'bronze bathing-utensil', seems to show the reality of a verbal stem išgap-. Since nouns in -uzzi- are usually derived from the zero-grade of a verbal root (e.g. išhuzzi- from išhai- ${ }^{i}$ / išhi-, kuruzzi- from kuer- $^{z i} / k u r-$, luzzi- from $l \bar{a}_{-}{ }^{i} / l-$, etc.), it is likely that $i s ̌ g a p-r e f l e c t s$ a zero-grade verbal root as well. If išgāpi and išgapuzzi- are related, we are dealing with an ablauting pair $i s ̌ g \bar{a} p-{ }^{i} /$ išgap-. Formally, this could reflect hardly anything else than a root $* s^{( } k^{\prime} e b^{(h)}$-. If however, the single $-p-=/-\mathrm{b}-/$ from išgapuzzi- has been taken over from the full-grade stem išgāp-, we could in principle assume an ablauting pair išgāp- ${ }^{i} /$ išgapp- (cf. ištāp- ${ }^{i} /$ ištapp-), which then could reflect *s $s^{\prime} k^{\prime} e p-$. Since the meaning of išgapuzzi- cannot be determined, and the meaning of $i \check{s} g \overline{a p i} i$ is not fully clear (although 'to fill up' is possible), any etymology would be too insecure. Nevertheless, a root *skep- 'to cover' is available in Gr. $\sigma \kappa \varepsilon ́ \pi \omega$ 'to cover'.
išk $\bar{a}^{\boldsymbol{r}}{ }^{\boldsymbol{i}} /$ iškar- (IIa2 $>\operatorname{IIa} 1 \gamma$, Ic2) 'to sting, to stab, to pierce; to stick (to)': 1sg.pres.act. iš-ka-a-a[r-hi] (KBo 17.25 rev. 6 (OS)), iš-ka-a-ar-hi (KBo 17.96 i 14 (MS)), iš-kar-hi (KUB $31.1+$ KBo 3.16 ii 7 (OH/NS)), iš-ga-ra-a-mi (KUB 48.123 iv 9 (NS)), 3sg.pres.act. iš-ka-a-ri (KBo $17.13+25.68$ rev. 11 (OS)), iš-ga-a-ri (KBo $15.10+20.42$ iii 28 (fr.) (OH/MS), KBo 3.8, $6(\mathrm{OH} / \mathrm{NS})$, KBo
11.12 i 9 (OH/NS), KUB 41.2 i 4 (fr.) (OH/NS), IBoT 2.123 i 9 (fr.) (OH/NS), KUB 12.58 ii $30(N S)$ ), $i s ̌-k a_{4}-a-r i(K B o 15.10+20.42$ i 38 ( $\mathrm{OH} / \mathrm{MS}$ ), VBoT 24 i 46 (MH/NS)), iš-ka-ri (KBo 12.126 i 8 (OH/NS)), iš-ga-ri (KBo 9.126, 5 (OH/NS)), iš-ga-ra-a-i (KUB 58.83 iii 18 (NS)), [i]š-ga-ra-iz-zi (KUB 49.94 iii 14 (NS)), 3pl.pres.act. iš-ga-ra-an-zi (OS), iš-ka-ra-an-zi, 3sg.pret.act. iš-ka ${ }_{4}-a r-$ ri-et (KUB $31.1+$ KBo 3.16 ii 13 (OH/NS)), 3pl.pret.act. iš-ga-re-er (KBo 21.22 obv. 6 ( $\mathrm{OH} / \mathrm{MS}$ )), iš-ka ${ }_{4}$-re-er (KBo 15.10 ii $2(\mathrm{OH} / \mathrm{MS})$ ); part. iš-ga-ra-an-t(OS, often), iš-ka-ra-an-t- (OS), iš-ga-ra-a-an-t-, iš-ka-ra-a-an-t-; impf. iš-ga-ri$i s ̌-k e / a$-, $i \check{s}$-kar-iš-ke/a-, iš-ga-ri-eš-ke/a-, iš-kar-ri-eš-ke/a-.

Derivatives: iškaranna- ${ }^{\text {i }}$ / iškaranni- (IIa5) 'id. (impf.)' (3pl.imp.act. iš-kar-ra-an-ni-an[-du] (KBo 8.35 ii 21 (MH/MS))), išgaratar / išgarann- (n.) 'sting(?)' (nom.-acc.sg. iš-ga-ra-tar, gen.sg. iš-ga-ra-na-aš, abl. iš-ga-ra-na-za).
IE cognates: Gr. $\kappa \varepsilon$ í $\rho \omega$ 'to cut (off)', OHG sceran 'to cut', OIr. scaraim 'to sever', Lith. skirti 'to separate'.

PIE *skór-ei, *skr-énti
See Puhvel HED 1/2: 416f. for attestations. This verb is a textbook example of an $\bar{a} / a$-ablauting hi-verb: iškārhi, iškāri vs. iškaranzi. In NS texts, we find forms that inflect according to the $\operatorname{tarn}(a)$-class (išgarāi) and to the hatrae-class (išgarāmi, išgaraizzi, iškarānt-).
Already Hrozný (1919: 82) connected this verb with the root *(s)ker- as seen in OHG sceran 'to cut', OIr. scaraim 'to sever', Lith. skirti 'to separate' etc. For Hittite, this means that we have to reconstuct *skór-ei, skr-énti. The same root ( $k^{(w)}$ er-) is visible in karš- ${ }^{z i}$ and kuer- $^{z i} /$ kur- / kuuar- (q.v.).

## iške/a- ${ }^{z i}$ : see iškiie/a- ${ }^{z i}$

iškiiela- ${ }^{z i}$ (Ic1 > Ic6, Ic2, IIal $\gamma$ ) 'to smear, to daub, to salve, to oil, to anoint' (Sum. İÀ): 1sg.pres.act. iš-ke-mi (KUB 29.55 i 14 (MH/MS)), iš-ga-a-mi (KBo 3.8 ii $20(\mathrm{OH} / \mathrm{NS})$ ), iš-ga-ah-ḩi (KUB 7.1 i $40(\mathrm{OH} / \mathrm{NS})$ ), 3sg.pres.act. iš-ki-ez-zi (KUB 30.19 iv 5 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 5.1 iii 6 ( $\mathrm{MH} / \mathrm{NS}$ ), KBo $16.24+25$ i 66 (MH/NS), KBo 19.139 ii 9, iii 8 (MH/NS), HT 1 ii 11 (MH/NS)), iš-ki-ia-zi (KUB 39.8 iv 3 (OH/NS), VBoT 120 iii 17 (MH/NS)), iš-ki-ia-iz-zi (KUB 9.31 ii 36 (MH/NS), HT 1 i 38 (MH/NS)), 3pl.pres.act. iš-ki-įa-an-zi (KUB 29.45 i 2 (MH/MS), KBo 21.42 i 8 (NS), KUB $24.5+9.13$ obv. 19 (NS)), iš-ki-an-zi (KBo 12.98 rev. 5 (NS)), iš-kán-zi (KUB 29.40 ii 7 (MH/MS), KUB 29.51 i 3 (MH/MS), KBo 21.34 i 22 (MH/NS), KUB 1.13 iii 9 (MH/NS), KBo 23.1 i 44, iii 34 (NS), KUB 5.14 i 16 (NS), KUB 36.90 obv. 18 (NS), KUB 42.98 i 8 (NS)),

3sg.pres.act. iš-ki-et (KUB 9.34 iii 34 (MH/NS), KUB 33.88 rev. 10 (MH/NS)), 3pl.pret.act. iš-ki-er (KUB 29.54 iv 18 (MH/MS)), 2sg.imp.act. iš-ki (KBo 3.23 obv. 4 (OH/NS)), 3sg.imp.act. iš-ki-ed-du (KUB 17.10 ii 23 (OH/MS), KBo 3.8 ii 33 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.imp.act. iš-ki-į $a-a n-d u(\mathrm{KUB} 36.12$ iii 4 (NS)); 3sg.pres.midd. $i \check{s ̌-k a t-t a-r i ~(I B o T ~} 3.148$ i 67, 68 (MH/NS)); part. iš-ki-ía-an-t- (KBo 21.22 rev. 43 (OH/MS)), iš-kán-t- (KBo 21.41+ rev. 59 (MH/MS)); impf. iš-ki-iš-ke/a-, iš-ki-eš-ke/a-.

PIE * $s^{\prime} \dot{g}^{\text {(hh }}-i e ́ l o ́-$
See Puhvel HED 1/2: 420f. for attestations. We find forms of different stems: iškii_azi, iškiíanzi, iškii_andu and iškiiant- point to a stem iškiie/a- ${ }^{z i}$; iškemi, iškanzi, iški and iškant- point to a stem iške/a- ${ }^{z i}$; išgāmi points to a stem išgae- ${ }^{-2} ;$ išgahhi points to a stem $i s ̌ g(a)-{ }^{i}$; iškiíaizzi points to a stem iškiíae- ${ }^{-2}$. The forms iš-KI-IZ$z i, i s ̌-K I-I T, i \check{s}$-KI-IR and $i s ̌-K I-I T-d u$ are dubious regarding their interpretetation: either they should be read $i s ̌-k e-e^{\circ}$ and belong to a stem $i s ̌ k e / a-{ }^{z i}$, or they should be read $i s ̌-k i-e^{\circ}$ and belong to a stem iškiiel $a_{-} z^{i}$. Although the stems $i \check{s} g a e-, i s ̌ g(a)-$ and iškiiae- are clearly secondary (they all occur in NS texts only), it is difficult to decide which one of the remaining two stems (iške/a- and iškiie/a-) is the more original one, since they both occur in MS texts already. On the basis of the fact that the only form that is attested in a $\mathrm{OH} / \mathrm{MS}$ text is part. iškiizant-, I assume that iškiie/a- ${ }^{z i}$ is more original. This has consequences for the etymological interpretation as well, of course.

Melchert (1984a: 110) connects this verb with pešš- ${ }^{z i}$ 'to rub' (q.v.) and assumes that the imperfective *ps-skée/o- would regularly yield Hitt. iške/a-, with loss of initial $p$-. This etymology has now become impossible as it cannot explain the stem-form iškiie/a-. Rieken (1999a: 293-4) proposes to connect iškiie/a- with
 indeed would yield Hitt. iškiie/a- as it is attested. Semantically, this connection is superior as well, in view of contexts like KUB 4.3 obv . (17) $k u-u \check{s}-s \check{a} a-n i-a n=m a$ $z a$ Ì-an iš-ki-ia $[-z i]$ 'She anoints herself with rented oil' and KUB 27.1 iv (39) EGIR $=\check{S} U=m a$ Ì-an iš-kán-zi 'Afterwards, they use oil for anointing', which can now be regarded as figurae etymologicae. See at šākan / šakn- for further etymology.
${ }^{(U Z U)}$ iškiš- (n.) 'back, backside, rear': nom.-acc.sg. iš-ki-iš (OS), gen.sg. iš-ki-ša$a \check{s}$, dat.-loc.sg. iš-ki-ši, all.sg. iš-ki-ša (MH/MS), erg.sg. iš-ki-ša-a-an-za, abl. iš$k i-s ̌ a-a z, i \check{s}-h i-s ̌ a-z a$ (NS), instr. $i \check{s}-k i-s ̌ i-i t=t i\left[-x^{?}\right]$, nom.-acc.pl. iš-ki-ša, iš-ki-i-ša.

See Puhvel HED 1/2: 424f. for attestations. The stem of this neuter word, iškiš-, at first sight seems to be comparable to nēpiš- and then would reflect an $s$-stem. Problematic, however, is the fact that good IE comparanda lack, let alone words that reflect an $s$-stem as well. The only proposed cognate is Gr. íxiov 'hip(s),
 is in my view not very convincing. Moreover, the inner-Greek alteration ' $\sigma \chi \mathrm{l}$ : ȯơúc clearly points to a substratum origin. If these forms are to be regarded as cognate, however, I would rather regard them as loans from a common source than as inherited.
išnā- (c.) 'dough’: nom.sg. iš-na-aš (MH/MS), iš-ša-na-aš (MH/NS), acc.sg. iš-na-an (MH/MS), iš-ša-na-an (MH/MS), gen.sg. iš-na-a-ǎ̌ (OS), iš-na-aš (MH/MS), iš-ša-na-aš (MH/NS), eš-ša-na-aš (KUB 9.34 iii 26), dat.-loc.sg. iš-ni (NS), instr. iš-ni-it (MH/MS), acc.pl. iš-ša!-na-aš (KUB 24.9 iii 6 (OH/NS)) // e$e \check{s}-s \check{a}-n a-a s ̌$ (KUB 41.1 iii 21 ( $\mathrm{OH} / \mathrm{NS}$ )).
Derivatives: iššanauuant- (adj.) 'doughy' (nom.-acc.pl.n. iš-ša-na-u-una-an-ta ( $\mathrm{OH} / \mathrm{MS}$ )), ${ }^{\text {DuG }} \boldsymbol{i s ̌ n u r a - , ~}{ }^{\text {DuG }}$ išnuri- (c.) ‘dough-bowl’ (nom.sg. iš-nu-u-ri-iš (MH/MS) // iš-nu-ra-aš (MH/NS), acc.sg. iš-nu-u-ri-in (MH/MS) // iš-nu-ra-an (MH/NS), iš-nu-u-ra-an (MH/MS), iš-nu-ra-a-an ( $1 \mathrm{x}, \mathrm{MH} / \mathrm{NS}$ ), dat.-loc.sg. iš$n u-u-r i(\mathrm{MH} / \mathrm{NS})$, nom.pl. iš-nu-u-ri-eš (OS), acc.pl. iš-nu-u-ru-uš (OH/MS), iš$n u-r u-u s ̌ \quad(\mathrm{OH} / \mathrm{MS}), \quad i s ̌-n u-r a-\check{s}=a=k a ́ n \quad(\mathrm{MH} / \mathrm{NS}), \quad$ dat.-loc.pl. iš-nu-u-ra-aš ( $\mathrm{OH} / \mathrm{MS}$ ).
IE cognates: Skt. yas- 'to boil', Gr. 广é $\omega$ 'to bubble, to boil, to cook', Gr. そعбтós 'cooked, boiling, hot', OHG jesan 'to ferment, to foam', TochA yäs-, TochB yās'to boil, to be turned on'.

PIE *ies-nó- or *is-nó-
See Puhvel HED 1/2: 381f. for attestations. This word is predominantly spelled $i \check{s}-n^{\circ}$ as well as $i \check{s}-s \check{ } a-n^{\circ}$. The occasional NS attestations with initial $e$ - are due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-\varsigma \check{-}$ - as described in § 1.4.8.1.d. The plene spelling in gen.sg. iš-na-a-ǎ̌ indicates oxytone accentuation. All in all, this word must be phonologically interpreted as /(P)iSnà́-/. Puhvel reconstructs ths word as *iesnó-, derived from the root *ies- 'to ferment, to boil' as especially visible in OHG jesan 'to ferment'. Semantically, this certainly makes sense and formally it is possible as well: in *iesnó- the initial $*_{i}$ - before $*_{e}$ would be lost, the $*_{s}$ before $*_{n}$ would be fortited and the pretonic $*_{e}$ would be weakened to $/ \mathrm{i} /$, yielding /(P)iSnà́-/. Another possibility is to reconstruct *is-nó-, with the zero-grade root.
išpai- $^{i}$ / išpi- (IIa5 > Ic2) 'to get full, to be filled, to be satiated': 2sg.pres.act. iš$p a-a-i-s ̌ i(B o 6180,5$ (undat.)), 3sg.pres.act. iš-pa-a-i (Bo 4491, 5 ( OH ?/NS)), iš$p a-a ?[-i]$ (KBo 13.94, 2 (OH/NS)) 3pl.pres.act. iš-pí-ia-an-zi (KBo 3.5 i 28 (MH/NS)), 3pl.pret.act. iš-pí-i-e-er (KUB 17.10 i 20 (OH/MS), KUB 33.19 iii 8 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 33.24 ii 13 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-pí-er (KUB 33.32 iii 5 ( $\mathrm{OH} / \mathrm{NS}$ )), 2sg.imp.act. ǐ̌-pa-a-i (VSNF 12.16 obv. 9 (OH/NS), 516/z rev. 4 (NS), KBo 4.6 obv. 9 (NH)), iš-pí-ía (KUB 20.92 vi 9 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 36.12 i 7 (fr.)), 2pl.imp.act. iš-pí-iš-te-en (KUB 12.17, 6 (NS)), iš-pí-it-tén (KUB 33.62 iii 11 ( $\mathrm{OH} / \mathrm{MS}$ )), 3pl.imp.act. iš-pí-ia-an-du (KUB 15.34 i 49 (MH/MS)); part. iš-pí-ía-an-t-; verb.noun iš-pí-ía-tar 'satiety' (KUB 17.10 i 11 (OH/MS), KUB 33.24 ii 16 ( $\mathrm{OH} / \mathrm{NS}$ ) ).

Derivatives: išpiianu- ${ }^{\text {z }}$ (Ib2) 'to saturate' (verb.noun iš-pí-ia-nu-mar (KBo 11.1 rev. $21(\mathrm{NH})$ )), išpān (n.) 'satiation(?)' (nom.-acc.sg. iš-pa-a-an (KBo 8.42 obv. 6), gen.sg. iš-pa-a-na-aš (KUB 36.44 i 12)), išpiningatar (n.) 'satiation of hunger and thirst' (nom.-acc.sg. iš-pí-ni-in-ga-tar (KBo 39.66, 9 (OH/MS), KBo 30.96 iv 4 ( $\mathrm{OH} / \mathrm{NS}$ )).

IE cognates: Skt. sphā- 'to become fat, to increase', Lat. spēs 'hope, expectation', OE spōwan 'to prosper', OCS spěti 'to succeed', Lith. spëti 'to have plenty of time'.

PIE *sph $h_{1}$-ói-ei, ${ }^{\text {s }}{ }^{\text {sph}} h_{1}-i$-énti
See Puhvel HED 1/2: 429f. for attestations. The oldest attested forms inflect according to the dāi/tiíanzi-class: išpāi, išpiíanzi. In younger times we find forms that inflect according to the hatrae-class (išpāiši) and the -ie/a-class (2sg.imp.act. išpiìa, also visible in išpiįanu-).
Since Sturtevant (1928a: 4), this verb is generally connected with Skt. spháyate 'to become fat', OE spōwan 'to prosper', OCS spěti 'to succeed', Lith. spëti 'to be in time, to have plenty of time' and Lat. spēs 'hope'. In the BSl. forms as well as in Lat. spēs, we find a root $*$ speh $_{l^{-}}$, which has received a *-ie/o-suffix in OE spōwan < *speh ${ }_{1}-\stackrel{i}{2} e / o-$. This latter preform cannot account for Skt. spháyate, however, as it would not yield -ph- (note that $\mathrm{LIV}^{2}$ unconvincingly reconstructs the root as $*_{s p}{ }^{h} e h_{1^{-}}$). As I have shown in Kloekhorst fthc.a, the Hitt. dāi/tiianziclass reflects a structure ${ }^{*} \mathrm{CC}$-oi-, ${ }^{*} C C-i$-, i.e. the zero-grade of the root followed by an ablauting $*_{\text {-oi-/-i-suffix. For išpāi, išpiianzi, this means that we have to }}$ reconstruct $*_{s p h}$-oí-ei, $*_{s p h}^{l}$-i-énti. Note that the preform $*_{s p h}^{l}$-ói-e would regularly yield Skt. spháaya- as well.

See Rieken 1999a: 313 for an analysis of išpiningatar as a compound of išpiand nink- 'to quench one's thirst' + the abstract suffix -atar. For the analysis of išpān- as 'satiation', see Oettinger 1979a: 467-8.
išpant- (c.) 'night' $\left(S u m . \mathrm{GE}_{6}{ }^{(\mathrm{KAM})}\right.$, Akk. MUŠU): nom.sg. iš-pa-an-za, acc.sg. iš$p a-a n-t a-a n$, iš-pa-an-da-an, gen.sg. $\mathrm{GE}_{6}-a n-d a-a \check{s}$, dat.-loc.sg. iš-pa-an-ti, abl.
 $u s ̌$ (NH).
IE cognates: Skt. kṣáp- 'night', Av. xšapan- / xšafn- 'night'.
PIE $* k^{(w)} s p$-ent-
See Puhvel HED 1/2: 431f. for attestations. Since Götze \& Pedersen (1934: 60), this word is generally connected with Skt. kṣap- 'night'. It then would show the suffix *-ent-, which is well known from terms like hamešhant- (beside hamešha-) 'spring', zēnant- (besides zēna-) 'autumn', gimmant- (besides $\operatorname{gim}(m)$-) 'winter', etc. We therefore have to reconstruct $* k^{(w)}$ sp-ent-.
išpānt- ${ }^{i}$ / išpant- (IIa2 > IIal $\gamma$ ) 'to libate, to pour, to sacrifice' (Sum. BAL): 1sg.pres.act. iš-pa-an-tah-hé (1x OS), iš-pa-an-tah-hi (3x OS), ši-pa-an-da-ah-hi, ši-pa-an-ta-ah-hi, ši-pa-an-tah-hi, ši-ip-pa-an-tah-hi, 3sg.pres.act. ši-pa-a-an-ti (16x OS), ǐ̌-pa-a-an-ti (2x OS), ši-pa-an-ti (19x OS, 750+x), ǐ̌-pa-an-ti (2x OS), iš-pa-an-di (3x OS), ši-ip-pa-an-ti (50x), ši-ip-pa-an-da-i (1x), ši-ip-pa-an-ta-i (1x), [ši-]pa-an-da-a-i (1x), 1pl.pres.act. ši-pa-an-du-ua-ni, 3pl.pres.act. ši-pa-an-ta-an-zi (OS, 12x), ši-pa-an-da-an-zi (OS, 59x), iš-pa-an-ta-an-zi (OS, 2x), ši-ip-pa-an-ta-an[-zi] (1x), ši-ip-pa-an-da-an-zi (2x), ši-ip-pa-an-tan $n_{x}-z i(1 \mathrm{x}), \check{s i} i-p a-a-$ $a n-d a-a[n-z i]$ (1x), 1sg.pret.act. ši-ip-pa-an-da-ah-hu-un (1x), ši-pa-an-da-ah-huun (1x), ši-pa-an-tah-ḩu-un (1x), 3sg.pret.act. ši-pa-an-ta-aš (KBo 15.10 iii 59, 66 (OH/MS)), ši-pa-an-da-aš (KBo 15.10 iii 54, 58 (OH/MS)), ?ši-pa-an-za-[a]šta (VSNF 12.59 v 6 (MH/NS)), ši-pa-an-da-za (KUB 19.37 ii $24(\mathrm{NH})$ ), 3pl.pret.act. ši-ip-pa-an-te-er (1x), ši-pa-an-te-er (7x), ši-ip-pa-an-ta-er; part. ši-pa-an-ta-an-t- (MH/MS, 2x), ši-pa-an-da-an-t- (6x), ši-ip-pa-an-ta-an-t- (1x); verb.noun ši-ip-pa-an-du-ua-ar, ši-ip-pa-an-du-u-üa-ar, gen.sg. ši-ip-pa-an-tu-una[-aš], ši-pa-an-du-ua-aš; inf.I ši-pa-an-tu-u-ua-an-zi, ši-pa-an-du-ua-an-zi, ši-ip-pa-an-du-ua-an-zi; impf. iš-pa-an-za-aš-ke/a- (1x OS), ši-ip-pa-an-za-ke/a(13x), ši-pa-an-za-ke/a- (25x), iš-pa-an-za-ke/a- (1x).

Derivatives: šippandanna- ${ }^{i}$ / šippandanni- (IIa5) 'to libate (impf.)' (3sg.pret.act. ši-ip-pa-an-da-an-na-aš), DuG išpantuua- (c.) 'libation-vessel' (nom.sg. ši-pa-an-du-ua-aš, acc.sg. iš-pa-an-tu-ua-an, iš-pa-an-du-ūa-an, ši-ip-
$p u-u a-a n-d a-a n, ~ a b l . ~ i s ̌-p a-a n-d u-u a-a z, ~ i s ̌-p a-a n-d u-a z$, instr. iš-pa-an-du-it, nom.pl. iš-pa-an-du-ưa-ă̌), ${ }^{(\mathbf{D U G})}$ išpantuzzi- (n.) 'libation-vessel, libation, libate’ (nom.-acc.sg. iš-pa-an-tu-uz-zi (OS, often), iš-pa-an-du-uz-zi, iš-pa-an-tu-zi, iš$p a-a n-d u-z i$, acc.sg.c. iš-pa-an-du-uz-zi-i[n], gen.sg. iš-pa-an-tu-uz-zi-aš (OS, often), iš-pa-an-du-uz-zi-aš, iš-pa-an-tu-zi-aš, iš-pa-an-du-zi-ǎ̌, dat.-loc.sg. iš$p a-a n-t u-u z-z i$, $i \check{s}-p a-a n-t u-u z-z i-i, i a$, abl. iš-pa-an-tu-uz-zi-az, instr. iš-pa-an-du$u z-z i-i t$, gen.pl. iš-pa-an-tu-uz-zi-ia-aš), ${ }^{\text {LỨ } i s ̌ p a n t u z z i i a l a-~(c .) ~ ' l i b a t i o n-b e a r e r ' ~}$ (nom.pl. [iš-pa-an-tu-uz-zi-i] a-le-e-eš, iš-pa-an-tu-uz-zi-a-li-uš, iš-pa-an-tu-uz-zi$i a-l i-u s ̌, \quad i \check{s}-p a-a n-t u-u z-z i-i \underline{C l} a-l a-a s ̌, \quad i s ̌-p a-a n-t u-u z-z i-l a-a \check{s}), \quad{ }^{(D U G)} \boldsymbol{i s ̌ p a n t u z z i i a} a s ̌-$ šar(a)- (n., c.) 'libation-vessel’ (nom.-acc.sg.n. iš-pa-an-tu-uz-zi-aš-šar (OS), iš-pa-an-tu-uz-zi-i्रa-aš-šar (OS), iš-pa-an-tu-zi-aš-šar (OS), acc.sg.c. [iš-pa-a]n-tu-zi-aš-ša-ra-an (OS), [iš-pa-an-tu-uz-z]i-ia-aš-šar-an (OS), instr. iš-pa-an-du-uz$z i-i a-a \check{s}-s \check{S}^{a} a-r i-i t$, acc.pl. iš-pa-an-tu-zi-aš-ša-ru-uš (OS)).
IE cognates: Gr. $\sigma \pi \varepsilon ́ v \delta \omega$ 'to libate', Lat. spondeō 'to pledge, to promise', TochB spänt- 'to trust'.

PIE *spónd-ei, *spnd-énti
This verb shows initial spellings with $i s ̌-p a$-, ši-pa- and ši-ip-pa-. Although the spelling ši-ip-pa- occurs in younger texts only, the spellings $i s ̌-p a$ - and ši-pa- are both attested in OS texts already. The occurrence of a spelling iš-pa- besides ši$p a$ - (and ši-ip-pa-) is remarkable since other words with $*_{s} C$ - are only spelled $i s ̌$ $C^{\circ}$ and never $\check{s} i-C^{\circ}$. Nevertheless, there seems to be no distribution between the spellings with $i s ̌-p a$ - and $\check{s} i-p a$-: I have not found a difference in meaning between išpant- and šipant-, nor have I been able to find a meaningful distribution of the spellings $i s ̌-p a$ - and $\check{s} i-p a$ - within the paradigm. Assuming a phonetic distribution between $i s ̌-p a$ - and $s ̌ i-p a-$ (e.g. /ispV-/ vs. /sipC-/) does not solve anything, in view of šipānti (OS) besides išpānti (OS) < *spónd-ei vs. šipantanzi (OS) besides išpantanzi (OS) < *spndénti. According to Forssman (1994: 103), the form šipant- reflects *spe-spond- (cf. OLat. spepond-), whereas išpant- reflects the unreduplicated *spond-. Although in Hittite we have to reckon with occasional loss of reduplication (compare possibly Hitt. išhai- ${ }^{i}$ / išhi- 'to bind' next to CLuw. hišhiia- 'id.' < *sh $\left.h_{2} i-s h_{2}-(o) i-\right)$, this hypothesis cannot be proven. Moreover, we would perhaps expect a (slight) difference in meaning between the two, which to my knowlegde is not extant.

The oldest forms of this verb show a clear ablaut between išpānt- and išpant-. Already Hrozný himself (1915: 29) equated this verb with Gr. $\sigma \pi \varepsilon ́ v \delta \omega$, Lat. spondeō, etc., which has been generally accepted since. I therefore reconstruct *spóndei / *spndénti.

According to Carruba (1966: $23^{35}$ ) the noun ${ }^{\text {DUG }}$ išpantuua- is based in a false analysis of the gen.sg. išpantuuaš of verb.noun išpantuuar: DUG išpantuuaš 'vessel of libation' > ${ }^{\text {DUG }}$ išpantuuaš̌ 'libation-vessel', which was interpreted as nom.sg. of a stem ${ }^{\text {DUG }}$ išpantuua-
išpār- ${ }^{i} /$ išpar- (IIa2 > Ic1, IIal $\left.\gamma(?)\right)$ 'to spread (out), to strew': 1sg.pres.act. iš-pa-ar-ḩi (KUB 12.44 ii $30(\mathrm{NS})$ ), iš-pár-ah-hi (KUB 7.57 i 8 (OH/NS)), 3sg.pres.act. $i s ̌-p a-a-r i(\mathrm{KUB} 20.46$ iii $8(\mathrm{OH} / \mathrm{NS})$, KBo 10.45 ii $20(\mathrm{MH} / \mathrm{NS})$ ), iš-pa-ri (KBo 4.2 ii 53 (NH)), iš-pár-ri-ez-zi (KUB 14.1 rev. 91 (MH/MS)), iš-pár-ri-i-e-ez-zi (Oettinger 1979a: 266), iš-pár-ri-i-ia-az-zi (KUB 7.60 ii 10 (NS)), [iš-]pár-ra-a-i (Oettinger 1979a: 266), 3pl.pres.act. iš-pa-ra-an-zi (KBo 20.27 rev.? 3 (fr.) (OS), KBo 25.31 iii 10 (OS), KUB 30.29 obv. 5 (MH/MS?), VBoT 24 ii 32 (MH/NS), HT 1 iv 22 (NS)), iš-pár-ra-an-zi (KUB 29.45 i 14 (MH/MS), often NS), 1sg.pret.act. iš-pár-hu-un (KUB 15.34 i 41, 42 (MH/MS)), iš-pár-ra-ah-hu-un (KUB 7.60 ii 2 (NS)), 3pl.pret.act. iš-pár-re-er (KBo 39.290 iii 11 (NS), KUB 33.114 iv 12 (NS)), 3sg.imp.act. iš-pa-a-ru (Oettinger 1979a: 266), 2pl.imp.act. iš-pí-ir-te-en (KBo 21.14 obv. 8 (MS?)); 2sg.imp.midd. iš-pár-ḩu-ut (KUB 23.77 i 4 (MH/MS)); part. iš-pár-ra-an-t-; verb.noun. iš-pár-ri-i_a-u-ua-ar (KBo 1.42 v 4 (NS)); sup. iš-pár-ru-ua-an (KBo 14.45, 4 (NH)); inf.I iš-pár-ru-um-ma-an-zi (IBoT 2.131 i 23 (NS)); impf. iš-pa-ri-eš-ke/a- (KUB 7.5 ii 19 (MH/NS)).
Derivatives: išparanna- ${ }^{i}$ / išparanni- (IIa5) 'to spread (impf.)' (3sg.pres.act. iš-pa-ra-an-na-i (KUB 57.83 iv 5 (NS))), išparnu- ${ }^{z i}$ (Ib2) 'to spread, to spray, to scatter' (1sg.pres.act. iš-pár-nu-mi, 3sg.pres.act. iš-pár-nu-zi (OS), iš-pár-nu-uz$z i$, 3pl.pres.act. [iš-pár-n]u-ua-an-zi, 1sg.pret.act. iš-pár-nu-nu-un, 3sg.pret.act. iš-pár-nu-ut; impf. [i]š̌-pár-nu-uš-ke/a-), ${ }^{\text {(GIŠ) }}$ išparuzzi- (n.) 'rafter' (nom.-acc.sg. or pl. iš-pa-ru-uz-zi (KUB 29.1 iii 18 (OH/NS)), iš-pár-ru-uz-zi (KUB $40.55+$ 1236/u, 16 (MH/MS))).
Anat. cognates: CLuw. parri(ia)- 'to apply (medicine), to smear(?)' (3sg.pres.act. pa-ar-ri-it-ti, 3pl.pres.act. pa-ar-ri-en-ti, 3sg.pret.act.(?) pár-ri-ia$i[t]$ (KUB 35.111 ii 2), verb.adj.nom.sg. pa-ri-ía-u-ua-an-za (KUB 12.61 i 14).
IE cognates: Gr. $\sigma \pi \varepsilon i ́ \rho \omega$ 'to spread (out)'.

> PIE *spór-ei, *spr-énti

See Puhvel HED 1/2: 441f. and Oettinger 1979a: 266 for attestations. There is much debate on the semantics and formal interpretation of this verb. Oettinger (o.c.: 267f.) states that this verb originally means 'treten, festtreten' and connects it with the root *sperH- 'to kick (with the foot)' (Skt. sphuráti etc.). He interprets $i \check{s}$-pár-RI-IZ-zi as the most original form /isparret ${ }^{\mathrm{s}} \mathrm{i} /$ and reconstructs it as ${ }^{\text {s }}$ sprh $_{l^{-}}$
é-ti. All the forms that show išpāri are in his view secondary formations in analogy to the semantically comparable verb iškar- ${ }^{i} /$ iškar- 'to prick, to stab'. The OS attestations iš-pa-ra-an-zi are, in his opinion, a "Fehler". He states that the causative išparnu- means 'versprengen, zerstreuen', however, and therefore should be cognate with Gr. $\sigma \pi \varepsilon$ í $\rho \omega$ 'to spread' < *sper- and etymologically does not belong with išparre-. His views are followed by e.g. Melchert (1984a: 17 and, with adaptations, 1994a: 80).
In my opinion, there are some flaws in Oettinger's theory. The assumption that the OS attestations iš-pa-ra-an-zi are spelling mistakes is totally ad hoc. They are supported by several MS and NS attestations. Moreover, the semantic interpretation of the verb is incorrect. As Puhvel (l.c.) shows, the bulk of the contexts in which this verb occurs, demand a translation 'to spread (out)' (said of e.g. beds, cloths, leaves). Only a few forms indeed have to be translated 'to trample' and these I have treated under a separate lemma, išparra- ${ }^{i}$ / išparr(q.v.).

Taking this criticism in mind, I would like to propose the following new interpretation. Although we find spellings with single $-r$ - as well as with geminate $-r r-$, it is clear that the spelling with single $-r$ - is more original (OS iš-pa-ra-an$z i$ ). The fact that we find geminate $-r r$ - from MH times onwards must be compared to the situation of amiiant-> ammiiant-, imiie/a-> immiie/a-, inara-> innara-, etc. The original inflection clearly is išpāri / išparanzi. The verb denotes 'to spread (out)' only: the forms that must be translated 'to trample' belong to a different verb, išparra- ${ }^{i}$ / išparr-. Already in MH texts, we find a few forms that show the secondary stem išparriie/a- (iš-pár-RI-IZ-zi (which is to be interpreted as iš-pár-ri-ez-zi =/ispaRiet ${ }^{\mathrm{s}} \mathrm{i} /$ and not as iš-pár-re-ez-zi $=/$ ispaRet ${ }^{\mathrm{s}} \mathrm{i} /$ ), išparriiezzi, išparriĩazzi, išparriìauuar). Occasionally, the verb is taken over into the $\operatorname{tarn}(a)$-class ([iš]parrāi, išparrahhun) and therewith becomes fully homophonic with $\operatorname{išparr}(a)$ - 'to trample (with the feet)'.

The obvious cognate is Gr. $\sigma \pi \varepsilon i \rho \omega$ 'to spread', which must reflect *sper-ie/o-. For the Hittite forms, this means that we have to reconstruct *spór-ei, *spr-énti. Note that we now do not have to reconstruct a root-final laryngeal, which has always been obligatory in the case of a connection with Skt. sphuráti 'to kick (with the feet)', Lith. spirti 'to kick out (of horses)', etc., and which was identified as *h by e.g. Oettinger (1979a: 270) on the basis of the interpretation of $i \check{s}$-pár-RI-IZ-zi as /sparret ${ }^{\mathrm{s}} \mathrm{i} /<{ }^{\prime} s p r h_{l}-\dot{e}-t i$. This solves the vexing problem of the difference between išpāri and $\bar{a} r r i$ 'he washes': when išpāri was still reconstructed as *spórh $h_{l}$-ei, it was impossible to explain why it shows single $-r$-,
whereas $\bar{a} r r i<{ }^{*} h_{1} o ́ r h_{1}-e i$ (see at $\bar{a} r r_{-}{ }^{i} / a r r-$ ) shows geminate $-r r-$. Now we see that the only outcome of $* V r h_{1} V$ is $V r r V$ (which is not lenited by a preceding *ó).
If 2pl.imp.act iš-pí-ir-te-en or iš-pé-er-te-en is a genuine form and must be interpreted /isperten/, it is fully aberrant within the paradigm of išpār- ${ }^{i}$ / išpar-. Perhaps its $e$-grade is secondarily taken over from the $m i$-verbs that have (secondary) e-grade in this form as well. The causative išparnu- (attested in OS texts already) regularly reflects ${ }^{\text {s spr-neu- }}$.
According to Dercksen (fthc.) the noun išparuzzi- 'rafter' is attested in OAssyrian texts from Kültepe as išpuruzzinum, which shows that the pronunciation must have been [isprut ${ }^{5} \mathrm{i}-$ ] at that time.
išparra- ${ }^{i}$ / išparr- (IIa1 $\gamma$ ) 'to trample': 2sg.pres.act. iš-pár-ra-at-ti (KUB 21.27 iii $30(\mathrm{NH}))$, 3pl.pres.act. ǐ̌-pár-ra-an-zi (KBo 6.34 iii $25(\mathrm{MH} / \mathrm{NS})$ ), 1sg.pret.act. iš-pár-ra-ah-hu-un (KUB 17.27 iii 12 (MH/NS)), 3pl.imp.act. iš-pár-ra-an-du (KBo 6.34 iii 28 (MH/NS)).

IE cognates: Skt. sphuráti 'to kick (with the foot)', Lat. spernere 'to push away, to dispise, to reject', ON sperna 'to kick out with the feet', Lith. spirti 'to kick out (of horses), to defy, to sting', Arm. spā̄na- 'to threaten'.

PIE spórh $_{2 / 3}$-ei, *sprh $_{2 / 3}$-énti
The forms that I treat in this lemma are usually regarded as belonging to išpār- ${ }^{i}$ / išpar- 'to spread (out)'. This is primarily based on the fact that both verbs are formally quite similar: especially because išpār-/išpar- is often spelled with geminate $-r r$ - from MH times onwards, it shares many homophonic forms with išparr (a)-. Moreover, on a semantic level, the verbs are often equated by assuming a semantic range 'to trample $>$ to shatter $>$ to scatter $>$ to spread'. This is the reason for e.g. Oettinger (1971: 266f.) and Melchert (1994a: 80-1) to assume that the meaning 'to spread out' developed out of 'to trample' and they therefore connect the verb with PIE *sperH- 'to kick (with the feet)'. As I have argued under the lemma of išpār-/išpar-, most of the forms of this verb clearly denote 'to spread (out)', however (cf. the context gathered in Puhvel HED 1/2: 441f.) and must be connected with Gr. oneí $\rho \boldsymbol{\omega}$ 'to spread (out)' < *sper-. Nevertheless, some forms remain that unambiguously denote 'to trample'. The contexts in which they occur are the following:

KUB 21.27 iii
(29) ... nu ke-e HUL-u[-ua $\left.A-U A-T E^{\mathrm{MES}} \mathrm{GI}\right] \mathrm{R}^{\mathrm{MES}}{ }_{-i[t]}$
(30) iš-pár-ra-at-ti
'You will trample these evi[1 words] with (your) [fe]et';

KBo 6.34 iii

(25) kat-t[a ḩu-ua-ap-p]a-a-i n=a-an GÌR-it iš-pár-ra-an-zi
(26) $n u$-u=š-ma-[aš ki]š-an te-ez-zi ku-iš=ua=kán ku-u-uš
(27) NI-IŠ [DINGIR ${ }^{L I M}$ ] šar-ri-ez-zi nu ú-ua-an-du a-pé-el
(28) URU-a[ $n$ DINGIR $]^{\mathrm{M}}{ }^{\text {ES URU }}$ Hat-ti QA-TAM-MA GÌR-it iš-pár-ra-an-du
(29) $n=a$-[at da]n-na-at-ta URU-ia-še-eš-šar i-ia-an-du
'He takes [the figurine] and [fling]s it face down and they trample it with (their) feet. And he speaks to them thus: "Who-ever breaks these oaths [of the gods], let the [god]s of Hatti come and likewise trample with the feet his city and let them make [it] into a [de]vastated townsite!"";

KUB 17.27 iii
(10) ... 2-e=pát $\mathrm{UH}_{7}-n a-a s ̌ \mathrm{UH}_{7}-t a r ~ p e ́-e s ̌-s ̌ i-i a-n u-u n ~$
(11) [ ]x-aš=kán še-er al-la-pa-ah-hu-un $n=a-a t ~ a n-d a$
(12) $\left[\mathrm{GIR}^{\mathrm{MES}}\right]$-it iš-pár-ra-ah-h̆u-un n=a-at=kán ANŠE-aš še'-hur-ri-eš-ke-ed-du

(14) $[k u$-iś] še-er ar-hha i-ía-at-ta-ri nu-u=š-ša-an še-er
(15) [al-l] $a-a p-p a-a h-h i-i s ̌-k e-e d-d u$
'Twice I have thrown away the sorcery of the sorcerer. I have spat on [...] and trampled it with (my) [feet]. Let the donkey piss on it, let the cow shit [on it]! And [whatever] human walks over it, let him [s]pit on it!'.

I do not exclude, however, that more of the forms cited under the lemma išpār- ${ }^{i}$ / išpar- in fact belong here.

The forms that belong with this verb, išparratti, išparranzi (homophonic with išparranzi 'they spread (out)'), išparrahhun and išparrandu clearly show a $\operatorname{tarn}(a)$-class inflection: išparra- ${ }^{-}$/ išparr-. As stated above, the obvious cognates to this verb are Skt. sphuráti 'to kick (with the feet)', Lith. spirti 'to kick out (of horses)', etc. that reflect *sperH- (note that reconstructions with root-final *- $h_{1}$ are based on false interpretation of the Hittite material, e.g. Oettinger (1979a: 270) who reconstructs $i \check{s}$-pár-RI-IZ-zi as *sprh ${ }_{1}$-é-ti (actually, the form means 'to spread out' and shows the secondary stem išparriie/a-), or Melchert (1994a: 80-1)
who reconstructs išpirten as $*_{\text {sperh }}^{1}$-ten with the argument that $*_{\text {sperh }}^{2 / 3}$ ten
 reflect *sper-ten)).
In Hittite, the $\operatorname{tarn}(a)$-class consists of different types of verbs. On the one hand, it goes back to verbs that either reflect a structure ${ }^{*}(\mathrm{Ce}) \mathrm{CoH}-$, ${ }^{*}(\mathrm{Ce}) \mathrm{CH}-$ or $* \mathrm{CC}$ -no- $H-$, *CC-n-H-, and, on the other, verbs that go back to roots of the structure ${ }^{*} \mathrm{CeCh}_{2 / 3}$ - (see also at malla- ${ }^{i} /$ mall- 'to mill, to grind', padda- ${ }^{i} /$ padd- 'to dig' and iškalla- ${ }^{i} /$ iškall- 'to slit, to split'): 3sg.pres.act. *CóCh $h_{2 / 3}$-ei regularly yielded Hitt. CaCai, on the basis of which the verb was taken into the $\operatorname{tarn}(a)$-class (also having 3sg.pres.act. CaCai), and not into the normal class that shows 3sg.pres.act. CaCi. For išparra-/išparr-, this means that it must go back to $*_{\text {sperh }_{2 / 3^{-}} \text {whereas }}$ *sperh $1_{1^{-}}$is impossible. This is supported by PGerm. *spurnō- (ON sperna, sporna, OE spornan) that must reflect $*_{s p r-n e-h_{2 / 3}-}$ and cannot go back to $*_{s p r}$ $n e-h_{l^{-}}$(cf. LIV ${ }^{2}$ under lemma $*_{s p}{ }^{h} e r H-$ ). I therefore reconstruct $*_{s p o ́ r}^{2 / 3} h_{2}$-ei, ${ }^{*} \operatorname{sprh}_{2 / 3}$-énti. Note that the plural-form regularly should have given $* * i s ̌ p a r h a n z i$, but was replaced by išparranzi with generalization of the -rr-of the singular.
išparriiela- ${ }^{z i}$ : see išpār- ${ }^{i} /$ išpar-
išpart $^{-z}$ (Ia4 > Ic1, IIa1 $\left.\gamma>\mathrm{Ic} 2\right)$ 'to escape, to get away': 3sg.pres.act. iš-pár-zi-zi (KUB 4.72 rev. 5 (OS)), iš-pár-za-zi (MH/MS, often), iš-pár-za-az-zi (KBo 5.4 obv. 10 (NH), KBo 4.3 iii $4(\mathrm{NH})$, KBo 4.7 iii $30(\mathrm{NH})$ ), iš-pár-ti-i-e-ez-zi (KBo 11.14 ii 20 (OH/NS)), iš-pár-za-i (KUB 6.7 iv 4 (NS), KUB 40.33 obv. 20 (NS)), $i s ̌-p a ́ r-z a-a-i(K B o 12.38$ ii $2(\mathrm{NH})$ ), iš-pár-za-iz-zi (112/u, 6 (NS)), 1sg.pret.act. $i s ̌-p a ́ r-z a-a h-h u-u[n]$ (KUB 25.21 iii 14 (NH)), 2sg.pret.act. iš-pár-za-aš-ta (KUB 19.49 i $6(\mathrm{NH})$ ), 3sg.pret.act. iš-pár-za-aš-ta (OS, often), iš-pár-za-aš (KUB 23.93 iii 15 (NS), 3pl.pret.act. iš-pár-te-er (MH/MS), iš-pár-ze-er (KUB 1.16 ii 8 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 1.1+ ii $14(\mathrm{NH})$ ), 3sg.imp.act. iš-pár-za-aš-du (KBo 12.126 i 21 $(\mathrm{OH} / \mathrm{NS})$ ), iš-pár-ti-ed-du (KBo 11.14 ii $21(\mathrm{OH} / \mathrm{NS})$ ); part. iš-pár-za-an-t- (KBo 6.28 obv. 15 (NH)).

IE cognates: Arm. sprdem 'to escape', Goth. spaurds, OE spyrd 'race, runningmatch', Skt. spardh- 'to contend, to fight for'.

PIE *sperd ${ }^{h}$-ti, *sprd ${ }^{h}$-énti
See Puhvel HED 1/2: 447f. for attestations. The oldest (OS and MS) attestations show a mi-inflecting stem išpart- that shows assibilation when the ending starts in a dental (išparzizi, išparzazi (both /ispartst i i ), išparzašta (/ispartsta/), išparter). In NS texts, we find a few forms with a stem išpartiie/a- ${ }^{z i}$ (išpartiiezzi,
išpartieddu). The NS forms that show a stem išparza- ${ }^{i}$ /išparz- (according to the tarn(a)-class: išparzai, išparzahhun, išparzaš, išparzer, išparzant-) are comparable to the stem ezza- ${ }^{i} / e z z$ - that is derived from the verb $e d-{ }^{z} / a d-$ 'to eat'. The exact point of departure for these $\operatorname{tarn}(a)$-class stems is unclear to me. Only once, we find a form that shows a stem išparzae-, according to the productive hatrae-class.

This verb is clearly cognate with Arm. sprdem 'to escape' and Goth. spaurds, OE spyrd 'race, running-match' and Skt. spardh- 'to contend, to fight for' < *sperd'-, which must have had a basic meaning 'to run (away) fast'.
išpartiie/a- ${ }^{z i}$ : see išpart- ${ }^{z i}$
išparza- ${ }^{i} /$ išparz- : see išpart- ${ }^{\text {zi }}$
(URUDU) išpātar / išpann- (n.) 'spit, skewer, dagger' (Sum. GÍR?, cf. Rieken 1999a: $380^{1913}$ ): nom.-acc.sg. iš-pa-a-tar, iš-pa-a-ta, iš-pa-tar, gen.sg. iš-pa-an-na-aš, abl. iš-pa-an-na-za, instr. iš-pa-an-ni-it.

See Puhvel HED 1/2: 450 for attestations. He suggests a connection with Gr . $\sigma \pi \alpha ́ \theta \eta ~ ‘ b l a d e ’, ~ O E ~ s p a d a ~ ' s p a d e ' ~ e . a ., ~ b u t ~ F r i s k ~(1960-1972: ~ s . ~ \sigma \pi \alpha ́ \theta \eta) ~ s t a t e s ~ t h a t ~$ the Hitt. word should be separated from these. Formally, išpātar / išpann- looks like a abstract noun in -ātar / -ann- of a verbal root *speH- or *seP-, which are further unattested in Hittite. Rieken (1999a: 380 ${ }^{1913}$ ) suggests a connection with the PIE root *speh $i_{1}$ - 'sharp' (Pokorny 1959: 981-2), but this root is not verbal. Unfortunately, I know of no verbs in the other IE languages that reflect *speH- or $*_{s e P}$ - and that would fit semantically.
išpiie/a- ${ }^{z i}$ : see išpai- $^{i} /$ išpi- $^{-}$
ištahh- ${ }^{z i}$ : see $i s ̌ t a(n) h h^{z i}$
ištalk- ${ }^{\text {zi }}$ (Ia4 > Ic2) 'to level, to flatten': 3sg.pres.act. iš-tal-ak-zi (KUB 24.9 ii 20 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-tal-ga-iz-zi (KBo 4.2 i $40(\mathrm{OH} / \mathrm{NS})$ ); 3sg.pres.midd. iš-tal-ki-ia-at-ta-ri (KUB 4.3 obv. 10 (NS)); part. iš-tal-ga-an-t- (KUB 31.86 ii 17 (MH/NS), KUB 31.89, 6 (MH/NS)); impf. iš-tal-ki-iš-ke/a- (KUB 31.100 rev. 13 (MS)).
IE cognates: Skt. (s)tarh- 'to crush, to shatter'.
PIE *stelg' ${ }^{h}$-ti, *stlg' ${ }^{h}$-énti

See Puhvel HED 1/2: 451f. for attestations. We are dealing with an original stem ištalk- ${ }^{-2 i}$, on the basis of which the secondary stems ištalkiie/a- ${ }^{z i}$ and ištalgae- ${ }^{z i}$ are made. Puhvel (1.c.) suggests a tie-in with OCS postblati 'to spread', that belongs with Gr. $\sigma \tau \varepsilon \wedge \lambda \lambda \omega$ 'to fix, to prepare', OHG stellen 'to arrange, to establish' < *stel-. Semantically, this connection is not very convincing. I would rather suggest a connection with Skt. (s)tarh- 'to crush'. Usually, this latter verb is reconstructed as ${ }^{*}$ sterg $^{\prime}{ }^{h}$ - and connected with Hitt. ištark-, but see there for my reasons to reject this etymology. I therefore rather take Skt. (s)tarh- with Hitt. ištalk- and reconstruct *stelg' ${ }^{h}$ - 'to flatten, to crush'. Note that the preservation of $/ \mathrm{g} /$ in the cluster $-\lg \mathrm{C}$ - is in line with the distribution as unravelled in the lemmas har $(k)_{-}^{z i}$ and hark- ${ }^{z i}$, namely loss of lenis $/ \mathrm{k} /$ in $*-R k C->-R C$-, but preservation of lenis /g/ in *- $R g^{(h)} C->$ Hitt. $-R k C$-.
${ }^{\text {(UZU) }}$ ištāman- / ištamin- (c. > n.) 'ear' (Sum. GEŠTUG, Akk. UZNU): nom.sg.c. $i \check{s}$-ta-mi-na-aš (KBo 1.51 obv. 16, 17 (NS)), acc.sg. iš-ta-ma-na-an (KUB 24.1 i $16(\mathrm{NH})$, KUB 24.2 obv. $14(\mathrm{NH})$ ), iš-ta-ma-na-a(n)=š-ša-an (KBo 6.3 i 37 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-ta-ma-n[a-a(n)=š-ma-an] (KUB 14.13 i $19(\mathrm{NH})$ ), nom.-acc.sg.n. GEŠTUG-an (KUB 8.83, 4 (MH/MS)), gen.sg. iš-ta-ma-na-aš (KUB $55.20+$ KUB 9.4 i 4 (MH/NS)), dat.-loc.sg. iš-ta-ma-<<aš->»ni (KUB $55.20+$ KUB 9.4 i 5 (MH/NS)), iš-dax-ma-ni-e=š-ši (KBo 10.45 ii 26 (MH/NS)), instr. iš-ta-ma-an-ta (KBo 20.93, 4 (MS?), KUB 12.21, 11 (NS)), iš-ta-mi-ni-it (KUB 33.120 ii 33 (MH/NS)), nom.pl.c. iš-ta-ma-ni-eš (KBo 13.31 ii 11 ( $\mathrm{OH} / \mathrm{MS}$ )), acc.pl.c. iš-ta-a-ma-nu-uš (KBo 6.3 iv 43 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-ta-ma-nu-uš (Bo 3640 iii 8 (NS)).

Derivatives: ${ }^{\text {d }}$ Ištamanašša- (c.) deity of hearing (nom.sg. iš-ta-ma-na-aš-ša-aš), ištamašš- ${ }^{z i}$ (Ib1) 'to hear, to listen to, to obey; to percieve' (Sum, GEŠTUG, Akk. $S ̌ E M \bar{U}$; 1sg.pres.act. $i \check{s}$-ta-ma-aš-mi (MH/MS), iš-dax-ma-aš-mi, 2sg.pres.act. iš$t a-m a-a s ̌-s ̌ i(\mathrm{OH} / \mathrm{MS}), i \check{s}-t a-m a-a \check{s}-t i$, 3sg.pres.act. $i s ̌-t a-m a-a \check{s}-z i$, iš-dax-ma-aš-zi, 1pl.pres.act. $\quad i s ̌-t a-m a-a \check{s}-s ̌ u-u{ }_{c} a-n i \quad(M H / M S), \quad 2 p l . p r e s . a c t . \quad i s ̌-t a-m a-a \check{s}-t a-n i$ (MH/MS), iš-ta-ma-aš-te-ni (MH/MS), iš-dax-ma-aš-te-ni, 3pl.pres.act. iš-ta-ma$a \check{s}-s ̌ a-a n-z i \quad(\mathrm{OS}), \quad i s ̌-d a_{x}-m a-a \check{s}-s ̌ a-a n-z i, \quad 1 \mathrm{sg} . p r e t . a c t . \quad i \check{s}-t a-m a-a \check{s}-s ̌ u-u n$ (MH/MS), 3sg.pret.act. $i \check{s}-t a-m a-a \check{s}-t a$, $i \check{s}-d a_{x}-m a-a \check{s}-t a$, 2pl.pret.act. iš-ta-ma-ǎ̌tén, iš-dax-ma-aš-tén, 3pl.pret.act. iš-ta-ma-aš-še-er (MH/MS), iš-ta-ma-aš-šer,
 3sg.imp.act. $i s ̌-t a-m a-a \check{s}-t u$ (OS), iš-ta-ma-aš-du, 2pl.imp.act. iš-ta-ma-aš-te-en, $i \check{s}-t a-m a-a \check{s c}$-tén (MH/MS), 3pl.imp.act. iš-ta-ma-aš-ša-an-du; 3sg.pres.midd. iš$d a_{x}-m a-a s ̌-t a-r i$; part. iš-ta-ma-ǎ̌-ša-an-t-, iš-dax-ma-ǎ̌-ša-an-t-; verb.noun iš-ta$m a-a s ̌-s ̌ u-u a-a r, i s ̌-d a_{x}-m a-a \check{s}-s ̌ u^{\prime} u-u a-a r$; inf.I iš-ta-ma-aš-šu-ua-an-zi; impf. iš-ta$\left.m a-a \check{s}-k e / a-(\mathrm{MH} / \mathrm{MS}), i \check{s}-d a_{x}-m a-a \check{s}-k e / a-\right)$.

Anat. cognates: CLuw. tummant- (n.) 'ear’ (nom.-acc.pl. tum-ma-a-an, gen.adj. nom.-acc.sg.n. ${ }^{\text {UZU }}$ GEŠTUG-za), tūmmāntaima/i- (adj.) 'renowned’ (nom.sg.c. tu-u-um-ma-a<-an»-ta-im-mi-iš), tūmmanti(iia)- 'to hear' (3sg.pret.act. tu-um-ma-an-te-it-ta, 3pl.pret.act. t $[u]$-u-ma-an-ti-in-ta), tūmmantiia- (c.) 'obedience’ (nom.sg. tu-u-ma-an-ti-ia-aš, du-um-ma-an-te-íia-aš, acc.sg. tu-um-ma-an-ti-i-iaan, tu-u-um-ma-an-ti-i्da-an, tu-u-ma-an-ti-ia-an, dat.-loc.sg. tu-um-ma-an-ti-ia), dumantiiala- 'ear canal (vel sim.)' (Hitt. dat.-loc.pl. du-ma-an-ti-ía-la-aš), ${ }^{\text {Étümantiiatta/i- }}$ 'audience room' (dat.-loc.sg. tu-u-ma-an-ti-íla-at-ti); HLuw. *tumanti(ia)- 'to hear' (3pl.pret.act. AUDIRE+MI-ti-i-ta (KARKAMIŠ A6 §4, §6), part.nom.sg.c. AUDIRE+MI-ma-ti-mi-i-sa (KARKAMIŠ A6 §1)), *tumantari(ia)-'to hear' (3pl.imp.midd. AUDIRE+MI-ta+ra/i-ru (KARKAMIŠ A11c §32)).
IE cognates: Gr. $\sigma \tau$ ó $\mu \boldsymbol{\alpha}$ (n.) 'mouth', Av. staman- (m.) 'snout, maw'.

$$
\text { PIE *sté } h_{3}-m n, \text { *sth }_{3}-m e ́ n-s
$$

See Puhvel HED 1/2: 452f. for attestations. The bulk of the attestations show a stem ištāman- (although the plene $-a$ - is attested only once, I think it is significant), but twice we find a stem ištamin(a)- (nom.sg. ištaminaš, instr. ištaminit). This indicates that originally this noun was an ablauting $n$-stem ištāman- / ištamin-. It is not fully clear what the original gender of this word was: the oldest attested forms (in MS texts) show nom.acc.sg.n. GEŠTUG-an (MH/MS) vs. nom.pl.c. iš-ta-ma-ni-eš (OH/MS). It should be noted that the CLuwian cognate, tummant-, is neuter.
Already Sturtevant (1928b: 123) suggested to etymologically connect Hitt. ištāman- with Gr. $\sigma$ tó $\mu \alpha$ 'mouth', Av. staman- 'maw', which has been generally accepted since then, despite the difficult semantics. Although on the basis of these three words, one could reconstruct *stom-en-, Oettinger (1982a: 235) states that CLuw. tummant- 'ear' can only be explained by reconstructing *stHm-en-. On the basis of the -o- in Greek, the laryngeal must be determined as $* h_{3}$. The Greek form $\sigma \tau$ ó $\mu \alpha$ in my view indicates that we have to reconstruct a neuter word (although Av. staman- is masculine). All in all, I would reconstruct a paradigm *sté $h_{3} m n$, *sth ${ }_{3} m e ́ n-s$. It is likely that, just as $h_{3} n e h_{3}-m e n$ - 'name' (which is derived from the verbal root H $_{3}$ neh $_{3^{-}}$visible in Hitt. hanna- ${ }^{i}$ / hann-), steh ${ }_{3}$ menhas to be analysed as $*_{\text {ste }}^{3}$-men-, although I know of no IE words that show a verbal root ${ }^{*}$ steh $_{3}$-.

The verb ištamašš- shows many NS attestations with the sign DAM, of which Melchert (1991b: 126) states that in NS texts it can be read $d a_{x}$ as well (besides normal dam). This would mean that we do not have to read iš-dam-ma-aš- with
geminate $-m m-$, but $i s ̌-d a_{x}-m a-a \check{s}$ - with single $-m$-. The verb is a clear $-s$-extension of the nominal stem ištaman-, with *-ans->-ašš- (from virtual *sth ${ }_{3} m e n-s-$ ).
 ta-na-na-an, gen.sg. iš-ta-na-na-aš (OS), dat.-loc.sg. iš-ta-na-a-ni (OH/MS, often), iš-ta-na-ni (often), abl. iš-ta-na-a-na-az (OH/MS), iš-ta-na-na-az, iš-ta$n a-n a-z a$, iš-da-na-na-az, nom.pl. iš-ta-na-ni-iš (OH/MS), dat.-loc.pl. iš-ta-na$n a-a s ̌$ (OS, often).

See Puhvel HED 1-2: 461f. for attestations. This word is fairly often attested with
 Puhvel (o.c.: 463) states that an etymological connection with PIE *steh $2^{2}$ 'to stand' is probable. Although semantically this indeed is a possibility, I would not know how to interpret the suffix -nāna- then, which would be unparallelled.
$\boldsymbol{i s ̌ t a ( n ) h} \boldsymbol{h}^{-z i}$ (Ib3) 'to taste, to try (food or drinks)': 2pl.pres.act iš-tah-te-e-ni (KUB 41.8 iii 31 (MH/NS)), iš-tah-te-ni (KBo 10.45 iii 40 (MH/NS)), 3pl.pres.act. iš-tah-ha-an-zi (KUB 33.89 + 36.21, 14 (NS)), 3sg.pret.act. iš-tah-ta (KUB 33.84, 6 (MH/NS), KBo 3.38 obv. 5 (OH/NS)); impf. iš-ta-ah-hi-eš-ke/a- (701/z, 8 (NS)), iš-ta-an-hi-iš-ke/a- (KBo 8.41, 12 (OH/NS)).
Derivatives: ${ }^{\text {MuNuS }}$ ištahatal(l)i- (c.) 'taster' (nom.sg. iš-ta-ha-ta-al-li-iš, dat.loc.sg. iš-ta-h $a-t a-l i)$.

$$
\text { PIE } *_{s T e N h_{2 / 3}} \text { ? }
$$

See Puhvel HED 1/2: 463 for attestations. Most forms show a stem ištahh-, but impf. ištanhišket shows a stem ištanh- (note however that it is found in a broken context and that therefore its meaning is not ascertained). It therefore is likely that we are dealing with a stem išta(n)h-. The original distribution between ištanhand ištahh- must have been ištanh $V$ - vs. ištahC- (cf. li(n) $k_{-}^{z i}, n i(n) k^{z i}$, etc. for the alternation between $-n$ - and - $\varnothing$-). As we can see in other verbs of this type, this distribution gets lost in the NH period. Therefore the aberrancy of the NS form ištahhanzi (instead of expected *ištanhanzi) is not unexpected.
Mechanically, išta(n)h- must go back to PIE $*_{s} T e N h_{23^{-}}$, but I know of no convincing IE cognate. LIV ${ }^{2}$ states that išta(n) $h$ - is a nasal-infixed form of PIE * steh $_{2^{-}}$'to stand' through an original meaning *'(den Geschmack) feststellen'. This does not seem very convincing to me semantically.
ištantāielaz- ${ }^{z i}(\mathrm{Ic} 3>\mathrm{Ic} 2)$ 'to stay put, to linger, to be late': 3sg.pres.act. iš-ta-an-ta-a-i-ez-zi (OS), 1sg.pret.act. iš-ta-an-ta-nu-un (NH), 3sg.pret.act. iš-ta-an-ta-it (NH), iš-ta-an-da-a-it (NH); part. iš-ta-an-ta-an-t- (NH); verb.noun iš-ta-an-ta-ua-ar (NS).

Derivatives: ištantanu- ${ }^{\text {zi }}$ (Ib2) 'to put off, to delay' (2sg.pres.act. iš-ta-an-ta-nuši (NH), 1sg.pret.act. iš-ta-an-ta-nu-nu-un (NH), impf. iš-ta-an-ta-nu-uš-ke/a( $\mathrm{OH} / \mathrm{NS}$ )).
IE cognates: Goth. standan 'to stand'.

$$
\text { PIE *sth }{ }_{2} \text {-ent-eh } 2 \text {-ié/ó-. }
$$

See Puhvel HED 1/2: 464f. for attestations. It is remarkable that almost all forms are from NH texts except 3sg.pres.act. iš-ta-an-ta-a-i-ez-zi, which is attested in an OS text. Moreover, it is remarkable that this latter form in principle seems to inflect according to the tāie/a-class (Ic3), whereas the NH forms inflect according to the hatrae-class. Because this is exactly the situation we would expect from a phonetical point of view (cf. § 1.4.8.1.a and especially note 193), I assume that an original verb ištantāiela- ${ }^{z i}$ developed into NH ištantae- ${ }^{z i}$.
Already since Marstrander (1919: 132) this verb has been generally connected with PGerm. *standan 'to stand'. This means that ištantae- ${ }^{z i}$ must be derived from $*_{\text {sth }}^{2}$-ent-, the participle of $*_{\text {steh }_{2}-}$ 'to stand' (visible in Hitt. tiiela- ${ }^{z i}$ (q.v.)), and goes back to virtual ${ }^{*}$ sth $_{2}$-ent-eh $h_{2}$-ié/ó-.
ištanzan- (c.) 'soul, spirit, mind', pl. also 'living things, persons' (Sum. ZI): nom.sg. iš-ta-an-za-aš=mi-iš (KUB 30.10 rev. 15 (OH/MS)), ǐ̌-ta-an-za-( $(\check{s})=\check{s} i-i s ̌$ (KUB 33.5 iii 6 ( $\mathrm{OH} / \mathrm{MS}$ )), iš-ta-an-za-na- $a(\check{s})=$ š-mi-iš (KUB 41.23 ii 19, 23 $(\mathrm{OH} / \mathrm{NS})$ ), iš-ta-an-za-a(s)=$\breve{s}^{-}$-me-et (KUB 41.23 ii 24 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-ta-za-na-$a(\check{s})=\check{s}-m i-i t(\mathrm{KUB} 41.23$ ii $21(\mathrm{OH} / \mathrm{NS})$ ), ZI- $a n-z a$ (KUB 13.3 iii $26(\mathrm{OH} / \mathrm{NS})$, KUB $33.98+36.8$ i 17 (NS)), acc.sg. iš-ta-an-za-na-an (KUB 41.23 ii 15 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-ta-an-za-na-(n)=ma-an (KUB 1.16 iii $26(\mathrm{OH} / \mathrm{NS})$ ), gen.sg. iš-ta$a n-z a-n a-a \check{s}=t a-a \check{s}$ (KUB 30.10 obv. 9 (OH/MS)), iš-ta-an-za-na-aš=ša-aš (KBo 21.22 obv. 14 ( $\mathrm{OH} / \mathrm{MS}$ )), dat.-loc.sg. ZI-ni, abl. iš-ta-an-za-na-az (KUB 33.120 ii 2 (MH/NS)), instr. iš-ta-an-za-ni-it (KUB 17.10 ii 21 (OH/MS), KUB 33.5 iii 9 (fr.) ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 17.21 i 6 (fr.) (MH/MS)), acc.pl. [i]š-ta-za-na-aš=me-eš (KBo 18.151 rev. 13 (MH/MS)), iš-ta-an-za-na-aš (KBo 3.21 ii 4 (MH/NS)).
 (KUB 20.24 iv 17), iš-ta-an-za-aš-ši-i[[s] (KUB 55.39 iii 27)).

[^2]See Puhvel HED 1/2: 468f. for attestations. The noun is clearly commune: the forms ištanzaš=šmet and $i \check{s ̌ t a n z a \check{s}=\check{s} m i t ~ t h a t ~ s h o w ~ n e u t e r ~}=\check{s} m e / i t$, occur in one text only, where we find correct ištanzanaš=šmiš as well. The oldest forms of this noun (MS) are nom.sg. ištanzaš, gen.sg. ištanzanaš, instr. ištanzanit, acc.pl. ištanzanaš. This points to an $n$-stem inflection (cf. hāraš, hāranan, hāranaš 'eagle’), with nom.sg. ištanzaš < *ištanzanš. In NS texts, we see two developments. On the one hand, the nom.sg. ištanzaš is enlarged to ištanzanaš, probably on the basis of a reanalysis of the oblique forms as showing a thematic stem ištanzana-. On the other hand, the nom.sg. ištanzaš is (hypercorrectly?) shortened to ištanza (ZI-anza), but note that no other forms with a stem ištant- ar found.
Melchert (2003d) shows that the suffix -anzan- probably derived from -ent-i-on-. This also has consequences for the etymology of ištanzan-. Eichner (1973a: 98) proposed a connection with PIE *pstēn 'breast' (cf. Skt. stána-, YAv. fs̃tāna-, Arm. stin 'breast of a woman', Gr. $\sigma \tau \mathfrak{q} v o v \cdot \sigma \pi \tilde{\eta} \theta$ oc 'breast, heart'), which has received support by e.g. Oettinger (1980: 59) and Melchert (1984a: 110). This etymology is largely based on the idea that words in *-e $n+s$ end up in the Hitt. -anzan-class, which has its origin in the assumption that Hitt. "šumanza- 'cord"", which belongs to this class as well, is to be equated with Gr. $\dot{\cup} \mu \eta$ ́v 'sinew' '< *sh ${ }_{l} u$-mén. As we can see under its own lemma, this latter word, which in fact is (Ú) šumanzan-, means '(bul)rush' and has nothing to do with Gr. ט́ $\mu \eta{ }^{\prime} v$. This means that the connection between ištanzan- and *pstēn has to be given up as well.

A better etymology may therefore be Oettinger's suggestion (1979a: 548) that ištanzan- reflects *sth ${ }_{2}$-ént-, the participle of $*_{s t e h_{2}}$ 'to stand' (although Oettinger himself later on has given up this idea in favour of Eichner's proposal), which is hesitatingly repeated by Melchert (2003d: 137). For a semantic parallel, compare ModDu. verstand 'mind, intellect, intelligence', lit. 'understanding'. All in all, we can reconstruct ištanzan- as *sth ${ }_{2}$-ent-i-on-.
ištāp- ${ }^{i}$ / ištapp- (IIa2) 'to plug up, to block, to dam, to enclose, to shut; to besiege': 1sg.pres.act. iš-ta-a-ap-hé (KBo 17.3 iv 33 (OS), KBo 17.1 iv 37 (OS)), $i s ̌-t a-a-a p-h i(K U B 55.3$ obv. 8 (OH/MS?)), iš-ta-ap-ah-hi (KUB 33.70 iii 12 ( $\mathrm{OH} / \mathrm{NS}$ )), iš-tap-mi (AAA3.2, 12 (NS), KUB 15.30 ii 7 (NS)), 3sg.pres.act. iš-ta-a-pí (KUB 29.30 ii 17 (OS), KUB 32.137 ii 27 (MH/NS), KBo 5.11 iv 14, 16 (MH/NS), KBo 30.1, 6 (fr.) (NS)), iš-da-a-pí (KUB 9.22 ii 43 (MS)), iš-da-pí (KUB 9.22 ii 33 (MS)), iš-tap-pí (KBo 6.26 i 8 (OH/NS), KUB 13.15 rev. 5 (OH/NS), KUB 40.102 vi 14 (MH/NS), Bo 4876, 4 (MH/?), KBo 19.129 obv. 31 (NS), KUB 12.16 ii 14 (NS)), 3pl.pres.act. iš-tap-pa-an-zi (KBo 4.2 i 8 ( $\mathrm{OH} / \mathrm{NS}$ ),

KBo 21.34 i 61 (MH/NS)), iš-tab-ba-an-zi (IBoT 2.23, 4 (NS)), 3sg.pret.act. iš-tap-pa-aš (KUB 33.106 iii 38 (NS), KBo 3.6 iii 57 (NH), KUB 1.8 iv 12 (NH)), iš-tap-ta (KBo 6.29 ii $34(\mathrm{NH})$ ), 3pl.pret.act. iš-tap-pé-er (KBo 21.6 obv. 5 (NS)), 2sg.imp.act. iš-ta-a-pí (KUB 33.62 iii 6 (OH/MS)), 3sg.imp.act. iš-ta-a-pu (KUB 28.82 i 23 (OH/NS)), iš-tap-du (KUB 9.31 ii 38 (MH/NS), HT 1 ii 12 (MH/NS)), 3pl.imp.act. iš-tap-pa-an-du (KUB 13.2 i 7 (MH/NS)); 3pl.pres.midd. iš-tap-pa$a n-d a-r i(\mathrm{ABoT} 60$ obv. 18 (MH/MS)); part. iš-tap-pa-an-t- (MH/MS).
Derivatives: ištappinu- ${ }^{z i}$ (Ib2) 'to shut, to close' (3pl.pret.act. iš-tap-pí-nu-e[r] (KUB 8.52, 6 (NS)), ištappulli- (n.) 'cover, lid, plug, stopper' (nom.-acc.sg. iš-tap-pu-ul-li, instr. iš-tap-pu-ul-li-it, nom.-acc.pl. iš-tap-pu-ul-li (OS)), ištappulliiée/a- ${ }^{\text {zi }}$ (Ic1) 'to use as a stopper' (part. iš-tap-pu-ul-li-ịa-an-t-), ištappēššar / ištappē̌šn- (n.) 'dam, enclosure’ (nom.-acc.sg. iš-tap-pé-eš-šar, gen.sg iš-tap-pé-eš-na-aš, abl. iš-tap-pé-eš-na-az).
IE cognates: ?ModEng. to stuff, OHG stopfōn, ModDu. stoppen 'to plug up, to stuff'.

$$
\text { PIE *stóp-ei } / * \text { stp-énti? }
$$

See Puhvel HED 1/2: 471f. for attestations. This word clearly shows an ablaut ištāp- ${ }^{i}$ / ištapp-. The introduction of the weak stem ištapp- in the singular takes place in NH times only. Mechanically, ištāpi, ištappanzi can hardly reflect anything else than *stóp-ei, *stp-énti.
The etymological interpretation of this verb is difficult. Semantically as well as formally, it resembles ModEng. stuff, OHG stopfōn, ModDu. stoppen 'to plug up, to stuff'. Problematic, however, is the fact that these verbs reflect PGerm. *stup-, with an -u- that does not fit Hitt. ištāp- / ištapp- from *stop- / *stp-. The only possibility to uphold this etymology, is assuming that PGerm. *stup- is a secondarily created zero-grade besides unattested *stip- and *stap- from PIE *ste/op-. This is admittedly rather ad hoc, however, if no other cognates can be found.
ištar(ak)kiie/a- ${ }^{z i}$ : see $i s ̌$ tar $(k)-^{z i}$
ištar(k)- ${ }^{z i}$ (Ia4 > Ic1) 'to ail, to afflict' (Sum. GIG): 3sg.pres.act. iš-tar-ak-zi (KBo 18.106 rev. 6 (NS), KBo 21.20 i 12 (NS), KBo 21.74 iii 3 (NS), KUB 5.6 i 46 (NS), KUB 8.36 ii 12 (fr.), 13, iii 16 (NS), KUB 1.1 i 44 (NH)), iš-tar-zi (KUB $8.38+44.63$ iii 9 (MH/NS)), [i]š-tar-ki-i̇a-az-zi (KBo 5.4 rev. $38(\mathrm{NH})$ ), iš-tar$a k-k i-i, a-z i(K B o 21.21$ iii 4 (MH/NS)), 3sg.pret.act. iš-tar-ak-ta (KUB 13.35 iii 5 (NS), KUB 14.15 ii $6(\mathrm{NH})$ ), iš-tar-ki-et (KUB 19.23 rev. 12 (NS)), iš-tar-ak-ki-et
(KBo 22.100, 6 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 5.9 i 15 (NH)), iš-tar-ki-at (KBo 4.6 obv. 24 (NH)), iš-tar-ak-ki-at (KBo 32.14 ii 10, 51 (MH/MS)), iš-tar-ak-ki-ía-at (KUB 14.16 iii $41(\mathrm{NH})$ ); 3sg.pret.midd. iš-tar-ak-ki-ia-at-ta-at (KUB 14.15 ii 13 (NH)); impf. iš-tar-ki-iš-ke/a- (KUB 8.36 iii 20 (NS)).
Derivatives: ištarni(n)k- ${ }^{z i}$ (Ib3) 'to ail, to afflict' (2sg.pres.act. iš-tar-ni-ik-ši, 3sg.pres.act. iš-tar-ni-ik-zi (OS), iš-tar-ni-ik-za (KBo 40.272, 5), 1pl.pret.act. iš-tar-ni-in-ku-en, 2sg.imp.act. iš-tar-ni-ik; 3sg.pret.midd. iš-tar-ni-ik-ta-at), ištarningai- (c.) 'ailment, affliction' (nom.sg. iš-tar-ni-in-ga-iš, acc.sg. iš-tar-ni-in-ga-in, iš-tar-ni-ka-i-in).
IE cognates: Lith. teršiù 'to befoul', Lat. stercus (n.) 'excrement'.
PIE *sterk - $t i$
See Puhvel HED 1/2: 475f. for attestations. Of this verb we find the stems ištark${ }^{z i}$ and ištarkiie/a ${ }^{z i}$. The several spellings with geminate $-k k$ - (iš-tar-ak-ki-) are significant. The verb is mostly used impersonally, e.g. KUB 13.35 iii 5 iš-tar-ak$t a=u a=m u$ 'it ailed me $=\mathrm{I}$ am sick', but sometimes the subject of the verb is explicitly mentioned:

KUB 14.15 ii
(6) $n=a$-an i-da-lu-uš GIG-aš iš-tar-ak-ta
'A bad disease ailed him';
KUB 5.6 i
(45) $m a-a-a n=u a$ DINGIR $^{L U M}$ UN-ši me-na-ah-ḩa-an-da TUKU.TUKU-an-za
(46) $i s ̌-t a r-a k-z i=u a-r=a-a n$
'If a god is angry at a man and ails him'.
The etymological interpretation of this verb is in debate. Puhvel (1.c.) suggests a connection with Lith. sergù 'to be ill', TochA särk 'illness', etc. and implausibly assumes that the root ${ }^{\operatorname{sen}}$ serg- received some kind of $t$-insertion to ${ }^{*}$ sterg- $>$ Hitt. ištark-. Eichner (1982: 16-21) suggests a connection with Skt. (s)tarh- 'to crush' < *ster $g^{h}$-. Although semantically possible, the formal side is difficult: PIE $*-g^{h}$ does not match Hitt. geminate $-k k$ - that points to an etymological fortis velar. Melchert (1994a: 153) argues that lenis stops get geminated after $-r$-, and that therefore ištarakk- could well be from * sterg ${ }^{h}{ }^{h}$-. The other examples of this gemination of lenis stops are quite dubious, however: the only example of parkiie/a- 'to rise, to raise' (q.v.) $<*^{h} b^{h} g^{h}$ - that shows gemination is dubious
 'to change sides' (q.v.) $<{ }^{*} h_{3} e r b^{h}$ - and its derivatives, we only find two examples of har-ap-pa-, both in a NS text, which therefore may not be very probative. In the case of ištark(iiela) ${ }^{z i}$, the examples of geminate spelling are quite numerous: in fact, we find the spelling $i s$-tar-ak-ki- more often than $i \check{s}$-tar-ki-. This situation is so different from e.g. hark(iie/a) ${ }^{z i}$ 'to get lost' $<{ }^{*} h_{3}$ erg-, which never shows a spelling **har-ak-ki-, that I cannot conclude otherwise than that the geminate spelling of $i \check{s}$-tar-ak-ki- must be taken seriously and reflect * $k$.
An extra argument in favour of reconstructing a *k could be the form iš-tar-zi (KUB $8.38+44.63$ iii 9). In the edition of this text (Burde 1974: 30), this form is emended to iš-tar <-ak২-zi (also Kimball 1999: 305 calls it "probably a mistake"), but that may not be necessary. If we assume that $i \check{s}$-tar-zi is linguistically real, it is comparable to 3 sg.pres.act. har-zi from the paradigm of $\operatorname{har}(k) z^{z i}$ 'to have, to hold'. As I have argued there, the loss of $*_{-k}$ - in this form is due to the sound law $*_{-r k} C>-r C$-, which does not apply for $* g^{(h)}$ : e.g. $* h_{3}$ erg-ti $>$ har-ak-zi 'he gets lost'. In this case, the form iš-tar-zi would show that we have to deal with a preform $*_{\text {sterk-ti and not }} *_{\text {sterg }}{ }^{(h)}$-ti. This interpretation implies a massive analogical restoration of $-k$ - in the forms that do show iš-tar-ak-zi and iš-tar-ak-ta (e.g. on the basis of ištarkiie/a-), however. See at $\operatorname{tar}(k) u^{-z i}$ for the possiblity that *-RkC-> Hitt. $-R C$ - through an intermediate stage $*-R ? C$-.
All in all, I would like to propose an etymological connection with Lith. teršiù 'to befoul', Lat. (n.) stercus 'excrement' < *sterk'- 'to befoul, to pollute'. Semantically, a development 'it befouls me' > 'it ails me' > 'I am sick' seems probable, and formally, this connection would perfectly explain the forms with geminate $-k k$ - as well as the one form iš-tar-zi. Moreover, this root shows different $n$-infixed forms (e.g. Bret. stroñk 'excrements', We. trwnc 'urine') which can be compared to the derivative ištarni(n)k-zi'to afflict, to ail'. See at ištalk- ${ }^{z i}$ 'to flatten' for my view that Skt. (s)tarh- 'to crush' rather belongs with that verb and reflects ${ }^{\text {stelg }}{ }^{h}$ -
ištarna, ištarni (adv.) 'in the midst, between, among, within' (Sum. ŠÀ): iš-tar$n a(\mathrm{OS})$, iš-tar-ni (KBU 23.101 ii 18), iš-tar-ni-i=š-mi, iš-tar-ni=šum-mi (OS).

Derivatives: ištarniiia- (adj.) 'middle, central' (nom.sg.c. iš-tar-ni-į् a-aš, acc.sg.
 loc.pl. iš-tar-ni-ia-ǎ̌).
IE cognates: Gr. $\sigma \tau \varepsilon ́ \rho v o v ~ ' b r e a s t, ~ h e a r t ' . ~$

$$
\text { PIE *st }(o) r n-o, ~ * s t(o) r n-i
$$

See Puhvel HED 1/2: 478f. for attestations and contexts. The basic meaning of this adverb seems to be 'in the midst, in between, among'. The bulk of the attestations show ištarna, but ištarni does occur as well. When the adverb carries enclitic personal pronouns, it always shows the form ištarni: ištarni=šmi 'among them; mutually', ištarni=šummi 'between us; mutually'.

Puhvel (l.c.) compares ištarna to Lat. inter, which semantically indeed seems probable. This comparison is followed by Melchert (e.g. 1994a: 137, 168) who reconstructs *ens-ter-nē (ens-ter- besides en-ter-, like Gr. $\varepsilon$ íc besides $\dot{\varepsilon} v$ 'in’). Formally, this reconstruction is problematic, however, since *ens > Hitt. aš (e.g. gen.sg. -uen-s > -uaš (of verb.nouns in -uar)). One could argue that word-initial *ens- develops differently and yields Hitt. iš-, but that does not seem likely to me (see at $\bar{a} s \check{S H}_{-}{ }^{z i}$ 'to remain' for my suggestion that it reflects * $h_{l} e N s$-). Furthermore, we do not find a formation $* h_{l}$ ens-ter- anywhere in the other IE languages, whereas *hlen-ter- is widely attested. Moreover, Gr. eic does not show an inherited $s$-extension of $* h_{l} e n$ (which is visible in Gr. $\dot{\varepsilon} v$ as well), but is likely a secondary form in analogy to the pair $\grave{\varepsilon} \xi$ besides $\grave{\varepsilon} \kappa$ (cf. Frisk 1960-1972 sub عíc). I therefore reject the connection with Lat. inter and the subsequent reconstruction* $h_{1}$ enstern-.
Like in other Hitt. adverbs, the two forms ištarna and ištarni seem to be a petrified allative and dative-locative, respectively, from a further unattested noun *ištarna-. Already Sturtevant (1928a: 5) compared this to Gr. otépvov 'breast, heart', assuming a semantic development 'in the heart' > 'in the middle'. This explanation seems much more plausible to me and is supported by the fact that ištarna is sumerographically written with the sign ŠÀ, which literally means 'heart'. Since Hitt. ištarn- cannot go back *stern- (which would yield **ištern-), we should either reconstruct *strn- or *storn- here.
išdušduške/a- ${ }^{z i}$ (Ic6) 'to be announced(?)': broken: iš-du-uš-du-uš-k[e-...] (KUB
59.44 obv. 13) // iš-du-uš-du-uš[-ke-...] (KBo 23.90 i 7) // [iš-d]u-uš-du-uš-k[e-...] (KUB 40.23, 12), iš-du-uš-du[-uš-ke/a-...] (KBo 22.126 obv. 2).

PIE *stu-stu-skée/o-
See Puhvel HED 1/2: 483 for attestations. The verb only occurs in broken contexts, of which it is not easy to determine the meaning:

KUB 59.44 obv.
(12) $[n=] a-a \check{\text { š-ta }}$ ke-e-ez URU-az ar-ha [...]
(13) $d u-u s ̌-g a-r a-z a ~ i s ̌-d u-u s ̌-d u-u s ̌-k[e-. .$.
'Out of this town [...]. Joy will ${ }^{?} /$ must $^{\prime}$ išdušduške/a-'.

Puhvel (l.c.) suggests a figura etymologica with dušgaratt- 'joy', but this does not account for $\underline{i s ̌} d u s ̌ d u s ̌ k e / a$-. Kühne (1972: 251-2) rather interprets the verb as a reduplication of ištu- 'to be announced'. This might make sense semantically as well: dušgaraza išdušdušk[iiatta(ru) ?] 'Joy will (or must) be announced!’. In this way it can be directly compared to CLuw. dušduma/i- 'manifest, voucher' < *stu-stu-mo- (see under ištu- ${ }^{\text {ari }}$ ). If this analysis is correct, it would show that in words that are spelled $i s \check{ } C$-, the initial $i$ - was not phonemic up to the (quite recent) stage in which reduplicated formations like $i s ̌ d u s ̌ d u s ̌ k e / a-{ }^{z i}$ were created. See at $i s ̌ t u-{ }^{\bar{r} r i}$ for further etymology.
ǐšu- ${ }^{\overline{a r} r i}$ (IIIf) 'to be exposed, to get out (in the open); to be announced': 3sg.pres.midd. iš-du-ua-a-ri (often), iš-tu-una-a-ri, iš-du-una-ri, 3sg.pret.midd. iš$d u-u a-a-t i, i s ̌-d u-u a-t i$.

Anat. cognates: CLuw. dušduma/i- (c.) 'manifest, voucher' (nom.sg. du-uš-du$m i-i s ̌, \quad c o l l . p l . \quad d u-u s ̌-d u-m a, \quad$ gen.adj.nom.-acc.pl.n. $d u-u \check{s}-d u-m a-a \check{s}-s \check{a})$, *dušdušša- 'to make known (?)' (form? du-uš-du-uš[-...]).
IE cognates: Skt. stav- 'to honour, to praise, to invoke, to sing', GAv. stāumā 'I praise', Gr. $\sigma \tau \varepsilon \tilde{\tau} \tau a \mathfrak{c}$ 'announces solemnly, promises, asserts'.

PIE *stu-ó-ri
See Puhvel HED 1/2: 483f. for attestations. The verb primarily denotes that secrets, plots and plans are being exposed and get out in the open, but also e.g. that favour is casted over someone (KUB 30.10 rev . (19) nu=mu-u=š-ša-an še-eer aš-šu-ul na-at-ta iš-du-ua-ri 'Over me, favour has not been cast'). This makes it likely that the original meaning of this verb is 'to be announced publicly'.
Formally, the verb inflects similarly to tukkāri, which reflects *tuk-ó-ri (i.e. middle with root in the zero-grade). Already Sturtevant (1928a: 4-5) convincingly
 reflects *steu-. For Hittite, this means that we have to reconstruct *stu-ó-ri. Although regularly *u would disappear in this position (*Tuo > Hitt. Ta), it could easily have been restored from other forms of the paradigm (although these are unattested in Hittite). See at $i s ̌ d u s ̌ d u s ̌ k e / a-{ }^{z i}$ for the possibility that this verb is the reduplicated impf. of $i s ̌ t u-{ }^{\overline{a r} r i}$.
-it (instr.-ending): see - $t$
idālu- / idālaư- (adj.; n.) 'bad, evil; evilness’ (Sum. HUUL, Akk. MAŠKU): nom.sg.c. $i-d a-a-l u-u s ̌, i-d a-l u-u s ̌, ~ a c c . s g . ~ i-d a-a-l u-u n$ (MH/MS), i-da-lu-un, nom.-acc.sg.n. $i-d a-a-l u(\mathrm{OS}), i-d a-l u$, dat.-loc.sg. $i-t a-a-l a-u ́-i$ (OS), $i-d a-a-l a-u-$ $i, \quad i-d a-a-l a-a-u-i, \quad i-d a-l a-u-i, \quad i-d a-a-l a-u-e, \quad i-t a-l u-i \quad$ (KBo 18.151 rev .6 (OH/MS)), all.sg. i-ta-lu-ua (KBo 18.151 rev. 19 (OH/MS)), abl. i-da-a-la-u-ua$a z$, $i-d a-a-l a<-u\rangle-a z$, erg.sg. i-da-a-la-u-ua-an-za, nom.pl.c. ida-a-la-u-e-eš, i-da$l a-u-e-e s ̌, ~ L u w o i d ~ i-d a-a-l a-u-u a-a n-z i$, acc.pl. $i-d a-a-l a-m u-u s ̌, i-d a-l a-m u-u s ̌, i-$ $d a-l u-u s ̌$, nom.-acc.pl.n. $i-d a-a-l a-u a, i-d a-l a-u-u a, i-d a-a-l u$, dat.-loc.pl. $i-d a-a-$ la-u-ua-aš.

Derivatives: idālaunatar / idālaunann-, idaluuatar (n.) 'badness, evil disposition' (nom.-acc.sg. i-da-lu-una-tar, dat.-loc.sg. i-da-a-la-u-an-ni, i-da-a-la-u-una-an-ni, $i$-da-la-u-an-ni), idālauahh- ${ }^{i}$ (IIb) 'to treat badly, to maltreat' (1sg.pres.act. $i$-da-la-u-ua-ah-mi, sg.pres.act. i-da-la-ua-ah-ti, i-da-a-la-a-u-ua-ah-ti, i-da-la-a-u-ua-ah-ti, 3sg.pres.act. i-da-la-ua-ah-zi, 3pl.pres.act. i-da-a-la-ua-ah-ḩa-an-zi, 1sg.pret.act. $i$-da-la-ua-ah-hu-un, i-da-a-la-ua-ah-hu-un, 3sg.pret.act. i-da-la-ua$a h-t a, 1$ pl.pret.act. $i-d a-l a-u-u$-u-ah-hu-u-en), idalaunēšs z- ${ }^{i}$ (Ib2) 'to become bad, to go bad, to become evile' (2sg.pres.act. i-da-la-u-e-eš-ti, 3sg.pres.act. i-da-la-u-e$e s ̌-z i, i-d a-l a-a-u$-e-eš-zi, i-da-a-la-u-e-eš-zi, 2pl.pres.act. i-da-la-a-u-e-eš-te-ni, i-da-a-la-a-u-e-eš-te-e-ni, 3pl.pres.act. $i$-ta[-a-la-u-e-eš-ša-an-zi] (OS), i-da-la-u-e$e s ̌-s ̌ a-a n-z i, i-d a-a-l a-u-e-e \check{s}-s ̌ a-a n-z i, i-d a-l a-u-e-s ̌ a-a n-z i$, 3sg.pret.act. $i$-da-la-u-$e$-eš-ta, impf. HUUL-eš-ke/a-).
Anat. cognates: CLuw. $\overline{\boldsymbol{a}} d \boldsymbol{d u} \boldsymbol{\lambda} \boldsymbol{a}-(\mathrm{adj}$.$) 'evil' (nom.-acc.sg.n. ad-du-ua-an-za,$ dat.-loc.pl. $a-a d-d u-u a-a n-z a), \overline{\boldsymbol{a}} d d u \boldsymbol{1} \boldsymbol{a l}-$ (n.) 'evil’ (nom.-acc.sg. $a-a d-d u-u a-a-a l$, nom.-acc.pl. $a-a d-d u-u$-la), $\overline{\boldsymbol{a}} d d u \boldsymbol{1} \bar{a} l(i)-(a d j$.$) 'evil' (nom.sg.c. a-a d-d u-u a-l i-i s{ }_{1}$,
 ua-li-in, nom.-acc.sg.n. a-ad-du-úa-al-za, [a-a]d-du-ua-a-al-za, ad-du-ua-al-za, at-tu-[una-]al-za, abl.-instr. a-ad-du-ua-la-ti, ad-du-ua-la-ti, nom.pl.c. [a]d-du-ua-$l[i-i] n-z i$, nom.-acc.pl.n. $a-a d-d u-u a-l a)$, adduualahit- (n.) 'evil' (dat.-loc.sg. at-tu-ua-la-hi-ti), adduuali(ia)- (adj.) 'of evil’ (nom.-acc.sg.n. ad-du-ua-li-i्त्र-an); HLuw. átuwa- (n.) 'evil’ (nom.-acc.sg /Ratuwan=t'a/ MALUS-wa/i-za-' (TELL AHMAR 1 §19, TELL AHMAR 2 §13), MALUS-za (KARABURUN §7, §9, SULTANHAN §34)), átuwal(i)- (adj./n.) 'evil' (nom.pl.c. MALUS-ta ${ }_{4}-z i$ (KARATEPE $1 \S 20 \mathrm{Hu}$. ), ${ }^{\text {MALUS }} \dot{a}-t u-w a / i-r i+i-z i$ (KARATEPE $1 \S 20$ Ho.), abl.instr. MALUS-ta $a_{4}-a-t i$ (ALEPPO 2 § 24 ), MALUS- $t_{4}-t i-i{ }^{\prime}{ }^{\prime}($ KARKAMIŠ A11c $\S 19, \S 20)$, MALUS-ta $a_{-}$-ti (KARKAMIŠ A31 §10, ADIYAMAN §1)), átuwalada‘evil’ (abl.-instr. ["]MALUS"-ta4-tara/i-ti (ANCOZ 7 §9)), átuwalahit- ‘evilness' (abl.-instr. MALUS-hi-tà-ri+i (CEKKE §20)), átuwalastar- (n.) 'evilness' (abl.instr. MALUS-ta ${ }_{5}$-sa-tara/i-ti (BOYBEYPINARI 1-2 §5, §15, §19), MALUS-ta $4^{-}$

```
PAnat. *Reduo-(1-)
```

See Puhvel HED 1/2: 487f. for attestations. In Hittite, we only find the stem idālu- / idālaul- (when it is adjectival: as a noun 'evilness' it shows the nonablauting stem $i d \bar{a} l u$ - like we would expect in $u$-stem nouns). In Luwian, we also find the un-extended stem $\bar{a} d d u u a-$ 'evil', besides the stem $\bar{a} d d u u a l-$. Note that in HLuwian, the assumption of a stem atuwal- (with -l-) largely depends on the phonetic interpretation of the signs $t a_{4}$ and $t a_{5}$ as $/ \mathrm{la}$ (cf. Hawkins 1995: 114 ${ }^{9}$ ), e.g. MALUS-ta $a_{4}-a-t i=/$ Ratualādi/. For the one attestation ${ }^{\text {MALUS }}{ }^{a}-t u-w a / i-r i+i-z i$ (KARATEPE 1 §20 Ho.), which shows $-r$ - instead of $-l-$, cf. Kloekhorst 2004: $39^{26}$.

Because Hitt. idālu- / idālau- clearly is a $u$-stem, we can compare Hitt. idāldirectly with Luw. $\bar{a} d d u u a l-$. The difference between Hitt. $i$ - and Luw. $\bar{a}$ - points to an initial PAnat. *pe-. The difference between Hitt. single $-t$ - and Luw. geminate -tt- can only be explained by reconstructing PAnat. *d and assuming Čop's Law in Luwian, which automatically means that in Luwian the initial $e$ was accentuated: *?éd-. In Hittite, we must assume that $i$ - is the regular result of unaccentuated $* P e-$, which coincides with the fact that $-\bar{a} l$ - is often spelled plene, which indicates stress. The fact that in Luwian we find $-u$ - which is absent in Hittite, is easily explained by the sound law *Tuo $>$ Hitt. Ta. So, all in all, Hitt. $i d a ̄ l-$ must reflect PAnat. *Reduól-, whereas Luw. ādduual- < PAnat. *?éduol-. Taken the Luwian stems CLuw. adduua- and HLuw. átuwa- into account, we must reconstruct a PAnat. adjective *Reduo- 'evil', which served as the basis for a noun *Reduol- 'evilness' that had mobile accent. This *Reduol- then was the cource of the $u$-stem adjective idālu- / idālau- as attested in Hittite.
If these words are of IE origin, PAnat. *Peduo- can only go back to PIE * $h_{1} e d^{(h)} u o$-, which means that a connection with the root $* h_{3} e d$ - 'to hate' (thus e.g. Hrozný 1917: 5) is impossible. Watkins (1982a: 261) states that idālu may be a derivative from * $h_{1} e d u \bar{o} l$, in his view " $[t]$ he Indo-European prototype of the substantive 'Evil' [...], comparable in shape to *Seh ${ }_{2} u \bar{\sim} l$ 'sun' and ultimately a derivative of the root * $h_{1} e d$ - 'bite (> eat)' like the similarly formed IE * $h_{1} e d u \bar{o}(n)$ 'pain, mal'" (referring to Schindler 1975c, who reconstructs this noun on the basis of Arm. erkn 'labour pains', Gr. ỏ $\delta u ́ v \eta ~ ' p a i n ' ~ a n d ~ O I r . ~ i d u ~ ' p a i n ') . ~ T h i s ~$ suggestion has been taken over by e.g. Melchert 1984a: 106.
itar (n.) 'way': nom.-acc.sg. i-tar (KUB 41.8 i 20).
IE cognates: Lat. iter, itineris 'way, road', TochA ytār, TochB ytārye 'road, way', Av. pairi-i $\theta n a$ - '(end of) lifetime'.

$$
\text { PIE *h } h_{l} e ́ i-t r, * h_{l} i-t e ́ n-s
$$

Unfortunately, this word is attested only once. We would like to have known inflected forms of it to better judge its prehistory. Nevertheless, since Benveniste (1935: 10, 104), this word is generally connected with Lat. iter, itineris 'way, road' and TochA ytār 'road, way'. These words point to ${ }^{*} t$, however, whereas i-tar seems to represent phonological /Ridr/. Rieken (1999a: 374-7) proposes to assume that the original paradigm of this word was $* h_{l} e ́ i-t r, * h_{l} i-t e ́ n-s$, and that in the nom.-acc.sg., ${ }^{*} t$ got lenited due to the preceding accentuated diphthong yielding $* * /$ Rédr/, $* * /$ Riténas/, after which $i$ - was generalized throughout the paradigm, with i-tar /Ridr/ as result.

See at ${ }^{\text {LU }}$ ittaranni for a discussion of this alleged cognate.
${ }^{\text {LÚ }} \boldsymbol{i t t t a r a n n i}$ (uninfl.) 'runner, messenger' (Sum. ${ }^{\text {LÚ }} \mathrm{KAS}_{4}$.E): acc.sg. it-ta-ra-an-ni (KUB 23.77 rev. 68 (MH/MS)); broken ${ }^{\text {LÚ.MEš }}$ it-t $[a-\ldots]$ (KUB 31.102 iv 2).

This noun is interpreted by Puhvel (HED 1/2: 494) as a Hurrian formation in -anni- on the basis of the Hurr. verb idd- 'to go'. Starke (1990: 500-1) opposes this interpretation, however, and states that ittaranni- is a Luwian formation on the basis of a Luwian noun *ittar- 'way', which further is unattested, but which must be cognate to Hitt. itar 'way' (q.v.) (which en passant shows that the single $-t$ - in itar must go back to *t as still reflected in the Luw. geminate $-t t-$ ). In my view, the fact that ittaranni is not inflected (acc.sg. ittaranni) clearly shows that it must be a foreignism. Since Luwian words are always taken over either in their original inflection (in this case with acc.sg.-ending -in) or as a Hittitized form (also with -in), we must assume that the word is of another origin, and Hurrian provenance becomes very likely then.
iuar (postpos. + gen.) 'in the manner of, after the fashion of, like, as': i-ua-ar ( $\mathrm{OH} / \mathrm{MS}$ ).
IE cognates: Skt. iva 'in the manner of, like, as'.

$$
\text { PIE * } h_{l} i-u r \ll * h_{l} e ́ i-u r
$$

This postposition goes with the genitive and denotes 'in the manner of...'. Already Hrozný (1917: 183) suggested that this word is to be regarded as a pertrified verbal noun of $i_{-}{ }^{z i}$ 'to go', which is semantically quite plausible. This
would mean that iuar reflects $* h_{l} i-u r$, which must go back to original $* h_{l} e ́ i-u r$ with introduction of the zero-grade root from the oblique cases (* $h_{l} i-\underline{\lambda}$ én-s). The semantically and formally very similar Skt. iva 'in the manner of' may reflect the old loc.sg. *h $h_{l} i-u n$ (also from original *héi-un with introduction of zero-grade), the latter part of which is identical to the Hitt. supine-"ending"-uan (q.v.).
$\boldsymbol{i u} \boldsymbol{u} \boldsymbol{k}-{ }^{( }{ }^{(\mathrm{GIS})} \boldsymbol{i} \boldsymbol{i} \boldsymbol{u k a}$ - (n.) 'yoke, pair' (Sum. ŠUDUN): nom.-acc.sg. i-ú-uk (KBo 25.72 r.col. 11 (OS)), i-ú-kán (KBo 12.22 i 11 (OH/NS), KBo 12.131 r.col. $5(\mathrm{OH} / \mathrm{NS})$, KUB 31.4 + KBo 3.41 obv. 7 (OH/NS)), i-ú-ga-an (KBo 13.78 obv. 2 (OH/NS), KUB 7.8 ii 8 (MH/NS)), dat.-loc.sg. $i-u$ - $-k i(K U B 13.5$ ii 21 (OH/NS)).
IE cognates: Skt. yugám, Gr. ऍuүóv, Lat. iugum, Goth. juk, OCS igo 'yoke’.
PIE *iug-o-m

See Puhvel HED 1/2: 495f. for attestations. See Rieken (1999a: 61f.) for a discussion of the OS form $i-u$ - $u k$, which shows that this word originally was a root noun and was only thematicized to iuka- within the Hittite period. This means that the other IE words that reflect *iugom, with which this word is generally equated, must show an independent thematization. The form $i-u$ i-uk represents /iúg/ and therefore must reflect *ieuǵ (a preform *iouǵ would have yielded Hitt. ${ }^{* *}$ /ióg/, spelled $* * i-u-u k$, cf. § 1.3.9.4.f).
The "adjective" iuga- 'yearling' (q.v.) probably still was a real gen.sg. of $i \bar{u} k$, iuka- 'yoke, pair' in the oldest texts.
iuga- ("adj.") 'yearling': nom.sg.c. $i-u ́-g a-a s ̌(\mathrm{OS})$, acc.sg. $i^{\prime}-u^{\prime}$ '-ga-an (text: $u$-i-ga-an, KBo 17.65 rev. 53 (MS)), gen.sg. i-ú-ga-aš, acc.pl.c. i-ú-ga-aš.
Derivatives: iugǎ̌ša- (adj.) 'yearling' (gen. pl. i-ú-g[a-aš]-ša-a[n] (OS), i-ú-ga$a \check{s}-s ̌ a-a \check{s}$ ( $\mathrm{OH} / \mathrm{NS}$ )), tāīiuga- ("adj.") 'two-year-old' (nom.sg.c. ta-a-i-ú-ga-aš (OS), da-a-i-ga-aš (OH/NS), ta-a-ú-ga-aš (OH/NS), gen.sg. ta-a-i-ú-ga-aš (OS), acc.pl.c. ta-a-i-ú-ga-aš).
IE cognates: see iuga- 'yoke’
PIE *iug-o-s
See Puhvel HED 1/2: 496f. for attestations. In the oldest texts, we only find iugaš and tā̀ugaš, irregardless of the grammatical function of the noun with which they belong. This clearly indicates that originally these forms were gen.sg.-forms. The MS attestation acc.sg. $i^{!}-u^{\prime}-g a-a n$ shows that from that time onwards, iuga- was regarded as a real congruating adjective (there are no attestations of tāiugaoutside the Laws). It is clear that these words belong with the noun $i \bar{u} k$, iuga-
'yoke, pair' (q.v.) in the sense that 'calf of a yoke' denotes a yearling, whereas 'calf of a double yoke' denotes a two-year-old. The adj. iugašša- shows the suffix -ašša- which is comparable to the Luwian gen.adj.-suffix -ǎ̌ša/i- (note that because of the OS attestation of this adjective, a Luwian origin of it is unlikely). The element $t \bar{a}$ - in tāiuga- is cognate with $t \bar{a} n$ 'for a second time' (q.v.) and must reflect *dưoịo- (Melchert (1994a: 168) reconstructs *dān-íiugo-, but this is improbable: dān is an adverb that denotes '(a) second (time)', and its adverbial ending *-om is not to be expected in a compound). Since in *duoio-iugo- the $i$ iugo- should regularly have been lost (in intervocalic position), it must have been restored on the basis of the simplex noun iuga- (note that *iugo- cannot have had an initial laryngeal (which one could suppose because of its retention in tāiuga-, so then < *duoio-Hiugo-) because of Gr. Yuүóv: cf. at ${ }^{\text {(UDÚL) }}$ euan- for the fact that *\#i- > Gr. §-). $_{\text {- }}$

## K

$\boldsymbol{k} \overline{\boldsymbol{a}}-/ \boldsymbol{k} \overline{\boldsymbol{u}}-/ \boldsymbol{k i}$ - (demonstrative pronoun) 'this (one)'; $\boldsymbol{k} \overline{\boldsymbol{a}} \boldsymbol{s} . . . \boldsymbol{k} \overline{\boldsymbol{a}} \check{s}$ 'the one ... the other'; $\boldsymbol{k} \overline{\boldsymbol{a} s}$... kūn 'each other': nom.sg.c. $k a-a-a s ̌$ (OS), acc.sg.c. $k u-u-u n(\mathrm{OS})$, ka-a-an (1x, KUB 33.92 iii 5 (NS)), nom.-acc.sg.n. ki-i (OS), ki-i-ni (KBo 34.142 i 7 + KBo 8.55, 16 (MS?)), gen.sg. ke-e-el (OS), dat.-loc.sg. ke-e-ti (OH/MS), ke-$e-d a-n i(\mathrm{MH} / \mathrm{MS})$, abl. ke-e-et (OS), ke-e-ez (OH/MS), ke-e-ez-za (MH/MS), ke-$e-z a$, ke-ez, ki-i-iz (KUB 17.28 iv 4 (NS)), instr. ke-e-da-an-ta (OS), ki-i-da-an-da ( $\mathrm{OH} / \mathrm{NS}$ ), ke-e-da ( $\mathrm{OH} / \mathrm{NS}$ ), nom.pl.c. ke-e (OS), ki-i (NS), ku-u-uš (NS), acc.pl.c. $k u-u$-uš (OS), $k u-u$-ú-uš (KUB 14.14 rev. 13 (NH)), ke-e (NS), ki-i (NS), ke-e-uš (KUB 14.8 rev. $18(\mathrm{NH})$ ), nom.-acc.pl.n. ke-e (OS), ki-i (NH), gen.pl. ki-in-z[a? $\left.{ }^{?}\right]-a\left[n^{?}\right]$ (KBo 6.2 iii 46 (OS)), ki-in-za-an (KUB 31.64 ii 42 (OH/NS)), ke-e-en-za-an (KUB 35.148 iv 15 ( $\mathrm{OH} / \mathrm{NS}$ )), ke-e-el (MS), dat.-loc.pl. ke-e-da-aš (MH/MS), ki-i-ta-aš (KUB 43.55 v 4 (OH/NS)).
Derivatives: $\boldsymbol{k e t t}=\boldsymbol{a}$ kett=a (adv.) 'on one hand, on the other' (ke-e-et-t=a ke-e$e t-t=a$ (OS)), k $\overline{\boldsymbol{a}}$ (adv.) 'here' (ka-a (MH/MS)), kān(i) (adv.) 'here' (ka-a-ni (KBo 22.1 obv. 6 (OS), KBo 22.2 obv. 9 (OH/MS)), $k a-a-n=a$-at (KUB 41.23 ii $20(\mathrm{OH} / \mathrm{NS}))$ ), kiššan (adv.) 'thus, as follows' (ki-iš-ša-an (OS), kiš-an (NS)), kīniššan (adv.) 'thus, as follows' (ki-i-ni-iš-ša-an (KUB 28.4 obv. 16b (NS))), kiššuųant- (adj.) 'of this kind' (nom.-acc.sg.n. ki-iš-šu-ųa-an, ki-iš-šu-an).

Anat. cognates: Pal. k $\overline{\boldsymbol{a}}$ - (dem.pron.) 'this' (nom.-acc.sg.n. kāt(-)), kiĩat (adv.) 'here'; CLuw. z $\overline{\boldsymbol{a}}-/ \boldsymbol{z} \boldsymbol{i} \boldsymbol{i}$ (dem.pron.) 'this' (nom.sg.c. $z a-a-a \check{s}, z a-a s ̌$, acc.sg.c. $z a-$ $a m=p a$, nom.-acc.sg.n. $z a-a$, dat.-loc.sg. $z a-a-t i-i, z a-t i-i$, nom.pl.c. $z i-i-i n-z i$, $z i-$ $i n-z i$, acc.pl.c. $z i-i-i n-z a, z i-i n-z a$, nom.-acc.pl.n. $z a-a$, gen.adj.acc.sg.c. $z a-a \check{s}-s ̌ i-$ in, gen.adj.nom.-acc.sg.n. za-aš-ša-an[-za]), zāšta/i- (dem.pron.) 'this (very)' (nom.-acc.pl.n. $z a-a-a \check{s}-t a-a-a=t-t a, z a-a \check{s}-t a-a-a=t-t a$, dat.-loc.sg. $z a-a-a \check{s}-t i, z a-$
$a s ̌-t i$, dat.-loc.pl. $z a-a \check{s}-t a-a n-z a), z \overline{\boldsymbol{a}} u \boldsymbol{i}(\boldsymbol{n})$ (interj.) 'here, voici' (za-a-ú-i, za-ú-i, $z a-a-u ́-i-i n, z a-u ́-i-i n)$; HLuw. zā̄- (dem.pron.) 'this' (nom.sg.c. /t $\overline{\text { sas }} \mathrm{s} / z a-a-s a, z a-$ $s a$, acc.sg.c. /t ${ }^{\varsigma} \mathrm{a} \mathrm{n} / z a-a-n a, z a-n a, z a-a=C, z a-i-n a$ (KARKAMIŠ A1 $a \S 25$ ), nom.acc.sg.n. $/ \mathrm{t}^{\mathrm{s}} \bar{a} / z a-a, z a$, gen.sg. /t ${ }^{\mathrm{s} a s i / z a-s i \text { (KARATEPE } 1 \text { §51 Hu.), } z a-i-s i-i}$ (KARATEPE 1 §51 Ho.), dat.sg. /t ${ }^{\mathrm{s}} \mathrm{a} \mathrm{di} / z a-a-t i, z a-a-t i-i, z a-t i, z a-t i-i, z a-r i+i$, abl.-instr. /t ${ }^{\mathrm{s}} \mathrm{in} / z i-i-n a, z i-n a$, nom.pl.c. $/ \mathrm{t}^{\mathrm{s}}{ }^{\mathrm{ar}} \mathrm{t}^{\mathrm{s}} \mathrm{i} / z a-a-z i, z a-z i$, acc.pl.c. $/ \mathrm{t}^{\mathrm{s}}{ }^{\mathrm{a}} \mathrm{at}^{\mathrm{s}} \mathrm{i} / z a-$ $a-z i, z a-z i$, nom.-acc.pl.n. /t ${ }^{\mathrm{s} a \mathrm{aia}} / z a-a-i a, z a-i a$, dat.pl. /t ${ }^{\mathrm{s}} \overline{\mathrm{a}} \mathrm{diant}^{\mathrm{s}} / z a-a-t i-i a-z a, z a-$ $t i-i a-z a, z a-t i-z a$ (KULULU 5 §4))), zin ... zin (adv.) 'on one hand, on the other'.
IE cognates: PGerm. *hi 'this' (Goth. himma daga 'today', und hina dag 'untill today', und hita 'untill now', OSax. hiudiga 'today', OHG hiuru 'this year'), Lith. šis 'this', šiañ-dien 'today', š̌̃-met 'this year', šè 'here', OCS sb 'this', dbnb$s b$ 'today', Arm. sa 'this', OIr. cē 'here', Lat. -c(e) in ecce and hi-c, Gr. $\sigma \mathfrak{\eta} \mu \varepsilon \rho o v$ 'today' < *кı- ́ $\mu \varepsilon \rho о v, ~ \sigma \tilde{\eta} \tau \varepsilon \varsigma ~ ' t h i s ~ y e a r ’ ~<~ * \kappa ı-(F) \varepsilon \tau \varepsilon \varsigma ~(=~ A l b . ~ s i-v j e t ~ ' t h i s ~ y e a r '), ~$ Alb. sot < *kíáá-diti 'today', si-vjet 'this year'.

PIE * $k$ o-, * $k i$ i-
Within the three-way demonstrative system in Hittite, $k \bar{a}-/ k \bar{u}-/ k \bar{l}$ functions as the proximate demonstrative and can be translated 'this' (cf. Goedegebuure 2003). It is cognate to CLuw. $z \bar{a}$-, HLuw. $z a$ - and Pal. $k \bar{a}$ - 'this'. The fact that Hitt. $k$ - corresponds to Luw. $z$ - already proves that we are dealing with PIE * $k$-, which is supported by the cognates in the other IE languages as well (PGerm. *hi-, Lith. ši-, Gr. *kı-).
The flection of this demonstrative shows some peculiarities. Nom.sg.c. kāš ~ Luw. zās < *Kós. Acc.sg.c. kūn is less clear, however. Benveniste (1962: 71f.) assumed that this form is a remnant of an $u$-stem inflection, but this is unconvincing (nowhere in IE a stem * $k^{\prime} u$ - is found), also in view of HLuw. zān and CLuw. zam=pa, that seem to reflect *kóm. As I have shown in § 1.3.9.4, the spelling $k u-u$-un must represent /kón/, and I therefore assume a special development of *-óm >/-ón/ (also in apūn /२bón/, uni /Róni/), that contrasts with ${ }^{*}{ }^{\circ} \mathrm{C}-\mathrm{m}>/{ }^{\circ} \mathrm{C}-\mathrm{on} /$ and ${ }^{*}$--om $>/-\mathrm{an} /(c f$. Melchert 1994a: 186). Nom.-acc.sg.n. $k \bar{\imath}$ seems to reflect *kí (this stem also in Lith. ši-, PGerm. *hi-, Gr. *кı-), and must be more archaic than CLuw. zā, HLuw. $z \bar{a}$ and Pal. k $\bar{a} t$ that reflect *ḱód (this ending also in Hitt. apāt). The $i$-stem is comparable to nom.-acc.sg.n. ini in the paradigm of aši / uni / ini. Note that the hapax kīni (also once attested in kīniššan instead of kiššan) must have the same origin as ini, namely *kí $+-m+-i$. Gen.sg. $k \bar{e} l$ is comparable to ap $\bar{e} l$ and $\bar{e} l$. The exact origin of the pronominal ending - $\bar{e} l$ is still unclear. Dat.-loc.sg. keti, abl. ket, kez, instr. keda and dat.-loc.pl. kedaš show a stem ked- that is comparable to aped- and ed-. Sometimes it is enlarged to
kedan-: dat.-loc.sg. kedani, instr. kedanta (also apedan-, edan-). The origin of this element -ed(an)- is unclear (although -an- could reflect $* C-n h_{l^{-}}$as visible in gen.pl. kinzan (see below)?). Nom.pl.c. ke must reflect *ḱói, whereas acc.pl.c. kūš < *kóms (compare apūs). The interpretation of nom.-acc.pl.n. ke is less clear. One could think of an $i$-diphthong (*koi or *kei, seemingly supported by HLuw. nom.acc.pl.n. zāa ${ }_{c} a<{ }^{*} k^{e} / o i-e h_{2}$ ?), but it is difficult to connect these forms to neuter plural forms in other IE languages. Alternatively, one could assume that ke is the result of $* k i h_{2}$ in which $* h_{2}$ had a lowering effect on $* i$ (similarly in $a$ - $a \check{s}$-šu-u /RáSo/ 'goods' < *-uh $h_{2}$. Note that CLuw. za-a reflects *k'eh . Gen.pl. kinzan (with -i- instead if -e- (cf. apenzan, kuenzan, šumenzan) due to raising as in ki- ${ }^{\text {tadrii) }}$ and $k \bar{u} \check{s}^{\text {a(ri) }} / k i \check{s}-$ ?) shows the ending -nzan that is also visible in the already mentioned forms. Because of Lyc. gen.pl. ebẽhẽ, we must conclude that this ending is of PAnat. origin. Since $-V n z V$ - can only reflect *-nHs- (whereas PAnat. *VnsV > Hitt. VššV), I reconstruct *-nHsom. The element -som may have to be compared to Skt. téṣām 'of those', Lat. eōrum 'of these', and OCS těxъ 'of those'.
${ }^{\text {LÚ }}$ kaina- (c.) 'in-law, kinsman’ (Akk. HAT(A)NU): nom.sg. ga-i-na-aš (OH/MS), $k a-i-n a-a \check{s}(\mathrm{OH} / \mathrm{NS})$, ka-e-na-aš (OH/NS), ga-a-i-na-aš (OH/NS), acc.sg. ga-i-na-$a(n)=\check{s}-5 \check{s} a-a n(\mathrm{OS}), k a-i-n a-a(n)=\check{s}-s ̌ a-a n, k a-e-n a-a n(\mathrm{MH} / \mathrm{NS})$, dat.-loc.sg. $k a-i-$ $n i(\mathrm{KUB} 31.38$ rev. 11 ( $\mathrm{OH} / \mathrm{NS}$ )), nom.pl. ga-i-na-aš=ši-iš (OH/MS), ga-e-na$a \check{s}=\check{s} e-e \check{s}(\mathrm{OH} / \mathrm{NS})$, acc.pl. ga-e-ni-eš (NH).

Derivatives: ${ }^{\text {LÚ }}$ kainant- (c.) 'id.' (dat.-loc.sg. ka-e-na-an-ti (MH/NS)), ${ }^{\text {LÚ }} \boldsymbol{k a i n a t a r}$ / kainann- (n.) 'in-lawship' (dat.-loc.sg. ka-i-na-an-ni (NH), ga-i-na$a n-n i(\mathrm{NH})$ ).
IE cognates: Lat. cīvis '(fellow) citizen', Skt. śiva- 'friendly, prosperous'.
PIE *ḱoi(H)-no-

See Puhvel HED 4: 12f. for attestations. On the basis of attestations like KUB 13.4 i (30) $\mathrm{DAM}=\check{S} U \mathrm{DUMU}^{\mathrm{MES}}=\check{S} U$ (31) $\check{\mathrm{S}} \mathrm{E} \check{S}=\check{S} U \quad \mathrm{NIN}=\check{S} U \quad{ }^{\mathrm{L}}$ ka-i-na-aš MÁŠ= $\check{S} U$ 'His wife, his children, his brother, his sister, his $k$. (and) his family' and KBo $3.1+\mathrm{i}$ (24) $\mathrm{DUMU}^{\mathrm{MES}}=\check{S} U$ (25) ŠES $\check{S}^{\mathrm{MES}}=\check{S} U$ LÚ.MEŠ $_{g a-e-n a-a \check{s}=s ̌ i-i s ̌}$ LÚ ${ }^{\mathrm{MES}} h 2 a-a[\check{s}-\check{s}] a-a n-n a-a \check{s}=\check{s} a-a \check{s}$ 'His children, his brothers, his $k .-\mathrm{s}$, the people of his family', it has been generally assumed that kaina- must mean something like 'in-law'.
For long it has been thought that PIE diphthongs unconditionally monophthongized in Hittite, which would mean that -ai- in kaina- must be of another origin. Puhvel (1.c.) therefore assumes that here -ai- must be due to the disappearance of an original laryngeal between two vowels and therefore
reconstructs *ǵmh ${ }_{2}$-ino-, connecting it with Skt. jámātar-, Gr. $\gamma \alpha \mu \beta \rho o ́ c ~ ' s o n-i n-$ law'. This reconstruction is formally impossible, however: we would expect an outcome $* *$ kamhina-. Kimball (1994b) closely examined the outcome of the PIE diphthongs in Hittite and concludes that a diphthong *oi is retained as Hitt. -ai- in front of dental consonants (including -n-). She therefore is able to revive (o.c.: 1722) an old suggestion by Hrozný (1919: 100-1), who connected kaina- with the root *Ḱei- 'cognate, connected (vel sim.)'. This root is also reflected in Lat. cīvis '(fellow) citizen’ (OLat. ceiueis < *kéei-ui-), Skt. śvá- 'friendly, prosperous, beneficient', and with root extension *k'eiH- in OHG hīrāt 'wedding', Latv. siẽva 'wife, spouse’ (*kéeiH-üo-), Skt. séva- 'friendly' etc.
kaka- (c.) 'tooth’ (Sum. KAxUD): nom.sg. ga-ga-aš (OH/MS), ga-ga-a-aš ( $\mathrm{OH} / \mathrm{MS}$ ), acc.pl. ga-ku-uš (OH/MS).

See Puhvel HED 4: 14-5 for attestations. He connects this word with OE hōc 'hook'. Apart from the fact that a semantic connection between 'hook' and 'tooth' is not very convincing, it is likely that the whole complex of Germanic words for 'hook, corner' (*ang- in OHG ange, ModEng. angle; *kank- in ON kengr 'hook'; *xank- in ON hanki 'handle' MDu. honc 'corner'; *xaug- in ON hokinn 'hooked'; *xōk- in Swed. hake 'hook', OHG haggo 'hook', ModEng. hook) cannot be of IE origin (cf. Beekes 1999: 17 ${ }^{31}$ ). Therefore a connection between Hitt. kaka- and these Germanic words does not make much sense.
 ( $\mathrm{OH} / \mathrm{NS}$ ); part. ka-la-an-kán-t-, ga-la-an-kán-t-,
Derivatives: galaktar (n.) 'soothing substance, (opium) poppy(?)' (nom.-acc.sg. ga-la-ak-tar (often), kal-la-ak-tar (KUB 9.27 obv. 8)), galaktarae- ${ }^{z i}$ (Ic2) 'to make drowsy' (2sg.pres.act. ga-la-ak-ta-ra-ši).
IE cognates: ON kløkkr 'weak', Lith. glẽžnas 'weak, soft', Bulg. glézja 'to pamper'.

PIE *glo-n- $\dot{g}^{h}-e i$
See Puhvel HED 4: 18f. for attestations. The only finite form of this verb, 3sg.imp.act. kalankaddu in principle points to an original mi-conjugation. Nevertheless, since this form is attested in a NS text, it may not be reliable. Because mi-verbs that end in -nk- always show $i$-vocalism (e.g. li(n) $k{ }^{2 i}, n i(n) k-{ }^{z i}$, huni(n) $k-{ }_{-}^{z i}$, harni(n) $k-{ }^{z i}$, nini(n) $k-{ }^{z i}$, etc.) it is in my view unlikely that this verb was mi-conjugated originally. The stem kalank- much better fits hi-inflected
verbs like kānk- / kank- 'to hang' or hamank- / hame/ink- 'to tie'. This is the reason that I cite this verb as kalank- $^{-i}$ (a similar reasoning in Oettinger 1979a: 149).

The verb denotes 'to soothe', which makes it likely that the noun galaktar, which denotes a soothing substance, possibly the poppy of opium (cf. Güterbock 1983: 162), is cognate to it.
According to Oettinger (1.c.) we should connect these words with the PIE root "*gleǵ-" 'weak, soft', which in Pokorny (1959: 401) is reconstructed on the basis of ON kløkkr 'weak', Lith. glẽžnas 'weak, soft' and Bulg. glézja 'to pamper'. Although ON kløkkr indeed seems to point to a root *gleǵ-, Lith. glẽžnas can only reflect *gleg ${ }^{h}$ - because of the absence of Winter's Law (we would expect *gleǵto have yielded Lith. ${ }^{* *}$ glëž-). If both forms are indeed cognate, we have to assume that the geminate $-k k$ - in ON is due to Kluge's Law (any stop followed by an ${ }^{*} n\left({ }^{*}-T n-\right)$ yields a voiceless geminate (-tt-)). In this case, this $-n$ - is still visible in Lith. glẽznnas. This means that we would have to reconstruct a root *gleg ${ }^{h}$ - (note that the reconstruction *gleg- is against the root-constraints of PIE as well: two mediae in one root is impossible).
The Hittite verb kalank- shows a nasal infix, which fits the semantics as well: nasal infixes denote causativity, in this case 'weak' > 'to make weak' = 'to soothe'. All in all, I reconstruct *glo-n- $g^{h}$-. Note that the noun galaktar must reflect $* g l o g^{h}-t r$, because in $* g l o n^{\prime}{ }^{h}-t r$ the nasal would not disappear (cf. § 1.4.7.2.b).
kallar- (adj.) 'inauspicious, unpropitious, baleful, enormous' (Sum. NU.SIG ${ }_{5}$ ): acc.sg.c. kal-la-ra-an (KUB 24.7 iv 33), nom.-acc.sg.n. kal-la-ar (often), gal-laar, kal-la-ra-an (KUB 31.141 obv. 8), dat.-loc.sg. kal-la-ri, instr. kal-la-ri-it, nom.-acc.pl.n. kal-la-a-ar, kal-la-a-ra.
Derivatives: kallaratar / kallarann- (n.) 'inauspiciousness, unfavourable response of an oracle, enormity, excess' (dat.-loc.sg. kal-la-ra-an-ni, gal-la-ra$a n-n i$ ), kallarahh- ${ }^{i}$ (IIb) 'to make inauspicious' (3sg.pret.act. kal-la-ra-ah-ha-aš, 3sg.imp.act. NU.SIG $5_{5}-a h-d u$ ), kallarešš- ${ }^{z i}$ (Ib2) 'to become inauspicious' (3sg.pre.act. kal-la-re-eš-zi, 3sg.imp.act. kal-la-re-eš-du, kal-la-ri-iš-du; impf. kal-la-re-eš-ke/a-, gal-la-re-eš-ke/a-), kallaratta/i- (c.) 'exaggerator’ (nom.sg. kal-la-ra-at-te-eš (NS)).
IE cognates: OIr. galar 'disease'.
PIE * $g^{*}{ }^{(h)}$ olH-ro-?

See Puhvel HED 4: 20f. for attestations. We find forms that point to a stem kallar- as well as forms that point to a stem kallara-. According to Starke (1990: 355-9) and Rieken (1999a: 275) the stem kallar- is to be regarded as an original noun 'badness', that was gradually being adjectivized and therefore thematicized to kallara-. It is quite likely that the word is of Luwian origin: kallar- appears a few times written with gloss wedges and most of the attested forms of kallar- are found in a text interlarded with Luwisms. According to Rieken (1999a: 367) the nom.-acc.pl.n.-form kal-la-a-ra(-), which seems to show a mixture of the ending $-\bar{a} r$ of the Hitt. $r / n$-stems with the Luwian ending $-a$, can be used as evidence for a Luwian origin because such a phenomenon occurs in Luwisms only. Another clue may be the form kallaratteš which Starke (1990: 358) convincingly interprets as Luwian.
Pedersen (1938: 26, 46) compared kallar with OIr. galar 'disease', which then reflects $*^{\prime} g^{〔 h}$ e/olH-ro-. Starke rejects this etymology on the basis of his assumption that IE $*^{\left(g^{(\gamma)}\right.}$ either was lost in Luwian or yielded $-z$-. Melchert (1994a: 255) argues that because PAnat. ${ }^{*} g_{g}^{\prime \prime}$ is preserved in Luwian before a backvowel, we may have to reconstruct PAnat. * ${ }^{(\prime)}{ }^{\prime}$ allr- already, in which the $*^{\left({ }_{g}^{\prime}\right.}$ regularly was preserved.
kaleliie/a- ${ }^{-{ }^{i}}$ (Ic1) 'to tie up, to truss': 3sg.pret.act. ka-le-li-e-et (OS), ka-le-e-li-eet (OH/NS); part. ka-le-li-an-t- (OH/NS), ka-le-li-i ia-an-t- (OH/NS).
IE cognates: Gr. кá $\lambda \omega \varsigma$, кá $\lambda o s$ 'rope, line, reef'.

$$
\text { PIE * } k^{\prime} l h_{1} \text {-el-ielo- }
$$

See Puhvel HED 4: 22 for attestations. Since the sign LI can be read $l i$ as well as $l e$, all spellings have to be interpreted as kaleliie/a-. According to Oettinger (1979a: 354) this verb is a derivative in -ie/a- of a stem *kalel-, which he compares to šuel-'thread' (see under ${ }^{\text {(SíG) šūil-). Rieken (1999a: 475) takes over }}$ this analysis and argues that *kalel- shows that all il-stems go back to a PIE suffix *-el. For the etymology of *kalel- she suggests, as does Puhvel (1.c.), a connection with Gr. кál $\omega \varsigma$, кálos 'rope, line, reef' (o.c. 481), which points to *klH-o-. If this connection is correct, *kalel- should reflect $* k l h_{l}-e l-\left(* h_{l}\right.$ because $* h_{2}$ and $* h_{3}$ would have yielded $*$ kalhal- in that position).
$\boldsymbol{k a l l i s ̌ s ̌ -}{ }^{z i} / \boldsymbol{k a l i s ̌ s ̌}-(\mathrm{Ia} 2)$ 'to call, to evoke, to summon': 3pl.pres.act. ga-li-iš-ša-an$z i$ (IBoT 2.80 vi 4 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pret.act. kal-li-iš-ta (KUB 17.5, 6 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.imp.act. kal-li-iš-du (KUB 24.1 i 12 (NS), KUB 24.2 obv. 11 (NS)); inf.I kal-
$l i-i s ̌-s ̌ u-u-u a-a n-z[i]$ (KUB 20.88 vi 22 (MS)), kal-le-eš-šu-ua-an-zi (KUB 41.8 i
22 (MH/NS), KBo 10.45 i 38 (fr.) (MH/NS)).
Derivatives: kallištaruana- (c.) 'feast, party’ (Sum. EZEN; gen.sg. kal-li-iš-tar-una-na-aš, dat.-loc.sg. [kal-l]i-iš-tar-ưa-ni, kal-le-eš-tar-u [a-ni]), gallištaruanili (adv.) 'in a feastly manner' (gal-liš-tar-ua-ni-li).
IE cognates: Gr. к $\alpha \lambda \varepsilon$ ह́ $\omega$ 'to call', Lat. calāre 'to call'.
PIE *Kélh $h_{1}-s$-ti, *kilh $-s$-énti
See Puhvel HED 4: 22f. for attestations. Since Laroche (1961: 29), this verb is connected with Gr. ka入ć( $\omega$, Lat. calāre 'to call' e.a., from PIE *k'elh $h_{1}$. Although Oettinger (1979a: 197) states about kallišš- that "die Flexion ist völlig regelmäßig", the attestations do show traces of a paradigmatical alternation, which can be characterized by the opposition of 3 sg .pret. kal-li-iš-ta vs. 3pl.pres. $g a-l i-i \check{s}-s ̌ a-a n-z i$ : the geminate vs. single writing of $-l$ - must reflect a real phonological opposition.
The details of the prehistory of this verb are in debate. Oettinger (1.c.) improbably interprets the verb as a back-formation from Hitt. kalleštar 'invitation' < *kalh $h_{l}$-es-tr. Kimball (1999: 412) takes kallišš- as a derivation of a formation *kalh $l_{1}$ é $h_{l^{-}}$, which she compares to Umbr. kařitu, kařetu, carsito which must reflect PItal. *kalētōd. Since the Umbrian forms with *kalē- probably are an inner-Italic innovation (cf. Schrijver 1990: 400), the postulation of a PIE formation *kalh $h_{l}$-é $h_{l}$ - is incorrect.
As I have argued in Kloekhorst fthc.f, 3pl.pres.act. ga-li-iš-ša-an-zi must be phonologically interpreted as /kliSánt ${ }^{\mathrm{s}} \mathrm{i}$, which in my view is the phonetic outcome of ${ }^{k} k \not l^{l} h_{l}$ sénti (compare tame/iššanzi $<* d m h_{2}$ sénti and kane/iššanzi $<$ *ǵnh $3_{3}$ sénti). The form 3sg.pret.act. kal-li-iš-ta in my view reflects /káLista/ (note the spelling with -e-in inf.I. kal-le-eš-šu-ua-an-zi), which I reconstruct as *kélh $h_{l} s t$ (for the development of ${ }^{*}$ CeRHsC $>$ CaRRisC compare damme/išh $\bar{a}-<$ $* \operatorname{demh} h_{2} s h_{2} O-$ ). Note that the colouring of $* e$ in $* k e l h_{1} s t>k a l l i s ̌ t a ~ b e s i d e s ~ t h e ~ n o n-~$ colouring of $* e$ in genzu- 'lap' < *g'enh $l_{l}$-su- shows that $* e R h_{l} C C>H i t t . ~ a R^{\circ}$, whereas ${ }^{*} e R h_{l} C V>$ Hitt. $e R^{\circ}$.
With the reconstruction of kallišš- as *kelh $h_{l} s$ - and gališš- as *klh $h_{l} s$-, we see that kallišš- ${ }^{z i} /$ kališš- goes back to a normal $e / \varnothing$-ablauting $s$-extended verb like tamāšš- ${ }^{z i} /$ tame/išš- 'to (op)press' < *dmeh $h_{2} s-/ * d m h_{2} s-$, etc.
The derivative kallištaruana- 'feast, party' probably is derived from a noun *kallištar- < *kelh ${ }_{l} s$-tr- 'invitation' or 'summoning'.
kalmara- (c. / n.) 'ray': abl. kal-ma-ra-az, acc.pl.c. kal-ma-ru-uš, nom.-acc.pl.n. kal-ma-ra, gal-ma-ra.

Derivatives: ${ }^{\text {(GIŠ) }} \boldsymbol{k a l m i -}$ (c.) 'piece of firewood' (acc.sg. kal-mi-in, nom.pl. kal$m i-i-e-e \check{s}_{17}$ ), ${ }^{\text {(GIŠ) }} \boldsymbol{k a l m i s ̌}(\boldsymbol{a}) \boldsymbol{n a} / \boldsymbol{i}-(\mathrm{c}$.$) 'brand, piece of firewood, (fire)bolt' (nom.sg.$ kal-mi-ša-na-aš, kal-mi-eš-na-aš, kal-mi-iš-na-aš, acc.sg. kal-mi-ša-na-an, kal-mi-iš-na-an, dat.-loc.sg. kal-mi-iš-ša-ni, instr. kal-mi-ša-ni-it, kal-mi-iš-ni-it, nom.pl. kal-mi-eš-ša-n[i-eš], kal-mi-i-še-ni-iš, acc.pl. kal-mi-iš-ni-uš, [kal-mi-i]š-ša-ni-uš), *kalmātar / kalmann- (n.) 'brand’ (gen.sg. kal-ma-an-na-aš, abl. [ka]l-ma-an-na-az).

See Puhvel HED 4: 26f. for attestations. The noun kalmara- denotes 'ray (of the sun)'; ${ }^{\text {(GIŠ) }}$ kalmi- occurs in a clear context once, where it seems to denote a piece of firewood; ${ }^{(\mathrm{GIŠ})}$ kalmiš(a)na/i- (also kalmešna- and kalmiššana/i-) on the one hand denotes pieces of firewood or brands, and on the other a sort of firebolt, fired by the Storm-god with which he strikes cities. All in all, it seems that we are dealing with a stem *kalm- that denotes 'glowing / burning long object'. Note that in my view the 'glowing' or 'burning' is a crucial part of the semantics.
The standard etymological interpretation of these words was first suggested by Laroche (1983: $309^{5}$ ), who connects them with Gr. кóla $\mu$ o̧ 'reed', Lat. culmus, OHG hal(a)m, Latv. sal̃ms 'straw', etc., from PIE *k'olh2-mo-. Although this etymology is generally accepted, I do not see how its semantic side would work: in no other IE language we find a semantic feature of 'glowing' or 'burning', which is the clear basis of the Hittite words. I therefore reject this etymology.
In my view, the stem of these words was *kalm-, which shows the suffices -raand -i- (both of IE origin) and the unclear suffix -iš(a)na/i-. Since a root structure *Kelm- is against PIE root constraints, I believe that we are dealing with a non-IE element.
Rieken (1999a: 211-213) argues that ${ }^{\text {GIš }}$ kalmuš- 'crook, lituus' (q.v.) is cognate to these words. This assumption is based, however, on the false translations "Holzscheit" for kalmi-, kalmatar / kalmann- and kalmiš(a)na/i-, with which she ignores the 'burning/glowing'-aspect of these words.
${ }^{\text {GIš̌ }}$ kalmuš- (n.) 'crook, crozier, lituus’: nom.-acc.sg. kal-mu-uš, gen.sg. kal-mu$s ̌ a-a s ̌$, dat.-loc.sg. kal-mu-ši, abl. kal-mu-ša-az.

See Puhvel HED 4: 28 f . for attestations. The word denotes the crook with which the Hittite kings often are depicted. The origin of this word is unclear. According to Rieken (1999a: 212f.) this word is cognate with kalmara- 'ray', kalmi- 'piece
of firewood', e.a. (see at kalmara-). As I have stated under the lemma kalmara-, this connection seems semantically unlikely to me. Puhvel (l.c.) points to the striking resemblance with Akk. gamlu(m) 'crook, curved staff' and plausibly suggests that Hittite borrowed this word from Akkadian or from an intermediate source.
$\boldsymbol{k a m m a r s ̌}-{ }^{z i}$ (Ib1) 'to shit, to defecate, to shit on, to befoul': 3sg.pres.act. ka-mar$a \check{s}-z i(\mathrm{NS}), 3 \mathrm{pl} . \mathrm{pres} . \operatorname{act.}$ ga-mar-aš-ša-an-z[i] (NS); verb.noun gen.sg. [k]a-mar$\check{s ̌ u-u ̄ a-a s ̌ ~(M H / M S), ~ e r g . s g . ~ g a-m a-a r-s ̌ u-u ̂ a-a n-z a ~(M H / M S) ; ~ i m p f . ~ k a-m a r-s ̌ i-e s ̌-~}$ ke/a- (NS), kam-mar-ši-eš-ke/a- (MH/NS).
Derivatives: kammarašniiie/a- ${ }^{\text {tta(ri) }}$ (IIIg) 'to befoul(?)' (3sg.pret.midd. kam-ma-ra-aš-ni-ia-at-ta-at (MS?), 3pl.pret.midd. [ka(m)-m]a-ra-aš-ni-ia-an-ta-at (MS)).

Anat. cognates: CLuw. katmarši(ía)- 'to defecate' (3sg.pres.act. kat-mar-ši-itti).

See Puhvel HED 4: 37f. for attestations. The verb and its derivatives are spelled with single as well as with geminate $m$, and both spellings are attested in MS texts already. Once, we find a Luwian form, namely katmaršitti (although in a Hittite context: the ending -tti shows its Luwian origin, however). It therefore has generally been assumed that Hitt. $\operatorname{kam}(m)$ arš- reflects *katmars-, with an assimilation of $*^{-t m}$ - comparable to $*$-tn- $>$ Hitt. -nn-. Since $*$-tn- yields a geminate, -nn-, it might be best to assume that the spelling kammarš-, with geminate -mm-, is the original form and that the forms with single $-m$ - show simplified spellings.
Schmidt (1980: 409) compared kammarš- < *katmars- with TochB kenmer 'excrement', which then would be a PIE -mer-derivation of the root $* g^{h} e d$ - 'to defecate’ (Gr. $\chi \check{\varepsilon} \zeta \omega$, Skt. hadati, Alb. dhjes 'to shit, to defecate', Av. zaסah- 'arse, anus', etc.). This view has found wide acceptance. Problematic to this etymology, however, is the fact that the existence of TochB kenmer 'excrement' seems to be a mirage (cf. Adams 1999: s.v.). With the disappearance of kenmer, the -merderivation in Anatolian would stand on its own. Another problem is the fact that, although $* V \operatorname{tn} V$ indeed assimilates to Hitt. $V n n V$, the sequence $* V d^{(h)} n V$ seems to have had a different outcome, namely $V t n V$. If we apply this information to the clusters with $-m$ - as well, we would expect that $* V t m V$ should yield Hitt. VmmV, but $* V d^{(h)} m V>$ Hitt. $-V t m V$. Although I must admit that I do not know any other examples of both of these developments, it would make the reconstruction of kammarš- < *katmars- $<*^{\prime} g^{h}$ od-mr- less likely. All in all, I remain cautious in etymologizing this verb.
$=\boldsymbol{k} \boldsymbol{k} \boldsymbol{a} \boldsymbol{n}$ (encl. locatival sentence particle) '?': nu-u=k-kán (OS), tá=k-kán (OS), $n=e=k a ́ n(\mathrm{OS}), t a=k a ́ n(\mathrm{OS}), t a-m a-i-s ̌=a=k a ́ n(\mathrm{OS})$, etc.
IE cognates: Lat. cum 'with', com-, OIr. con- 'with', Goth. ga-. PIE *ḱom?

This particle is spelled both with and without geminate $-k k$ - (in OS texts already, compare tá=k-kán (OS) besides ta=kán (OS)). Spellings with geminate $-k k$ appear in OS, MS and NS texts, however, and I therefore am convinced that we have to analyse the particle as $/=\mathrm{kan} /$ (and not as $/=\mathrm{gan} /$ ) throughout the Hittite period. The regular absence of geminate spelling in my view is due to simplified spelling, which is apparent from the fact that, apart from seven OS attestations of $n u-u=k$-kán, the $/ \mathrm{k} /$ of $=k k a n$ is never spelled with the signs AK, IK or UK. The only sign that is used is TÁK, in the cases where the particle $=t t a$ preceded $=k k a n$. The use of only TÁK can be explained by the fact that with this single sign (which is moreover more simple than AK, IK or UK) both the particle $=t t a$ as well as the geminateness of =kkan's /k/ could be expressed, whereas in the case of AK, IK or UK the scribe would need an 'extra' sign for the sole purpose of indicating the geminateness of $/ \mathrm{k} /$. For the sake of simplification, these signs therefore were omitted when spelling /=kan/.
In my corpus of OS texts (consisting of 23.000 words), $=k k a n$ occurs 55 times (2.4 promille), in my corpus of MH/MS texts (consisting of 18.000 words) 279 times ( 15.5 promille) and in my corpus of NH texts (consisting of 95.000 words) $2000+$ times ( 22 promille). This shows that the use of $=k k a n$ has increased enormously from the MH period onwards. In NH times, it is virtually the only used locatival sentence particle ( 22 promille vs. =ššan ( 0.75 promille) and $=(a)$ šta $(0.2$ promille $)$ ). This means that the semantic function of $=k k a n$ has broadened throughout Hittite times, in disfavour of the other enclitic locatival sentence particals that Hittite originally used $(=(a) n,=(a) p(a),=(a) s ̌ t a$ and $=\check{s} s \check{a} a n)$. The original meaning of $=k k a n$ therefore should only be determined on the basis of OH texts. Despite several studies in this field (Carruba 1964, Josephson 1972, Boley 1989), the exact function of $=k k a n$ is still unclear (Boley, o.c.: 87: "The primary sense of -kan is a genuine enigma").

Despite the difficulty in determining the original meaning of =kkan, many scholars have given an opinion on the origin of =kkan. The most promising in my view is Sturtevant's (1927d: 254-7), who connected =kkan with Lat. cum, com'with', Goth. ga- 'with', etc. < *kom.
$\boldsymbol{k a n e n}(\boldsymbol{i i e} / \boldsymbol{a})-{ }^{z^{i}}(\mathrm{Ib} 1>\mathrm{Ic} 1)$ 'to bow down, to crouch, to squat': 3pl.pret.act. [ka?-]ni-ni-e-er (KUB 36.19, 11 (MH/NS)); verb.noun ka-ni-ni-ía-u-ua-ar (NS), ka-ni-ni-ía-ua-ar (NS); part. nom.sg.c. ka-ni-na-an-za (VBoT 120 ii 17 (MH/NS), KBo 12.131, 20 ( $\mathrm{OH} / \mathrm{NS}$ )), gen.sg. ga-ne-na-an-da-aš (KBo 17.18 ii 10 (OS)), ga-ne-na-an-ta-aš (KBo 17.43 i 9 (OS)), nom.pl.c. ka-ni-na-an-te-eš (VBoT 120 ii 19 (MH/NS), ABoT 44 + KUB 36.79 i 33 ( $\mathrm{OH} / \mathrm{NS}$ )), ka-ne-na-an-te-eš (KUB 36.75 + Bo 4696 obv. 10 (OH/MS), KUB 31.134, 6 (OH/MS))).

See Puhvel HED 4: 41f. for attestations. The oldest attestations are forms of the participle ganenant- 'bowed, in a bowing position'. Note that all OS and MS attestations are spelled with $-e-$, whereas the forms that are spelled $-i$ are from NS texts only. Verbal forms are rare. We only find verb.noun kaniniizauıar in the vocabulary KBo 1.42 ii 43 passim, where it glosses Akk. ganāšu 'to bow, to bend', and a possible 3pl.pret.act. [ka-]ni-ni-e-er (KUB 36.19, 11), although this latter form must be regarded with caution as part of it has been added. These forms, which show a stem kaniniie/a- ${ }^{z i}$, are found in NS texts and therefore may be regarded as secondary forms.
The etymological interpretation of ganenant- 'bowing, in a bowing position' is quite difficult. Hrozný (1917: 78-9) interpreted it as a borrowing from Akkadian kanānu 'to bend down, to stoop'. Neu (1972: 291-2) assumes a connection with PIE *g'en-u- 'knee'. Such a connection is followed by others: Eichner (1979a: $59{ }^{58}$ ) unconvincingly states that kanen(iie/a)-shows 'Binnenreduplikation' from a preform *ǵnie- (referring to the verb kaleliie/a-, which has to be explained otherwise, however). Rieken (1999a: 151-152) puts ganenant- 'bowing' on a par with ganenant- 'thirsty' (see at kanint-) and assumes an original meaning 'to bow down to water thirstily', of which she judges the tie-in with *g'enu- 'knee' as "unproblematisch". Puhvel (1.c.) connects kanen(iie/a)- with the PIE root *kneiof which we find root extensions *knei-g ${ }^{w h}$ - (in Lat. cō-n $\bar{l} v e \bar{o}$ 'to close (the eyes)', Goth. hneiwan, OE hnīgan 'to bend down, to bow') and *knei-b- (in ON hnípa 'to be downcast' and Lith. knibti 'to collapse'). Hitt. kanen- would then go back to a preform *kn(e)i-n-. All alleged cognates mentioned above rather belong to the European substrate-complex, however, so a connection to the Hittite verb is rather improbable.
In my view, only Neu's suggestion to connect ganenant- with *ǵenu- 'knee' may have some merit. We then should assume that PIE possessed a verbal root *g'en- 'to bend', of which on the one hand the noun *g'en-u- 'knee' was derived, and on the other a nasal-infixed verb *g'né-n-ti 'to bow' was formed. This verb, which has not been preserved in the other IE language, was almost completely
lost in Hittite as well, apart from the participle ganenant- 'bowing'. In NH times, when a verbal noun was necessary to gloss Akk. ganāǎu 'to bend', an ad hoc formation kaniniiauuar was secondarily created.
$\boldsymbol{k a n e} / i$ šš $^{z i}$ (Ib1) 'to recognize, to acknowledge': 1sg.pres.act. ga-ni-eš-mi, ka-ni$i s ̌-m i, 3 s g . p r e s . a c t . ~ g a-n e-e \check{-s}-z i(\mathrm{OS})$, ga-ni-eš-zi (OS), ka-ni-eš-zi, ka-ni-iš-zi, ka$n i-e-e s ̌-z i, k a-n i-e s ̌-i z-z i(K U B 33.70 ~ i i ~ 15), ~ 3 p l . p r e s . a c t . ~ k a-n i-e s ̌-s ̌ a-a n-z i, ~ g a-n i-~$ $e \check{s ̌-s ̌ a-a n[-z i], ~ k a-n i-e-e s ̌-s ̌ a-a n-z i, ~ k a-n i-i s ̌-s ̌ a-a n-z i, ~ 1 s g . p r e t . a c t . ~ k a-n i-i s ̌-s ̌ u-u n, ~}$ 2sg.pret.act. ka-ni-iš-ta, 3sg.pret.act. ga-ni-eš-ta, ga-ni-iš-ta, ka-ni-eš-ta, ka-ni-išta, 3pl.pres.act. ga-ni-eš-šer (OS); part. ka-ni-eš-ša-an-t-, ka-ni-iš-ša-an-t-; verb.noun. ka-ni-iš-šu-u-ua-ar, ka-ni-eš-šu-u-ua-ar; inf.I ka-ni-iš-šu-ua-an-zi; sup. $k a-n i-e s ̌-s ̌ u-u-u a-a n$.
IE cognates: Skt. jānáti, Goth. kunnan, Lith. žinóti, Gr. $\gamma \upharpoonright \gamma v \omega ́ \sigma \kappa \omega$, Lat. (g)nōscō 'to know'.

PIE *ǵné $h_{3}-s-t i$, *ǵnh $_{3}-s$-énti
See Puhvel HED 4: 42f. for attestations. Often, this verb is translated 'to know' (on the basis of etymological considerations), but this is incorrect. In Hittite, the original meaning of kane/išš- seems to be 'to recognize', out of which a meaning 'to acknowledge' develops. This latter meaning also can be used in the sense 'to admit, to confess' but also 'to reward (someone)' (i.e. 'to acknowlegde his deeds').
The verb is spelled -ne-eš-, -ni-eš- and -ni-iš-. A spelling with plene -e-, -ni-e$e \check{s}$-, is attested in one text only (KBo $22.178+$ KUB 48.109), where we find $k a$ $n i-e-e \check{s ̌ z} i$ as well as $k a-n i$-e-eš-ša-an-zi.
Since Laroche (1961: 27) this verb is generally connected with the PIE root *ǵneh $3_{3^{-}}$, which has yielded verbs that denote 'to know' in the other IE languages (e.g. Skt. jānā́ti, Gr. $\gamma \iota \gamma v \omega \dot{\sigma} \kappa \omega$, etc.). The $-s$ - apparently is some extension that can be compared to e.g. the $-s$ - in tamāšš- ${ }^{-1} /$ tame/išš- 'to (op)press' (*demh $2^{-}+$ $-s-)$, pahšs-i 'to protect' (peh $\left.2^{-}+-s-\right), p \bar{a} s^{-}{ }^{i} / p a s ̌ s^{-}$'to swallow' (*peh $\left.3^{-}+-s-\right)$, etc. Although widely accepted, this etymology presents a problem: we would not expect that a sequence ${ }^{*}$-eh $3^{-}$- would yield Hitt. -e-. Different solutions to this problem have been given (e.g. the reconstruction of an ablauting root ${ }^{*}$ ǵnoh $h_{l^{-}}$ besides *ǵneh $l^{-}$, cf. Melchert 1984a: 115), but the solution as presented by Jasanoff in his 1988-article has gained the most approval. There he compares Hitt. kane/išš- with TochA kñasäṣt 'du kennst dich aus' and states that both forms must reflect *ǵnē $h_{3}-s-$, in his view a 'Narten'-inflected $s$-present. The fact that this formation is found in two branches to his mind means that it must be archaic.

Moreover, this etymology is seen by Jasanoff as a "major piece of evidence for the correctness of Eichner's non-coloration rule" (1988: 236).

The Tocharian side of this theory has become problematic, however, since Hackstein (1993: 151f.) has shown that TochA kñasäst is to be taken as a preterite III of the present stem knāna- and that it shows a completely regular morphological palatalization and $s$-suffix. The form therefore likely is of innerTocharian origin and does note have to be archaic.

In my view, the same can be said of the Hittite verb, as I have shown in Kloekhorst fthc.f. The verb is spelled -ne-eš-, -ni-eš- and -ni-iš-, which in my view prototypically points to the phoneme $/ \mathfrak{i} /$. Since there is no difference in spelling between the singular and the plural, we are dealing with a synchronic non-ablauting paradigm $/ \mathrm{kniSt}^{\mathrm{s}} \mathrm{i} / \mathrm{kniSant}^{\mathrm{s}} \mathrm{i} /$. Because $m i$-verbs in principle show ablaut, it is likely that in this verb one of the ablaut-stems has been generalized thoughout the paradigm (note that this is silently assumed by Jasanoff as well: his reconstructed paradigm *ǵné $h_{3}-s-t i$, *ǵnéh ${ }_{3}-s-n t i$ should regularly have given *knēšzi, *knāšanzi (if one believes in Eichner's non-colouration rule), which means that he must assume generalization of the stem of the singular). As I have elaborately argued in l.c., the 3pl.pres.act.-form gane/iššanzi $/ \mathrm{kni} \mathrm{Sant}^{\mathrm{s}} \mathrm{i} /$ is the regular outcome of 'ǵnh $_{3}$-s-énti (just as tame/iššanzi /tmisant ${ }^{\mathrm{s}} \mathrm{i} /<* d m h_{2}$ sénti and gališšanzi $/ \mathrm{kli} \mathrm{Sant}^{\mathrm{s}} \mathrm{i} /<{ }^{*} k l h_{l}$ sénti). Since in $m i$-verbs the zero grade in the 3 pl.form corresponds to $e$-grade in the 3 sg.-form, I assume that the original 3 sg.pres.act.-form was $*$ ǵnéh $_{3}-s-t i$, which regularly should have yielded $* * k n a ̄ \check{s} z i$. Just as the original paradigm /tmástt $\mathrm{t}^{\mathrm{i}} / \mathrm{tmi}^{\text {Sánt }}{ }^{\mathrm{s}} \mathrm{i}$ / is altered in NH times to $/ \mathrm{tm}_{\mathrm{i}} \mathrm{St}^{\mathrm{s}} \mathrm{i}$
 attested $/ \mathrm{kníht}^{\mathrm{S}} \mathrm{i}$ / kniSánt ${ }^{\mathrm{s}} \mathrm{i} /$, spelled kane/išzi, kane/iššanzi.
kānint- (gender unclear) 'thirst': nom.sg. ka-ni-ị[-...] (KUB 3.103 obv. 6 (NS)), dat.-loc.sg. ka-a-ni-in-ti (KUB 14.16 iii 15 (NH), KUB 19.37 iii 54 (NH)), ka-ni-in-ti (KUB 14.15 iii 45, 46 (NH), KUB 33.121 ii 16 (NS)).

Derivatives: kaniruuant-, kaniriuant-, ganinant- (adj.) 'thirsty' (nom.sg.c. ka-ni-ru-ua-an-za (KBo 10.45 iv 11 (MH/NS)) // ka-ni-eš-šu-ųa-an-zi (KUB 41.8 iv 10 (MH/NS)), nom.-acc.sg.n. ka-ni-ri-ua-an (KUB 31.19 rev. 8 (NS)), dat.-loc.sg. [k]a-ni-ri-ua-an-t[i] (KUB 35.157, 3 (NS)), kaniruanti (616/p r.col. 10 (NS) (Puhvel HED 4: 47)), nom.pl.c. ga-ni-na-an-te-eš (KUB 1.13 iii 25, iv 25 (MH/NS)), dat.-loc.pl. ka-ni-ri-ua-an-da-aš (VSNF 12.100 iii 8 (NS)), [ka-]ni-ri!-ua-an-da-aš (ibid. 3 (NS)); broken ka-ne-ri-ua-a[n-...] (KBo 44.65, 13 (NS))).

See Puhvel HED 4: 47f. for attestations. It is difficult to judge the formal connection between kanint- 'thirst' and the adjective 'thirsty' that appears as kaniruuant-, kaniriuant- and ganinant- (note that the one attestation ka-ni-eš-šu-ua-an-t- hardly can be anything else than a scribal error, cf. Rieken 1999a: $151^{709}$ ). Puhvel (l.c.) assumes that kanint- is a $t$-stem and that the root kanen- is the basis of ganinant- and kaniruant-, which in his opinion displays an $-r$ - that is the result of dissimilation. Rieken (1999a: 151-152) commends on this interpretation that an original $t$-stem formation *kanen- $t$ - should have yielded Hitt. **kanant-. She therefore rather assumes that the $-t$ - of kanint- is of a secondary origin: according to Rieken the $-t$ - is added to an original noun *kanendue to influence of kāšt- 'hunger', which would certainly fit the fact that kā̄st- and kanint- 'hunger and thirst' often occur as a pair. Rieken further states that the adjectives ganenant- and kaniruant- must be compared to ešhanant- besides išharuant- (see Weitenberg 1971-72: 172) and that these reflect an $-r / n$-stem *kaner- / *ganen-. She further compares ganinant- to ganenant- 'bowing' (see at kanen(iie/a) - ${ }^{-2 i}$ ) and states that the meanings 'thirsty' and 'to bow' "sich durch eine Bedeutungsspezialisierung von 'sich beugen' zu 'sich durstig zum Trinken niederbeugen' semantisch plausible miteinander vereinbaren [lassen]" and that the words for 'thirst' and 'thirsty' therefore etymologically belong to the same root as *g'en-u- 'knee' (see at kanen(iie/a) z- ${ }^{z}$ for the etymological connection with *ǵen-u-). I must admit that I do not find this connection very plausible, however.

Puhvel analyses *kanen- as /knen-/ on the basis of the incorrect observation that the spelling ka-a-ni-in-t- is hapax. He implausibly reconstructs this /knen-/ as "*knē-n-", belonging to the root "*ken $\left(-E_{l}\right)$-" from which he also derives *kenkas attested in Goth. huhrus 'hunger', Lith. keñkras 'lean' and Gr. кá $ү \kappa \alpha v \circ$, 'parched'.
Although both Rieken's and Puhvel's etymological treatment are unconvincing, I am not able to provide an alternative.
 an-ga-ah-ḩé (OS), ga-a-an-ga-ah-ḩi (OS), ga-an-ga-ah-hi, kán-ga-ah-ḩi, 3sg.pres.act. $k a-a-a n-k i(\mathrm{OS}), k a-a n-k i, g a-a n-k i$ (often), ga-an-ga-i (KUB 7.60 ii 6 (NS)), 3pl.pres.act. ka-an-kán-zi (OS), ga-an-kán-zi, kán-kán-zi, 1sg.pret.act. ga-an-ki-ia-nu-un (KBo 14.103 iv 23 (NS)), 3pl.pret.act. ga-an-ke-er, 2pl.imp.act. ga-an-ga-at-tén, 3pl.imp.act. kán-kán-du; 3sg.pres.midd. kán-ga-at-ta'-ri, 2sg.imp.midd. kán-ga-ah-hu-ut; part. ga-an-ga-an-t- (OS), ga-an-kán-t-, kán-ga-an-t-, kán-kán-t-; verb.noun kán-ku-ûa-ar, ga-an-ku-u-una-ar; impf. kán-ki-eš-ke/a-.

Derivatives: $\boldsymbol{k a n g a n u -}{ }^{z i}$ (Ib2) 'to have (something) weighed' (1sg.pres.act. kán-ga-nu-mi, 3sg.pres.act. kán-ga-nu-uz[-zi]; impf. [ká]n-ga-nu-uš-ke/a-), gangala(c.) 'hanger, curtain (vel sim.)' (nom.pl. ga-an-ga-liš), gangala- (c.) 'scale (??)' (nom.sg. ga-an-ga-la-aš), kangali- (n.) 'hanging, suspension' (gen.sg. kán-ga-li$\left.i{ }^{2} a-a \check{s}\right),{ }^{(\mathbf{D U G})} \boldsymbol{k a n g} \boldsymbol{u r}$ (n.) '(hanging?) vessel' (nom.-acc.sg. ka-an-gur, ga-an-gur, abl. $k a-a n-g u r-a z)$.

IE cognates: Goth. hahan 'to hang', Skt. śánkkate 'to waver, to hesitate', Lat. cunctor.

PIE *kónk-ei / *ḱnk-énti
See Puhvel HED 4: 48f. for attestations. The oldest forms clearly show an ablaut kānk- vs. kank-. In NH texts we occasionally find inflections according to the productive $\operatorname{tarn}(a)$-class (3gs.pres.act. gangai) and -ie/a-class (gankiianun). The form $g a-a$-an-ga-ah-hi must be phonologically interpreted as /kắnkHi/ and shows retention of $-n$ - in front of two consonants. This seems to contradict the distribution in e.g. $l i(n) k^{-{ }^{z}}$ 'to swear', where we find lik- $C$ vs. link-V. Perhaps the difference in treatment of $-n$ - depends on the fact that in $g \bar{a} n g a h h i$ we are dealing with a preceding ${ }^{*} o$, whereas in li(n)k- we have ${ }^{*} e$ (compare e.g. Lycian where the absence of a sign $* *_{i}$ besides $i$ (vs. $\tilde{e}$ and $\tilde{a}$ besides $e$ and $a$ ) shows that the nasalization of the high vowel $i$ was lost whereas it was retained on the low vowels $e$ and $a$ ).
This verb is always used transitively, 'to hang (something/one)', and can also denote 'to weigh'. The causative in $-n u$ - therefore means 'to have something weighed'. Already since Sturtevant (1931b: 172), kānk- ${ }^{i}$ / kank- has been connected with Goth. hahan 'to hang (trans.)', which has been generally accepted since. A further connection with Skt. sánikate 'to hesitate' shows that we have to reconstruct a root *kenk-. Nevertheless, the morphological interpretation of this verbs is in debate.
Hittite kānk- / kank- points to *k'onk- / *k'nk- and is transitive. In Germanic, the basic formation is reflected by Goth. hahan 'to hang (trans.)' and OHG hāhan 'to hang (trans.)' that go back to *kónk-. From this verb a secondary stative *konké $h_{l^{-}}$is visible in OHG hangēn 'to hang (intr.)', whereas a secondary 'causative' that virtually goes back *konk-ié- is visible in OHG hengen 'to hang (trans.)' (note that the meaning is identical to hāhan). In Sanskrit, we are dealing with a thematic middle śánikate < *ké/ónk-e-to 'to hesitate' < *'to hang (intr.)', which might be equated with Lat. cunctor $<*$ 'konk-to 'to hesitate' $<*$ 'to hang (intr.)'. Although I do not know how to explain the Germanic o-grade, this system appears to reflect a siuation in which an intransitive middle formation *kenk-to
'to hang (intr.)' is primary, whereas the transitive Hittite hi-inflected verb reflects the causative *K'onk-eie- (compare lāki 'to make lie down' $<* l o g^{h}$-eie-, the causative to *leg ${ }^{h}$-to 'to lie down').

Note that Jasanoff (1979: 87) adduces this verb to the group of verbs that in his view reflect o/e-ablaut, assuming *kónk- vs. *kénk-, but Melchert (1994a: 139) points out that *kénk- should have yielded Hitt. **kink-.
${ }^{\text {(UZU) }}$ ganu-: see ${ }^{\text {(UZU) } \text { genu- / ganu- }}$
${ }^{(\text {PIIŠ) }}$ kapart- / kapirt- (c.) a rodent (Sum. PÍŠ): nom.sg. ka-pár-za, acc.sg. ga-pár-ta-an, ga-pí-ir-ta-an, gen.sg. ga-pí-ir-ta-aš, ka-pí-ir-ta-aš.

See Puhvel HED 4: 58f. for attestations. The alteration between -par- and -pir- is difficult to explain and has even led scholars to propose that the sign $\mathrm{BAR}=p a ́ r$ perhaps should be read pir $r_{x}$ as well (Laroche 1968a: 782). Other have attempted to explain the alteration linguistically. For instance, Neumann (1985) analysed the word as a compound of kappi- 'small' and *art- 'to gnaw' < *reh $d$-, roh $h_{l} d$-, ${ }^{r} h_{1} d$-. The idea is then that kapart- reflects kappi- + ard- whereas kapirt- goes back to kappi- $+{ }^{*} r$ d. The consistent single spelling of $-p$ - in kapart- / kapirt- is not favourable to this etymology, however.

Kimball (1994a: 85) proposes to interpret -pirt- / -part- as an alternance between $* b^{h} \bar{e} r$ - $t$ - and $b^{h} r$-t-. Oettinger (1995: 44-6) elaborates this idea and derives kapart- / kapirt- from *kom- $b^{h} \bar{e} r-t-/ * k o m-b^{h} r-t$ - 'one who carries together, hoarder, packrat'. He explains the development of *kom- to ka- as "Proklise $<$ *kom-' ", comparing it to Germanic *ga- < *kom-'. This proclisis should then explain the difference in outcome between kapart- / kapirt- $<*$ kom$b^{h}$ ér-t- and kappi- / kappai- 'small' < *kmb ${ }^{(h)}$-(e)i- (q.v.).
This etymology has found wide acceptence. E.g. Rieken (1999a: 88) states that because verbal compounds derived in $-t$ - in the other IE languages always show a zero-grade stem (e.g. Skt. deva-stú-t- 'praising the gods', Gr. à $\gamma v \omega$ ćs 'not knowing' < *n-ǵnh $h_{3}-t$-), the type displayed in kapirt- / kapart- < *kom-b ${ }^{h}$ ér-t- / *kom-b ${ }^{h} r$-t- must show a very archaic ablaut pattern. Melchert apud Oettinger (1995: 45) even adduces a Lydian cognate, namely kabrdokid 'steals' < *kabrd-ua-ka-, which then would show that 'mouse' developed into 'thief', a development comparable to Gr. $\varphi \omega ́ \rho$ 'thief' < * $b^{h} \bar{o} r$.

We know that many Hittite animal names are from a non-IE origin. It is in my view therefore too dangerous to assume that only the word for a rodent would display a flection type that is so archaic that it is unattested elsewhere, or a
phonetic development ("proclisis" of *kom- > ka-) that is not assuredly attested in other words. All in all, I am very sceptical regarding this etymology.
kappi- / kappai- (adj.) 'small, little’ (Sum. TUR): nom.sg.c. kap-pí-iš, acc.sg.c. kap-pí-in, nom.-acc.sg.n. kap-pí (OS), acc.pl.c. kap-pa-uš (KUB 12.63 obv. 31 ( $\mathrm{OH} / \mathrm{MS}$ )), kap-pí-ú-uš (KBo 34.47 ii 8 (MH/MS)).
Derivatives: kappae- ${ }^{z i}$ (Ic2) 'to diminish, to reduce' (part. kap-pa-a-an-t-, kap$p a-a n-t-$ ).

Anat. cognates: Lyd. $\boldsymbol{\kappa} \boldsymbol{\mu} \beta \boldsymbol{\varepsilon} เ \boldsymbol{v}$ (gloss) 'grandchild'.
IE cognates: Av. kamna- 'small', kambišta- 'least', OP kamna- 'small'.
PIE *kmb ${ }^{(h)}-(e) i-$
See Puhvel HED 4: 61f. for attestations. Szemerényi (1966: 207) proposed to connect kappi- / kappai- with Av. kamna- 'small', which in view of its superlative kambišta- 'least' must reflect *kmb-na-. This would then mean that Hitt. kappi- / kappai- reflects $* k m b^{(h)}-(e) i-\left(\right.$ with $* k m b^{(h)}->k a p p-$ comparable to *kmt->katt-). Note that a reconstruction *komb ${ }^{(h)}$-(e)i- is impossible in view of dampu- 'blunt' < *tomp-u-. Puhvel (1.c.) states that Hitt. -pp- points to *p and that therefore Szemerényi's proposal cannot be correct. A fortition of *-mb- to Hitt. -pp- is well understandable, however, and fits e.g. *-ms-> Hitt. -šš- (cf. Melchert 1994a: 162). According to Neumann (1961: 61), words like ка $\beta \varepsilon \imath v$, ко $\mu$ оц, $\kappa o ́ \mu \beta \iota \circ v, \kappa \alpha \nu \psi \eta$ (gen.), каv $\psi \iota o v$ (gen.) 'grandchild', which are attested in Greek inscriptions from Anatolia, are derived from PAnat. *komb-(e)i-.
$\boldsymbol{k a p p i l a e}-{ }^{z i}$ (Ic2) 'to pick a fight (vel sim.)': 3pl.pret.act. kap-pí-la-a-er (NS).
Derivatives: kappilahh- ${ }^{\text {i }}$ (IIb) 'to get in a fight' (3pl.pret.act. kap-pi-la-ah-he-er (NH)), kappilalli- (adj.) 'prone to fight, aggressive' (nom.sg. kap-pí-la-al-li-iš, kap-pí-la-al-liš (NH)).
Anat. cognates: CLuw. kappilazza- 'to become hostile' (3sg.pret.act. kap-pí-la$a z-z a-a t-t a)$; HLuw. kapilala/i- (c.) 'enemy(?)' (acc.sg. "\#314" ka-pi-la-li-na (TELL AHMAR 1 §24), "*314" $k[a]$-pi-la-li-i-na (TELL AHMAR 1 §26)).

See Puhvel HED 4: 63f. for attestations. The etymological interpretation of this word is difficult. For instance, Puhvel (1.c.) connects it with Gr. кá $\mu \pi \omega$ 'to bend', Lat. campus 'field' (from *'bending (valley) between mountains'), arguing that the Hittite semantics must be compared to the development of Lat. campus 'field' to ModHG Kampf 'war, battle'. This is rather improbable, however, since the semantic development of *'bending' > 'field' > 'war' is very specific and only
accounts for the word campus: I would not dare to state that in general words that mean 'to bend' and 'to pick a fight' should be connected. Eichner (1979a: 61) rather connects Skt. s'ap- 'to scold, to curse' < *k'ep-, but this should have yielded Luw. ${ }^{* *}$ zapp-. All in all, none of the proposed etymologies are convincing.

карриие $\boldsymbol{a}^{-}{ }^{\text {i }}$ ( $\left.\mathrm{Ic} 4>\mathrm{Ic} 2\right)$ 'to count, to calculate; $(+\bar{a} p p a(n))$ to take into account, to value': 2sg.pres.act. kap-pu-u-ua-ši (OH/NS), ka-pu-u-e-ši (OH/NS), 3sg.pres.act. kap-pu-u-ez-zi (MH/MS), kap-pu-u-e-ez-zi (MH/NS), [ka]p-pu-u-i$e z-z[i]$ (KBo 54.42 r.col. 9 (NS)), kap-pu-u-ua-iz-zi (OH/NS), 2pl.pres.act. kap-pu-u-uа-at-te-ni (NS), 3pl.pres.act. kap-pu-u-en-zi (OS), kap-pu-u-an-zi (OH/?), kap-pu-u-uа-an-zi, kap-pu-ua-an-zi, kap-pu-u-иа-a-an-zi (NS), 1sg.pret.act. kap-ри-и-иа-пи-un, 2sg.pret.act. kap-pu-u-et, 3sg.pret.act. kap-pu-u-e-et (OH/MS), kap-pu-u-et (ОН/MS), kap-pu-u-uа-it (NH), kap-pu-uа-it (OH/NS), 1pl.pret.act. kap-pu-и-иа-и-еп, kap-pu-иа-и-en, 2pl.pret.act. kap-pu-uа-at-tén (OH/NS), 3pl.pres.act. kap-pu-u-e-er (OH/NS), kap-pu-u-ua-a-er (undat.), 2sg.imp.act. kap$p u-u-i(\mathrm{OH} / \mathrm{NS})$, kap-pu-ua-i (OH/NS), kap-pu-u-ua-i (MH/NS), 3sg.imp.act. kap-pu-u-ed-du (MH/NS), kap-pu-u-ua-id-du (MH/NS), 2pl.imp.act. kap-pu-ua-at-te-en (MH/NS), kap-pu-u-uа-at-ti-en (MH/NS), 3pl.imp.act. kap-pu-u-ua-an$d u$ (MH/MS); part. kap-pu-uа-an-t-, kap-pu-u-an-t-, kap-pu-u-иа-an-t-; verb.noun. kap-pu-иа-и-иа-аr, kap-pu-и-иа-и-иа-аг, kap-pu-и-иа-и-ar; impf. kap-pu-uš-ke/a- (MH/MS), kap-pu-u-uš-ke/a- (MH/MS), kap-pu-iš-ke/a(MH/NS), kap-pu-u-e-eš-ke/a-(NS).
Derivatives: kappueššar / kappuešn- (n.) ‘counting, calculation’ (Sum. ŠID-ešn-; dat.-loc.sg. kap-pu-eš-ni (NS), abl. kap-pu-u-e-eš-na-az (MH/NS)).

See Puhvel HED 4: 66f. for attestations. The oldest attestations of this verb clearly show that the -uue/a-inflection is original. In NS texts, we also find forms that show a stem kappuuae- ${ }^{z i}$, according to the very productive hatrae-class. Verbs in -uиe/a- reflect *-u-ie/o- and usually are denominative (huešuue/a- ${ }^{z i}$ from ȟuešu-, šaruue/a- ${ }^{z i}$ from šāru- etc.). We would therefore at first sight assume that kappuue/a- is derived from a further unattested noun *kappu-. Pisani (1953: 3078) analysed kappuue/a- as *katt(a) + puue/a-, which he connected with Lat. putāre 'to cut, to carve'. Čop (1965: 104; 1966-8: 61) adapted this view and assumed *kom+puue/a-, which then would be comparable to Lat. computāre 'to count'. Although seemingly attractive, the absence of other examples in Hittite of such preverbs (see at ${ }^{\text {(Píš) }}$ kapart- / kapirt- for the unlikeliness of its usual interpretation *kom- $b^{h} \bar{e} r-t$-), makes me quite sceptical towards this interpretation.
karaitt- / karett- (c.) 'flood, inundation’: nom.sg. ka-ra-i-iz (OS), gi-re-e-ez-za ( $\mathrm{OH} / \mathrm{NS}$ ), ka-re-ez (MH/NS), dat.-loc.sg. ka-ra-it-ti (OS), nom.pl. ga-re-et-te-eš ( $\mathrm{OH} / \mathrm{NS}$ ), ka-re-et-ti-iš (OH/NS), ga-re-et-ti-iš (NS), ka-re-et-ti-ia-aš (NS), acc.pl. $k a-r e-e d-d u-u s ̌$ (MH/NS), dat.-loc.pl. $k a-r e-e t-t a-a \check{s}(\mathrm{OH} / \mathrm{NS})$.
IE cognates: Skt. jráyas- 'expance, space, flat surface’, YAv. zraiiah- ‘sea’. PIE *ǵrói-t-s, *ǵrói-t-m, *ǵréi-t-s.

See Puhvel HED 4: 85f. for attestations. The interpretation of this word is difficult, also because of its different spellings. The oldest attestations, nom.sg. $k a-r a-i-i z$ (OS) and dat.-loc.sg. ka-ra-it-ti (OS) point to a stem /krait-/. In NS texts, we mostly encounter the spellings $k / g a$-RI-IT- and $k / g a$-RI-IZ, which could in principle be read $k a-r i-i t-$ and $k a-r i-i z$ as well as $k a-r e-e t-$ and $k a-r e-e z$. On the basis of the hapax spelling gi-RI-e-IZ-za, which unambiguously points to gi-re-e$e z-z a$, one could argue that all other forms must be read with the vowel $-e-$ as well: ka-re-et- and ka-re-ez. On the other hand, it occurs more often that in NS texts occasionally an $e$-spelling turns up of an otherwise consistent $-i$ - (although most of these cases can be explained by the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-h-,-s \check{-}$, $-m$ - and $-n$ - (cf. § 1.4.8.1.d), but this does not occur before $-t-$ ), on the basis of which one could argue that the spelling gi-re-e-ez-za has to be disregarded for etymological reasoning. All in all, we are dealing with a noun that shows an ablaut /krait-/ besides /kret-/ or /krit-/.
Puhvel (1.c.) argues that the spellings with -ai- are "hypercorrect on the basis of *ai>e" and assumes that the stem is /kret-/, which he compares to Skt. hradá'lake, pool', hrādin- 'watery'. Apart from the fact that Skt. - $d$ - does not regularly correspond to Hitt. -tt-, the spellings with -ai- cannot be ignored: as I have shown in detail under the lemma hai(n) $k-{ }^{\text {tla(ri) }}$, there are no examples in Hittite of an 'hypercorrect' or 'reverse' spelling of etymological *-e- as -ai-.
Čop (1954a: 162) and Schindler (1972: 35) connect karaitt- to Skt. jráyas'expance, space, flat surface', YAv. zraiiah- 'sea' and reconstruct *ǵroi-t-t. Rieken (1999a: 134-5) follows this connection and states that "[die] Lautungen [grait-, gret-, grit-] ... lassen sich unter der Annahme eines paradigmatischen Ablauts *-ōi- / *-oi- / *-i- auf eine t-Ableitung ... *ǵrōi-t- / *ǵroi-t- / *ǵri-tzurückführen". This is not fully correct: the diphthong *-oi- does not monopthongize to $-e$ - in front of $*^{*}$ (compare e.g. daitti $<*^{h^{h}} h_{l}-o ́ i-t h_{2} e-i$ ), and *groi-t- therefore would not yield Hitt. /kret-/. If the stem /kret-/ is linguistically real, it can only reflect *grei-t-.
All in all, we are dealing with the following situation. If the one spelling with plene $-e$ - must be taken as a proof that the spellings $k a$-RI-IT- and $k a$-RI-IZ have
to be interpreted as ka-re-et- and ka-re-ez, then we are dealing with an ablauting stem /krait- / kret-/ that must reflect a static paradigm *ǵrói-t-s, *ǵrói-t-m, *ǵréi-$t$-s (cf. at nekuz for a similar static $t$-stem ${ }^{*} n^{\prime o} g^{w h}-t-s$, *nóg ${ }^{w h}-t-m$, *nég ${ }^{w h}-t-s$ 'night'). If we disregard the spelling with plene -e- and read $k a$-RI-IT- and $k a$-RIIZ as ka-ri-it- and ka-ri-iz, we are dealing with an ablauting stem /krait- / krit-/ that must reflect a hysterodynamic paradigm *ǵrói-t-s, *ǵrói-t-m (or *ǵri-ót-m?), *g'ri-t-ós. Since I would be inclined to think that the first situation is more likely, I have cited all forms in the overview above with the vowel -e-. See at e.g. šiuattfor the outcome of a hysterodynamic $t$-stem.

The root *ǵrei- is verbally attested in Skt. jray- 'to expand', which means that karaitt- as well as Skt. jrayas- and Av. zraiiah- originally meant 'fast surface, large body (of water)'.
$\boldsymbol{k a r a ̄ p}-{ }^{i} / \boldsymbol{k a r e} / \boldsymbol{i p}-$ (IIa3) 'to devour, to consume': 3sg.pres.act. ka-ra-a-pí (OS), ga-ra-pí, ka-a-ra-pí (KBo 36.48 + KUB 29.11 ii 10 (OH/NS) // KUB 8.6 obv. 10 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. gi-ri-pa-an-zi (OH/NS), ka-ri-pa-an-zi (NS), ka-ri-ip-pa$a n-z i(\mathrm{ABoT} 44$ i 55 (OH/NS)), ka-ra-pa-an-zi (OH/NS), 3sg.pret.act. ga<<-ri»>-ra-pa-aš (KBo 9.114, 13 ( $\mathrm{OH} / \mathrm{MS}$ )), ka-ri-pa-aš (NS), ka-ri-ip-ta (NS), 3pl.pret.act. ka-re-e-pé-er (MH/MS), 2pl.imp.act. ka-ri-ip-tén ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.imp.act. $k a-r i-p a-a n-d u \quad(\mathrm{MH} / \mathrm{NS}), \quad k a-r i-i p-p a-a n-d u$ (ABoT 44 i 54 (OH/NS)); part. ka-ri-pa-an-t-; inf.I ka-ri-pu-ua-an-zi, ka-ri-pa-u-ua-an-zi (NS); sup. ka-ri-pu-u-ua-an; impf. ka-ri-pa-aš-ke/a-, ga-ri-pí-iš-ke/a-.

IE cognates: Skt. grabhi- 'to seize', OCS grabiti 'to rob', SCr. gräbiti 'to seize', Lith. gróbti 'to rob', Latv. grebt 'to seize', ON grápa 'to seize'.

PIE * $g^{h}$ róbh $h_{l}$-ei, $* g^{h} r b h_{l}$-énti
See Puhvel HED 4: 72f. for attestations. The verb denotes 'to devour, to consume': Puhvel (o.c.: 73) rightly remarks that it differs from $\mathrm{ed}^{-{ }^{z i}} / \mathrm{ad}$ - 'to eat' in the sense that the latter verb is used for the normal eating of humans, whereas karāp- ${ }^{i}$ / kare/ip- "has as natural subjects wolf, dog, horse, ruinous insect(s) or demonic deity, with the extended figurative meaning 'consume recklessly'". Almost all forms of this verb are spelled with single $-p$-. The only two attestations that show a geminate spelling -pp- are found in one context, namely ABoT 44 i 54-55, and therefore do not have much weight. Puhvel's statement (1.c.) that the occasional spelling $-p p$ - points to etymological ${ }^{*} p$ consequently is incorrect. The form ka-ri-ip-pi-an-zi (KBo 15.10 ii 57) cited in Oettinger (1979a: 53) is unreliable: the hand copy of the text only reveals a form [ ... ]x-ri-ip-pi-an-zi, of which no clear indication exists that it should mean 'to devour'. The oldest forms,
$k a-r a-a-p i ́(\mathrm{OS})$ and $k a-r e-e-p e ́-e r(\mathrm{MH} / \mathrm{MS})$ point to an ablaut karāp- / karep-. It must be noted, however, that the plene spelling of $-e$ - is absent in all other forms, so that I have chosen to cite the verb as karāp- ${ }^{i}$ / kare/ip- in this lemma. Occasionally we find plene spelling of the first $a$, e.g. in ka-a-ra-pí. It has been claimed that this shows that this vowel was phonetically real, but in my view this form could be regarded as a corrupt spelling for $k a-r a^{\prime}-a^{\prime}-p i$. Nevertheless, such a solution is more difficult in ga-a-ri-pi-iš[-..] (KUB 4.47 obv. 6), if this form really should be regarded as a broken spelling of the imperfective of this verb. The one attestation gi-ri-pa-an-zi (KUB 43.75, 17) by contrast indicates that the first written vowel must be empty: in this form the empty vowel was copied after the following real vowel $-i-$, implying a phonological $/ \mathrm{krV}-/$.
In Sturtevant \& Hahn (1951: 31), karāp- / kare/ip- is connected with Skt. grabh- 'to seize', etc., but this has caused some debate. E.g. Oettinger (1979a: $421^{57}$ ) states that "man [wird] aus semant. Gründen die heth. Entsprechung von * $g^{h} r e b^{h}$ - 'ergreifen' eher in karpie- ${ }^{m i}$ (* $g^{h} r b^{h}-{ }_{2} e_{-}$) 'heben' als in garāp-/garēp'verschlingen' suchen". Nevertheless, the verb karpp(iie/a-) ${ }^{z i}$ formally can hardly derive from * $g^{h} r e b^{(h)}$, which still leaves Sturtevant's suggestion open as a possibility. Moreover, Oettinger's own etymology, namely connecting karāp- / kare/ip- with Skt. jrambh- 'to yawn' is semantically rather weak. Puhvel (1.c.) also objects against Sturtevant's etymology on semantic grounds and suggests himself the rather impossible reconstruction $* g^{w} r-\bar{e} p / b^{h}$-, connecting Gr. $\beta \rho \alpha ́ \pi \tau \varepsilon เ v$ 'to eat' and Skt. giráti 'to devour'.
In my view, the connection between karāp- / kare/ip- 'to devour' and Skt. grabhi' 'to seize', Lith. grébti 'to rob', OCS grabiti 'to rob', ON grápa 'to seize' is semantically possible if we assume that the original meaning of this root was 'to seize' (note that the Lith. and OCS meaning 'to rob' is an innovation as can be seen by Latv. grebt 'to seize'). The exact reconstruction of this root has caused some debate. On the basis of Skt. grbhnáati it is clear that the structure of the root must be $* g^{(h)} r e b^{(h)} H$-. Because of Winter's Law in Balto-Slavic (cf.. Kortlandt 1988: 393), the labial consonant must have been *-b-. This means that in Sanskrit, the laryngeal has caused aspiration of the preceding $* b$. According to LIV ${ }^{2}$, this indicates that we are dealing with $* h_{2}$, since it apparently is assumed that only $* h_{2}$ caused aspiration in Sanskrit. Nevertheless, the comparison between the Sanskrit primary 2 pl.-ending -thá and the corresponding Greek ending $-\tau \varepsilon<*_{-} t h_{l} e$ shows that $* h_{l}$ caused aspiration in Sanskrit as well. The root-final laryngeal therefore could be $* h_{l}$ as well as $* h_{2}$. According to PIE root constraints it is impossible to have two glottalized stops in one root, which means that the initial consonant must have been $* g^{h}$-. This $* g^{h}$ lost its aspiration in Sanskrit due to Grassmann's

Law. All in all, we have to reconstruct the root 'to grab' on outer-Anatolian grounds as $* g^{h} r e b h_{1 / 2}$. The fact that Hitt. karāp-/kare/ip- does not inflect according to the $\operatorname{tarn}(a)$-class, in my view rules out the possibility of a root-final * $h_{2}$, however. As I have shown under the lemma of malla- ${ }^{i}$ / mall- 'to mill', verbs of the structure ${ }^{*} \mathrm{CeCh}_{2 / 3^{-}}$end up in the $\operatorname{tarn}(a)$-class because of 3 sg .pres.act. *CoCh ${ }_{2 / 3}$-ei $>$ CaCai. This means that karāpi can only be reconstructed as * $g^{h} r o ́ b h_{l}$-ei.

The verb karap $\overline{-}^{i}$ / kare/ip- is one of the few hi-verbs that show a synchronic ablaut - $\bar{a}-/-e / i-\left(\right.$ also $a s ̌ a ̄ \check{s}-{ }^{i} /$ aše/iš-, hamank- ${ }^{i}$ / hame/ink- and šarāp- / šarip-: note that $\check{s} \bar{a} k k-{ }^{i} / \check{s} a k k-$ (often cited as $\check{s} \bar{a} k k-/ \check{s} e k k-$ ) does not belong to this group originally). This type is difficult to explain. E.g. Oettinger (1979a: 114) assumes that the $-\bar{a}-/-e / i-$ ablaut is analogical to the verb "šākk-/ šekk-", in which, according to him, the ablaut vowel $-e$ - is the regular outcome of a reduplication syllable ${ }^{*} s e-s g$-. As I have shown under the lemma šākk- ${ }^{i} / s \check{s} a k k-$-, Oettinger's interpretation of this verb cannot be upheld anymore, and therewith the idea that the $-\bar{a}-/-e / i-$ ablaut type analogically spread out of this verb must be abandoned as well.

In 1978, Jasanoff suggested a new approach, namely assuming that the synchronic Hittite $-\bar{a}-/-e / i$ - ablaut is the phonetic outcome of a PIE *ó/é-ablaut. In the course of time, this theory has gained many supporters and nowadays is enthusiastically applied to PIE verbal theory (most strikingly in Jasanoff 2003). The fact that a verbal ablaut $*_{o / e}$ is unattested in any other Indo-European language is not very favourable to Jasanoff's theory, however. Moreover, I believe that the $-\bar{a}-/-e / i$-ablaut has an inner-Hittite explanation.
As I have shown under the discussion of the verbal class IIa3 (§ 2.2.2.2.f), to which karāp-/kare/ip-belongs, I think that the $e / i$ as found in the weak stem must be compared to šarāp- ${ }^{i} /$ šarip- 'to sip' and to terepp- ${ }^{z i} /$ tere/ipp- 'to plough' (from class Ia5). It is in my view significant that these are the only three verbs in Hittite that show a structure $* C R e C$-. I therefore assume that the phonetically expected outcomes of the ablauting pair *CReC-/*CRC-> Hitt. CReC- / CaRC(when $m i$-conjugated) and $* C R o ́ C-/ * C R C->$ Hitt. CRāC-/ CaRC- (when hiconjugated) were too aberrant (synchronically, it looks like Schwebe-ablaut) and therefore eliminated, secondarily placing the anaptyctic vowel/i/ in the zerograde form on the place of the vowel in the full grade form. In this way, a miconjugating verb $* C R e ́ C-/ * C R C$ - was altered to synchronic $C R e C-/ C R i t-$, whereas the hi-conjugating *CRóC-/*CRC- was altered to synchronic CRāC- / $C R \not t C$-. In both cases, the weak stem is spelled $C R e / i C$-. With this scenario in mind, we can explain karāp- ${ }^{i}$ / kare/ip- as phonological /krāb- / krib-/, the
'regular' secondary outcome of $* g^{h} r o ́ b h_{l^{-}} / * g^{h} r b h_{l^{-}}$. Note that in $* g^{h} r o ́ b h_{1}$-ei, the $* h_{l}$ did not geminate the preceding $* b$.
$\boldsymbol{k a r a s ̌}(\mathrm{n}$.$) 'wheat, emmer-wheat': nom.-acc.sg. kar-aš (OH/NS), acc.sg.c. kar-ša-$ an ( $1 \mathrm{x}, \mathrm{MH} / \mathrm{NS}$ ), acc.pl.c. kar-aš-šu-uš (OH/MS).
IE cognates: Lat. hordeum, OHG gersta, Alb. drith 'barley'.
PIE $* g^{h}{ }^{h} r s d^{h}$
See Puhvel HED 4: 74-5 for attestations and semantics. The nom.-acc.sg.n.-form kar-aš occurs many times, whereas the commune forms acc.sg.c. kar-ša-an and acc.pl.c. kar-aš-šu-uš both are (semi-)hapax and therefore must be secondary. Nevertheless, these forms show that the spelling kar-aš is to be phonologically interpreted as $/ \mathrm{karS} /$. Hutter (1988: 60) first connected karaš with the PIE root *g' ${ }^{h}$ ersd'- 'barley', which was elaborated by Rieken (1999a: 63-65). According to her, $*^{\prime} g^{h}$ ers $d^{h}$ - 'barley' is a dental extension of the verbal root $* g^{h}$ ers- as found in Skt. hárṣate, hrsṣati 'to be excited', Lat. horreō 'to stand up straight, to shiver', which in her view is a derivative of a root $*^{h} g^{h} e r$ - as visible in Gr. (Hes.) $\chi \eta$ п́ $\rho$
 According to Rieken (o.c.: 64) the connection to these latter forms (* ${ }^{\prime}{ }^{h} e r$ - 'pig, pork') is supported by a passage in which Hitt. karaš seems to mean 'pig's bristle':

KUB 17.28 i
(4) $[n u=k a ́ n]$ ha-at-te-eš-ni an-da ŠAHु-aš kar-aš
(5) [ar-r]a-aš ša-ak-kar da-ah-hi
(6) $[k a t-t a-a] n-d a$ ŠAH.TUR ha-ad-da-ah-ha-ri
"In der Opfergrube nehme ich das $k$. eines Schwein und den Kot des [Gesä]ßes. Ich schlachte das Ferkel hinab".

I do not think that this is the only possible interpretation of this text (note that Puhvel (1.c.) translates "pig's emmer[-feed?]" here), and I therefore would leave the alleged cognates that show a root $*^{\prime}{ }^{h} e r$ - 'pig' out of consideration here. Rieken reconstructs $* g^{h} r s$ or $*^{\prime} g^{h}$ ers "weil sowohl $*$-er- als auch $*_{-r}$ - vor Konsonant heth. -ar- ergeben". I do not fully agree with her: *g' ${ }^{h}$ ers in my view would have yielded $* *$ kerš. I would much rather reconstruct $*^{\prime} g^{h}$ ers $^{h}$ : this form would regularly yield Hitt. /karS/, with loss of wordfinal dental consonant after the lowering of $*-e$ - to $-a$ - in front of $* R C C$. Moreover, semantically this reconstruction is more appealing than Rieken's.
$\boldsymbol{k a r a ̄ t}$ - (c.) 'entrails, innards; inner being, character' (Sum. ŠÀ): nom.sg. ka-ra-a$a[z](\mathrm{OH} / \mathrm{MS})$, ga-ra-az (OH/MS), ka-ra-az (OH/NS), acc.sg. ka-ra-a-ta-an ( $\mathrm{OH} / \mathrm{MS}$ ), instr. ŠÀ-it, nom.pl. ka-ra-a-te-eš (OH/MS), ka-ra-a-ti-iš (OH/NS), ga-ra-a-te-eš (OH/NS), ga-ra-a-ti-eš (OH/NS), ga-ra-a-ti-iš (OH/NS), ka-ra-te$e \check{s}$ ( $\mathrm{OH} / \mathrm{NS}$ ), ga-a-ra-a-ti-iš (NS) acc.pl. ka-ra-a-du-uš (OH/NS), ka-ra-du-uš ( $\mathrm{OH} / \mathrm{NS}$ ), ga-ra-a-ti-uš (1x: OH/NS), nom.-acc.pl. ka-ra-a-ta (MH/MS), ka-ra-ta (NS), ga-ra-ta (NH).
IE cognates: Gr. $\chi$ о $\rho \delta \dot{\eta}$ 'gut', Lith. žárnos 'bowels’, Lat. haruspex 'entrailsexaminer', Skt. hirā́- 'vein'.

PIE *ǵr $h_{l}$-ód-
See Puhvel HED 4: 75f. for attestations. For a long time it was thought that the stem karāt- was part of the paradigm ker / kard(i)- 'heart' (q.v.), not only because of the formal similarity, but also because both stems can be sumerographically written with the logogram ŠÀ 'heart, inside'. Laroche (1968b: 244f.) showed that we should distinguish two words, however, namely ker / kard(i)- 'heart' and karāt- 'entrails'. Despite some occasional confusion (compare Puhvel, for instance, who cites under the paradigm of karāt- an abl. kartaz on the basis of the syntagm an-na-az kar-ta-az (KUB 30.11 rev. 19, KUB 30.10 rev. 20), which he translates as 'from mother's womb, i.e. since birth': it is more logical to interpret this form as belonging with ker / kart-), this division still holds.
Within the paradigm of karāt-, plene spelling of $-a$ - is common (especially in the oldest texts), and the dental consonant is consistently spelled single, which points to a phonological interpretation /krād-/. Semantically, karāt- can stand for the entrails themselves, but also, more metaphorically, for the inner spirit (especially in the pair karāt- ištanzan- 'entrails (and) soul'). On the basis of the following context,

KBo 22.2 obv.
(16) $n u-u=s ̌-m a-a s ̌ ~ D I N G I R ~{ }^{\text {DIDLI }}$-eš ta-ma-i-in ka-ra-a-ta-an da-i-er nu

AMA $=\check{S} U-N U$
(17) $\left[\begin{array}{lll}\mathrm{x} & \mathrm{x} & \mathrm{x}-u\end{array} \tilde{s}^{s} ? ~ n a-a t-t a ~ g a-n i-e \check{\prime}-z i\right.$
'The gods placed a different karät- in/on them and (therefore) their mother does not recognize (them)',
it has been claimed that karāt- should mean ‘Äußeres, Hülle' (thus Rieken 1999a: 139), but this seems unnecessary to me: compare Puhvels translation "the gods
installed another character in them, and their mother does not recognize [them]" (o.c.: 76).

Already Laroche (1.c.) connected karāt- with Gr. $\chi \circ \rho \delta \bar{\eta}$ 'gut', Lat. haruspex 'person who examines the entrails of sacrificed animals', Lith. žárnos 'bowels' and Skt. hirā́ 'vein', which were reconstructed by Schrijver (1991: 208) as a root $*^{\prime}{ }^{h}(e) r H$-. If Hitt. karāt- then would show a - $d$-stem (compare the $d$-extension in Gr. Хо $\delta \delta \dot{́}$ ), we must reconstruct $* \dot{g}^{h} r h_{1}$-ód- (note that both $\dot{g}^{h} r h_{2}$-ód- and $* g^{h} r h_{3}$ -ód-would have yielded Hitt. **karhāt-). Since in synchronic Hittite we only find the stem karāt- $<{ }^{*} g^{h} r h_{l}$-ód-, the original paradigm cannot be determined (possibly $*^{\prime}{ }^{h}$ ér $h_{1}-\bar{o} d-s,{ }^{*} g^{h} r h_{1}-o ́ d-m,{ }^{*} g^{h} r h_{1}-d$-ós?). Note that this reconstruction implies that the synchronic analysis of karāt-should be /kr?ād-/.
${ }^{(S I)}$ karāuar / karaun- (n.) 'horn(s), antler(s)' (Sum. SI): nom.-acc.sg. ka-ra-a-uaar (KUB $31.4+$ KBo 3.41 obv. 15, 16, 19 (OH/NS)), dat.-loc.sg. ga-ra-ú-ni (KUB 43.32 iii 1 (OS), KBo 17.4 iii 9 (OS)), ka-ra-ú-ni (Bo 2689 ii 11 $(\mathrm{OH} / \mathrm{NS})$ ), instr. $\mathrm{SI}^{\mathrm{HILA}}-a n-d a(\mathrm{KUB} 43.60$ i 19 (OH/NS)), nom.-acc.pl. ga-ra-a-$u[a-a r](K B o 20.110,8(N S))$, case? ka-ra-u-na-aš (KBo 30.129 iii 4 (OH/NS)).

Anat. cognates: CLuw. SI-na- 'horn’ (abl.-instr. SI-na-ti), zaruani(ia)- (adj.) 'of a horn' (abl.-instr. za-ar-ua-ni-ia-ti); HLuw. suran- 'horn; plentifulness(?)' (nom.-acc.sg. "CORNU+RA/r" $s u+r a / i-s a$ (KARATEPE 1 §6), ${ }^{\text {CORNU }+R A / I} s u+r a / i-s a ́$ (KARATEPE 1 §36), nom.-acc.pl. "CORNU" sù $+r a / i-n i(A S S U R ~ l e t t e r s ~ f+g \S 34)$ ).

PIE * $k_{r}^{\prime}$-ó-ur / *kr-ó-un-
See Puhvel HED 4: 77-9 for attestations. This word belongs to the small group of words that end in -āuar / -aun-: ašāuar / ašaun- 'sheepfold', haršāuar / haršaun'tilled land', partāuar / partaun- 'wing, feather' and šarāuar / šaraun- 'stormclouds(?)'. The exact formation of these forms is not fully clear, but the nouns hुaršāuar, a derivative from the verb hāarš- 'to till (the soil)', and ašāuar, possibly a derivative of the verb eš- ${ }^{(q(i)}$ / ǎ̌- 'to seat', clearly have to be analysed as * $C(V) C$ - $\bar{a} u a r$, i.e. a suffix - $\overline{\text { anar }}$ attached to (the zero-grade of) a root. This situation reminds of the abstract nouns in - $\bar{a} t a r /-\bar{a} n n-$ that have the structure *CC-ātar. For karāuar this would mean that we are dealing with a root kar-.
Hilmarsson (1985) argued that karāuar must be regarded as cognate with Arm. elǰewr 'horn' and TochA kror, TochB krorīya 'horn, crescent (of moon)' that seem to reflect * $g^{h} r^{r} h_{1} u r$. This latter preform should have yielded Hitt. **krēuar, however, and I therefore reject this etymology. Sommer (1941: 60 ${ }^{1}$ ) connected karāuar with PIE *Ker $\left(h_{2}\right)$ - 'head, horn' (on which see especially Nussbaum 1986), which makes much more sense. Nevertheless, there has been no concensus
on the morphology of karāuar. Some scholars analyse karau-+-ar (in which karaú- ~ Gr. кєpa(f)ós 'horned’, Lat. cervus 'stag'), others kara-+-uar (with kara- ~ Gr. кépaç 'horn'). Eichner (1973a: 92 ${ }^{35}$ ) states that karāuar may reflect "ein Nomen *karā (mit vorheth. Schwund von auslautendem $-H_{2}<* k r e h_{2}$ oder *kreheh $=$ (formal) gr.ion. ká $\rho \eta$ )" to which a suffix "-uor/-un- mit kollektiver Bedeutung" has been attached. This view has been taken over by e.g. Melchert (1984a: 63), Nussbaum (1986: 31-6) and Rieken (1999a: 349-50). It is problematic, however, that this reconstruction presupposes a suffixation of -uar after the loss of word-final laryngeal (normally, $*_{\text {-eh }}^{2}$-ur would yield Hitt. -ahhur, cf. *péh $h_{2} u r>p a h h u r$ 'fire') and that this reconstruction cannot account for CLuw. zaruani(ia)-' 'of a horn', in which no trace of $* h_{2}$ can be found.

In my view, there is no need to reconstruct a basis *kerh ${ }_{2}$-: as Nussbaum (1986: 1-18) has shown, we must assume for PIE a basic stem *ker- 'horn', from which a 'collective' *k'er- $h_{2}$ - 'horn' has been derived that serves as a basis for many derivations that denote 'horn' and 'head'. So, if we assume that the suffix -āuar / -aun- can be compared to -ātar / -ānn- and reflects *-ó-ur / -ó-un-, we can safely assume that karāuar has been derived from the unextended stem *ker-: *kr-ó-ur.
The exact interpretation of HLuw. suran- 'horn; plentifulness(?)' is unclear to me. Perhaps we are dealing with a metathesis of *kruan- ~ CLuw. zaruan-.

## karett-: see karaitt- / karett-

kareuariuar (adv.) 'at daybreak, early in the morning'
Derivatives: ka-re-ua-ri-ua-ar (NS), ka-a-re-ua-ri-ua-ar (1x, NS), ka-re-ua-a-ri-ua-ar (NS), ka-re-ú-ua-ri-ua-ar (OH/NS), [ka-r]e-ua-ri-u-u $[a-a r](N S), k a-r u-$ uа-ri-uа-ar (MH/MS), ka-ru-ú-a-ri-uа-ar (MH/NS), ka-ru-ú-uа-ri-ua-ar (MH/NS), ka-ru-ú-ua-ri-u-ar (NS), ka-ru-ú-ua-a-ri-u-ua-ar (NS), ka-ru-ú-ua-ar-ua-ar ( $1 \mathrm{x}, ~ \mathrm{OH} / \mathrm{NS}$ ), ka-ru-ú a-ri-ua-ar (MH/NS), ka-ru-ú a-ar-ri-ua-ar (MH/NS).

PIE * $g^{h} r e h_{1} u-r i-u r$ or $* g^{h} r h_{1}-e u-r i-u r$
See Puhvel HED 4: 86f. for attestations. We basically find three forms of this adverb, namely $k a$-RI-ua-ri-una-ar (which could be read $k a-r i-u a-$ as well as $k a$ -
 ariuar. It denotes 'at daybreak, early in the morning' and therefore probably is related to the adverb karu 'early' (q.v.). The bulk of the attestations are attested in NS texts only. Only once, we find a MS attestation, namely karuuariuar. At first sight this seems to indicate that karuuariuar is the original form. Nevertheless,

Puhvel (l.c.) rightly points out that it is likely that the variant karuuariuar is a reshaping on the basis of the simplex kar $\bar{u}$ and that karIuariuar therefore must be the original form. So we are dealing with an original karIuariuar 'at daybreak, early in the morning' that under the influence of kar $\bar{u}$ 'early' is reshaped to karūuariuar. Later on, this form even is reanalysed as karū ariuar 'at an early rising', with ariuar, as if from arai- ${ }^{\text {i }}$ / ari- 'to rise' (the regular verbal noun of which is arauar < *araiuar, however).

The adverb karluariuar probably has to be analysed as a verbal noun in -uar of a further unattested verb *karIuariie/a- ${ }^{z i}$ (cf. genušriúar, the verbal noun of genuš(̌̌a)riie/ $a_{-}{ }^{z i}$ (see at genu- / ganu-)). This *karIuariie/a- ${ }^{z i}$ then probably is a derivation in -ariie/a ${ }^{z i}$ of the stem *karIu- (cf. gimmantariie/a- ${ }^{z i}$ of gimmant-, nekumandariie/a- ${ }^{z i}$ of nekumant-). It is quite tempting to equate this *karIu- with karū 'early'. This means that *karIu- must be read as *kareu-, and that the diphthong *eu is preserved as such in word-internal position, but got monophthongized to karū in word-final position.

All in all, I would read ka-RI-ua-ri-ua-ar as ka-re-ua-ri-ua-ar /kreuəriuər/, derived from *kareuariie/ $a_{-}{ }^{z i} /$ kreuərie/a-/, which itself is derived from *kareu-/kreu-/. See at karū for further etymology.
kariant- (c.) 'grass': nom.sg. ka-ri-an-za (KUB 17.28 ii 42).
Derivatives: kariantašha- (c.) 'grassland, lawn' (dat.-loc.sg. ka-ri-<an->ta-aš-hi (KUB 17.28 ii 36).

$$
\text { PIE } * g^{h} r h_{l} \text { ient }-?
$$

This word is hapax in the following context:
KUB 17.28 ii
(33) $[m] a-a$-an $a n-t u-u h-s ̌ ̌ i{ }^{\text {LÚ }} T A P-P U=\check{S} U$ la-a-la-an kar-ap-zi
(34) na-aš-ma-a=š-ši-i=š-ša-an DINGIR ${ }^{\mathrm{MES}^{\prime}}$-uš ú-e-ri-i $a-a z-z i$
(35) $n u k i-i$ SÍSKUR $=S ̌ U 1$ NINDA.GUR 4 .RA $1{ }^{\text {DUG }}$ HAB.HAB GEŠTIN
(36) a-ra-ah-za ka-ri-ta-aš-hi pé-e-da-an-zi
(37) $n u$ NINDA.GUR 4 .RA GÙB-la-az pár-ši-ía $n=a$-an da-ga-a-an
(38) $d a-a-i$ KAŠ GEŠTIN GÙB-la-az BAL-an- $t i$
(39) nu ki-iš-ša-an me-em-ma-i
(40) $k u$-iš DUMU.LÚ [.U $\mathrm{U}_{19}$.L]U-za la-a-la-an $\mathrm{DINGIR}^{\text {MEŠ }}$-na-aš
(41) pé-ra-an [k]ar-ap-ta $k u$ - $i \check{s}=m u-u=\check{s}$-ša-an DINGIR ${ }^{\text {MEŠ }}-u s ̌$
(42) EGIR-an ú-e-ri-et nu ka-a-aš ka-ri-an-za
(43) ma-ah-ha-an ha-ta-an-za a-pé-el-l=a e-eš-ša-ri

> 'When against a man his company 'lifts the tongue' or invokes the gods for him, this is the ritual. They bring one thick-bread and one jug of wine outside on the karitašha-. He breaks the thick-bread to the left and places it on the ground. He libates beer and the wine to the left. He speaks thus: "Whatever person has 'lifted the tongue' before the gods, whoever evoked the gods for me: just like this kariant- is dried may of him his outer appearance and his dwelling likewise wither!"."

Puhvel HED 4: 80 interprets karianza as 'grass', referring to contexts where we find uelku hādan 'dried grass'. On the basis of this interpretation of karianza, he translates karitašhi as 'lawn'. Although these semantic intepretation seems probable to me, I think that the connection between kariant- and karitašha- would be much more understandable if the latter form is emended to $k a-r i-<a n->t a-a \check{s}-h i$.
Puhvel connects these words to ON gróa 'grow', Goth. gras 'grass', Lat. grāmen 'grass', etc., which all reflect a root $* g^{h}{ }^{h} r e h_{l^{-}}\left(\mathrm{ON}\right.$ gróa $<* g^{h} r e h_{1-i}{ }^{-} e / o-$,
 This would mean that kariant- reflects $* g^{h} r h_{l}$ ient-. For the development of *Crh_ie/o-> Hitt. Cariie/a-, cf. e.g. pariianzi 'they blow' < *prh ilenti.
kariie/a- ${ }^{\text {(tt)a(ri) }}$ (IIIg) 'to be gracious towards': 1sg.pret.midd. ka-ri-ia-ah-ha-ha-at (NH); verb.noun gen.sg. $k a-r i-i a-u-u a-a s ̌(O H / N S)$.
Derivatives: kariiašha- (c.) 'graciousness, mercy' (nom.sg. ka-ri-i_ia-aš-ha-aš (NH)), kāri tiiie/a- ${ }^{z i}$ (Ic1) 'to be gracious towards, to be mercyful to' (ka-a-ri+ tiie/a- ${ }^{z i}(\mathrm{NH})$ ).

IE cognates: Skt. háryati 'to desire, to covet', Gr. $\chi \alpha i ́ \rho \omega$ 'to rejoice at, to take pleasure in'.

PIE * $g^{h} r$-ie/o-
See Puhvel HED 4: 80-1 for attestations. The verb and its derivatives are predominantly attested in NH texts. Puhvel (1.c.) connects the words to the IE root *g'her- as reflected in Skt. háryati 'to desire, to covet', Av. zara- 'aim, goal(?)', Gr. $\chi \alpha i ́ \rho \omega$ 'to rejoice at, to take pleasure in' (<*g' ${ }_{r}$-ielo-), $\chi$ ápıç 'grace, favour', but also in Lat. horior 'to incite, to urge on' ( $\left.<* g^{h}{ }_{\delta} r-i e / o-\right)$. The word kāri would then be similar to Gr. $\chi$ ápış 'grace, favour' and reflect a petrified dative-locative.
kariie/a- ${ }^{z i}$ (Ic1) 'to cover (someone/thing (acc.) with something (instr.)': 3sg.pres.act. ka-ri-ez-zi (NS), ka-ri-ía-az-zi (MH/NS), ka-ri-ía-zi (NS),

3pl.pres.act. ka-ri-ia-an-zi (OH/NS), 3sg.pret.act. ga-ri-e-et (OH/MS), 3pl.pret.act. ka-a-ri-e-er (NS), 3pl.imp.act. ka-ri-ia-an-du (NS); 3pl.pres.midd. $k a-r i-i a-a n-d a(\mathrm{OH} / \mathrm{NS})$; part. $k a-r i-i$ (NS), $k a-a-r i-i s ̌-k e / a-(N H)$.
Derivatives: ${ }^{\text {TÙ̀ }}$ kariulli- (n.) 'hood' (nom.-acc.sg. ka-ri-ul-li, ga-ri-ul-li, ka-ri$u ́-u l-l i)$.

IE cognates: Skt. cárman-, Av. čaraman- 'skin, hide', Lat. corium 'leather', scortum 'hide', cortex 'rind, bark', OHG skirm 'cover, shelter'.

PIE * (s)kr-ie/o-
See Puhvel HED 4: 81f. for attestations. He convincingly connects this verb etymologically to Skt. cárman-, ‘skin, hide', Lat. corium 'leather', OHG skirm 'cover, shelter', e.a., and states that the identification of these words with the root *(s)ker- 'to cut' must be rejected.
Rieken (1999a: 74) alternatively suggests that kariie/a- is derived from IE *g'h er- 'greifen, fassen, umfassen, einfassen' as reflected in Skt. hárati 'to take, to carry (off), to bear', Gr. ұо́ $\boldsymbol{\rho}$ тос 'enclosure’. Formally, this is indeed possible, but the supposed semantic development from '*to grasp, to seize' > '*to enclose' > 'to cover' is less attractive.
kariie/a- ${ }^{z i}$ (Ic1) 'to pause(?), to rest(?)': 3sg.pres.act. ka-ri-i_i-zi, 3sg.pret.act. ka-ri-i-e-et.
 (OS), ga-ri-nu-an-zi (OS), ka-ri-nu-una-an-zi (OH/NS), 3sg.pret.act. ka-ri-ina-nu-ut (NH)).

See Puhvel HED 4: 82-3 for attestations. The interpretation of these forms is difficult. In KUB 22.25, we find the following contexts:
obv.

$$
\begin{aligned}
& \text { (25) }{ }^{\text {URU } H a-a n-h a-n a-a z=k a ́ n ~ a r-h} a{ }^{\text {URU }} \text { Ha-at-te-na an-da-an nu I-NA } \\
& \text { URU.DU }{ }_{6}^{\text {HI.A URU } \text { Ka-at-ru-ma }} \\
& \text { (26) ka-ri-ia-zi nu I-NA URU Pí-it-tág-ga-la-aš-ša an-da-an URU Pí-it-tág-ga-la- } \\
& \quad a \check{s}-s \check{a}-a n=m a \\
& \text { (27) ma-a-an GUL-ah-zi }
\end{aligned}
$$

'Out of the city Hanhana, towards the city Hattena. In the ruins of Katruma he $k$.-s. Towards Pittaggalǎ̌̌̌a. When he strikes Pittaggalǎ̌̌̌a, ...’;
rev.
(20) ${ }^{\mathrm{URU}} \mathrm{H} a-a n-h 2-n a-z a=k a ́ n ~ a r\left[-h a{ }^{\mathrm{URU}} H a-a t-t e-n a\right.$ an-da-an nu I-N] $A$ URU.DU ${ }^{\text {HI.A URU }} K a-a t-r u-m a k a-r i-i-i a-z i$
(21) $l u-u k-k a t-t i=m a \ldots$
'Out of Hanhana, towards Hattena. In the ruins of Katruma he $k$.-s. The next morning ...'
(30) ${ }^{\text {URU }} \mathrm{H} a-a n-h a\left[-n a-z a=k a ́ n ~ a r-h a n u\right.$ I-N] $A$ URU.DU $6{ }^{\text {HI.A }}\left[{ }^{\mathrm{URU}} K a-a t-r\right] u$ ma ka-ri-ia-zi lu-u[k-kat-ti=ma]
'Out of Hुanhana. In the ruins of Katruma he $k$.-s. The next morning ...'.
Von Schuler (1965: 178, 182) translates kariiiazi as 'rests', which seems to be especially based on the latter two contexts where the following sentence starts with lukkatti=ma 'the next morning'. Another example as mentioned by Puhvel is KUB 17.10 i (34) $n u=z a=k a ́ n ~ a n-d a ~ k a-r i l-i-e-e t ~ \check{s}=a$ - $a \check{s} \quad e-s ̌ a-t i$, which he translates as 'he paused and sat down', but this translation does not do justice to both $=z$ and anda. In my view, it cannot be excluded that in all cases we are dealing with the verb kariie/ $a_{-}{ }^{z i}$ 'to cover, to hide'. The first three contexts then should be translated 'he hides in the ruins of Katruma', and the latter 'he covered himself up inside and sat down'.
More linguistically real is the causative karinu- $^{z i}$, however, which is securely attested. It usually has musical instruments or people as its object and denotes 'to silence'. Puhvel paraphrases this as 'to cause to stop' and assumes a derivation from kariie/a- ${ }^{z i}$ 'to pause', but this now has become shaky in view of the unclearness regarding kariie/a- ${ }^{z i}$ 'to pause'. Moreover, the oldest attestations show the stem karinu-, whereas the stem kariianu- is attested once in a NH text only. In my view, this rather points to derivation of a further unattested verb *karai- ${ }^{i}$ / kari- (for causatives in -inu- from dāi/tiiianzi-class verbs compare e.g. huinu- ${ }^{z i}$ from huuai- ${ }^{i}$ / hui-, pattinu- ${ }^{z i}$ from pattai- ${ }^{i} /$ patti- and zinu- ${ }^{z i}$ from zai- ${ }^{i} /$ $z i-)$. Further unclear.
${ }^{\text {É }} \boldsymbol{k a r i m m i}$, ${ }^{\text {Ét }}$ karimn- (n. / c.) 'shrine, chapel, sanctuary': nom.-acc.sg.n. ka-ri-im$m i, k a-r u-u ́ u m-m i, k a-r i-i m-m e$, gen.sg. ka-ri-im-na-aš, dat.-loc.sg. ka-ri-im-ni, ka-ri-im-ma, ka-ri-im-mi, abl. ka-ri-im-na-az, acc.pl.c. ka-ri-im-nu-uš, dat.-loc.pl.ka-ri-im-na-aš, ka-ri-im-ma-na-aš.

Derivatives: ${ }^{\mathbf{L}(\mathbf{U}(\mathbf{E})} \boldsymbol{k a r i m n a ̄ l a - ~ ( c . ) ~ f u n c t i o n a r y ~ b e l o n g i n g ~ w i t h ~ t h e ~ k a r i m n - ~}$ (nom.sg. ka-ri-im-na-a-la-aš, nom.pl. ka-ri-im-na-a-li-iš, ka-ri-im-na-li-iš).

See Puhvel HED 4: 83f. for attestations. The word denotes a cultic building, and can be translated as 'shrine' or sim. The word shows a number of stems, namely un-inflecting karimmi and karimma besides an inflecting stem karimna-. The occurrence of the attestation karummi is remarkable.

Some scholars have tried desparately to etymologize this word. For instance, Puhvel (l.c.) states that the 'declension pattern' karimmi / karimn- must be compared to Skt. ásthi- / asthn-' 'bone' and proposes to reconstruct *ghremi : ghremn- (~ Skt. harmyám 'stronghold' and Lat. gremium 'lap, recess'). Melchert (1983: 11f.) treats karimmi as a *men-extension of a stem *kari-, which he connects to kariie/az ${ }^{z i}$ 'to cover' (q.v.) from IE * $g^{h}$ er-, thus reconstructing $* g^{h}$ er-imen. He explains the nom.sg. karimmi as *kari-mn-i, "a neuter nom.-acc.pl. like halhaltumari 'corners'". He does not explain, however, why *-mn- assimilated in this form only and not in e.g. gen.sg. karimnaš. Moreover, he does not explain the form karūmmi.

In my view, the different stems with un-Indo-European alterations (-mn-: -mm-; $-i-:-\bar{u}$-) clearly point to a foreign origin, just as we would expect in a word that
 e.a.).
$\boldsymbol{k a r i n u} \mathbf{- z}^{z i}$ : see at $k a r i i e / a_{-}{ }^{z i}$ 'to pause(?), to rest(?)'
karitt-: see karaitt- / karett-
kariuariuar: see kareuariuar
$\boldsymbol{k a r p}^{\text {-ta(ri) }}$ : see karp( $_{\text {(iele/a)- }}{ }^{\text {tu(ri) }}$
$\boldsymbol{k a r p}^{-z^{i}}$ : see $k a r p i i e / a_{-}{ }^{z i}$
$\boldsymbol{k a r p}\left(\right.$ iiela)_- ${ }_{-}^{\text {ta(ri) }}$ (IIId / IIIg) 'to be angry': 3sg.pres.midd. kar-ap-ta-ri (NH), kar-pí-ia-at-ta (NS); part. kar-pí-ia-an-t-; Luw.part. kar-pí-mi-.

Derivatives: $\boldsymbol{k a r p} \overline{\boldsymbol{e} s s^{z}}{ }^{z i}$ (Ib2) 'to become angry' (part. kar-pi-iš-ša-an-t-), karpi(c.) 'wrath, anger, fury’ (nom.sg. kar-pí-iš (MH/MS), acc.sg. kar-pí-in (MH/NS), dat.-loc.sg. kar-pí (NS), nom.pl. kar-pí-uš (NS)), karpiūāla- (adj.) 'furious' (nom.-acc.pl.n. kar-pí-ua-a-la (OH/MS)).

IE cognates: Lat. increpāre 'to shout out, to upbraid', Skt. krpate 'to lament', Russ. kropotá 'conflict, fight'.

PIE *k'rp-?
See Puhvel HED 4: 98f. for attestations. Although the verb is attested a few times only, the noun karpi- is well-established. Tischler (HEG A-K: 515) connects karpi- with CLuw. zarpa/i- that, according to Tischler, denotes "jedenfalls ein Übel, das den Menschen befällt". If this semantic field of zarpa/i- indeed is accurate, a connection with Hitt. karpi-, which particularly denotes 'divine wrath', is indeed possible. On the basis of Hitt. karp- and Luw. zarp- we should reconstruct PAnat. *k'rp-.
Eichner (1979a: 61) suggests to connect $k a r p(i i e / a)$ - to Lat. increpāre 'to shout out, to upbraid' and Russ. kropotá 'conflict, fight'. Puhvel judges this suggestion as "mildly probable" and suggests himself as possible cognates Skt. krpate 'to
 $\kappa \alpha \rho \pi \alpha ́ \lambda ı \mu \circ$, which semantically remains far) could point to an IE root *krep- 'to express one's discontent'. We should then assume, however, that the *k' of *k'repdepalatalized before $* r$ in Russian and Sanskrit (Weise's Law) and yielded plain velars there. In Hittite, the zero grade of this root, *k'rp-, would then have been generalized. Although this etymology is not impossible, it is not instantly convincing either.
$\boldsymbol{\operatorname { k a r p }}\left(\right.$ iie/a)- ${ }^{z i}$ (Ia4 / Ic1) 'to take (away), to take up, to lift, to pluck; (midd.) to have finished': 1sg.pres.act. kar-pí-i-e-mi (OH/MS), kar-ap-mi (NH), 2sg.pres.act. kar-ap-ši (OH/NS), 3sg.pres.act. kar-pí-i-ez-zi (OS), kar-pí-ez-zi (OS), kar-pí-i-e-ez-zi (OH/?), kar-pí-e-ez-zi (OH/NS), kar-ap-pí-ez-zi (OH/NS), kar-ap-zi (OS), kar-pa-zi, 2pl.pres.act. kar-ap-te-ni (OH/NS), 3pl.pres.act. kar-pi-an-zi (OS), kar-pí-ia-an-zi (OH/NS), kar-ap-pí-an-zi (OS), kar-ap-pí-ia-an[-zi] (NS), kar-pa-an-zi (OS), kar-pa-a-an-zi (NS), kar-pa-an-ti (NS), kar-ap-pa-an-zi, kar-ap-an-zi, 1sg.pret.act. kar-pu-un (NS), kar-ap-pu-un (NH), 3s.pret.act. kar-ap-ta ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pret.act. kar-pí-i-e-er $(\mathrm{OH} / \mathrm{NS})$, kar-pí-er or kar-pé-er (NS), 2sg.imp.act. kar-ap (MS), kar-ap-pí-ia (OH/NS), 3sg.imp.act. kar-ap-du ( $\mathrm{OH} / \mathrm{MS}$ ), 2pl.imp.act. kar-ap-tén ( $\mathrm{MH} / \mathrm{MS}$ ), kar-ap-pí-ia-at-tén ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.imp.act. kar-pa-an-du (NS), kar-ap-pa-an-du (OH/NS); 3sg.pres.midd. kar-ap-ta-ri (OH/NS), 3pl.pres.midd. kar-pa-an-ta-ri (MH/MS), kar-ap-pa-an-da-a$r i$ (NS), 3sg.pret.midd. kar-ap-ta-at (NS); part. kar-pa-an-t- (OS), kar-ap-pa-an-$t$-; verb.noun kar-pu-u-ua-ar (NS), kar-pé-eš-šar (NS); inf.I kar-pu-u-ua-an-zi (NS); impf. kar-pí-iš-ke/a-, kar-pí-eš-ke/a-.

Derivatives: $\boldsymbol{k a r p a n u -}{ }^{z i}$ (Ib2) 'to pick up' (3sg.pres.act. kar-pa-nu-zi).
Anat. cognates: Lyd. fa-korfid 'to undertake (vel sim.)'.
IE cognates: Lat. carpō 'to pick, to pluck', Gr. карлóৎ 'fruit' (<*krp-o-), Lith. kiřpti 'to shear off', OE sceorfan 'to bite', Latv. škirpta 'notch, sherd'.

PIE *krp-íé/ó-; *kérp-t / *krp-ént
See Puhvel HED 4: 91f. for attestations. Already in the oldest texts, we find two stems, namely karp- $^{z i}$ besides karpiie/a- ${ }^{z i}$. Oettinger (1979a: 345) states that of these two, karpiie/a- is older than karp-: "karp- ${ }^{m i}$ ist jüngere Umbildung!". Melchert (1997b: 84ff.) states that it is significant that in OS texts the stem karpiie/a- is attested in the present indicative only. In his view, this is a remnant of a system in which the stem karpiie/a- is used in the present indicative only, and the stem karp- everywhere else (but note that already in OS texts this system is blurred as we can see by the attestation of 3sg.pres.act. kar-ap-zi). According to Melchert, this division reflects an opposition between a root aorist $* \operatorname{Ker} P$ - and a derived present $* \mathrm{KrP}$-ie/o-.
The labial consonant is spelled with a geminate -pp- that often, that we can only conclude that we are dealing with phonological /karp-/ and /krpie/a-/. This is of importance for the etymological interpretation. For instance, Oettinger (1979a: 345) derives karpiie/a- from IE $* g^{h} r b^{h} h_{1}$-ie/o-, connecting it with Skt. grabh'- 'to grab', Lith. grébiu 'to rob', etc. Although semantically appealing, the formal obstacles are too large to uphold this etymology. Not only does the geminate spelling $-p p$ - not fit etymological $* b^{(h)}$, the full grade $* g^{h} r e b h_{l^{-}}$does not correspond to the Hittite stem $/ \mathrm{karp}-/<* \operatorname{Ker} P$-. Moreover, it is more likely that the PIE root ${ }^{*} g^{h} r e b h_{1}$ - is reflected in Hitt. karāp- ${ }^{i} /$ kare/ip- 'to devour' (q.v.).
Already Sturtevant (1930b: 155-6; 1930c: 217) compared karp(iie/a)- with Lat. carpō 'to pick, to pluck' and Lith. kiřpti 'to cut off' from PIE *kerp-. Although semantically these words seem to be quite far from Hittite 'to take (away), to take up, to lift', there is some indication for a meaning 'to pluck' in Hittite as well: KUB 27.16 i (9) nam-ma ${ }^{\text {GIS }} I N-B I^{\text {HI.A }}$ kar-ap-pí-ia-an[-zi] 'Further they pluck fruits'; KBo $4.9 \mathrm{v}(36) t a{ }^{\text {LƯ.MEŠ }} \mathrm{NAR}$ GIŠ ${ }^{\mathrm{d}}$ INANNA ${ }^{\text {HI.A }} k a r-p a-a n-z i$ 'The musicians pluck the harps' (both examples Puhvel o.c.: 94). Either we have to assume that a PIE meaning 'to pluck' was extended in Hittite to 'to take (away), to take up, to lift, to pluck', or that a PIE meaning 'to take (away), to take up, to lift, to pluck' remained thus in Hittite and was narrowed to 'to pluck' in the other Indo-European languages.
The appurtenance of Lyd. fa-korfid is semantically as well as formally possible, but does not shed any additional light to the Hittite state of affairs.

karši- / karšai- (adj.) 'harsh, astringent': nom.sg.c. kar-ši-iš (MH/MS), acc.sg.c. kar-ši-in, nom.-acc.sg.n. kar-ši (MH/MS), kar-aš-ši (NH), acc.pl.c. kar-ša-uš ( $\mathrm{OH} / \mathrm{NS}$ ), kar-ši-įa-aš (NS), kar-še-íia-aš (NS), nom.-acc.pl.n. kar-ša (NS), kar$\check{s} a-i a(\mathrm{NH}), k a r-a s ̌-s ̌ a-i$

Derivatives: karšikarši- (n.) 'astringent' (nom.-acc.sg. kar-ši-kar-ši, abl. kar-ši-kar-ši-ịa-za).

IE cognates: ModHG harsch, ModEng. harsh.
PIE *krs-(e) i-
See Puhvel HED 4: 107f. for attestations. An etymological tie-in with karš(iie/a)${ }^{z i}$ is likely from a formal as well as semantic point of view, which is supported by the Germanic cognates like ModHG harsch 'harsh, rough', ModEng. harsh < *kor-sk-. In an ablauting -i-stem adjective, we would expect ablaut in the root as well, so *kérs-i-, *krs-éi-. Since *VrsV > Hitt. VrrV (compare arra- 'arse' < *Horso-), the cluster -rš- must have been generalized out of the oblique cases, *krs-éi- where it regularly was retained.
$\boldsymbol{k a r s ̌}(i \underset{\sim}{i e} / \boldsymbol{a})$ - $^{z i}$ (Ia4 / Ic1 > Ic2, IIa1 $\gamma$ ) 'to cut (off), to separate; to stop' (Sum. TAR): 1sg.pres.act. kar-aš-mi (OH/NS), 2sg.pres.act. kar-aš-ti (NH), kar-ša-at-ti (NS), 3sg.pres.act. kar-aš-zi (OS), kar-aš-ši-i-ez-zi (OS), kar-aš-ši-i-e-ez-zi ( $\mathrm{OH} /$ ? $),$ kar-aš-še-ez-zi (OH/NS), 1pl.pres.act. kar-šu-u-e-ni (NS), kar-aš-šu-uィ-e〉-ni (NS), 2pl.pres.act. kar-aš-te-ni (OH/NS), 3pl.pres.act. kar-ša-an-zi ( $\mathrm{OH} / \mathrm{NS}$ ), 1sg.pret.act. kar-šu-un ( $\mathrm{OH} / \mathrm{MS}$ ), kar-aš-šu-un (NS), kar-ša-nu-un (NH), 3sg.pret.act. kar-aš-ta (OH/MS), kar-ša-da (OH/NS), 3pl.pret.act. kar-šeer (NS), kar-šer (NS), kar-aš-še-er (OH/NS), 1sg.imp.act. kar-ša-al-lu (OH/NS), 2sg.imp.act. kar-aš (OH/NS), kar-ši (NS), kar-še (1x, MH/NS), 3sg.imp.act. kar$a s ̌-d u$ ( $\mathrm{OH} / \mathrm{NS}$ ), 2pl.imp.act. kar-aš-te-en (OH/MS), kar-aš-tén (MH/NS), 3pl.imp.act. kar-aš-ša-an-du (MH/MS), kar-ša-an-du (OH/NS); 3sg.pres.midd. kar-ša (NS), kar-aš-ta-ri (OH/NS), 3pl.pres.midd. kar-ša-an-ta-ri (NS), kar-ša$a n-d a(N S), k a r-a s ̌-s ̌ a-a n-d a(\mathrm{OH} / \mathrm{NS}), ~ 3 p l . p r e t . m i d d . ~ k a r-s ̌ a-a n-t a-a t(N S)$, 3sg.imp.midd. kar-aš-ta-ru (OH/NS), kar-ša-a-ru (NS), kar-aš-ša-ru (NS), 3pl.imp.midd. kar-ša-an-ta-ru (OH/NS); part. kar-ša-an-t-, kar-aš-ša-an-t-; verb.noun kar-ša-u-ua-ar (NS), gen.sg. kar-šu-ua-aš (NS), kar-šu-u-una-aš; inf.I kar-šu-an-zi, kar-šu-u-ua-an-zi; impf. kar-aš-ke/a- (MH/MS), kar-ši-ke/a-, kar-ši$i s ̌-k e / a$-.

Derivatives: karšatar (n.) 'chunk’ (nom.-acc.sg. kar-ša-tar), karš̌eššar / karšešn- (n.) 'cutting, parcel’ (gen.sg. kar-še-eš-na-aš, dat.-loc.sg. kar-še-eš-ni), karšatt- (c.) 'cutting, removal’ (dat.-loc.sg. kar-ša-at-ti), karšantalli- (c.) '?’ (acc.pl. [k]ar-ša-an-ta-al-li-uš), karšnu- ${ }^{z i}$ (Ib2) 'to cut off, to cancel' (2sg.pres.act. kar-ša-nu-ši, 3sg.pres.act. kar-ša-nu-zi, 1sg.pret.act. kar-ša-nu-nuun, kar-aš-nu-nu-un, 3pl.pret.act. kar-aš-nu-er, kar-ša-nu-er; impf. kar-ša-nu-uš-ke/a-, kar-aš-nu-uš-ke/a-).

Anat. cognates: CLuw. karš- 'to cut' (1sg.pres.act. kar-šu-i, inf. kar-šu-na, part. nom.sg.c. kar-ša-am-mi-iš), karšattar / karšattn- (n.) 'parcel (of land), selection (of animals); block (of metal)' (nom.-acc.sg. kar-ša-at-tar, kar-ša-tar, dat.-loc.sg. kar-ša-ad-da-ni); Lyd. fa-karsed 'to cut (out)'.
IE cognates: TochAB kärs- 'to know', Gr. кعípo 'to cut', Lith. skirti 'to divide', etc.

PIE *krs-ié/ó-; *kérs-t / *krs-ént
See Puhvel HED 4: 100f. for attestations. The most common stem of this verb is $k a r s \check{s}^{z i}$. A stem karšiie/a- ${ }^{z i}$ only occurs in 3sg.pres.act. in the Hittite Laws. This reminds of the distribution between $k a r p-{ }^{z i}$ and karpiie/a- ${ }^{z i}$ 'to take (away), which reflects an old distinction between root-aorist *kerp- vs. derived present *krp-ie/o- (cf. Melchert 1997b: 86). In NH texts, we occasionally find forms that display a stem karšae-- ${ }^{\text {i }}$ (karšanun and possibly karšauuar) and a stem $\operatorname{karš(a)-~}{ }^{i}$ (karšatti and possibly karšauuar), according to the highly productive hatrae- and $\operatorname{tarn}(a)$-class respectively.

Already since Hrozný (1919: 205) this verb is commonly connected with PIE *ker- 'to cut'. In Hittite, we apparently are dealing with an $s$-extension, which is also visible in TochAB kärs- 'to know'.
The common geminate spelling of -šš- shows that we have to phonologically interpret this verb as /karS- / krS-/. The fortition of $*_{s}$ to /S/ is due to the adjacent -r- (compare kě̌šar /keSr/ 'hand' < *g' ${ }^{h}$ 'ésr).

According to Melchert (1994a: 332), Lyd. fa-karse- reflects *-kors-éie-.

## kard-: see ${ }^{(\mathrm{UZU})}$ ker / kard(i)-

$\boldsymbol{k a r t a e}^{-}{ }^{i}$ (Ic2) 'to cut off' (Sum. TAR): 1sg.pret.act. kar-ta-a-nu-un (OH/NS); part. kar-ta-an-t-; verb.noun gen.sg. kar-ta-u-aš (NS).

IE cognates: Skt. kart- 'to cut (off)', Lith. kertù 'to fell, to cut down', OCS očrěsti 'to cut'.

PIE *kert-

See Puhvel HED 4: 109f. for attestations. The verb is attested a few times in NS texts only. It inflects according to the hatrae-class.

Already Sommer apud Friedrich HW: 103 makes a connection with Skt. kart'to cut'. In order to explain the Hittite inflection, one has to assume that an original Hittite stem kart- was secondarily taken over into the hatrae-class. This assumption is valid in view of the fact that the verb occurs in NS texts only, which coincides with the fact that the hatrae-class was highly productive in that period. Oettinger (1979a: 375) is against this assumption however, because of his conviction that stems in dentals avoid secondarily rebuilding into the hatraeclass. He therefore suggests that kartae- is a derivation of a noun *kr-tó- or *kórt-o-, which, through *k(o)rto-ie/o-, gave kartae-. In my view, verbs like hantae- ${ }^{z i}$, lelhuntae $z^{z i}$, mitae $z^{z i}$, partae- ${ }^{z i}$, pittae- ${ }^{z i}$, etc. clearly show that there was no problem with taking stems that end in a dental consonant over into the hatraeclass. I therefore assume that kartae- is a secondary creation based on an original stem kart-, which is cognate with Skt. kart- etc. and reflects PIE *kert-.
kard(i)-: see ${ }^{(\mathrm{UZU})} \mathrm{ker} / \operatorname{kard}(i)-$
kardimiie/a- ${ }^{\text {ta(ri) }}$ (IIIg / Ic1) 'to be angry' (Sum. TUKU[.TUKU]): 3sg.pres.midd. kar-di-mi-ia-at-ta-ri (MS?), ka[r-di-mi-]ina-et-ta (MH/MS), kar-tim-mi-ia-at$t a[-r i](\mathrm{OH} / \mathrm{NS})$, kar-tim-mi-i̇a-ta-ri (OH/NS), kar-tim-mi-ia-at-t $[a](\mathrm{MH} / \mathrm{NS})$, 3pl.pres.midd. kar-tim-mi-ia-an-ta-ri $(\mathrm{OH} /$ ? ), 3sg.pret.midd. kar-di-mi-ia-et-ta-at (MS, OH/NS), kar-tim-mi-at-ta-at (NS); 3sg.pres.act. kar-di-mi-ia-az-zi (MS), kar-tim-mi-i_ia-ez-zi (MS), 1sg.pres.act. kar-tim-mi-ia-nu-un (OH/NS); verb.noun abl. kar-di-mi-i_ia-u-ua-a[z] (OH/NS); impf. kar-tim-mi-iš-ke/a-.

Derivatives: kardimiiauuant- (adj.) 'angry' (nom.sg.c. kar-tim-mi-ia-u-ua-an$z a(\mathrm{MH} / \mathrm{NS})$, kar-tim-mi-i_u-ua-an-za (MS), kar-di-mi-ia-u-ua-an-za (OH/MS), kar-dim $-m i-i, i-u-u a-a n-z a$ (NS), acc.sg. kar-di-mi-ía-u-ua-an-da-an (OH/MS), nom.pl.c. kar-tim-mi-i_ia-u-ua-an-te-eš (NS)), kartimmiē̌̌š- ${ }^{z i}$ (Ib2) 'to become angry' (3sg.pres.act. [ka]r-tim-mi-eš-zi (NS), 2sg.pret.act. TUKU.TUKU-e-eš-ta (NS), 3sg.pret.act. kar-tim-mi-e-eš-ta (NS); part. kar-tim-mi-e-eš-ša-an-t- (NS)), $\boldsymbol{k a r d i m i}(\mathbf{i} \boldsymbol{a}) \boldsymbol{n u} \boldsymbol{-}^{-{ }^{i}}$ (Ib2) 'to make angry' (3sg.pres.act. kar-tim-mi-ia-nu-zi (NS), kar-tim-nu-uz-zi (NH), 3pl.pres.act. kar-tim-mi-ia-nu-ųa[-an-zi] (NS), 3sg.pret.act. kar-tim-mi-i_ia-nu-ut (NS), part. kar-di-mi-nu-ua-an-t- (MH/MS)), kardimiiahh- ${ }^{i}$ (IIb) 'to make angry' (3sg.pres.act. kar-tim-mi-ía-ah-hi (MS), 3pl.pres.act. [ka]r-di-mi-ia-ah-ha-an-zi (MS), 3sg.pret.act. kar-tim-mi-ia-ah-ta (NS)), kardimiiatt- (c.) '(cause of) anger’ (nom.sg. kar-di-mi-ia-az (OH/MS),
kar-tim-mi-iadaz (NH), kar-tim-mi-ia-za (NS), acc.sg. kar-di-mi-ia-at-ta-an ( $\mathrm{OH} / \mathrm{MS}$ ), kar-tim-mi-ia-at-ta-an (MH/NS), kar-tim-mi-at-ta-an (NS), gen.sg. kar-di-mi-ia-at-ta-aš (OH/MS), dat.-loc.sg. kar-di-mi-at-ti (MS), acc.pl. kar-di-mi-ía-at-tu-uš (OS), kar-tim-mi-i्2a-ad-du-uš (NS)).

PIE *k'rd-im-ie/o-
See Puhvel HED 4: 110f. for attestations. The forms that belong to this lemma are spelled in two ways: either kar-di-mi- or kar-tim-mi- (the attestations with kar-DAM-mi- in KBo 2.2 are probably to be read $k a r-d i m_{x}-m i-$, cf. HZL: 239). The chronological distribution between these spellings is as follows: in OS texts, we only find kar-di-mi-; in MS texts we mostly find kar-di-mi- and sometimes kar-tim-mi-; in NS texts we mostly find kar-tim-mi- and sometimes kar-di-mi-. In my view, this indicates that kar-di-mi- is the original spelling, which is gradually being taken over by kar-tim-mi- from MH times onwards. This is important, since we now have to interpret the single spelling of $-m$ - as original. For the replacement of single $-m$ - by geminate $-m m-$, compare e.g. imiie/a $->$ immiie/a-, amiiiant-> ammiiiant-, etc.
The verb shows the middle as well as active inflection, both with the same meaning. Because the middle forms are more numerous, I assume that this verb was middle originally. Note that already in MS texts we find forms that show the secondary stem kardimiidae- ${ }^{z i}$.

Since Pedersen (1938: 40) it is generally accepted that kardimiie/a- is cognate with ker / kard(i)- 'heart' (compare OCS srъditi se 'to be angry' ~ srbdbce 'heart', Lith. šiřsti 'to be angry' ~ širdis 'heart' and Arm. srtnim 'to become angry' ~ sirt 'heart'). Nevertheless, the morphological analysis of kardimiie/ahas been in debate. For instance, Pedersen (l.c.) thought that kardimiie/a- was based on a participle *kartimma-. This is unlikely because this type of participle is attested in Luwian only and not in Hittite. Oettinger (1979a: 255) suggests that kardimiie/a- is derived from a base kardima-, an "(i)ma-Nomen" (like lahlahhima- 'agitation', tethima- 'thunder', tuhhima- 'smoke'). Apart from the fact that I know of no other verbal derivatives of these nouns in -ima-, we would expact that such a derivative would end up in the hatrae-class (so **kardimae-). Rieken (1999a: 110-1) therefore gives a different analysis. According to her, the root *k'erd- 'heart' served as the basis for a verb *k'erd-ie/o- 'to be angry'. Of this *kerd-ie/o- a -men- derivation *kerd-i-men- 'anger' is formed, of which another verb in *ie/o- is derived: *kerd-i-mn-ie/o-, which regularly yielded Hitt. kartimmiie--. Problematic, however, is the fact that the original form of this verb is kardimiie/ $a$-, with single -m-, which cannot be explained out of *-mn-.

I would like to propose a different analysis. In my view, kardimiie/a- is a compound of kard- + imiie/a- 'to mix'. As we saw, the original inflection of this verb is middle, and I assume that the literal meaning of this compound therefore was 'to be mixed regarding his heart' (cf. English 'to have mixed feelings'). This became to denote 'to be angry' and because of this active meaning was taken over into the active inflection as well. For a further etymological treatment, see at ker / kard(i)- 'heart' and imiie/a- ${ }^{z i}$ 'to mix'.
The causative shows three spellings. Of these, the spelling kar-tim-nu- is found in a NH text and therefore probably is secondary (compare Melchert 1997b: $90^{17}$ ). The spelling kar-di-mi-nu- is attested in a MH/MS text however, and in my opinion therefore significant. It may show that originally verbs in -ie/a-formed causatives in *-i-nu- (compare the causatives in -inu- that are derived from the dāi/tiiianzi-class verbs), which were later on replaced by -ia-nu- (like kar-tim-mi-ia-nu- in this case).
$\boldsymbol{k a r u} \boldsymbol{u}$ (adv.) 'early; formerly, earlier, already; up to now': ka-ru-ú (OS).
Derivatives: karuuili-, karūli- (adj.) 'former, early, ancient' (Sum. LIBIR.RA; nom.sg.c. [k]a-ru-il-i-š=a (OS), acc.sg.c. ka-ru-ú-i-li-in (OH/NS), ka-ru-ú-li-in ( $\mathrm{OH} / \mathrm{NS}$ ), nom.-acc.sg.n. $k a-r u-u ́-i-l i(\mathrm{NH})$, gen.sg. $k a-r u-u ́-i-l i-a s ̌(N H), k a-r u-u ́-$ $i-l i-i \underline{C l} a \check{s}(\mathrm{NH}), k a-r u-i-l i-a s ̌$ (NS), abl. ka-ru-ú-i-li-ía-az (MH/NS), ka-ru-ú-i-liia $a-z a(\mathrm{NH})$, ka-ru-ú-li-ía-az (MH/NS), nom.pl.c. ka-ru-ú-i-li-e-eš (NH), ka-ru-ú-$e$-li-e-eš ( $1 \mathrm{x}, \mathrm{OH} / \mathrm{NS}$ ), ka-ru-ú-li-e-eš (MH/NS), ka-ru-ú-i-li-uš (MH/NS), acc.pl.c. $k a-r u-u ́-i-l i-u s ̌!~(K B o ~ 16.86 ~ i ~ 9 ~(O H / N S)), ~ v o c . p l . ~ k a-r u-u ́-i-l i-i ́ a-a s ̌ ~(N S), ~$ nom.-acc.pl.n. $k a-r u-u ́-i-l a(N H)$, $k a-r u-u ́-i-l i(N S), k a-r u-u ́-i-l i-i \underline{a}(\mathrm{NS})$, gen.pl. ka-ru-ú-i-li-ía-aš (NS), dat.-loc.pl. ka-ru-ú-i-li-ịa-aš (NS)), karuuiliiatt- (c.) 'former state' (all.sg. as adverb ka-ru-ú-i-li-ia-at-ta (OH/MS)).
Anat. cognates: HLuw. ruwan (adv.) 'formerly' (rú-wa/i-na (KARATEPE 1 §33)).

IE cognates: ON grýiandi 'dawn', Swed. dagen gryr 'the day dawns', OIc. grár, OHG grāo 'grey'.

PIE * $g^{h} r h_{l}-\bar{e} u$ or $* g^{h} r e h_{l}-u$
See Puhvel HED 4: 112f. for attestations. The adverb karū is consistently spelled $k a-r u-u$, from OS texts onwards. This points to a phonological interpretation /krū́/, which contrasts with the form $a-a \check{s}-s ̌ u-u / R a ́ S o / ~ ' g o o d s ' ~<~ *-u h_{2}$. Within Anatolian, we find a cognate in HLuw. ruwan 'formerly' (with -an probably in analogy to adverbs like anan 'below', antan 'inside', apan 'behind' paran 'before', e.a.), that shows that we must reconstruct PAnat. $*^{\prime} g^{\prime} r$-. As I have shown
under its own lemma, the adverb kareuariuar, which originally is a verbal noun to a verb *kareuariie/ $a_{-}{ }^{z i}$, itself a derivative in -ariie/a- ${ }^{z i}$ from a stem *kareu-, shows that karū must show the word-final development of *kareu. All in all, we must reconstruct PAnat. *'greu. Puhvel (l.c. with reference to Čop 1961-62: 187197, 206-9) cites as outer-Anatolain cognates ON grýiandi 'dawn' and Swed. dagen gryr 'the day dawns', which together with OIc. grár and OHG grāo 'grey' point to a $u$-stem $* g^{\prime} r e h_{1}-u$-. This means that kar $\bar{u}$ could go back to $* g^{\prime} r h_{1}-\bar{e} u$ or *g ${ }^{h}{ }^{r} e h_{1}-u$.
$\boldsymbol{k a r u ̈ s ̌ s ̌ s ( i i e l a ) - ~}{ }^{z i}$ (Ib1/Ic1) 'to be silent, to fall silent': 1sg.pres.act. [ka-r]u-uš-ši-ía-mi (NH), 2sg.pres.act. ka-ru-uš-ši-i̇la-ši (NH), ka-ru-uš-ši-i $a-a t-t i \quad(N H)$,
 ši-ez-zi (MH/NS), 2pl.pres.act. ga-ru-uš-ši-i_ia-at-te-ni (MS), 3pl.pres.act. ka-ru$u s ̌$-ši-an-zi (MH/MS), ka-ru-uš-ši-ịa-an-zi (OH/NS), 1sg.pret.act. ka-ru-uš-ši-ịa-nu-un (NH), 3sg.pret.act. ka-ru-uš-ši-į् a-at (NH), ka-ru-ú-uš-ši-į्a-at (NH), 3sg.imp.act. ka-ru-ú-uš-ši-ed-du (MH/NS), 2pl.imp.act. ka-ru-uš-tén (NS); 2sg.pres.midd. ka-ru-uš-ši-ịa-ri (NH), 3sg.pret.midd. ka-ru-uš-ši-ịa-at-ta-at (NH), ka-ru-ú-uš-ši-i_ia-at-ta-at (MH/NS); part. ka-ru-uš-ši-įa-an-t-; verb.noun ka$r u-u s ̌-s ̌ i-i-i a-u-u a-a r$ (NS), $k a-r u-u s ̌-s ̌ i-i, i a-u a[-a r]$ (NS).
 $z i(\mathrm{OH} / \mathrm{NS}), k a-r u-u s ̌-s ̌ i-i \underline{i} a-n u-u-u{ }_{c} a-a n-z i(\mathrm{OH} / \mathrm{NS}), k a-r u-u ́-u s ̌-s ̌ i-i a-n u-u a-a n-z i$ ( $\mathrm{OH} / \mathrm{NS}$ ), karuššiiantili (adv.) 'silently, quietly’ (ka-ru-uš-ši-i-ia-an-ti-li (NH)).

IE cognates: OHG chrosōn, MHG krosen, Goth. kriustan, OSwed. krýsta 'to gnash'.

PIE *gréus-t/*grus-ént, *grus-ié/ó-
See Puvhel 116f. for attestations. Almost all forms show a stem karuššiie/a-. Only once, we find the unextended stem karuš-, in 2 pl.imp.act.. This seems to correspond to the distribution as described in Melchert 1997b: the forms in -ie/a-, which reflect the -ie/o-present, are originally found in the present only, whereas the unextended forms, which reflect the root-aorist, are originally found in nonpresent forms (cf. $\operatorname{karp}\left(\right.$ iie/a) $\left.{ }^{z i}\right)$.
Eichner (1975b: $164^{16}$ ) connects this verb with OSwed. krýsta 'to gnash' and Goth. kriustan 'to gnash', which reflect a root *greus- (also attested without a dental extension in OHG chrosōn, MHG krosen 'to gnash'), assuming that the original meaning 'die Zähne knirschen; sich das Wort verbeißen’ developed into Hitt. 'zu/über etwas schweigen'. Eichner himself assumed a preform *grous-éie/o-, but e.g. Rieken (1999a: 211 ${ }^{994}$ ) adapts this to *grous-ie/o-. Both
interpretations must be incorrect because the diphthong $*$-ou- would not monophthongize in front of $-s$ - (cf. aušten < *h $h_{2}$ óu-sten). Moreover, as we saw above, this verb likely goes back to a root-aorist and its -ie/o-derived present. So structurally, we would expect an aorist *gréus-t/*grus-ént besides a present *grus-ié/ó-. The full grade stem *gréus- would yield Hitt. krūš-, whereas *grus- > Hitt. kruš-. We can see that the full grade stem has been generalized because the occasional plene spelling ka-ru-ú-uš-ši-ie/a- points to *greus-ie/o-. The geminate -čss- in my view must be explained by the fact that *grusie/o- regularly yielded Hitt. /kruSe/a-/, showing the development *VsidV>V̌̌šV (cf. also -ašša-<*-osịoand uašše/a- < *usie/o-). When the -ie/a-suffix was restored, this yielded $/ \mathrm{kruSie} / \mathrm{a}-/$, spelled karuššiie/a- (see at uešš- ${ }^{\text {Ita }}$, uašše/a ${ }^{z i}$ for a similar scenario).

## karūuariuar: see kareuariuar

karza / karzan- (n.) 'spool, bobbin (vel sim.)': nom.-acc.sg./pl. kar-za (OH/NS), dat.-loc.pl. kar-za-na-aš (OH/NS), abl. kar-za-na-az (OH/NS).
IE cognates: Skt. kart- 'to spin', krtsná- 'whole', SCr. krétati 'to move'.
PIE *kért-s-ōr / *krt-s-n-ós?
See Puhvel HED 4: 117 for attestations. This word denotes an instrument of a weaver, probably 'spool' or 'bobbin' or similar. According to Eichner (1974: 98), this word is a fossilized concretized verbal noun *kért-s(o)r, gen. *k(e)rt-snós 'spin' that should be connected with Skt. kart- 'to spin' and perhaps krtsná'whole, entire'. The loss of $-r$ in nom.-acc. karza is explained by him as due to "prophylaktische Dissimilation". Neu (1982: 206 ${ }^{6}$ ), however, assumes that karza is a "durch die neutrische Endung gekennzeichneten Kollektivbegrip". This is followed by Rieken (1999a: 391) who analyses karza as /kart-s-a/. This would, according to her, indicate that the word was an $s$-stem, that must go back to *kért-s, *k(e)rt-s-n-'. In my view, it is also possible to assume that karza $=$ /kártsa/ goes back to a preform *kért-sōr (in which word-final *-r regularly was dropped after an unaccentuated ${ }^{*}-\bar{o}-$, cf. § 1.4.6.2.a), the morphologically expected nom.-acc.pl.-form of an $-r / n$-stem *kért-sr, *krt-sn-ós.
$\boldsymbol{k} \overline{\mathbf{a} s} \boldsymbol{a}, \boldsymbol{k} \boldsymbol{k}$ šma (interj.) 'look here, behold’: ka-a-ša (OS), ka-a-aš-ma (MS).
Anat. cognates: CLuw. zāuiui(n) (interj.) 'here, voici’ (za-a-ú-i,za-ú-i,za-a-ú-iin, za-ú-i-in).

PIE *kós $+=(m) a$

The interjections kāša and kāšma are identical in usage and often translated as 'look here, lo, behold', etc.. The exact formal relationship between the two forms is unclear, however. Often it has been thought that kāšma must derive from kāša and in fact is a syncopated variant of $k \bar{a} \check{s} a=m a$ (thus Puhvel HED 4: 118, followed by Melchert 1994a: 158). In my opinion, such instances of unmotivated syncopes must be regarded as unconvincing ad hoc solutions.
In this case it is of major importance to look at the chronological distribution of the forms $k \bar{a} \check{s} a$ and $k a ̄ s ̌ m a$. In OS texts, we only find $k a-a-s ̌ a(100 \%)$ and never $k a-a$ - $a s \check{-}-m a(0 \%)$. In MH/MS texts, we find $k a-a$-ša 89 times ( $86 \%$ ), and $k a-a$ - $a s ̌-$ ma 14 times ( $14 \%$ ). In NH texts, we find $k a-a$-aš-ma 14 times ( $87,5 \%$ ), and $k a-a$ ša 2 times $(12,5 \%)$. This means that $k a ̄ s ̌ a$ is the original form and that $k \bar{a} s ̌ m a ~ i s$ only starting to appear in MH times, taking over the position of $k \bar{a} s ̌ a$ in NH times. This replacement of $-a$ by $-m a$ from the MH period onwards, of course immediately reminds us of the distribution between the functionally equal adversative enclitic clause conjunctives $=a$ and $=m a$ 'but': in OS texts we find $C=a$ vs. $V=m a$, but this distribution has been given up from the MH period onwards: we then find $C=m a$ as well; in NH texts, $=m a$ has totally taken over the position of $=a$ (see at $=(m) a$ ). Comparing these chronological distributions, I cannot conclude otherwise than that $k \bar{a} \check{s} a$ should be analysed as $k \bar{a} \check{s}+=(m) a$. The OS texts show the particle $=(m) a$ as expected: after consonant we find the allomorph $=a$. In MH/MS texts, we see that the postconsonantal position is being taken over by $=m a$, and in NH texts the form $k \bar{a} \check{s}=m a$ is the most common one. The fact that the MH distribution $k \bar{a} \check{s}=a: k \bar{a} \check{s}=m a$, which is $86 \%: 14 \%$, does not match the overall MH distribution between $C=a: C=m a$, which is $40 \%: 60 \%$, may be caused by the fact that $k \bar{a} \bar{s}=a$ is by that time becoming a petrified formation that for some speakers is not longer analyzable as $k \bar{a} \check{s}=a$. This petrification is clear from its occasional NH occurrence, which would be unexplainable in view of the total absence of the adversative particle $=a$ in these texts. In my view, the first part, $k \bar{a} \bar{s}$, should be equated with the nom.sg.c. $k \bar{a} \bar{s}$ of the demonstrative pronoun $k \bar{a}-/ k \bar{u}-/ k i-$ 'this'.

All in all, the interjection $k \bar{a} s ̌ a$ and $k \bar{a} s ̌ m a ~ m u s t ~ b e ~ r e g a r d e d ~ a s ~ t w o ~$ chronologically different realizations of the formation $k \bar{a} \check{s}+=(m) a$. Originally, this formation must have meant 'this then!', which later on developed into 'look!, behold!'. For further etymology, see at $k \bar{a}-/ k i-/ k \bar{u}-$ and $=(m) a$.
The semantically similar interjection āšma (q.v.) similarly must reflect $* h_{1} o ́ s+$ $=(m) a$. The interpretation of CLuw. zāui is not fully clear. Nevertheless, the part $z \bar{a}$ - undoubtedly must be equated with the demonstrative $z \bar{a}$ - 'this' (see also under $k \bar{a}-/ k \bar{u}-/ k i-)$.
$\boldsymbol{k} \overline{\boldsymbol{a} s ̌ t}-$ / kišt- (c.) 'hunger, starvation, famine': nom.sg. ga-a-aš-z[a] (OS), $k a-a-a s ̌-$ $z a$ ( $\mathrm{OH} / \mathrm{MS}$ ), ka-aš-za (MH/MS), ga-aš-za (MH/MS), acc.sg. ka-a-aš-ta-an ( $\mathrm{OH} / \mathrm{MS}$ ), ga-aš-ta-an (OH/NS), ka-aš-ta-an (NS), dat.-loc.sg. ka-a-aš-ti (MH/MS), $k a-a \check{s}-t i(\mathrm{MH} / \mathrm{MS})$, abl. $k a-a \check{s}-t a-z a(\mathrm{NH})$, instr. $k a-a-a \check{s}-t i-t=a=m a-a n$ (MH/MS), dat.-loc.pl. ga-aš-ta-aš (OH/MS).
Derivatives: kištuunant- (adj.) 'hungry' (nom.sg.c. ki-iš-du-an-za (MH/NS), dat.-loc.sg. ki-iš-du-ua-an-ti (OH/NS), all.sg. ki-iš-du-ua-an-da (OH/NS), nom.pl.c. ki-iš-du-ưa-an-te-eš (MH/NS), acc.pl.c. ki-iš-du-uaa-a-an-du-uš (MH/MS)), kištant-, kaštant- (c.) 'hunger' (nom.sg. ka-aš-ta-an-za (NS), instr. ki-iš-ta-an-ti-it (OH/MS)), kištanziide/a- ${ }^{\text {tua(ri) }} \quad$ (IIIg) 'to suffer famine' (3sg.pret.midd. ki-iš-ta-an-zi-at-ta-at (OS)), see kišt- ${ }^{\text {ari }}{ }^{\text {(OL }}$ 'to perish, to be extinguished'.
Anat. cognates: HLuw. "*460" ást- 'hunger(?)' (abl.-instr. "*460" ${ }^{\prime}$-sa-ta-ri+i (ASSUR letter $e \S 10$ ), nom./acc.pl. *460-t[i]-zi (TELL TAYINAT 2 fr. 3 §ii)).

PAnat. *'gósT- ?
IE cognates: TochA kast, TochB kest 'hunger, famine'.
PIE *(') ${ }^{\prime}$ ós $d-; *^{\prime} g^{h} d$-uent-
See Puhvel HED 4: 121f. for attestations. The oldest texts (OS and MS) show predominantly spellings with plene $-a-$, which shows that the stem was $k a \bar{a} t-$. The derivatives of this noun show a stem kišt-, however. Usually, this kišt- is interpreted as reflecting $* \operatorname{Kes} T$-, an ablaut-variant with $* e$ besides $*$ Kost- as reflected in kāst-. On the basis of this assumption, e.g. Rieken (1999a: 132-3) concludes that the original paradigm of kāst must have show $*_{o / e}$-ablaut: *Kós-t-s / *Kós-t-m / *Kés-t-s. Nevertheless, it cannot be ruled out that kištreflects a zero-grade formation. In my opinion, it is likely that an initial sequence *KsT- would yield Hitt. /KisT-/, spelled kišt- (cf. § 1.4.4.4 for clusters with $-k$ and $-s$ - that receive the anaptyctic vowel $/ \dot{\mathbf{f}}$ /). This analysis would morphologically fit kištuuant- < *KsT-uent- and kištant- < *KsT-ent- better.
Because of the formal similarity, it is generally assumed that the verb kišt ${ }^{-\quad}{ }^{\text {rri }}$ 'to be extinguished, to perish' (q.v.) is cognate with kāšt-. This would mean that kištoriginally meant 'to be starved' or similar. Since this verb belongs to class IIIf (tukkāri-class), which goes back to zero-grade middles, it is likely that it reflects a zero-grade formation as well: *KsT-ó(ri). This is an additional argument for assuming that the stem kišt- of kištuuant- and kištant- reflects *KsT-.

The etymological interpretation of these words is difficult. Already since Friedrich (1924-25: 122), kāšt- is generally connected with TochA kaṣt, TochB kest 'hunger' that reflect $* K o s T$-. The combination of the Hittite and the Tocharian facts do not shed any light on the precise nature of the velar and the dental consonant. Melchert (1987a: 185) adduces HLuw. "460" $\dot{a}$-sa-ta-, which is found in ASSUR letter e $\S 10{ }^{\text {COR }}$ na-hu-ti-zi=wa/i=mu |za-zi IINFANS-ni-zi $\mid$ REL- $\left.i\right|^{" * * 460 "} \dot{a}^{-s} s-t a-r i+\left.i\right|^{\text {"COR" }}$ ta-wa/i-sa-ta-ti=ha |su-ti-ri+i-ti $\mid h a+r a / i-t a-t i=h a$ |PRAE-na IARHA-' ${ }^{\text {MORI }} w a / i-w a / i-r i+i-t a-t i$ 'These beloved' children of mine are nearly? dying of "460" ást- and of "COR" tawa/isa(n)t- and of sutiri- hara/ita-'. His interpretation of $\dot{a}-s a-t a$ - as 'hunger' is partly based on the interpretation of sign 460 as a combination of EDERE+MINUS, which indeed seems to fit 'hunger' (unfortunately, the only other attestation of this sign, nom./acc.pl. 460-t $[i]-z i$, is found in a broken context). If this is correct, then $\dot{a}-\mathrm{s} a-\mathrm{ta}$ - would show that we are dealing with PAnat. * $\left.{ }^{( }\right) o s T$-, since only lenis velars disappear in Luwian. Note however that Starke (1990: $1866^{613}$ ) rather compares HLuw. $\dot{a}-s a-t a-$ to CLuw. ašta- 'spell, curse', which seems to be followed by Melchert himself in 1993b: 37.

On the basis of the Tocharian verb käs- 'to be extinguished' (middle), which semantically is identical to Hitt. kiš̌- ${ }^{\bar{a}(r i)}$ 'to be extinguished', it has been thought that $k \bar{a} s ̌ t-$ and $k i \check{s} t-{ }^{\overline{a r} i}$ must show dental extensions of a root $* K e s$ - as found in TochAB käs-. Problematic, however, is the fact that TochAS käs- goes well with Skt. jásate 'to be exhausted,' Gr. $\sigma \beta$ ह́vvo $\mu$ 'to extinguish', Lith. gèsti 'to cease to burn, to go out', OCS ugasiti 'to extinguish' and Goth. qist 'destruction', which all point to a root $*(s) g^{w} e s$-, whereas an initial $* g^{w}$ - is not possible for the Hittite words. In order to solve this problem, e.g. Oettinger (1976b: 129) separates the Greek and the Gothic forms, and states that the other forms could reflect *ges-. Melchert (1994a: 120) goes even further and states that "TochA küs- also requires a plain velar /g/". This last statement is not valid however: the effect of labiovelars on surrounding vowels in Tocharian is far from clear. With this *gesas root, it is thought that Hitt. kāšst- and TochA kaṣt, TochB kest reflect a $t$-stemnoun *gos-t- 'hunger'.

In my view, this interpretation cannot be upheld. I do not see how it is possible that this nominal $t$-suffix ends up in the Hittite verb kišt- ${ }_{-}{ }^{\bar{r} i}$. We would expect that a verbal derivative of the noun $k \bar{a} s ̌ t$ - would retain the vocalism of the noun, would show a derivational suffix (e.g. *-ie/o-) and would be semantically more close to the noun (e.g. 'to hunger out'). In my opinion, if kā̄št- and kišt- ${ }^{\overline{a r} i}$ are cognate (which is formally likely), they can only be regarded as showing the same root, which then must be $* K e s T$ - 'to starve'. Note that the whole idea of deriving käst-
from "*ges-" 'to extinguish' is based on the assumption that TochA kaṣt, TochB kest 'hunger' and TochAB käs- 'to be extinguished' are cognate, while within Tocharian there is no indication (semantically nor formally) that these words belong together.
All in all, I assume that Hitt. kāšt- 'hunger' (with derivatives kištuuant'hungry' and kištant- 'hunger') is related to kišt- ${ }^{\text {ari }}$ 'to be extinguished' and that they reflect $* K o s T$ - and KsT-óri respectively, derived from a root $* K e s T$ - 'to starve'. If HLuw. "460" $a$-sa-ta- indeed denotes 'hunger', it would imply a PAnat. reconstruction ${ }^{*}(\dot{g}) o s T-$. The only known outer-Anatolian cognate is TochA kast, TochB kest 'hunger', which reflect $* K o s T$-. For the PIE reconstruction, it is of importance that PAnat. $*_{g}^{\left.()_{g}\right)}$ can reflect PIE $*_{g}^{(\cdot)}$ as well as $*^{(\stackrel{\prime}{g}}$. Although the attested forms do not shed any light on the nature of the PIE dental (fortis, lenis or glottalized), I think that reconstructing $* d$ is best in view of the absence of PIE verbal roots that end in ${ }^{*}$-st- and ${ }^{*}$-sd ${ }^{h}$ - (cf. LIV ${ }^{2}$; for ${ }^{*}$-sd-compare *pesd- 'to fart', *g'eisd- 'to startle', * $h_{2}$ eisd- 'to honour'). If this is correct, then the initial consonant should have been $* g^{h}$ - (PIE roots never contain two glottalic stops). I therefore (tentatively) reconstruct a verbal root $*^{\prime} g^{\prime h} e s d$ - 'to starve', which was the basis for a root noun *'gh'ósd- 'starvation, hunger' (> Hitt. kāšt-, TochA kaṣt, TochB kest), an adjective *'ghsd-uént- 'starving' (> Hitt. kištuuant-) and the middle verb ${ }^{\prime}{ }_{g}^{\prime \prime h} s d-o ́ o$ 'to be starved $>$ to be extinguished' ( $>$ Hitt. kišt $-{ }^{\bar{a} r i}$ ).
${ }^{(D U G)}$ kattakuranta- (c.) a libation vessel: nom.sg. kat-ta-ku-ra-an-ta-aš, acc.sg. kat-ta-ku-ra-an-ta-an, instr. kat-ta-ku-ra-an-te-et, nom.pl. kat-ta-ku-ra-an-du-uš.

$$
\text { PIE } * k m t o+* k^{w} r \text {-ent- }
$$

See Puhvel HED 4: 123-4 for attestations and etymology: this word undoubtedly is a compound of katta- and kurant-, thus originally meaning something like 'under-cut'. See at $k a t t a$ and $k u e r-{ }^{z i} / k u r$ - for further etymologies.

GIŠkattaluzzi- (n.) 'threshold'; kattera- kattaluzzi- 'doorstep'; šarāzzi(ial)-kattaluzzi- ‘lintel': nom.-acc.sg. kat-ta-lu-uz-zi, gen.sg. kat-ta-lu-uz-zi-iaa-aš, dat.loc.sg. kat-ta-lu-uz-zi.

Anat. cognates: CLuw. ${ }^{\text {GIš }} \boldsymbol{k a t t a l u z z i - ~ ( n . ) ~ ' t h r e s h o l d ' ~ ( n o m . - a c c . s g . ~ k a t - t a - l u - ~}$ $u z-[z i]-s \check{a})$.

PIE *kmto + *lut-i-
See Puhvel HED 4: 124-5 for attestations. This word has received many etymologies (see the overview in Puhvel), none of which can be judged as
evident. In my view, we should interpret this word as katta 'alongside' + luzzi-, the assibilated variant of the oblique stem lutti- as found in the paradigm of luttāi/ lutti- 'window'. Whereas in luttāi- / lutti-, which reflects *lut-(o) i-, the -tt- was generalized throughout the paradigm on the basis of luttāi, in *katta-lutti- the *t did assibilate in front of $* i$ (which shows that at time the word was not analyzed as katta 'alongside' + lutti- 'window' anymore). See at katta and luttāi / lutti- for further etymology.

Starke (1990: 214) regards the CLuwian word, which he cites as kattaluzzit-, as a loanword from Hittite, which indeed is necessary to explain the $-z$-.
$\boldsymbol{k a t t a}$ (adv., prev.) 'downwards', (postpos. + gen.) '(along) with, alongside'. (Sum. GAM(-ta)): kat-ta (OS), ka-at-ta (KUB 20.4 vi 4 (OH/NS), KUB 20.43, 9 ( $\mathrm{OH} / \mathrm{NS}$ )).

Derivatives: kattan (adv.) 'below, underneath' (Sum. GAM-an; kat-ta-an (OS)), katti= (adv. with encl. poss. pron.) '(along) with' (+ 1sg.: kat-ti=mi (OS, often), kat-ti=m-mi (KBo 3.22 rev. 77 (OS)), kat-te=mi (KBo 3.38 rev. 21 $(\mathrm{OH} / \mathrm{NS})$ ); + 2sg.: kat-ti=ti (MH/MS, often), kat-ti-i=t-ti (KUB 20.7, 13 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 7.5 i 25 (MH/NS)); + 3sg.: kat-ti-i=š-ši (OS, often), kat-ti=ši (KUB 30.10 i 4 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 7.5 iv 4 (MH/NS)), kat-ti-e=š-ši (KUB 7.41+ ii 24 (MH/NS), KUB 20.52 i 27 (MH/NS), KUB 20.83 iii 9 (NS)), kat-te-e $=s ̌-s ̌ i$ (KBo 3.38 rev. 32 ( $\mathrm{OH} / \mathrm{NS}$ )); + 1pl.: kat-ti=šu-mi (HKM 57 rev. 21 (MH/MS)), kat-te-e=š-šum[-...] (KBo 13.110 rev. 2 (NS)); +2/3pl.: kat-ti-i=š-mi (OS, often), $k a-a t-t i-i=\check{s}-m i(\mathrm{KBo} 30.36 \mathrm{rev} .4$ (OS), kat-ti-e=š-mi (KBo 10.25 vi 14 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 11.16 iv 10 ( $\mathrm{OH} / \mathrm{NS}$ ))), kattanda (adv.) 'downwards, along' (kat-ta-an-da (MH/MS), kat-ta-an-ta (MH/MS)).

Anat. cognates: HLuw. kata (adv.) 'down, under' (INFRA-ta, INFRA-tá), $\boldsymbol{k a t a n t a}$ (adv.) 'below' (INFRA-tá-ta (AKSARAY §6)); Lyd. kat- (prev.) '?', $\boldsymbol{k a} \boldsymbol{\tau}$ - (prev.) '?'.
IE cognates: Gr. katá 'down, along, according to, against', OIr. cēt, OWe. cant 'with', Lat. cum 'with', etc.

PIE * $k^{\prime \prime} m t$ -
The semantics as given above describe the OH situation as established by Starke (1977: 131-5, 181-7), namely that we must distinguish between a "locatival adverb" kattan 'below, underneath', a "terminative adverb" katta 'downwards', a "locatival postposition (+ genitive)" katta '(along) with' and a "locatival adverb ( + enclitic personal pronouns)" katti $=$ '(along) with'. From the MH period onwards the distinction between katta and kattan is being given up.

Since Neu (1974a: 67) it is generally assumed that katta, kattan and katti are petrified all.sg., acc.sg. and dat.-loc.sg. respectively of an original nominal stem katt-. Already Bugge apud Knudtzon (1902: 59) saw katta as cognate of Gr. katá 'downwards', which, together with OIr. cét 'with', OWe. cant 'with' clearly must belong with Lat. cum 'with', etc. and reflect *' $k^{\prime} m t$-. Nevertheless, there has been some discussion on whether or not this etymology is correct, especially because of the absence of a reflex of the $*-m$ - in $* k^{\prime} m t->k a t t-$. As Melchert states (1994a: 126): "the idea the syllabic $*_{m}$ regularly loses its nasalization before another consonant is contradicted by āntara-" 'blue', which is derived from *md'ro-. Other examples Melchert (1994a: 125) gives for the assumption that $* N$ keeps its nasalization are $*_{s m n}$ - 'to disappear, to withdraw' > šamn- (see šamen- ${ }^{z i} /$ šamn-) and $*_{n s \text { - ' }}$ us' > anz-. However, it is not imperative that a preform $*{ }^{\prime} k m t$ - would behave similar as a sequence $* \# N C$ - (like in antara- and anzāš) or $* C N N V$ (like in šamn-). On the contrary, if kappi- / kappai- 'little' indeed reflects *kmb ${ }^{h}-i$-, it would show that a sequence $* T N T->$ Hitt. TaT (in which $T=$ any stop), and that a development $* k^{\prime} m t->$ Hitt. katt- is in perfect order.
All in all, I reconstruct katta as $*^{\prime} k^{\prime} m t-o$, kattan as $*^{\prime} k^{\prime} m t$-om and katti $=$ as $*^{\prime} k^{\prime} m t-$ (e) $i$. The absence of accentuation (no plene vowels) is explained by the establishment that in poetic verse local adverbs and postpositions are unstressed (cf. Melchert 1998a: 485).
kattera- (adj.) 'lower, inferior; infernal; farther along' (Sum. GAM-ra-): nom.sg.c. kat-te-er-ra-aš (KUB 17.14 iv 17 (NS)), acc.sg.c. kat-te-ra-an (KBo 39.280 iii 11 (NH)), nom.-acc.sg.n. kat-te-ra (Bo 3078 ii 9 (NS)), kat-te-er-ra (KBo 13.104 + Bo 6464 ii 7 (NS)), dat.-loc.sg. kat-te-ri (KBo 4.2 i 30, 35, 43 ( $\mathrm{OH} / \mathrm{NS}$ )), kat-te-er-ri (KBo 10.24 iv 31 ( $\mathrm{OH} / \mathrm{NS}$ )), kat-ti-ir-ri (KUB 26.9 i 6 (MH/NS)), kat-ti-ir-r[i?] (KUB 33.115 ii 6 (MH/NS)), all.sg. kat-te-ra (IBoT 1.36 iv 15 (MH/MS)), kat-te-er-ra (KUB 10.3 ii 23 (NS), KBo 6.29 ii 12 (NH), KUB 36.18 ii 18 (MH/NS)), loc.sg. kat-te-e-er (KUB 30.32 i 11 (MS) // KBo 18.190 obv. 6 (fr.) (NS)), abl. kat-te-ra-az (Bo 3617 i 7 (NS), KBo 15.24 ii 32 (MH/NS)), kat-te-er-ra-az (KBo 4.9 iv 34 (NS), KUB 2.10d, 2 (fr.) (NS)), kat-te-er-ra-za (KBo 13.104 + Bo 6464 ii 3 (NS)), kat-ti-ir-ra-az (KBo 10.24 iv 20 ( $\mathrm{OH} / \mathrm{NS}$ )), nom.pl.c. kat-te-re-e-eš (KUB 34.90, 3 (NS)), kat-te-re-eš (Bo 3617 ii 9 (NS)), kat-te-er-ri-iš (KBo 13.104 + Bo 6464 ii 6 (NS)), kat-te-ri-uš (Bo 3078 ii 9 (NS)), kat-te-er-ru-uš (KUB 17.14 rev. 21 (NS)), kat-ti-ir-ru-uš (KBo 15.9 i 19 (NS)), kat-te-ra-aš (KUB 6.31 iv 6 (NS)), dat.-loc.pl. kat-te-e-ra-aš (KBo 32.19 ii 38 (MH/MS)).

Derivatives: kattera (adv.) 'below' (kat-te-ra (KUB 7.1 ii 23 ( $\mathrm{OH} / \mathrm{NS}$ ))), $\boldsymbol{k a t t e r a h h}^{\text {i }}$ (IIb) 'to lower, to make inferior, to dismiss' (3sg.pres.act. kat-te-ra-ah-hi (KUB 13.2 iii 27 (MH/NS)), 2pl.prs.act. kat-te-er-ra-ah-te-e-ni (KUB 13.20 i 35 (MH/NS)), 3sg.pret.act. kat-te-er-ra-ah-ta (KUB 1.1 iii 20 (NH)), 3pl.pret.act. kat-te-er-ra-ah-he-er (KUB $1.4+674 / \mathrm{v}$ iii 43 (NH), KUB 1.10 iii 15 (NH)); impf. kat-te-er-ra-ah-hi-eš-ke/a- (KUB 31.66 iii 16 (NH))), katterezzi(adj.) 'lower, inferior' (dat.-loc.sg. kat-te-re[-ez-z]i (KBo 24.71, 11 (NS))).

$$
\text { PIE * } k^{\prime \prime} m t \text {-éro- }
$$

See e.g. Puhvel HED 4: 131f. for attestations. The two MS attestations kat-te-ra and kat-te-e-ra-aš clearly show that the single spelling of $-r$ - is original. The fact that in NS texts we often come across the spelling kat-te-er-r ${ }^{\circ}$, with geminate $-r r-$, must be due to the occasional NH gemination of intervocalic resonants as described by Melchert 1994a: 165. The few forms that are spelled with the sign TI (kat-ti-ir-r ${ }^{\circ}$ ) probably are due to the NH mixing up of the signs TE and TI (cf. Melchert 1984a: 137). Moreover, the MS attestation kat-te-e-ra- with plene eclearly points to a phonological interpretation /katéra-/.
It is in my view evident that this word reflects * $k^{\prime \prime} m t$-éro-, a derivative of the stem katt-, for which see katta.

## katti=: see at katta

$\boldsymbol{k a t t u}$ - (n.) 'enmity, strife': nom.-acc.sg.n. $k a d-d u-u=\check{s}-m i-i t(\mathrm{OH} / \mathrm{NS})$.
Derivatives: $\boldsymbol{k a t t u и a e -}{ }^{z i}$ (Ic2) 'to be aggrieved(?)' (3sg.pret.act. kad-du-u-ua-i[t] ( $\mathrm{OH} / \mathrm{NS}$ ), kad-du-ua-i-i[t] (OH/NS)), kattaūātar / kattaüann- (n.) ‘aggrievedness, enmity’ (nom.-acc.sg. kat-ta-ua-a-tar (OH/NS), kat-ta-ua-tar ( $\mathrm{OH} / \mathrm{MS}$ ), gen.sg. kat-ta-ua-an-na-aš (OH/NS)), kattauannalli- (adj.) 'vengeful' (nom.sg.c. kat-ta-una-<an->na-al-li-iš (MH/NS)).
Anat. cognates: CLuw. kattauatnalli- (adj.; c.) 'vengeful; plaintiff' (nom.sg.c. kat-ta-ua-at-na<-al>li-iš, acc.sg.c. kat-ta-ua-at-na-al-li-in, kat-ta-ua-at-na-al-li$e n$, nom.pl.c. [(kat-ta-ua-at-na-a)]l-li-in-zi, acc.pl.c. kat-ta-ua-at-na-al-li-in-za).

PIE *k'h $h_{2} e t-(e) u$ - ?
See Puhvel HED 4: 138f. for attestations. Although the basic noun kattu- is only attested once, on the basis of the derivatives kattuuae- and kattauatar we can set up an adjective *kattu- / kattau- 'aggrieved, inimical'. Laroche (1965: 51) compared these words to Gr. кótos 'spite, anger', which is usually connected with OIr. cath 'strife, battle' (which reflects *katu- as in the personal names Gaul.

Catu-riges, OHG Hadu-brand), MHG hader 'fight, struggle' and Skt. śátru'enemy'. These words point to a root *k' $h_{2}$ et- (laryngeal needed to explain OIr. $-a$-), which would mean that Hitt. kattu- / kattau- reflects *k'h2et-eu-. Note that this implies that CLuw. kattauatnalli- cannot be genuinely Luwian, since $* k^{\prime}>$ Luw. $z-$, and therefore must be an adaptation of the Hittite word.
${ }^{\text {GADA }}$ kazzarnul- (n.) a certain cloth: nom.-acc.sg. gaz-za-ar-nu-ú-ul (MH/MS), $k a$ $a z-z a-a r-n u-u l$ (MH/MS), gaz-za-ar-nu-ul (MH/NS), ka-za-ar-nu-ul, gen.sg.(?) [g]az-za-ar-nu-ul-la-ǎ̌=x[...] (KBo 47.28 obv. 8 (NS)), dat.-loc.sg. ka-az-za-ar$n u-u l-l[i]$ (MH/MS), gaz-za-ar-nu-li (NS), instr. gaz-za-ar-nu-ú-li-it (NS), nom.acc.pl. gaz-za-ar-nu-ul-la (NS), ka-az-za-ar-nu-ul-li (MH/NS).

See Puhvel HED 4: 141 and Rieken 1999a: 467 for attestation. The word usually occurs with the determinative GADA and therefore must denote some cloth. Puhvel just states that this word does not have an etymology, but Rieken treats this word rather extensively. She translates the word as "Tuch zum Abtrocknen"", although she also states that "[e]ine inhaltliche Spezifizierung der Tuchbezeichnung anhand der Belege ist kaum möglich". According to her, the word must be a derivative in -ul- (< PIE *-ul) from a verb *kazzarnu- (for the formation she compares the hapaxes dalugnul- and parganul- (see at daluki- / dalugai- and parkiie/a- ${ }^{z i}$ respectively)). She states that the root kazzar-could be connected with *k'sěro- (Gr. گ́póv 'fast, dry land', Lat. serēscunt 'they dry', OHG serawēn 'to become dry'). As a parallel for the development $* \# k$ 's- $>\# k^{t} s$ she gives zakkar- I'skar/ < *skōr. As I have argued at šakkar, zakkar / šakn-, the initial cluster $z k$ - from zakkar is not phonetically regular. Moreover, under the lemma kāšt- / kišt- we see that *Kst- yields Hitt. kišt-/kist-/. All in all, I find Rieken's assumption that kazzarnul- reflects *k'ser-nu-l- phonetically improbable. Moreover, since the exact meaning of this noun cannot be established, this etymology lacks any semantic background as well.
${ }^{(U Z U)} \boldsymbol{g e n u}$ - / ganu- (n. > c.) 'knee': nom.-acc.sg. ge-e-nu (OH/MS), ge-nu (OH/NS), acc.sg.c. ge-nu-un (KBo 20.73 i 2 (MS), KUB 9.34 iii 37 (NS)), ke-nuun (KUB 9.34 iii 34 (NS)), ge-е-пи-иа-ап (Bo 4463, 13 (NS)), gen.sg. ge-nu-иа$a \check{s}$ (OS), ge-e-nu-ua-aš (OH/NS), dat.-loc.sg. ge-nu-u=š-ši (MH/NS), ge-nu-ūa (NS), abl. ge-e-nu-ua-za (NH), ge-nu-ua-az (OH/NS), instr. [g]e-nu-t=a-at=kán (OS), ge-nu-ut (OH/NS), ga-nu-ut (OH/MS), nom.-acc.pl.n. ge-е-пи-ua (NH), ge-nu-ua (MH/NS), acc.pl.c. ge-e-nu-uš=šu-uš (NS), ge-nu-uš=šu-uš (NH), dat.-
loc.pl. ge-nu-aš (MS), ge-e-nu-ua-aš (OH/NS), ge-nu-ua-aš (OH/NS), ka-nu-ua$a \check{s}$ (NS).
Derivatives: genuššariiela- ${ }^{z i}$, kanuššariielaz- ${ }^{\text {i }}$ (Ic1) 'to kneel' (3sg.pres.act. ge$n u-u s ̌$-ša-ri-az-zi (NS), ge-nu-uš-ša-ri-ez-zi (NS), 3pl.pres.act. ge-e-nu-uš-ra-a$a n-z i$ (MS); part. ge-nu-uš-ša-ri-ía-an-t-, ke-nu-uš-ša-ri-ía-an-t-, ge-nu-šar-ri-an-$t$-, $k a-n u-u s ̌-s ̌ a-r i-i a-a n-t-(N S), k a-n u-s ̌ a-r i-i a-a n-t-(M S) ; ~ v e r b . n o u n ~ g e-n u-u s ̌-r i-$ ua-ar (NS); impf. ge-nu-uš-ša-ri-eš-ke/a-), genušrinu- ${ }^{z i}$ (Ib2) 'to make kneel' (3sg.pres.act. ge-nu-uš-ri-nu-zi (MS)).

IE cognates: Skt. jắnu-, Gr. $\gamma o ́ v v$, TochA kanw-, Lat. genū, Goth. kniu 'knee'.
PIE *ǵénu- / *ǵn-eu-

See Puhvel HED 4: 146f. for attestations. Already since Hrozný (1919: 184), this word is connected with the words for 'knee' in the other IE languages. These words show a few ablaut variants: Skt. jánu-, Gr. үóvv, TochA kanw-, TochB keni reflect *ǵón-u-; Lat. genū reflects *gén-u-; and Goth. kniu, ON kné, OE cnēow < *ǵn-eu-. Because in Hittite the signs GI and KI can be read gi and ge and $k i$ and $k e$ respectively, the spellings GI-e-nu-, GI-nu- and KI-nu- can all be interpreted as /kénu-/ < *ǵénu-. The spellings $k a-n u$ - and ga-nu- are sometimes interpreted as reflecting *ǵónu-, but in my view this is not very likely. We would expect that $* o ́>$ Hitt. $\bar{a}$, spelled $* * k a-a-n u$-. I therefore assume that $g a-n u$ - and $k a-n u$ - represent $/ \mathrm{knu}-/<{ }^{\prime} g n-(e) u$-. Such a zero-grade formation is not only visible in the Germanic forms, but also in e.g. Skt. jñu- (in compounds), Av. dat.abl.pl. žnubiiō and Gr. dat.pl. $\gamma v v \sigma i ́, ~ \gamma v v ́ \xi ~ ‘ o n ~ k n e e s ’ . ~$
With these three ablaut grades attested in the IE languages, it is difficult to reconstruct a PIE paradigm. Beekes (1995: 188) states that on the basis of the $e$ and o-grade, we should reconstruct a static paradigm nom.-acc. *ǵónu, gen. *génu-s and that the forms that show *ǵn-eu- are secondary. Nevertheless, the Hittite forms seem to point to a paradigm *gén-u, *ǵn-éu-s.
The verb kanuššariie/a- ${ }^{z i}$ must be compared to e.g. nahš̌ariie/a- ${ }^{z i}$ 'to be afraid' (*neh $2_{2}$-sr-ie/o-) and possibly šešariiela- ${ }^{z i}$ 'to sieve' ( ${ }^{*}$ seh $_{1}$-sr-ielo-? ), and reflects *ǵn-eu-sr-ie/o- or *ǵn-u-sr-ie/o- (compare Rieken 1999a: 276). The e-grade form genuššariie/a-must be secondary to the noun.
$\boldsymbol{k e n u}^{-{ }^{z}}$ : see $k \overline{i n} u^{-{ }^{z}}$
${ }^{(U Z U)}$ genzu- (n.) 'abdomen, lap’: nom.-acc.sg. ge-en-zu (OH/MS), ke-e-en-zu ( $\mathrm{OH} / \mathrm{NS}$ ), ge-en-zu-ú (OH/NS), ge-e-e[n-z]u (NS), gi-in-zu (1x, NH), gi-im-zu $(1 \mathrm{x}, \mathrm{NH})$, abl. ge-en-zu-[(ua-)az], instr. [ge-]en-zu-i-t=a-at=kán (KBo 30.30 rev.

7 (OS)), nom.-acc.pl. ge-en-zu-u-uূa (OH/NS), dat.-loc.pl. ge-en-zu-ua-aš (MH/MS, OH/NS).

Derivatives: genzuие/а- ${ }^{z i}$, gепзииае- ${ }^{z i}$ (Ic1 / Ic2) 'to treat gently, to be compassionate (towards), to be kind (to)' (2sg.pres.act. ge-en-zu-ua-i-ši (OH/NS), ge-en-zu-ua-ši (OH/MS), 3sg.pret.act. ge-en-zu-ua-it (OH/NS), 2sg.imp.act. ge-en-zu-ua-i (NH)), genzuuala- (adj.) 'kindhearted' (nom.sg.c. ge-en-zu-ua-la-aš (NH), gi-in-zu-úa-la-aš (MH/NS)).

PIE *ǵenh $h_{l}$-Su-
See Puhvel HED 4: 154f. for attestations. The word denotes a body part, which can be identified with the lower abdomen on the basis of its place in lists of body parts. Besides its literal meaning, it also occurs metaphorically in expressions like genzu $d \bar{a}^{-}{ }^{i} / d$ - 'to take pity on', genzu har $(k){ }_{-}{ }^{z}$ 'to have fondness for', genzu pai- ${ }^{i}$ / pi- 'to extend kindness', but also in its derivatives genzuuae- ${ }^{z i}$ 'to be gentle with' and genzuuala- 'kindhearted'. The literal meaning 'lower abdomen' ('*area of the loins'?) and the metaphoric meaning 'kindness' seem to fit the PIE root *ǵenh $l^{-}$'to beget, to procreate' (Skt. $j a n^{i}-$ 'to procreate, Gr. $\gamma$ í $\gamma v o \mu a t$ 'to come into being', Lat. nātus 'born', etc.; for the meaning 'kindness', cf. Lat. gentilis 'gentle', ModEng. kind). It therefore is quite generally assumed that genzureflects *'ǵenh $h_{1}$-su- (cf. Skt. ráṃsu- 'enjoyable’, dhákṣu- 'burning', but also Hitt. tepšu- < * $d^{h} e b^{h}-$ su-), but details are unclear. The biggest question is how the cluster -nz- came about, especially in comparison to the fact that $* V n s V>$ Hitt. $V s \check{s} V$. For instance, Eichner (1973a: 55, 86) therefore assumes that in *ǵenh ${ }_{l}$-suthe laryngeal was vocalized to *genasu- and that this vocalized laryngeal only got syncopated after the assimilation of $*-n s$ - to $-s \check{s}$-. The secondary cluster $*-n s$ - then yielded $-n z$-. Problematic however is that neither vocalization of laryngeals (cf. Melchert 1994a: 65) nor syncope of vowels is a regular phonetic development in Hittite. Rieken (1999a: 220-1) remarks that Skt. dhákșu- is remodelled after an ostem, while ráṃsu- goes back to an IE $s$-stem *rém-e/os- (although opinions differ on this, cf. Mayrhofer 1986-2002: 2.428). In the same way genzu- then could be derived from the $s$-stem *g'énh $h_{1}$-e/os- (Gr. $\gamma$ र́voc, Lat. genus). According to Rieken, "[d]ie Bewahrung des Nasals vor dem Sibilanten und die Epenthese van $t$ in genzu-, die der normalen Entwicklung widersprechen, erklären sich aus dem Bedürfnis, die Morphemgrenzen deutlich zu bewahren". This is rather ad $h o c$, however. In my view, the solution is quite simple: just as ${ }^{*}-m s$ - and ${ }^{*}-m h_{l} s$ behaved differently when in intervocalic position (*VmsV>V̌̌šV (*h2emsu-> haššu-) whereas *Vmh $\left.s V>V n s ̌ V\left(* h_{2} o ́ m h_{l} s e i>\bar{a} n s ̌ i\right)\right)$, so did $-n s-$ and $-n h_{l} s-$
behave differently as well. The first one assimilated to $-\check{s} \check{s}$-, whereas $* V n h_{l} s V$ yielded $V n z V$ (for this outcome compare $* \mathrm{CnsV}>\mathrm{CanzV}$ and $* \mathrm{CmsV}>\mathrm{Canz} V$ ).

The preservation of $-e$ - is quite remarkable. Apparently, genzu- < *ǵenh $s u$ - did not participate in the sound law $* e R C C>a R C C$, nor in the sound law $* e n T>$ anT. This means that we have to set up the following relative chronology: (1) *enT>anT; (2) *Vnh $s V>V n z V$; (3) $* e R C C>a R C C$.
${ }^{(\mathbf{U Z U})} \boldsymbol{k e r} / \boldsymbol{k a r d}(\boldsymbol{i})-(\mathrm{n}$.$) 'heart; center, core' (Sum. ŠÀ, Akk. LIBBU): nom.-acc.sg.$ ke-er (MH/MS, OH/NS), ge-er (MS), gen.sg. kar-ti-ịa-aš (MH/MS), kar-di-i्टa-aš (OH/NS), kar-di-aš (OH/NS), dat.-loc.sg. kar-di (OS), kar-ti (OS), kar-ti-i (NH), $k a r-d i-i$ all.sg. kar-ta (MS), kar-da (OH/NS), erg.sg. kar-di-an-za (OS or MS), abl. kar-ta-az (OS), instr. kar-di-it (OH/MS).

Derivatives: see šallakarta- and kardimiìe/a- ${ }^{z i}$.
Anat. cognates: Pal. kārt- 'heart' (dat.-loc.sg. ka-a-ar-ti); CLuw. ${ }^{\text {UZU }} \boldsymbol{z} \boldsymbol{a} \boldsymbol{a} r \boldsymbol{t}-$ 'heart' (nom.-acc.sg. za-a-ar-za, dat.-loc.sg. za-ar-ti, abl.-instr. UZUŠÀ-ti, case? $z a-a r-t a)$; HLuw. ${ }^{\text {COR }} \boldsymbol{z a r t ( i ) - ~ ( n . ) ~ ' h e a r t ' ~ ( n o m . - a c c . s g . ~ / t ' a r t = s a / ~ z a + r a / i - z a ~}$ (KULULU 5 §11), gen.sg. /t ${ }^{\mathrm{s} a r t i a s / ~}{ }^{\text {COR }} z a+r a / i-t i-i a-s a ́ ~(A L E P P O ~ 3 ~ § 1), ~ d a t .-~$ loc.sg. /t ${ }^{\mathrm{s}}$ arti/ $z a+r a / i-t i$ (KARABURUN §12), gen.adj.acc.sg.c. /t ${ }^{\mathrm{s} a r t a s i n / ~}$ $z a+r a / i-t a-s i-n a$ (KÖRKÜN §11)), zartiiala 'to wish' (3sg.pres.act. /t'artiti/ $z a+r a / i-t i-t i-i(-i)$ (KARABURUN §7, §9, TELL AHMAR 2 §13, SULTANHAN §46), 3sg.pret.act. /t ${ }^{\mathrm{s} a r t i t a / ~}{ }^{\mathrm{COR}} z a+r a / i-t i-i-t a$ (TELL AHMAR 1 §20)).

PAnat. *k'ēr, *k'rdios, *k'rd-'
IE cognates: Gr. $\kappa \tilde{\eta} \rho$, Arm. sirt, OCS srъdbce, Lith. širdis, OPr. seyr, Lat. cor, OIr. cride, Skt. hārdi/ hrd-, hrdaya- 'heart'

PIE *kērr, *k'rd-i-ós, *k'rd-'
See Puhvel HED 4: 189f. and Rieken 1999a: 52f. for attestations. Some forms need comments. The nom.-acc.sg.-form is spelled with the signs KI, GI and IR that can stand for $k i$ and $k e, g i$ and $g e$ and ir and er respectively. This means that both a phonological interpretation /kir/ and /ker/ is possible. Since this form alternates with $\operatorname{kard}(i)-$, I have chosen to read it as /ker/ because the vowel $-e$ - is expected in such an alternation. Besides the well-attested gen.sg. /krdias/, Rieken (l.c.) also cites a gen.sg. kartaš on the basis of $k a r^{\prime}-t a-a \check{s}-m a$ in the following context:

## VBoT 58 i


(13) DUMU ${ }^{\mathrm{MES}} k a r$ !-ta-aš-ma hal-ki-uš [..]x ti-in-nu-zi.

In the break in line 13 she reads $[U-U] L$ and concludes that we then need an adversative $=m a\left(\right.$ so $\left.k a r{ }^{\prime}-t a-a \check{s}=m a\right)$ in order to translate "Gräser, Länder, Rinder, Schafe, Hunde (und) Schweine lähmte er, aber die Söhne des Herzens und das Getreide lähmt er nicht". $\mathrm{HW}^{2} \mathrm{H}: 54$ reads $\left[{ }^{[\mathrm{I}}\right]^{\check{\Sigma}}[\mathrm{GES}] \mathrm{T}$ IN in the break, however, and interprets kar'-ta-aš-ma as karta=šma, translating "Die Gräser/Kräuter der Länder/Landstriche, die Rinder, Schafe, Hunde (und) Schwei[ne] läh[mt sie]; die Kinder in ihrem "Herzen", die Getreide (und) den [We]in(stock)? ... lähmt sie". All in all, I judge this passage as too unclear to base an otherwise unattested gen.sg. kartaš on.
In Luwian, we find zart(i)- 'heart' (note that nom.-acc.sg. CLuw. zārza and HLuw. $z a+r a / i-z a$ have to be analysed as /zārt-sa/, showing the secondary neuter suffix -sa attached to a stem zart- (and not as zar + -sa, cf. uār-ša 'water')). Apparently, the form that corresponds to Hitt. nom.-acc.sg. ker (we would expect Luw. ${ }^{* *}$ zir) was replaced by the oblique stem. The similarity between Hitt.
 PAnat. *krdios. All in all, we can reconstruct a PAnat. paradigm * $k^{\prime} \bar{e} r$, $k^{k} r d i o s$, * ḱrd-

Already since Hrozný (1922b: $69^{1}$ ), Hitt. ker / kard(i)- has been connected to other IE words for 'heart' like Gr. k $\tilde{\rho} \rho$, Lat. cor, etc. The nominative-accusative must be reconstructed as *kēr on the basis of Gr. кñ $\rho$, Skt. hārdi, Arm. sirt, OPr. seyr. The PAnat. gen.sg. *'krdios can be compared to $i$-extensions as visible in Gr . кар $\delta$ í 'heart' and Skt. hrdaya-, Av. zaradaiia-
The interpretation of the word ke-er-ti-it-ta in KBo 3.21 iii (11) ${ }^{\text {d }}$ IM-aš ke-er-ti-it-ta mi-nu-an-du li-iš-ši=ma-a=t-ta ua-ar-aš-nu-an-du has been matter of debate. Puhvel (o.c.: 190) analyses kirti=tta and interprets kirti as a nom.-acc.sg.variant besides ker, which, he assumes, may be "a variant reinforced by the Hittite proliferation of $i$-stems in terms for body parts (e.g. arki-, hahri-, lišši...)". He translates the sentence in question as 'may they soothe thy heart [partitive apposition], and may they calm thy liver'. This interpretation is rather ad hoc and unsatisfactory. Eichner (1979a: $45^{9}$ ) analyses the form as $k i r=t i=t t a$, showing a suffixless loc.sg. kir followed by the enclitic possessive pronoun $=t t i$. He therefore translates 'In deinem Herzen sollen sie dich milde stimmen, in deiner Leber (d.h. Sinn, Gemüt) aber besänftigen!'. However, the assumption that the second person is expressed by using two enclitic particles (the possessive pronominal enclitic $=t t i-$ and the enclitic pronoun $=t t a$ ) is not very appealing. Neu (1980a: 31-33) analyses the form as kerti=tta and commends that kerti
should be taken as a loc.sg. that reflects *kérd-i. This analysis, kerti=tta, certainly fits the parallel word-chain lišši=ma=tta best. Rieken (1999a: 53) rejects Neu's interpretation, however, because she does not believe that *kérd- $i$ would yield Hitt. kerti: according to her *éRC >aRC, and thus *kérd-i>karti. The fact that *eRCV remains $e R C V$ is clearly visible in e.g * $k^{w}$ érmi $>$ kuermi, however, and therefore Neu's interpretation is phonetically regular as well. This means that kerti would be the regular outcome of the PIE loc.sg. *kérd-i, whereas Hitt. dat.loc.sg. kartı̄ goes back to the PIE dat.sg. *k'rd-éi. Note that Puhvel also cites a dat.-loc.sg. girdi on the basis of KUB 53.50 i (3) URU-aš gir-di 'in the heart of the city', but this is problematic in view of the fact that this would be the only instance known to me where the sign GÌR has to be read phonetically.
$\boldsymbol{k e s ̌ - ~}{ }^{z i}:$ see $k i s ̌$ - $^{-z i}$
keššar / kiššer- / kišr- (c.) 'hand' (Sum. ŠU, Akk. QATU): nom.sg. ke-eš-šar=ši$i s ̌$ ( $\mathrm{OH} / ?$ ), ki-iš-šar-aš (MS), ke-eš-ši-ra-aš ( $\mathrm{OH} / \mathrm{NS}$ ), ki-iš-ši-ra-aš (OH/NS), acc.sg. [ki-i]š-še-ra-an (OS), ki-iš-ši-ra-an (MH/NS), ke-eš-ši-ra-an (MH/NS), gen.sg. $\quad k i-i s ̌-r a-a s ̌ \quad(M H / M S), \quad k i-i s ̌-s ̌ a-r[(a-a \check{s})] \quad(\mathrm{MH} / \mathrm{MS}), \quad k i-i s ̌-s ̌ e-r a-a s ̌$ (MH/NS), dat.-loc.sg. ki-iš-ša-ri-i (OS), ki-iš-ri (OH/NS), ki-iš-ri (OH/NS), [(ki)$i] s ̌-s ̌ i-r i-i=t-t a(\mathrm{OH} / \mathrm{NS})$, all.sg. ki-iš-ra-a (OS), ki-šar-ra (NS), abl. ki-iš-ra-az (MH/MS), ki-iš-ša-ra-az (MH/MS), ki-iš-šar-ra-az (OH/MS), ki-iš-šar-az ( $\mathrm{MH} / \mathrm{NS}$ ), ke-eš-ša-ra-az (NS), instr. ki-iš-šar-at ( $\mathrm{OH} / \mathrm{MS}$ ), ki-iš-šar-ta (MH/MS), ke-eš-šar-ta (MH/NS), ki-iš-ri-i-it (MS?), ki-iš-ri-it (NS), ki-iš-ša-ri-it (MH/NS), acc.pl. ki-iš-še-ru-uš (OH/NS), dat.-loc.pl. ki-iš-ra-ǎ̌ (NS).
 $i \check{s ̌-s ̌ a-r i-i-i s ̌, ~ i-i s ̌-r i-i s ̌, ~ i s ̌-r i-i s ̌, ~ a c c . s g . ~ i s ̌-s ̌ a-r i-i n, ~ d a t .-l o c . s g . ~ i s ̌-s ̌ a-r i-i, ~ a b l .-i n s t r . ~} i$ $i \check{s}-s \check{a} a-r a-t i$, $i s ̌-s ̌ a-r a-a-t i$, coll.pl. $i-i s ̌-s ̌ a-r a$, iš-ša-ra, dist.pl. ŠU ${ }^{\mathrm{MES}}-a n-t a$, dat.loc.pl. $\quad i s ̌-s \check{a}-r a<-a n\rangle-z[a]$, gen.adj.nom.-acc.sg.nt. $\quad i s ̌-s ̌ a-r a<-a \check{s}-\check{s} a\rangle-a n-z a)$, iššarallattar- (n.) 'bracelet' (nom.-acc.pl. iš-ša-ra-la-ad-da-ra), išaruaina- (adj.) 'favourable (vel sim.)' (nom.-acc.sg.n. i-šar-ú-ua-ía-an, nom.-acc.pl.n. i-šar-ūaía), išaruila/i- 'right hand' (nom.sg.c. $i$-šar-ú-i-li-iš, i-šar-u_is-li-iš, abl.-instr. $i$ -šar-ú-i-la-ti), išaruili(ídia)- (adj.) 'of the right hand (> favourable)' (nom.-acc.sg.n. $i$-šar-ú-i-li-i_ia-an, abl.-instr.? [i-šar-]ú-i-ri-ía-a-tic); HLuw. istra/i- (c.) 'hand' (acc.sg /istrin/ ${ }^{\text {MANUS }}{ }_{i \text {-sà-tara/i-na (KARKAMIŠ A7 §3), "MANUS"-tara/i-na }}$ (JISR EL HADID fr. 2 line 2), dat.-loc.sg. /istri/ ${ }^{\text {MANUS }}{ }_{i-s a ̀ ̀-t a r a / i-i}$ (KARKAMIŠ A6 §15, §17, §22), MANUS-tara/i (KARKAMIŠ A21 §3), abl. /istradi/ ["MA]NUS"-tara/i-ti (KARKAMIŠ A11a §2b)); Lyc. izre/i- 'hand' (abl.-instr. izredi).

PAnat. *gésr-
IE cognates: Gr. גعíp 'hand', Arm. jer̄n 'hand’, TochA tsar, TochB ṣar 'hand', Alb. dorë 'hand', Skt. hásta- 'hand' (*g' és-to-).

PIE * $g^{h}$ és-r $/ * g^{h} s$-ér-m $/ *^{h}{ }^{h} s$-r-ós
See Puhvel HED 4: 160f. and Rieken 1999a: 278f. for attestations. Already since Sturtevant (1927a: 121) this word is generally connected with Gr. גeí 'hand', which in view of Arm. jer̄n and Skt. hásta- 'hand' must reflect *g' ${ }^{\prime} e s-r$. In Hittite, we find a variaty of forms, of which it is not always clear how to interpret them, despite the obvious etymon. The oldest forms (OS and MS) are the following: nom.sg. keššar, acc.sg. kiššeran, gen.sg. kiš(̌̌a)raš, dat.-loc.sg. kiš(ša)rī, all.sg. kišrā, abl. kiš(ša)raz, instr. kiššarat / kiššarta, acc.pl. kiššeruš, dat.-loc.pl. kišraš. In younger times, we see that some forms occur that reflect a thematic stem kiššera- (nom.sg. kišširaš (NS), gen.sg. kiššeraš (NS)) and kiš(ša)ra- (nom.sg. kiššaraš (MS), instr. kiššarit (NS)) (see Weitenberg 1995 on the thematicization and sigmatization of original asigmatic commune nominatives). According to Rieken (l.c., following Schindler) the original paradigm of $* g^{h} e s-r$ - must have been 'holodynamic', *g' ${ }^{h}$ és-ōr / *g' ${ }^{h}$ és-or-m / * $g^{h} s$-r-és / *g ${ }^{h} s$-ér $(-i)$, of which she states that "[d]as Hethitische setzt dieses mit den Stämmen keššar und kiš(ša)r-' fast lautgesetzlich fort" (o.c.: 280). This view, with which I do not agree at all, is supported by her incorrect idea that the vowel e/i in kiššer- / kiššir- is "lediglich graphischen Ursprungs".
If nom.sg. keššar would reflect *g' és-ōr, I do not know how to explain the
 for the loss of wordfinal $*_{-r}$ after unaccentuated $*_{-}-\bar{o}$ ). In my view, the geminate of keššar can only be explained by a pre-form $*^{\prime}{ }^{h}$ és-r, in which $*_{s}$ has been fortited due to contact with -r-. With this pre-form it is an exact match with Gr. $\chi \varepsilon i ́ \rho$. The reconstructed acc.sg. *g' és-or-m should have regularly yielded Hitt. **keššaran, which is not attested at all. Already in OS texts, we find kiššeran, which can either be interpreted as /kiSéran/ $<*^{\prime} g^{h} s$-ér-m (for the possible development of *\#KsV- > Hitt. /KiSV-/ compare kāšt- / kišt- and the total absence of Hittite words that start in $* * k a \check{s} V-<* K s V-$; the geminate $-s \check{s}$ - must be compared to $* V k s V>$ Hitt. $/ \mathrm{VkSV} /$, cf. § 1.4.4.2) or as /kiSéran/ < ${ }^{\prime} g^{h} e s$-ér-m (with $/ \mathrm{i} /$ going back to pre-tonic $* e$; note that we then should assume generalization of geminate - $\check{s} \check{s}-$ out of the other cases). The oldest attestations of gen.sg. kišraš and kiššaraš stand for /kíSrás/ < $g^{h} s-r$-ós or for /kiSrás/ < *g'hes-rós (compare Gr. גعípoc < *g'hesr-os). Dat.-loc.sg. kiš(ša)rū, all.sg. kišrā and abl. $k i \check{s}(s ̌ a) r a z$ stand for $/ \mathrm{ki} \mathrm{Sr}-/<{ }^{\prime} g^{h} s-r^{-}$or $/ \mathrm{kiSr}-/<{ }^{\prime} g^{h} e s-r^{-}$'. Instr. kiššarta /
kiššarat stands for /kiSrt/ < *g ${ }^{h}$ s-r-t. Acc.pl. kiššeruš stands for /kiSérus/ < *g'hs-ér-ms, compare acc.sg.

All in all, in my opinion it is clear that the Hittite material points to an original hysterodynamic paradigm $*^{\prime} g^{h}$ és-r, $*^{\prime} g^{h} s$-ér-m, $* g^{h} s$-r-ós, etc. (according to the 'fourth subtype' as described in Beekes 1995: 175).
The Luwian forms, CLuw. iš(ša)ra/i-, HLuw. istra/i- and Lyc. izre/i-, reflect PLuw. */iSra/i-/ < (virtual) *g'es-r-o-, a thematicized form of PAnat. *ǵes-r. The fact that *e yields Luw. - $i$ - may show that it was pretonic (cf. Hajnal 1995: 63). It should be noted that the appurtenance of CLuw. išaruaia-, išaruila/i- and išaruili(ia)- is uncertain because of the deviant semantics (the basic meaning seems to be 'favourable') and the occurrence of single $-\check{s}$ - vs. the geminate $-\check{s} \check{s}$ found in $\check{l} \check{s}(\check{s} a) r a / i-$.
$\boldsymbol{k e s ̌ t} \mathbf{-}^{\overline{a r} i}$ : see kišt- ${ }^{-\bar{r} r i}$
ketkar (adv.) 'at the head (of), on top': ke-et-kar=ša-me-et (OS), ke-et-kar (OH/MS), ke-et-kar-za (OH/NS), ke-et-kar-az (MH/MS), ke-et-kar-aš (MH/MS), ke-ek-kar (NS),
IE cognates: Gr. ह̇лì кá ${ }^{\prime}$ 'head down', àvà кá $\rho$ 'upwards'.

$$
\text { PIE *k'ed }+* k^{\prime} r\left(h_{2}\right)
$$

See Puhvel HED 4: 201-2 for attestations. Since Josephson (1966: 135) this adverb is generally seen as a univerbation of $k e t$, the old abl./instr. case of $k \bar{a}-$ / $k \bar{u}-/ k i-$ 'this', followed by kar, which must be compared to Gr. غ̇ $\pi \grave{̀}$ кá $\rho$ 'head down', àvà káp 'upwards', which must somehow reflect PIE *k'reh 'head, horn'. The interpretation of ket as an old abl./instr. is supported by the fact that in younger times -kar is replaced by the ablatival -karz.
The interpretation of -kar $\sim$ кá $\rho$ is difficult. Puhvel (l.c.) explains it as a suffixless locative, but safely gives no reconstruction. Rieken (1999a: 250, with reference to Nussbaum) assumes that these forms reflect $*-k_{r}^{\prime} r-h_{2}$, which would be the reduced form of *kréh in univerbation. It is difficult to judge whether a development $* k k^{\prime} h_{2}>$ Hitt. kar, Gr. káp is regular. In Greek, I know of no comparable instances of $*_{-C r h_{2}} \#$. Rix (1992: 75) only cites examples for the outcome of $*-C n h_{2} \#: ~ * k r h_{2} s n-h_{2}>$ Gr. (Hom.) кá $\eta \eta$ va and ${ }^{*} g^{w} e l h_{1}-m n-h_{2}>\operatorname{Gr}$. (Hom.) $\beta \dot{\varepsilon} \lambda \varepsilon \mu v a$ 'projectile'. These forms show that we would expect that *-k'rh $h_{2}$ yielded Gr. ${ }^{* *}$ к $\rho$ á. In Hittite, if $k a r$ reflects $* k^{\prime} r-h_{2}$, we would have to assume loss of word-final laryngeal (as does Melchert 1994a: 87).

Prins (1997: 202-3), after summing up the discussion in detail, assumes that the preforms of ketkar and Gr. ėnı̀ káp may never have had a laryngeal at all. She argues that the univerbation $*$-kr stems from the time that there still was a root *Ker- 'bone substance' (of which later the extensions *ker-h2- 'head', *ker-no'horn' e.a. were formed). According to her, this *-k'r did not receive a laryngeal at all, because "already in PIE the form *-k'r in univerbated forms was fossilized".

This assumption (although rather radical) indeed solves the formal problems of ketkar. A parallel formation of $k e t+\mathrm{abl}$. we find in ket(-)pantalaz (q.v.).
ketpantalaz (adv.) 'from this time on': ke-et pa-an-ta-la-za (MH/MS), ke-et pa-an-da-la-az (MH/MS), ke-et-pa-an-da-la-az (MH/MS), ke-et-pa-an-ta-la-az ( $\mathrm{OH} / \mathrm{NS}$ ).

See Puhvel HED 4: 202-3 for attestations. The form ketpantalaz, which is attested thus several times, is clearly a univerbation of ket and pantalaz. This is not only clear from the fact that this expression is written with a word space between the two elements in MS texts, but also because of the parallel expression a-pé-et pa$a n-t a-l a-a z$ 'from that time on'. For a treatment of ket, see $k \bar{a}-/ k \bar{u}-/ k i-$ 'this'; for a treatment of pantalaz see at pantala-
$\boldsymbol{k i}^{\text {ta(ri) }}$ (IIIb) 'to lie, to be laid, to be in place, to be set' (Sum. GAR): 3sg.pres.midd. ki-it-ta (OS), ki-it-ta-ri (MH/MS), ki-id-da-ri (NS), 3pl.pres.midd. ki-an-ta (OS), ki-an-da (OS), ki-ia-an-ta (OS), ki-ia-an-da (NS), ki-an-ta-ri ( $\mathrm{OH} / \mathrm{NS}$ ), ki-ia-an-ta-ri (OH/NS), 3sg.pret.midd. ki-it-ta-ti (MH/NS), ki-it-ta-at ( $\mathrm{OH} / \mathrm{MS}$ ), 3pl.pret.midd. ki-i-ịa-an-ta-ti (MH/NS), 3sg.imp.midd. ki-it-ta-ru (OS, often), ki-it-ta-a-ru (1x, MH/NS), ki-id-da-ru (NH), 2pl.imp.midd. ki-id-du-ma-ti (NH).

Anat. cognates: Pal. $\boldsymbol{k} \overline{\boldsymbol{I}}$ - 'to lie' (3sg.pres.midd. ki-i-ta-ar); CLuw. $\boldsymbol{z} \overline{\boldsymbol{\tau}}$ - 'to lie' (3sg.pres.midd. zi-ía-ar, zi-i-ia-ri); Lyc. si- 'to lie' (1sg.pres.midd. sixani, 3sg.pres.midd. sijẽni, sijeni, 3pl.pres.midd. sitẽni).

PAnat. *kíi-
IE cognates: Skt. śáye, śéte 'to lie', Av. saēte 'to lie', Gr. кعĩ $\mu a$ 'to lie'.
PIE *ḱéi-to / *ḱéi-nto

See Puhvel HED 4: 169f. for attestations. Already since Hrozný (1917: 35) this verb is generally regarded as the cognate of Skt. śay- and Gr. кعĩtaı 'to lie', which reflect *kei-. Because the Sanskrit and the Greek verb show the static inflection (Skt. 3sg. śáye, 3pl. Śére; Gr. 3sg. кعĩtat, 3pl. кéato < *kéi-n̊to), we
would expect that in Hittite we would find a static inflection as well. Because normally *-ei- would monophthongize to Hitt. - $\bar{e}$-, Eichner (1973a: 78) asssumed that $*_{-e i-}$ is raised to $-\overline{l^{-}}$after a velar consonant (also in $k i \bar{l}^{-a(r i)} / k i s^{-}$(q.v.)). Although such a raising is generally accepted now, it still is problematic why kitta(ri) shows a short $-i$ - throughout its paradigm, especially since shortening of long vowels in closed syllable is not usual (cf. kānkhi<kónk- $h_{2} e i$ ). For instance, Oettinger (1979a: 525) noticed that the Palaic form kïtar, in contrast to Hitt. kitta(ri), shows a long vowel $-\bar{l}$ - and a lenited stop $/ \mathrm{d} /$, due to the preceding accentuated long vowel. This means that Hittite must have reintroduced the unlenited ending -tta(ri), which, according to Oettinger, caused the shortening of the vowel. Melchert (1994a: 145) hesitates in believing this theory: he remarks that the form uītt- 'year' < *uét- shows a long - $\bar{l}$ - in a closed syllable and therefore seems to contradict this. In my view, this is not necessarily true: the plene spelling $u$-i-it-t $t^{\circ}$ does not have to indicate vowel length: it can be used just to disambiguate the ambiguous sign IT that can be read it as well as et. Nevertheless, I would like to reexamine the chronology of the development *Kei$>k \bar{l}$ -

As we can see, the raising of $* K e i->K \bar{l}$ - occurred in all Anatolian languages: *ḱei- > Pal. kī-, CLuw. $z \bar{l}-$ and Lyc. $s i(j)$-. This is therefore probably a ProtoAnatolian development. Eichner (l.c.) assumes that $*$ Keị- $>* k \bar{e}-$ (regular monophthongization of $*_{\text {-ei-) }}$ and that then velar gets palatalized to ${ }^{\prime} k^{\prime} \bar{e}-$, due to which $* \bar{e}$ is raised, yielding $* k{ }^{\prime} \bar{l}$-. In my view, we should rather assume that *Kei- was raised to *kii- before the monophthongization of *-ei- to $-\bar{e}-$. In the case of ki- ${ }^{\text {Hta(ri) }}$, this means that PIE *kééi-tor yielded PAnat. *kíiitor. This *kíitor fell victim to lenition due to the accentuated diphthong, yielding *kíidor. This *kíiidor is the immediate preform of Pal. kītar (with monophthongization of *-ii-$>-\bar{l}$-). In Pre-Hittite, the synchronically aberrant ending *-dor is replaced by the normal ending *-tor (with fortis /t/), yielding *kíí-tor. It should be noted that /t/ was phonetically a long (geminate) consonant: [kíit:or] or [kíittor]. In this form, the triconsonantal cluster $*$ - $i t t$ - is simplified to $-t t$ - through loss of the consonantal part of the diphthong *-ií-, a development comparable to *kiis $C>k i s C$, but also *link $C>l i k C$ and harkC > harC. This simplification then yielded Hitt. kitta(ri).
Within Sanskrit, we find two separate 3sg.pres.-forms, namely sááye < *kéi-o-i and séte < *kéi-to-i. The idea is that the ending *-o is the old stative ending, whereas -to originally belonged with the real middle. On the basis of Hitt. kitta and Pal. kītar < *kéé-to besides CLuw. zī̀iari and Lyc. sijẽni < *kéé-o, we must assume that Proto-Anatolian possessed both forms as well (which shows that already in PIE there were two forms: archaic *kéi-o and renewed *kéé-to). From
the two forms, *kéi-o 'won' in the Luwian branch, whereas *kéei-to 'won' in the Palao-Lydo-Hittite branch. Note that I interpret Lyc. sitẽni, which is usually cited as 3sg., as a 3pl.-form, reflecting *kéinto->*kíinto > Lyc. /sĩte-/, spelled site- (cf. Melchert 1992a: 195 for the fact that sitẽni has a plural subject).
$=\boldsymbol{k} \boldsymbol{k},=\boldsymbol{k} \boldsymbol{k} \boldsymbol{a}$ : see at $k u i-$
giem-: see gimm-
gimm- (c.) 'winter' (Sum. ŠE $\mathrm{E}_{12}$, Akk. KUṢṢU): dat.-loc.sg. gi-im-mi (KBo 15.32 i 4 (OH/MS), KUB 13.2 iv 23 (MH/NS), KUB 22.39 iii 14 (fr.) (NS), KBo 13.169 1.col. 1 (NS)), gi-e-mi (KUB 30.37 i 9, 11 (fr.) (NS)), gi-mi (IBoT 2.66 rev. 10 (NS)).

Derivatives: gimaniie/a- ${ }^{-3}$ (Ic1) 'to spend the winter' (3sg.pret.act. gi-ma-ni-e-et ( $\mathrm{OH} / \mathrm{NS}$ ), gi-ma-ni-et ( $\mathrm{OH} / \mathrm{NS}$ )), gimmant- (c.) 'winter' (nom.sg. gi-im-ma-an-za (MS), acc.sg. ki-im-ma-an-tan ${ }_{x}$ (undat.), gen.sg. gi-im-ma-an-ta-aš (OH/NS), gi-im-ma-an-da-aš (MH/NS), dat.-loc.sg. gi-im-ma-an-ti (MH/MS)), gimmantariie/a- ${ }^{z i}$ (Ic1) 'to spend the winter' (3pl.pres.act. ŠE $\mathrm{E}_{12}-i \underline{a} a-a n-z i$ (NS), 1sg.pret.act. gi-im-ma-an-ta-ri-i_ia-nu-un (NH), gi-im-ma-an-da-ri-i_ia-nu-un (NH)), see gimra-.

IE cognates: Skt. héman-, Av. ziiià, Lat. hiems, Gr. $\chi \varepsilon \mu \omega \dot{v}$ 'winter' etc.

$$
\text { PIE * } g^{h} i m-n(-e n t)-
$$

See Puhvel HED 4: 143f. for attestations. There he also cites acc.sg. [g]i-ma-an (KBo 26.132, 6), emended thus by Oettinger (1982a: 237), but as Rieken (1999a: 77) shows, this emendation is incorrect. Semantically, there is no reason the assume 'winter' in this context while the traces rather point to [...-a]m-ma-an.

Although the basic etymon of these words has been clear since Sommer (1920: 23), namely PIE *g' ${ }^{h}$ im-( $\left.n-\right)$ 'winter', the exact interpretation of all the forms is difficult. It may be worth while to first look at the formations in the other IE languages. There we find a root noun *g' iem- (Lat hiems 'winter', Av. ziiă <

In Hittite, an $n$-stem is assuredly attested in the verb gimaniie/a- $a^{z i}$ to spend the winter', which reflects *g' ${ }^{\prime}$ im-n-ie/o-. This makes it likely that the geminate -mmas attested in dat.-loc.sg. gi-im-mi 'in the winter' and gi-im-ma-an-t- 'winter' is the result of the assimilation of the cluster -mn-, so $*^{\prime} g^{h}$ im-n- and $* g^{h}$ im-n-ent-. Puhvel (o.c.: 145) objects to reconstructing gimm- as gim-n- with the consideration that in lamni 'name (dat.-loc.sg.)' the cluster -mn- is preserved, but

Melchert (1994a: 81) states that in principle *-mn- assimilates to -mm- unless it is part of an ablauting paradigm (like in the case of lāman / lamn-). This means that the original paradigm to which gimmi must have belonged ( $* g^{\prime}{ }^{h}$ éim-n, $* g^{h}$ im-n-ós $>$ Hitt. **kēman, **kimnā̄s) has been taken over by gimmant- (*g'him-n-ent-) at an early stage already. This is supported by the fact that OH gimaniie/a- ${ }^{z i}$ is replaced by NH gimmantariie/a-- ${ }^{\text {i }}$ 'to spend the winter' (cf. Rieken l.c.). The -antderivation gimmant- must be compared to hamešhant- beside hamešha- 'spring', zēnant- besides zēna- 'fall' and *uittant- besides uitt- 'year'. The fact that only dat.-loc.sg. gimmi has survived of the original $n$-stem paradigm resembles the situation of hamešḩa- besides hamešhant- where dat.-loc.sg. h_amešhi occurs far more often than hamešhanti.
The hapax gi-e-mi, which is attested in a NS text only, could be considered as a scribal error for gimmi. Nevertheless, Melchert (1984a: $127^{90}$ ) discusses the possibility that gi-e-mi is an archaic form that has to be equated with Lat. hiemi 'in the winter' and reflects $* g^{h}{ }^{\prime}$ iém-i.
gimmant-: see gimm-
gimmara-: see gimra-
gimra- (c.) 'the outdoors, countryside, field, military campaign' (Sum. LÍL, Akk. ṢERU): nom.sg. gi-im-ra-aš (MS), acc.sg. gi-im-ra-an (MS), gi-im-ra-a-an (NH), gen.sg. gi-im-ra-aš (OS), ki-im-ra-aš (NS), gi-im-ma-ra-aš (OH/NS), dat.-loc.sg. gi-im-ri (OH/NS), all.sg. gi-im-ra (OH/MS), abl. gi-im-ra-az (OH/NS), acc.pl. gi-im-ru-uš (MS), gi-im-ri-uš (1x, MH/NS), dat.-loc.pl. gi-im-ra-aš (MH/NS), gi-im$m a-r a-a s ̌$ (MH/NS).

Anat. cognates: CLuw. im(ma)ra/i- ‘open country’ (gen.adj.-stem im-ma-ra-aš$\check{s} a$, gen.adj.dat.sg. im-ma-ra-aš-šan, im-ra-aš-ša(-an)).

PAnat. *'gimro-
PIE *g ${ }^{h}$ im-ro-
See Puhvel HED 4: 175f. for attestations. The occasional spellings gi-im-ma-rashow that we should phonologically interpret this word as /kiMra-/. Taking this together with CLuw. im (ma)ra/i-, we can reconstruct a PAnat. *gimro-
Sturtevant (1930c: 216) suggested a connection with PIE * d'egh ${ }^{h} m$ - 'earth'. In view of Hitt. tēkan / takn- 'earth' $<*^{h} e g^{h}-m / * d^{h} g^{h}-m$ - and CLuw. tiiamma/i'earth' $<* d^{h} g^{h}$ ém-, it is impossible to derive PAnat. *'gimro- from a preform ** $d^{h} g^{h}$ em-ro-. Tie-ins with IE *kei- 'to lie' (Jucqois 1967: 177) or *kem- 'to
border' (Van Windekens 1981) are contradicted by CLuw. im(ma)ra/i- that requires PIE $* g^{(h)} / g^{(h)}$.
Benveniste apud Puhvel (1.c.) rather connects gimra- to PIE * ${ }^{\prime}{ }^{h}$ iem- 'winter', "thus in origin a term for the wintry steppe, the inhospitable outdoors (cf. 'out in the cold', sub Iove frigido, etc.)". Although a preform *g' ${ }^{\prime}$ im-ro- indeed would yield Hitt. /kiMra-/ and CLuw. im(ma)ra/i-, and although r-extensions of *ghiemare found in e.g. Arm. jmē̄n 'winter' < *'g' ${ }^{\text {itm-r-inos, Gr. } \chi \varepsilon ц \mu \varepsilon \rho เ v o ́ \varsigma ~ ' h a p p e n i n g ~}$ in the winter' $<*^{\prime} g^{h}$ eim-er-ino-, Lat. hībernus 'winterly' $<{ }^{\prime} g^{h}$ eim-r-ino- as well, the assumed semantic development may not be self-evident. For a further treatment of $* g^{h}$ iem-, see gimm- 'winter'.
$\boldsymbol{k i n a e}^{-{ }^{z}}{ }^{\text {( }}$ Ia2 > Ic2) 'to (as)sort': 3sg.pres.act. ki-na-iz-zi (OH/NS), ki-i-na-iz-zi (NS), ki-na-a-iz-zi (NS), 3pl.pres.act. ki-na-an-zi (OH/NS), 1pl.pret.act. ki-n[a-uen] (MH/NS), 2pl.pret.act. ki-na-a-at-tén (NS); part. ki-na-an-t-, ki-na-a-an-t-, ki-$i-n a-a-a n-t-(\mathrm{OH} / \mathrm{NS})$.

IE cognates: Gr. $\delta \iota \alpha-\tau \tau \alpha ́ \omega$ 'to sift', 3pl.pres. $\sigma \tilde{\omega} \sigma \iota ~ ' t h e y ~ s i f t ', ~ \sigma \dot{\eta} \theta \omega$ 'to sift'.

$$
\text { PIE *ki-né- } h_{2}-t i / * k i-n-h_{2} \text {-énti ? }
$$

See Puhvel HED 4: 179f. for attestations. This verb is attested in NS texts only and inflects according to the hatrae-class. Because the hatrae-class inflection was very productive in NH times, it is quite possible that in this verb this inflection is of a secondary origin. Such an assumption is necessary if one follows the etymology as offered by Puhvel (l.c.), who analyses Gr. $\delta \iota \alpha-\tau \tau \alpha \dot{\omega} \omega$ 'to sift' as *kieh $2_{2}-i \bar{O}, 3$ 3pl.pres. $\sigma \tilde{\omega} \sigma$ 'they sift' as *kieh $h_{2}-i o n t i$ and $\sigma \dot{\eta} \theta \omega$ 'to sift' < *kieh $h_{2}-d^{h}-$, thus identifying a root *kieh $2^{-}$'to sift'. According to Puhvel, this root also had a nasal infixed stem *ki-ne- $h_{2^{-}}$which ended up in Hittite as kinae- ${ }^{z i}$. Although this sounds appealing semantically, and is formally possible as well, I have one point of criticism. I would expect that a paradigm *ki-né- $h_{2}-t i / * k i-n-h_{2}$-énti would regularly yield Hitt. **kināzi/**kinnanzi, showing an alternation -n- vs. -nn-. Such an alternation is not tolerated, and in all cases that I know of, geminate -nnhas spread throughout the paradigm (e.g. zinnizi / zinnanzi 'to finish' << *zinēzi/ zinnanzi $<$ *tineh ${ }_{1} t i / *$ tinh $_{1}$ enti; šunnai / šunnanzi 'to fill' << *šunai /šunnanzi < *su-no-H-ei/*su-n-H-enti). A priori, I would therefore expect to have found Hitt. **kinnae ${ }^{z i}$ instead of kinae- ${ }^{z i}$. Nevertheless, it cannot be excluded that in this case the single $-n$ - spread throughout the paradigm at the cost of -nn-.

An alternative interpretation could be that kinae- ${ }^{z i}$ is, like all original hatraeclass verbs, a verbal derivative of an o-stem noun, *kina-ie/a-. This hypothetical
noun kina- then could reflect *kih $h_{2}$-no- (note that in this way the few plene spellings ki-i-na-could be better explained as well).
$\boldsymbol{k} \overline{\boldsymbol{I}} \boldsymbol{u}^{-z i}$ (Ib2) 'to open (up), to break open': 3sg.pres.act. ki-i-nu-z[i] (MS), ki-nu$u z-z i$ (MS), ki-nu-zi (OH/NS), gi-nu-uz-zi (MH/NS), 3pl.pres.act. gi-nu-ua-an-zi (MH/MS), ki-nu-an-zi (MS?), ki-nu-ua-an-zi (MH/NS), ke-e-nu-ua-an-zi (NS), ge-e-nu-an-zi (NS), 3sg.pret.act. gi-nu-ut (MH/NS), ki-nu-ut (NS), 2sg.imp.act. gi-nu-ut (OH/MS), 3sg.imp.act. ki-i-nu-ud-du (OH/MS), ki-nu-ud-du (OH/MS); 3sg.pret.midd. ki-nu-ut-ta-ti (NS), 3sg.imp.midd. ki-nu-ut-ta-ru (MH/NS); part. ki-i-nu-an-t- (MS), ki-nu-ua-an-t- (MH/NS), gi-nu-ua-an-t-; inf.I ki-nu-ma-an-zi (MS?), ki-nu-ua-an-zi (1x, MH/NS); verb.noun gen. gi-nu-ma-aš (NS), ge-e-nu-úa-aš (here?, NS).

PIE *g ${ }^{h}{ }^{i} H$-neu- ?
See Puhvel HED 4: 151f. for attestations. The verb is spelled in a few different ways: ki-nu-, gi-nu-, ki-i-nu-, ki-e-nu- and gi-e-nu-. Since the signs KI and GI in principle can be read $k i$ and $k e$ and $g i$ and $g e$ respectively, it is difficult to decide how to interpret this verb phonologically. In my view it is crucial that the forms that show ki-i-nu- are among the oldest attestations of this verb (OH/MS and MS?), whereas the spellings ke-e-nu- and ge-e-nu- are attested in NS texts only. This verb therefore must originally have been /kinu-/ or /kīnu-/, which developed to NH /kenu-/ due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-n$ - as described in § 1.4.8.1.d.
The verb denotes 'to open up (trans.), to break open'. Formally, it looks like an old causative in $-n u$-, which fits the transitive meaning. This could indicate that $k \bar{n} n u$ - is a derivative of a verb that denotes 'to open up (intr.)'. Although there are several IE languages in which we find words for 'to yawn, to open up (one's mouth)' that are formally similar (cf. Laroche 1963: 59), an exact reconstruction is difficult to give. Lith. žióti 'to open (one's mouth)' points to $* g^{h}$ ieh $_{2 / \beta^{-}}$, whereas Gr. $\chi \eta ́ \mu \eta$ 'yawn' and $\chi$ ávos 'gaping mouth' reflect *g' $(e) h_{2}$-. On the other hand, OCS zëjg 'to yawn' reflects *g'h eh $h_{l}(i)$-, whereas Lat. hīsco 'to open up, to yawn' goes back to ${ }^{\prime} g^{h} i H$-ske/o-, and OHD ginēn 'to yawn' $<{ }^{*} g^{h} i$ i-ne- $h_{1}$ -
All in all, a reconstruction $*^{h} g^{h} i H-n e u$ - for Hitt. kinu- is possible, but far from assured.
kinun (adv.) 'now': ki-nu-un (OS).

Derivatives: kinuna '(but) now' (ki-nu-na (NH)), kinuntariial (adv.) 'in the present' (ki-nu-un-tar-ri-i_ia-al), kinuntariialla- (adj.) 'as of now, present' (abl. ki-nu-un-ta-ri-ia-la-za, ki-nu-un-tar-i्1 a-la-za, ki-nu-un-tar-ri-íia-la-az).

Anat. cognates: CLuw. nānun 'now' (na-a-nu-un, na-nu-un, na-a-nu-um=pa, $n a-a-n u-u ́-u n=p a, n a-n u=p a$ ), nanuntarrit- (n.) 'the present' (nom.-acc.sg. [n]a-nu-un-tar-ri-š[a]), nanuntarri(ía)- (adj.) 'of the present' (nom.-acc.sg.n. [na-nu-un-tar-ri-i]a-an-za), nānuntarriial(i)- (adj.) 'present' (nom.-acc.sg.n. [na-a-nu-un-ta-ri-i_a-a-al, nom.-acc.pl.n. na-a-nu-un-ta-ri-i_ia-la, na-a-nu-un-tar-ri-ia-la, na-a-nu-um-ta-ri-ia-la).

PIE *kí-num
The adverb kinun 'now' is abundantly attested from OS texts onwards. Already in OS texts, it is often attested with the enclitic conjuction $=(m) a$ attached to it: ki$n u-n=a$ '(but) now', showing the post-consonantal form of $=(m) a$. The distribution between $C=a$ and $V=m a$ is disappearing from the MH period, which is visible in the fact that from then onwards we find $k i-n u-u n=m a$. Nevertheless, the form kinuna is still attested in MH as well as NH texts, showing that OH kinun $=a$ was not analysed as such anymore. I therefore interpret the NH form kinuna synchronically as a single form denoting '(but) now' (cf. attestations like $k i-n u-n a=m a=m u(\mathrm{KBo} 18.29 \mathrm{rev} .20(\mathrm{NH})$ ), $k i-n u-n a=m a=u a$ (KBo 18.19 rev . 28 (NH))).

If we compare Hitt. kinun to CLuw. nānun, it is clear that the former must be analysed as $k i+n u n$. The element $k i-$ must be identified with nom.-acc.sg. $k \bar{l}$ 'this' < *k' (see $k \bar{a}-/ k \bar{u}-/ k \vec{l}$ ). The element nun probably reflects *num as still is visible in the one CLuwian attestation with -m-, nānumtariiala. This *num must be compared to Gr. vũv 'now' and Lat. nunc 'now'. This latter form is especially interesting as it derives from *nun-ce $<{ }^{*} n u m+{ }^{*} k i$. The element *num must belong with PIE *nu 'now' as visible in Skt. nú, Lith. nù, Goth. nu, etc., but also in the Hittite clause conjunctive $n u$. The CLuw. form nānun probable shows a reduplication *no-num.

The derivative kinuntariialla- must be compared with Hitt. nuntariina- (adj.) 'swift, quick' and CLuw. nanuntariia-, reflecting *num-tr-ie/o-.
ginzu-: see ${ }^{(\mathrm{UZU})}$ genzu-
${ }^{\text {(GIš) }} \boldsymbol{\text { gipeššar }}$ / gipešn- (n.) 'cubit, ell', also area measure (as area measure: Sum. KÙŠ, Akk. AMMATU): nom.-acc.sg. gi-pé-eš-šar (OS), ki-pé-eš-šar, gi-pé-šar (1x), gen.sg. gi-pé-eš-na-aš.

See Puhvel HED 4: 186-7 for attestations. The fact that this word contains the suffix -eššar / -ešn- as well as that it is attested in OS texts already could point to an IE origin. Puhvel (l.c.) connects it with Ved. gábhasti- 'arm, hand', Khot. ggośtäand(ful)' and reconstructs * $g^{h} e b^{h} e s r$, but this does not seem immediately appealing to me. I would rather expect derivation of a root $* \mathrm{Keib}^{(h)}$ - or $* \mathrm{Kieb}^{(h)}$-, but have not been able to find a convincing cognate.
kir : see ${ }^{(\text {UZU })}$ ker / kard(i)-
$\boldsymbol{k} \breve{\boldsymbol{L}}^{-1}{ }^{-a r i)} / \boldsymbol{k i s ̌}-(\mathrm{IIIIa})$ 'to happen, to occur, to turn out to be; $(+=z)$ to become': 1sg.pres.midd. ki-iš-ha (OH/MS), ki-iš-ha-ha-ri (MH/NS), kiš-ha-ha-ri (NH), 2sg.pres.midd. $k i-i s ̌-t a(\mathrm{OH} / \mathrm{NS}), k i-i s ̌-t a-t i(\mathrm{NH}), 3 \mathrm{sg} . p r e s . m i d d . ~ k i-i-s ̌ a(\mathrm{OS}), k i-$ $i-s ̌ a-r i(\mathrm{OS}), k i-s ̌ a, k i-s ̌ a-r i(\mathrm{MH} / \mathrm{MS}), k i-s ̌ a-a-r i(2 \mathrm{x}, \mathrm{OH} / \mathrm{NS}), 3 p l . p r e s . m i d d . ~ k i-i-$ ša-an-ta (NH), ki-ša-an-da (NS), ki-i-ša-an-ta-ri (OH/NS), ki-ša-an-ta-ri ( $\mathrm{OH} / \mathrm{MS}$ ), ki-ša-an-da-ri (NS), 1sg.pret.midd. ki-iš-ha-ti (OH/MS), ki-iš-ȟa-at ( $\mathrm{OH} / \mathrm{MS}$ ), ki-iš-ha-ha-at (NH), 2sg.pret.midd. ki-iš-ta-at (OS), ki-ša-at (1x, $\mathrm{OH} /$ ?), 3sg.pret.midd. ki-i-ša-ti (OH/MS), ki-i-ša-at (MS), ki-ša-ti (OH/NS), ki$\check{s} a$-at (OH/MS), 2pl.pret.midd. kiš-du-um-ma-at (NH), 3pl.pret.midd. ki-i-ša-an-ta-ti (OS), ki-ša-an-ta-ti (NS), ki-i-ša-an-ta-at (MH/MS), ki-ša-an-ta-at (NH), ki-ša-an-da-at (NH), 2sg.imp.midd. ki-iš-ȟu-ut ( $\mathrm{OH} / \mathrm{NS}$ ), ki-iš-ȟu-u-ut ( $\mathrm{OH} / \mathrm{NS}$ ), 3sg.imp.midd. $k i-i-s ̌ a-r u(\mathrm{OH} / \mathrm{MS})$, $k i-s ̌ a-r u(\mathrm{MH} / \mathrm{MS}, \mathrm{OH} / \mathrm{NS})$, $k i-s ̌ a-a-r u$ (1x, MH/NS), 2pl.imp.midd. ki-iš-du-ma-at (NH); part. ki-ša-an-t- (NS).

Derivatives: kikkiš- ${ }^{\text {tra(ri) }}$ (*IIIa > IIIb) 'to turn out to be, to happen (impf.)' (3sg.pres.midd. ki-ik-ki-iš-ta-ri (OH/NS), ki-ik-ki-iš-ta-a-ri (NH), ki-ik-kiš-ta-ri (NS), ki-kiš-ta-a-ri (1x, NS), ki-ik-ki-eš-ta-ri (1x, NS), 3pl.pres.midd. ki-ik-ki-ša$a n-t a \quad(\mathrm{NS}), \quad 3 \mathrm{sg} . p r e t . m i d d . \quad k i-i k-k i-i s ̌-t a-a t \quad(\mathrm{NS})$, ki-ik-kiš-ta-at (NH), 3sg.imp.midd. $k i-i k-k i-i s ̌-t a-r u(\mathrm{OH} / \mathrm{NS})$; sup. $k i-i k-k i-i s ̌-s ̌ u-u-u a-a n(\mathrm{OH} / \mathrm{NS}))$.
IE cognates: OHG kēran, ModHG kehren 'to turn'.
PIE *'g'éis-o / *'g'géis-nto

See Puhvel HED 4: 191f. for attestations. The verb is spelled both with and without plene - $i$-. If we look at the occurrence of this plene $-i$ - closely, we immediately see a distribution: plene $-i$ - is only attested in forms in which the ending starts in a vowel, and never in forms in which the ending starts in a consonant. In OS texts this distribution is absolute: we find $k i-i-s V^{\circ}$ vs. $k i-i s ̌-C^{\circ}$. From MH times onwards the spelling $k i-s ̌ V$ starts to appear as well, which becomes standard in NH texts ( $126 \mathrm{x} k i-s V^{\circ}$ vs. $2 \mathrm{x} k i-i-s V^{\circ}$ ). This does not effect
the establishment of the original distribution, however. Since the alteration $k \bar{s} \check{s}-V$ vs. $k i \check{-}$ - $C$ is comparable to link- $V$ vs. lik-C (cf. li(n) $k_{-}^{z i}$ ) and hark- $V$ vs. har-C (cf. har $\left.(k)-{ }^{z i}\right)$, it is evident that in $k i \check{s} V / k i s ̌ C$ a phonological proces has taken place. Oettinger (1976b: 128-9) states that the distribution is due to "das Quantitätengesetz ${ }^{\approx \sim}>^{\sim}$ bei offener erster Silbe", on the basis of which he states that "dieses sekundären Lautgesetzes erlaubt der Stammvokalismus keine Entscheidung zwischen idg. ei, i und $e$ ". Since I do not believe that this "Quantitätengesetz" is linguistically real (see Oettinger 1979a: 447-8 where he only adduces examples that are incorrect: e.g. his "[t]ypische althethitische Beispiel" iš-ta-ap-hé : iš-ta-a-pí : iš-tap-pa-an-zi is in fact iš-ta-a-ap-hé (with long vowel), iš-ta-a-pí, iš-tap-pa-an-zi, where we find an ablaut between *stópin the singular and $*_{s t p \text { - in the plural), I would rather assume that } k i \check{s} C \text { is the }}$ result of a 'shortening' of original *kīsC, just as we see a 'shortening' in *linkC > likC and *harkC > harC. With this in mind, we can now look at the proposed etymologies.
Puhvel (l.c., with reference to Laroche 1952a: 102) favours the connection with Lat. gerō 'to carry', for which he presumes a basic meaning 'to bring about, to make occur'. Schrijver (1991: 18, with references to Osthoff) states that gero possibly is connected to IE $* h_{2} e g$ g- 'to drive', and thus reflects $* h_{2}$ ǵ-es-. This makes the connection between k $k \check{l} s ̌-$ and Lat. gerō improbable, for IE $* h_{2} g$ geswould have given Hitt. **hakeš-.
Melchert (1984a: 103) derives k $k \check{s} \check{s}$ - from "**keis- 'stir, be in motion' seen in Skt. cestati 'stirs, moves, acts'". He does not explain, however, why the Skt. verb is cests-, with an extra $t$ t-. So the root $*$ keis- does not independently exist, and I therefore find this etymology uncompelling.
Eichner (1973a: 78) compares k $k \check{s} s$ - to OHG kēran, ModHG kehren 'to turn' that reflect *'g'eis-. Semantically, this etymology is supported by e.g. Gr. ré入ouaı 'to turn; to become' $<* k^{w} e l$ - 'to turn', Goth. wairpan 'to become, to happen' < *uert- 'to turn', but also ModEng. to turn out to be. Because normally *-eiwould monophthongize to $-\bar{e}$-, Eichner assumes that ${ }^{*}$-ei- is raised to $-\bar{l}$ - after velars (cf. also kitta < *kéi-to). The question then is why do we find the distribution $* k i \check{s} C$ vs. $k \ddot{i} V$. It is easy to say that $*_{\bar{l}}$ was shortened in a closed syllable, but other long vowels do not shorten in closed syllables (at least, not in the OH period: e.g. ištāphi<*stóp- $h_{2} e i, k a ̄ n k h i<* k o ́ n k-h_{2} e i$ ). In order to solve this, we have to look closely at the development of $* \mathrm{Kei}->k \bar{l}$-. Eichner (1.c.) assumes that *Kei- > *kẹ- (regular monophthongization of *-ei-) and that then the velar gets palatalized to $*^{\prime}{ }^{\prime} \bar{e}-$, due to which ${ }^{*} \bar{e}$ is raised, yielding $*^{\prime}{ }^{\prime} \bar{l}$-. In my view, we must assume that *Kei- was raised to *kii- before the
monophthongization of $*-e i-$ to $-\bar{e}$-. In this way, we can explain the development of *kiiCC $>k i C C$ in the same lines as *linkC $>l i k C$ and *harkC $>$ har $C$, namely as loss of a consonantal element in a triconsonantal cluster. The sequence *kiiCV regularly developed into $k \bar{l} C V$.
All in all, I believe that k $k \overline{\bar{c}} \check{s}^{-}$reflects the root * ${ }^{\prime \prime}$ 'eis- 'to turn'. The preform
 $k i ̄ s ̌ a$.

Note that Puhvel states that the reduplicated imperfective kikkiš- should be phonologically interpreted as /kiks-/, but this is incorrect: spellings like 3pl.pret.midd. $k i-i k-k i-s \check{a} a-a n-t a$ and the lack of spellings like $* * k i-i k-s ̌ a-$ or $* * k i-$ $i k-k a-s ̌ a$ - show that we have to phonologically interpret the verb as /kikis-/. The fact the we find a geminate $-k k$ - here does not have any bearing on the etymological interpretation of $k \check{\bar{l} \check{s}-\text {-, since the reduplication can be formed quite }}$ recently.
$k_{i \check{s} \mathbf{-}^{-z i}}$ (Ib1 > Ic1, Ic2) 'to comb, to card': 3sg.pres.act. ki-iš-zi (Bo 7568, 4 (undat.)), $k i-s ̌ a-a-i z-z i$ (KUB 12.58 ii 42 (NS)), 3pl.pres.act. ki-ša-an-zi (KUB 39.14 i 12 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pret.act. ki-iš-ši-er (KUB 12.26 ii 6 (NS)), 3sg.imp.act. $k i-i-s ̌ a-a-i d-d u(K B o 21.8$ iii 14 (OH/MS)); part.nom.-acc.sg.n. ki-ša-a-an (KUB 12.58 iii 3 (NS)); impf. 3pl.pres.act. ki-iš-kán-zi (KUB 12.26 ii 1 (NS)), 1sg.pret.act. ke-eš-ke-nu-un (KBo 18.53, 8 (NS)).
Derivatives: kiš(ša)nu- ${ }^{z i}$ (Ib2) '?' (3sg.pres.act. ki-iš-nu-uz-zi (KBo $20.73+$ KUB 32.131 iv 23); impf. ki-iš-nu-uš-ke/a- (KBo 24.51 rev .1 ), ki-iš-ša-nu-uš-ke/a-(KBo 24.51 rev .3 ff .)), ${ }^{\text {SíG }} \boldsymbol{k i s ̌}(\mathbf{s} \boldsymbol{s} \boldsymbol{a}) r i-$ (c.) 'skein of carded wool(?)' (nom.sg. $k i-i s ̌-r i-i s ̌ \quad(\mathrm{OH} / \mathrm{NS})$, ki-iš-ša-ri-iš (NS), ki-iš-ri-eš (MH/NS), acc.sg. ki-iš-ri-in ( $\mathrm{MH} / \mathrm{NS}$ ), kiš-ri-in (MH/NS), nom.pl. ki-iš-ša-ri-e-š=a (KUB 12.63 rev. 26 ( $\mathrm{OH} / \mathrm{MS}$ )), ki-iš-ri-iš (MH/NS)), kišama/i- (adj.) '(garment of) carded (yarn)' (nom.-acc.sg. $k i-s ̌ a-m a, k i-s ̌ a-m e(N S), ~ n o m . p l . c . ~ k i-s ̌ a-m e-e s ̌, ~ k i-s ̌ a-m e-i s ̌) . ~$

Anat. cognates: CLuw. kiš- 'to comb' (3pl.pret.act. ki-ša-an-da; part. ki-ša-am$m a / i-, k i-i-s ̌ a-a m-m a / i-)$.

IE cognates: OCS česati 'to comb', kosa, kosmъ 'hair', Lith. kasà 'braid', OIr. cír 'comb', ON haddr (< *hazdaz < *kostó-) 'long hair', Gr. кóб $\mu$ оৎ 'hairdo'.

PIE *kés-ti / *ks-énti
See Puhvel HED 4: 157f. for attestations. There is evidence for different stems: $k i-i s ̌-z i, k i-s ̌ a-a n-z i$ and $k i-s ̌ a-a-a n$ point to a stem $k i s \check{S}^{-z} ; k i-s ̌ a-a-i z-z i$ and $k i-i-s \check{a}-a-$
 hatrae-class and the -ie/o-class are very productive in younger Hittite, we can
safely assume that kišae- ${ }^{z i}$ and $k i s ̌ s ̌ i i e / a-{ }^{z i}$ (with gemination due to the following $-\underline{i}-$ ?) are secondary creations and that the stem $k i s z^{z i}$ is the most original one. Already since Götze \& Sturtevant (1938: 88f.) this verb is generally connected with the PIE root *kes- 'to comb' that is visible in e.g. OCS česati 'to comb', Gr. ко́б $\mu$ оя 'hairdo', etc. Nevertheless, details are unclear, especially why Hittite shows an -i- (note that although the sign KI in principle can be read $k i$ as well as $k e$, the forms ki-iš-zi, ki-iš-ši-er (both with unambiguous -iš-) and ki-i-ša-a-id-du clearly point to $k i s^{-}$). Normally, an $* e$ does not raise to $-i$ - after velars (e.g. genu < *ǵenu-, genzu < *ǵenh $h_{1}$-su-), and we would therefore expect *kes- to develop to Hitt. **keš-. E.g. Melchert (1994a: 152) therefore reconstructs *kēs-éh ${ }_{2}$-ielo-, in which unaccentuated $*-\bar{e}$ - should have yielded Hitt. $-i-$. This preform is based on the stem kišae- ${ }^{z i}$ only, which must be secondary, and cannot account for $k i \check{s}-{ }^{z i}$.
I would like to propose the following solution. In PIE, the verb *kes- inflected *kés-ti/*ks-énti. Although it is clear that the former form should have yielded Hitt. **kešzi, the outcome of the latter form is not fully clear. When we compare e.g. kišt- ${ }^{-\overline{a r} i}<*^{\prime}{ }^{\text {gh }}$ s $s$-óri, we could expect that $* K s V$ - would regularly yield Hitt. $/ \mathrm{kis} V-/$, spelled $k i s ̌ V-$ (cf. the absence of any Hitt. words starting in kašV- < *KsV-). In this way, *ks-énti should regularly yield Hitt. ki-ša-an-zi/kisántis as attested. In my view, it is quite possible that the weak stem /kis-/ has spread throughout the paradigm (compare e.g. the situation in $g u l \check{s c}_{-}^{z i}$ ). If this scenario is correct, we may assume that the zero-grade stem $* k s$ - is the origin of CLuw. kišas well.
kiššar(a)-: see keššar / kiššer- / kišr-
kiššer(a)-: see keššar / kiššer- / kišr-
kišr(a)-: see keššar / kiššer- / kišr-
$\boldsymbol{k i s ̌ t} \boldsymbol{t}^{\bar{\pi} r i}$ (IIIf) 'to perish, to be extinguished': 3sg.pres.midd. gi-iš-ta-ri (OS), ki-iš$t a-a-r i(\mathrm{MS}), k i-i s ̌-t a-r i(\mathrm{OH} / \mathrm{NS}), 3 \mathrm{sg} . p r e t . m i d d . ~ k i-i s ̌-t a-a-t i$ (KBo 34.25, 1ff. (NS)), ki-iš-ta-ti (NH), 3sg.imp.act. ki-iš-ta-ru (MH/MS, OH/NS), ki-iš-ta-a-ru ( $\mathrm{OH} / \mathrm{NS}$ ); part. ki-iš-ta-an-t- (NS); verb.noun ki-iš-du-mar (NS).
Derivatives: kištanu- ${ }^{z i}$ (Ib2) 'to put out, to extinguish' (1sg.pres.act. ki-iš-ta-nu$m i, 3 s g . p r e s . a c t . ~ k i-i s ̌-t a-n u-z i, 3 p 1 . p r e s . a c t . ~ k i-i s ̌-t a-n u-a n-z i, k i-i s ̌-t a-n u-u a-a n-z i$, 1sg.pret.act. ki-iš-ta-nu-nu-un (MH/MS), 3sg.pret.act. ki-iš-ta-nu-ut, 2pl.imp.act. ki-iš-ta-nu-ut-te-en, ki-iš-ta-nu-ut-tén, ki-eš-ta-nu-ut-tén (OH/NS), 3pl.imp.act.
$k i-i s ̌-t a-n u-a n-d u$; part. $k i-i s ̌-t a-n u-u a-a n-t-;$ inf.I $k i-i s ̌-t a-n u-u m-m a-a n-z i ;$ impf.
ki-iš-ta-nu-uš-ke/a-), see kāšt-.
PAnat. *'g's $d$-ó
PIE $* g^{\prime}{ }^{\prime \prime} s d$ - $o ́$
See Puhvel HED 4: 167f. for attestations. This verb often has 'fire' as its subject, but also 'life' and 'evil adversary'. Its basic meaning therefore seems to be 'to cease to exist, to perish'. Within Hittite, it is likely for formal reasons that this verb is cognate with kāšt- 'hunger, kištuuant- 'hungry’. This could indicate that kišt - $^{\text {ari }}$ originally meant 'to be starved'. As I have argued extensively under the lemma $k a \bar{s} t-$, the original root of these words probably was $*^{\prime \prime} g^{h} e s d-$ 'to starve'. Since kišt- ${ }^{-\bar{r} r i}$ belongs to the tukkāri-class, which goes back to zero-grade middles, I reconstruct kištāri as $*^{\prime}{ }^{\prime}{ }^{h} s d$-ór (i).

## kitkar: see ketkar

kitpantalaz: see ketpantalaz
$=\boldsymbol{k} \boldsymbol{k} \boldsymbol{u}$ (encl.) 'now, even, and'; =kku ... =kku 'both ... and; if ... if; whether ... or' Anat. cognates: Pal. =ku 'and?'; CLuw. =ku (sentence initial enlcitic particle) 'and(?), furtermore(?)'.
IE cognates: Skt. ca 'and', Lat. -que 'and', Gr. $\tau \varepsilon$ 'and' etc.
PIE *- $k^{w} e$
See Puhvel HED 4: 203f. for an overview of attestations, e.g.
KBo 12.128
(6) $n u-u=k$-ku ka-ru-uš-tén nu GEŠTU-tén
'Now be silent and listen!';
KUB 33.24 i (with additions from KUB 33.27 obv. 7-8)
(43) $l e-e=u a-a=t$-ta na-a-hi tu-e $[-(e l=k u$ ua-a)š-ta-iš]
(44) úg=a-at $\mathrm{SIG}_{5}-z i-i a-m i \quad U-U L-a=k-k u$ tu[(-el un) $\left.a-a s ̌-t a-i s ́\right]$
(45) $u ́-g=a-a t \mathrm{SIG}_{5}-z i-i a-m i$
'Don't you worry. If it is your fault, I will make it right. If it is not your fault, I will make it right (as well)';

KUB 42.107 iii $^{?}$
(10) 6 PA ŠE ZI-KU-U'-KI ha-at-tar=ku
(11) zi-na-a-il=ku šu-me-eš=ku
‘6 parīsu of either zikûki-meal, hattar, zināil or šumeš grain'.
The particle $=k k u$ also occurs in the forms nekku 'not?' (q.v.), imma=kku 'and even, on top of it' (see imma), apiía $=k k u$ 'there and then' (see $a p \bar{a}-/ a p \bar{u}-$-) and possibly anku 'fully' (q.v.).
The etymon of $=k k u$ as reflecting the enclitic particle ${ }^{*}-k^{w} e$ has been widely accepted since Pisani (1952: 322). Pisani convincingly assumed that $=k k u$ reflects $/=\mathrm{k}^{\mathrm{w}} /$ with apocope from $*-k^{w} e$ (contra Garett apud Melchert (1994a: 184) who interprets $t a k k u$ as $\left./ \operatorname{tak}^{\mathrm{w}} \mathrm{u} /<* / \operatorname{tak}^{\mathrm{w}} \boldsymbol{\rho} /<*^{*} t^{w} e\right)$.
In the Laws, we find an enclitic particle $=a k u$, of which it is not fully clear whether we should divide it further in =(i) $a=k u$ (with an awkward single spelling $-k$-) or not:

KBo 6.2+ (OS) i (with variant and additions from KBo 6.3 i 45-46 (OH/NS))
(36) [(ták-ku LÚ.U ${ }_{19}$ )].LU-an LÚ- $n=a-k u$ (variant: LÚ- $a n-n=a-k u$ ) [(MUNUS- $n=a-k u$ $\left.{ }^{\text {URU }} H a-a t-t u-s ̌ a-a z ~ k u-i s ̌\right)-k i\left(\right.$ LÚ URU ${ }^{L u-u ́-i-i-i a-a s ̌)] ~}$
(37) $[(t a-a)]-i-e z-z i$
'If some man from Lūiịa steals a person from Hattuša, either a male or a female, ...'.

Tischler HEG 1: 601 states that "LÚ-na-ku" stands for "LÚ-n-ku = Akk.sg. antuȟšan-ku", but this seems hardly credible to me. Perhaps we have to assume $=$ (i) $a=k k u$ with lenition of $-k k$ - in post-posttonic position.
The interpretation of the sentence initial particles $=k u$ in Palaic and CLuwian is unclear, but a translation 'and' is of course quite possible. In CLuwian, $=k u$ is often followed by =ua, by which one could be tempted to analyse it as =kuua< ${ }^{*}-k^{w} e$ without apocope. The fact that this is not possible is visible in sentences like

KUB 35.102 ii
(15) $[a] n-n i-i s ̌=k u=u a=t i$ pár-na-an-za ma-ad-du-ú[-ua-ti]
(16) $[p] a-a p-p a ́ r-k u-u{ }^{2} a-a t-t i t a-a-t i-i s ̌=p a=u a=t i=a[-t a]$
(17) [.]x-ti-íia-ti pu-šu-ri-i $a[-t i]$
(18) [pa-]ap-pa-ša-at-ti
'Mother cleans the house with wine, and father p.-s it with [.]x-i- (and) pušuri-',
where the parallel particle chains $a n n i \check{s}=k u=u a=t i \sim t \bar{a} t i s ̌=p a=u a=t i(=a t a)$ show that we have to analyse a separate particle =ua in both chains.
kueluuana- (c.) 'washbasin (vel sim.)': dat.-loc.sg. [k]u-e-lu-ua-ni (KBo 22.203 obv.? 6 (MS?)), nom.pl. ku-e-lu-ua-ni-iš (MH/NS), dat.-loc.pl. ku-e-lu-ua-na-aš, ku-lu-ūa-na-ǎ̌ (MH/NS).

PIE *g ${ }^{w}$ elh $h_{1-2}$-uon-o-
Apart from dat.-loc.sg. [k]ueluuani, which is attested in a quite broken context, the other three attestations occur in one text, namely KUB 9.1 iii 14-22. It therefore is perhaps more likely to interpret the difference in spelling between $k u$ -$e-l u-u a-n a-a s ̌$ and $k u-l u-u a-n a-a s ̌$ as a scribal error (so the latter form rather $k u$-ィe-slu-ưa-na-aš) than as an ablaut alternation kuel- vs. kul-. The meaning 'washbasin (or similar)' is fairly certain. Neumann's connection (apud Tischler, 604) of this word with the PIE root "* $g^{w}$ el-" 'to drip, to overflow' (Skt. gálati 'to drip', OHG quellan 'to well', Gr. $\beta a \lambda \alpha v \varepsilon \tilde{o}$ ov 'bath') seems convincing. Nevertheless, Gr. (Hom.) ßá入ov (aor.) 'he fell' (cf. Rix 1992: 74) as well as Skt. galita- 'dripped' seem to point to a root * $g^{w}$ elh $_{1-}$. This would mean that kueluana- reflects * $g^{w}{ }^{w}{ }^{l} h_{l^{-}}$ uon-o- (with loss of $* h_{l}$ between consonants).
 1sg.pres.act $k u$-e-mi (MH/MS, OH/NS), 2sg.pres.act. $k u-e-s ̌ i(N H), k u$-en-ti (1x, $\mathrm{OH} / \mathrm{NS})$, $k u$-e-ti ( $1 \mathrm{x}, \mathrm{OH} / \mathrm{NS}$ ), ku-en-na-at-ti (1x, NS), 3sg.pres.act. ku-e-en-zi (OS), ku-en-zi (MH/MS), ku-in-zi (1x, MH/NS), ku-i-en-zi (1x, OH/NS), 1pl.pres.act. ku-uа-an-ú-e-ni (here?, KBo 39.248 obv. 4 (NS)), ku-en-nu-um-те-$e$-ni (1x, MH/NS), ku-en-nu-um-mé-e-ni (1x, NH), 2pl.pres.act. ku-en-na-at-te-ni ( $2 \mathrm{x}, \mathrm{OH} / \mathrm{NS}$ ), 3pl.pres.act. ku-na-an-zi (OS), ku-en-na-an-zi (1x, NS), 1sg.pret.act. ku-e-nu-un (NH), 2sg.pret.act. ku-in-ni-eš-ta (1x, NS), 3sg.pret.act. $k u$-e-en-ta (OS), ku-en-ta (MH/MS), 1pl.pret.act. ku-e-u-e-en (MH/MS), ku-e-uen (MH/NS), ku-in-nu-um-mé-en (1x, NS), 2pl.pret.act. ku-en-tén (NH), 3pl.pret.act. ku-e-ner (MH/MS), ku-e-ni-er (OH/NS), ku-en-ni-er (NH), ku-en-ner ( $\mathrm{OH} / \mathrm{NS}$ ), ku-in-ni-er (1x, MH/NS), 2sg.imp.act. ku-e-ni (MH/MS), ku-en-ni (1x, NH ), 3sg.imp.act. $k u$-en-du(NH), ku-in-du (NH), 2pl. imp. ku-en-te-en (MH/NS), 3pl.imp.act. $k u-n a-a n-d u(\mathrm{NH})$; part. $k u-n a-a n-t-$ (MH/MS); verb.noun $k u-n a-a$ tar (NH), gen.sg. ku-na-an-na-aš (NS), abl. ku-na-an-na-z=i-ia (NH); verb.noun
gen.sg. ku-en-nu-ma-aš (NH), ku-e-nu-ma-aš (NH); inf.I ku-en-nu-um-ma-an-zi (NS); inf.II ku-na-an-na (MH/MS), ku-na-a-an-na (OH/NS); impf. ku-aš-ke/a( $\mathrm{OH} / \mathrm{MS}$ ), $k u$-ua- $a \check{s}$-ke/a- ( $\mathrm{OH} / \mathrm{MS}$ ), ku-en-ni-eš-ke/a- (1x, NS).
IE cognates: Skt. han- / ghn- 'to strike, to kill, to slay', OCS žene 'to pursue, to hunt down', Lith. genù 'id.', Gr. $\theta$ cívف 'to smite', Lat. de-fendō 'to keep off, to defend'.

$$
\text { PIE } * g^{w h} \text { én-ti } / * g^{w h} n \text {-énti, } * g^{w h} n \text {-skééló- }
$$

See Puhvel HED 4: 206f. for attestations. The oldest texts show an $e / \varnothing$-ablauting mi-verb kuenzi / kunanzi. The original paradigm was kuemi, kueši, kuenzi, --, --, kunanzi ; kuenun, --, kuenta, kueuen, kuenten, kuener. We see that the -n- is lost in front of $m, s$ and $u$. Moreover, we see that in the forms kueši, kuenzi, kuenta and kuenten, where we would expect that $* e>a$ because of the following nasal + dental consonant, the $* e$ has been restored on the basis of the other forms of the paradigm. In NH times, we occasionally find forms that show a stem kuenna- ${ }^{i}$ / kuenn-, inflecting according to the productive $\operatorname{tarn}(a)$-class. The gemination of $-n n$ - in these forms is due to the NH gemination of intervocalic resonants as described by Melchert 1994a: 165. The imperfective kuuaške/a- is remarkable as it is the only form within the paradigm that shows a stem kuua(n)- (unless the hapax form ku-ua-an-ú-e-ni as attested on the very broken tablet KBo 39.248 obv. 4 is really to be interpreted as 1 pl.pres.act. $/ \mathrm{k}^{\mathrm{w}}$ ənuéni/). Because of the idea that $* K^{w} R C$ regularly yields Hitt. $K u R C$ and never ${ }^{* *} K u u a R C$, it is generally thought that this kuuaške/a-cannot reflect * $K^{w} n$-skée/o-, but must be the outcome of *kuen- + -ske/a-. As I have shown in detail in Kloekhorst fthc.e, the imperfective kuuaške/a- can be better explained if we assume that the development * $K^{w} R C>$ Hitt. KuRC is valid only when one consonant follows the resonant (so ${ }^{*} K^{w} R C V$ ), whereas in the case that two consonants follow the resonant ( ${ }^{*} K^{w} R C C V$ ), we find a development to Hitt. KuuaRCCV. In this way, kuuaške/a- $=/ \mathrm{k}^{\mathrm{w}}$ əské/á-/ shows the regular outcome of the preform $* g^{w h} n$-skééó-, the morphologically expected imperfective.

Already since Hrozný (1919: 73) the etymon has been clear: PIE $* g^{w h} e n$ - 'to smite; to slay, to pursue'. Especially the similarity to Skt. han- 'to strike, to kill' is striking: Hitt. kuenzi / kunanzi ~ Skt. hánti / ghnánti < *g whénti / *g wh nénti.
kuenzumna- (adj.) 'coming from where, of what origin': nom.sg.c. ku-en-zu-um$n a-a s ̌$.

This words, which occurs only twice (KBo 1.35, 7 and KUB 23.95, 9) is explained by Friedrich (1930: 152) as a derivation in -um(n)a- of the gen.pl. *kuenzan from the paradigm kui- / kuua- 'who' (which is unattested as such, but compare kenzan from $k \bar{a}-/ k \bar{u}-/ k i-$ 'this' and apenzan from ap $\bar{a}-/ a p \bar{u}-$-). The element $-u m(n) a$ - then must be equated with the appurtenance suffix -umen-/-umn- (q.v.) as visible in Hattušumen-, Nešumen-, etc. The form *kuenzan probably reflects $* k^{w}$ oi-nHsom: see at $k \bar{a}-/ k \bar{u}-/ k i$ - for a treatment of the element -nzan. See at -umen- / -umn- for a treatment of this suffix.
kuer- ${ }^{z i}$ / kur- / kuиar- (Ia1) 'to cut, to cut up, to cut out off, to amputate, to mutilate': 1sg.pres.act. ku-er-mi (NH), 3sg.pres.act. ku-e-er-zi (MH/MS), ku-er-zi (OH/NS), ku-er-ri (1x, KUB 24.12 iii 19), 1pl.pres.act. ku-e-ru-ẹ-n[i?] (MS?), 3pl.pres.act. ku-ra-an-zi (OH/MS?), 1sg.pret.act. ku-e-ru-un (NS), 3sg.pret.act. $k u$-e-er-ta (OH/NS), 3pl.pret.act. [k]u-e-re-er (NS), 3sg.imp.act. ku-e-er-du (NS), $k u-e r-d u(\mathrm{NS}), 3 p l . i m p . a c t$. . $k u-r a-a n-d u(\mathrm{NH}) ;$ part. $k u-r a-a n-t-$; inf.II $k u-r a-a-a n-$ $n a$ (MS), ku-ra-an-na (NS); impf. ku-ua-ar-aš-ke/a- (MS), kur-aš-ke/a- (MS), ku-ri-eš-ke/a- (NS), ku-ra-aš-ke/a- (NS).
Derivatives: ${ }^{\text {A.šì }}$ kuera- (c.) 'field parcel, territory, area' (nom.sg. ku-e-ra-aš ( $\mathrm{OH} / \mathrm{NS}$ ), ku-ra-aš ( $\mathrm{OH} / \mathrm{NS}$ ), acc.sg. ku-e-ra-an (MH/MS), dat.-loc.sg. ku-e-ri (MH/MS), abl. ku-e-ra-az), ${ }^{\text {URUDU }}$ kuruzzi- 'cutter' (instr. ku-ru-uz-zi-it (NS)), kuerš- ${ }^{z i}$ / kurš- (Ia1 > IIc2) 'to cut off' (1sg.pret.act. ku-e-er-šu-un (KBo 10.2 ii 48 ( $\mathrm{OH} / \mathrm{NS}$ ), 2sg.imp.act. kur-ša-a-i (KBo 11.1 obv. $26(\mathrm{NH})$ ), see ${ }^{(\mathrm{TƯG})} k u r e ̄ s ̌ s ̌ a r ~ / ~$ kurešn-.

Anat. cognates: CLuw. kuuar- / kur- 'to cut' (3sg.pres.act. ku-ua-ar-ti, ku-ua$a l-t i$, inf. ku-ú-ru-na), kuramma- 'cutting' (dat.-loc.sg. ku-ú-ra-am-mi, abl.-instr. ku-ra<-am>-ma-ti), kuranna/i- 'cutter (vel sim.)' (dat.-loc.sg. ku-ra-a[n]-ni), kurattar / kuratn- (n.) 'cutting' (dat.-loc.sg. ku-ra-at-ni, nom.-acc.pl. ku-ra-atna), kuraštra/i- (c.) 'schism' (gen.adj.nom.sg.c. ku-ra-aš-tar-ra-aš-ši-iš), kuri- / kurai- 'to cut into slices' (2sg.imp.act. ku-ú-ri, part. ku-ra-a-im-mi-i-iš), kuršauar / kuršau(a)n- (n.) 'island' (nom.-acc.pl. gur-ša-una-ra, dat.-loc.pl. gur-ša-u-ūa-na-an-za, erg.pl. kur-ša-ú-na-an-ti-in-zi, gen.adj.nom.sg.c. gur-ša-ûa-na$a s ̌-s ̌ i-i s ̌) ;$ HLuw. kwar- 'to cut (off)' (1sg.pret.act. "MANUS+CULTER"REL+ra/i-ha-' = $/ \mathrm{k}^{\mathrm{w}}$ arha/ (MARAȘ 4 § 13 )).

PAnat. * $k^{w} e r-/ * k^{w} r-$
IE cognates: Skt. $k r$ - 'to make', OIr. cruth 'shape, form' $\left(<* k^{w} r\right.$-tu-), Lat. curtus 'short' (<* $k^{w} r$-to- $)$.

PIE * $k^{w} e ́ r-t / * k^{w} r$-ént

See Puhvel HED 4: 212 f . for attestations. The verb is a perfectly regular e/Øablauting mi-verb. The only aberrant form is the hapax 3 sg.pres.act. ku-er-ri (KUB 24.12 iii 19), which in my view is so strange that I would rather emend it to $k u$-er-zi! (note that the signs RI and ZI are quite alike). The oldest form of the imperfective is kuuaraške/a-, which in my view is the regular outcome of * $k^{w} r$-skééló- (cf. Kloekhorst fthc.e). The younger forms kuraške/a- and kureške/aare secondary rebuildings, having taken over the synchronic weak stem kur-.
Since Pedersen (1938: 128) the etymon has been clear: PIE * $k^{w} e r$ - 'to carve, to crop, to shape by cutting'. The Sanskrit reflex of this verb, $k r$ - 'to make', displays a root-aorist ákar / ákran besides a derived present krṇóti / krṇvánti. This means that the Hittite paradigm is built on the PIE root aorist $*^{w} e ́ r-t / * k^{w} r$-ént (cf. the Skt. injunctive forms kár / $\left.{ }^{\dagger} k r a ́ n\right)$.

The interpretation of the two verbal forms that show an extra -s- is difficult. According to Oettinger (1979a: 119), kueršun is "ererbt aus einem sigmatischen Aorist". This is strange of course, in view of the fact that the un-extended stem kuer- / kur- reflects an aorist already. Puhvel (1.c.) therefore assumes that kuerš- is just a root-variant of kuer- as e.g. karš- ${ }^{z i}$ is of $i s ̌ k \overline{a r r-}{ }^{i} /$ iškar- < *(s)ker-. If this were the case, we would expect that $* k^{w} e r-s$ - would yield Hitt. **kuuarš- because of the sound law *eRCC>aRCC (note that all endings of the mi-inflection start in a consonant originally), just as karš-zi $<* k e r-s$-. I therefore assume that the form kueršun is an ad hoc-formation without any historicity. The form kuršăi is unclear regarding its interpretation. It is attested in KBo 11.1 obv. (26) ku-it-ma$a n=m a \quad$ KUR-e $a$-še-ša-nu-uš-ke-mi ku-it-ma-n=a-at kur-ša-a-i, which is translated by Puhvel (l.c.) as "but while I am [re]settling the land, during that time one keeps subdividing it", taking kuršāi as 3sg.pres.act. of a stem kurša- ${ }^{i}$ / kurš-. Starke (1990: $536{ }^{1978}$ ), however, translates "Solange ich das Land besiedlen werde, solange trenne es ab!", taking kuršāi as 2 sg.imp.act. of a stem kuršae- ${ }^{z i}$. He assumes that this kuršae- is a Hittite borrowing from a Luwian verb *kuršawhich is visible in CLuw. kuršauar 'island'.

## kueruana-: see kureuana- / kueruana-

kui- / kиe- / kuйa- (interrog. pron.) 'who?, what?’; (rel. pron.) 'who, what'; (indef. pron.) 'some(one), any(one)'; kuiš ... kuiš 'some ... other'; kuiš kuiš, kuiš ... kuiš, kuišš=a imma, kuiš ... imma, kuiš kuiš imma, kuiš imma kuiš, kuiš ... imma kuiš, imma kuiš (generalizing rel. pron.) 'who(so)ever, what(so)ever'.: nom.sg.c. $k u-i \check{s}(\mathrm{OS})$, acc.sg.c. $k u-i n(\mathrm{OS})$, nom.-acc.sg.nt. $k u-i t(\mathrm{OS}), k u-i-i t$ (rare, OS), gen.sg. ku-e-el (OS), ku-el (OS), dat.-loc.sg. ku-e-da-ni (OS), ku-e-da-a-ni
(1x), ku-i-e-da-ni (1x, NH), ku-i-da-ni (1x, OH/NS), abl. ku-e-ez (MH/MS), ku-e$e z-z a, k u-e-e z-z i$ (MH/MS), ku-e-za (1x), ku-i-e-ez-za (1x), ku-e-da-za (1x), nom.pl.c. $k u-i-e-e s ̌$ (OS), ku-i-eš (OS), ku-e-eš, acc.pl.c. $k u-i-u s ̌$ (OS), ku-i-ú-uš (1x, MH/MS), ku-e-uš (rare), ku-i-e-uš (1x), nom.-acc.pl.nt. ku-e (OS), ku-i-e (rare), dat.-loc.pl. $k u-e-d a-a \check{s}$ (MH/MS).
Derivatives: $\boldsymbol{k u i} \boldsymbol{-}^{+}=(\boldsymbol{m}) \boldsymbol{a}$ (generalizing rel. pron.) 'who(so)ever, what(so)ever' (nom.sg.c. $k u-i-s ̌ a(M H / M S), ~ n o m .-a c c . s g . n . ~ k u-i-t a(O S), ~ g e n . s g . ~ k u-e-l a ~(O S)), ~$ $\boldsymbol{k} u \boldsymbol{i}-+=\boldsymbol{k} \boldsymbol{k} \boldsymbol{i}=\boldsymbol{k} \boldsymbol{k} \boldsymbol{a}$ (indef. pron.) 'some(one), any(one)' (nom.sg.c. $k u-i s ̌-k i(\mathrm{OS})$, $k u-i s ̌-k a(K B o 6.5$ i 4 (OH/NS)), acc.sg.c. $k u$-in-ki (MH/MS), ku-i-en-ki (HKM 95, 5 (MH/MS)), nom.-acc.sg.n. ku-it-ki (OS), ku-it-ka (KUB 33.59 iii 14 (OH/NS)), ku-it-ga (KUB 7.1 ii 49 (OH/NS)), gen.sg. ku-e-el-ka (OS), ku-e-el$k a_{4}, k u$-el-ka $4_{4}, k u$-e-el-ki (1x), ku-el-ki (rare), dat.-loc.sg. ku-e-da-ni-ik-ki (OS), ku-e-da-ni-ki (rare, MH/MS), ku-i-ta-ni-ik-ki (1x), ku-e-da-ni-ik-ka (1x, OH/NS), abl. ku-e-ez-ka4 (NH), ku-e-ez-ga (NS), nom.pl.c. ku-i-e-eš-ka ${ }_{4}$ (MH/MS), acc.pl.c. $k u-i-u s ̌-g a$ (MH/MS), nom.-acc.pl.n. ku-e-ek-ki (MH/MS), ku-e-ek-ka $(\mathrm{NH}), k u-e-k a_{4}(\mathrm{NH})$, dat.-loc.pl. $k u-e-d a-a \check{s}-k a_{4}(\mathrm{NH})$ ), $\boldsymbol{k u i}-+=(i) a$ (generalizing pron.) 'every(one), each' (nom.sg.c. $k u-i \check{s ̌-s ̌ a ~(O S), ~ a c c . s g . ~ k u-i n-n a ~(M H / M S), ~}$ nom.-acc.sg.n. ku-it-ta (OH/MS), gen.sg. ku-el-la (OS), ku-e-el-la (OH/NS), dat.loc.sg. ku-e-da-ni-ía (MH/MS), ku-e-ta-ni-ia (OH/NS), abl. ku-e-ez-zi-ia (NS), $k u-e-e z-z i(\mathrm{MS})$ ), kuitmān (rel. conj.) 'until; while', (indef. adv.) 'for some time, in the interim, meanwhile' (ku-it-ma-a-n=a-ǎ̌ (OS), ku-it-ma-an (MH/MS)), $\boldsymbol{k u} \boldsymbol{a} \overline{\boldsymbol{t}}$ (interrog. adv.) 'why?; (+ 'if') for some reason; (kuuat imma kuuat) for whatever reason' (ku-ua-a-at (OS), ku-ua-at (MH/MS), ku-u-ua-at (1x)), kuūatka (marked indef.) 'in some way, somehow, perhaps' (ku-ua-a-at-k[a] (OS), ku-ua$\left.a t-k a_{4}(\mathrm{MH} / \mathrm{MS}), k u-a t-k a_{4}(1 \mathrm{x})\right)$, kuuatta(n) (interrog. adv.) 'where?, whither?'; (rel. conj.) 'where, whither'; (indef. adv.) 'somewhere', kuuatta kuuatta (adv.) 'in every way', kuиatta imma kuuatta 'wherever', kuйatta (imma kuuatta) šer 'wherefore, whatever for' (ku-ua-at-ta, ku-ua-at-ta-an, ku-ua-at-tan (1x), ku-ua-ta-an (1x), ku-ua-tan $(1 \mathrm{x}))$, kuūāpi(t) (interrog. adv.) 'where?, whither?; when?'; (rel. conj.) 'where, whither; when' (ku-ua-a-pí-it, ku-ua-pi-it (OS), ku-ua-a-pí (MH/MS), ku-ua-pi (MH/MS)), kuūāpikki (indef. adv.) 'somewhere, sometime, ever' (ku-ua-a-pí-ik-ki (OS), ku-ua-a-pí-ki (OS), ku-ua-pí-ik-ki (MH/MS, often), ku-ua-pí-ki (rare), ku-u-ua-pí-ik-ki (1x), ku-una-pí-ik-ka4 (rare)), kuūāpitta, kuuapiia (generalizing adv.) 'everywhere, always' (ku-ua-a-pí-it-ta (OS), ku-ua-pí-it-ta, ku-ua-pí-ía), kuššan (interrog. adv.) 'when?'; (rel. conj.) 'when'; (indef. adv.) 'sometime(?)'; kuššan imma 'whenever' (ku-uš-ša-an (OS)), kuššanka (indef. adv.) 'anytime, ever' ( $k u-u \check{s}-s \check{s} a-a n-k a, k u$ - $\left.u \check{s}-\bar{s} a-a n-k a_{4}\right)$.

Anat. cognates: Pal. kui- (rel. and interrog. pron.) 'who, what' (nom.sg.c. ku-iš, nom.-acc.n. ku-it, acc.sg.c. ku-in, dat.sg.? ku-i), kui- $+=\boldsymbol{a}$ (generalizing pron.) 'every' (nom.sg.c. ku-i-ša), kuiš kuiš (generalizing rel.) 'whoever' (nom.sg.c. ku$i s ̌ k u-i s ̌) ;$ CLuw. kui- (rel. and interrog. pron.) 'who, what' (nom.sg.c. ku-iš, ku-i$i \check{s}$, acc.sg.c. $k u-i n, k u-i-i n$, nom.-acc.sg.n. $k u-i$, nom.pl.c. $k u-i n-z i, k u-i-i n-z i), k u i-$ $+=\boldsymbol{h a}$ (indef. pron.) 'some/any(one)' (nom.sg.c. ku-iš-ha, acc.sg.c. ku-i-en-ha, nom.-acc.sg.n. ku-i-ha); HLuw. kwi- (rel. and interrog. pron.) 'who, what' (nom.sg.c. $/ \mathrm{k}^{\mathrm{w}} \mathrm{is} / \mathrm{REL}-i-s a$, REL-sa, acc.sg.c. $/ \mathrm{k}^{\mathrm{w}} \mathrm{in} / \mathrm{REL}-i-n a$, REL-na, nom.acc.sg.n. $/ \mathrm{k}^{\mathrm{w}} \mathrm{at}=\mathrm{sa} / \mathrm{REL}-a-z a$, REL-za, dat.-loc.sg. $/ \mathrm{k}^{\mathrm{w}} \mathrm{adi} / \mathrm{REL}-a-t i$, REL- $a-t i-i$, REL- $t i$, REL $+r a / i$, REL $+r a / i-i$, nom.pl.c. $/ \mathrm{k}^{\mathrm{w}} \mathrm{int}^{\mathrm{s}} \mathrm{i} / \mathrm{REL}-i-z i$, REL-zi, acc.pl.c. $/ \mathrm{k}^{\mathrm{w}} \mathrm{int}^{\mathrm{s}} \mathrm{i} / \mathrm{REL}-i-z i$, REL-zi, nom.-acc.pl.nt. $/ \mathrm{k}^{\mathrm{w}} \mathrm{ia} / \mathrm{REL}-i a$ ), $\boldsymbol{k} w i-+=\boldsymbol{h a}$ (indef. pron.) 'someone' (nom.sg.c. $/ \mathrm{k}^{\mathrm{w}}$ isha/ REL-i-sa-ha, REL-sa-ha, acc.sg.c. $/ \mathrm{k}^{\mathrm{w}}$ inha/ REL-i-ha, dat.-loc.sg. / $\mathrm{k}^{\mathrm{w}}$ adiha/ REL-ti-i-ha, REL-ti-ha), kwis kwis, kwis ima kwis, kwis kwisha, kwisha ... kwis (generalizing pron.) 'whoever, whatever', REL+ra/i (adv.) 'because' (/k ${ }^{\mathrm{w}}$ adi/?), REL-za (adv.) 'because', kuman (adv.) 'because' (ku-ma-na); Lyd. qi- (rel. and interrog. pron.) 'who, what' (nom.sg.c. $q i s, q y s$, acc.sg.c. $-q v$, nom.-acc.sg.nt. qid, qyd, qed, dat.-loc.sg. q $\lambda$ ), qi- $+=\boldsymbol{a}$ (indef. rel. pron.) 'whoever, whatever' (nom.-acc.sg.n. qida), qi- $+=\boldsymbol{k}$ (indef. pron.) 'someone' (nom.sg.c. qisk, qysk, acc.sg.c. qi(v)k, nom.-acc.sg.nt. qi(d)k, $q i(d) g$, dat.-loc.sg. q $\lambda k$ ), kud (rel. adv.) 'where', kot (rel. adv.) 'as', =ko(d)k (indef. encl.) 'somehow'; Lyc. ti- (rel. pron.) 'who, which' (nom.sg.c. ti, acc.sg.c. $t i$, nom.-acc.sg.n. $t i$, dat.-loc.sg. tdi, nom.pl.c. ti, nom.-acc.pl.n. tija), ti- + =ke (indef. pron.) 'some/anyone' (nom.sg.c. tike, acc.sg.c. tike, nom.-acc.sg.n. tike, dat.-loc.sg. tdike), $\boldsymbol{t i}-+=\boldsymbol{s e}$ (indef. pron.) 'any(one)' (nom.sg.c. tise, acc.sg.c. tise,
 $k \tilde{m} m \tilde{e}, ~ a c c . p l . c . ~ k \tilde{m} m i s, ~ n o m .-a c c . p l . n . ~ k \tilde{m} m a)$, k $\tilde{m} m \tilde{e} t(i)-\quad ‘ h o w(e v e r) ~ m a n y ’$ (nom.pl.c. k $\tilde{m} m e ̃ t i s, ~ a c c . p l . c . ~ k \tilde{m} m e ̃ t i s) . ~$

PAnat. $*^{w} i-, *^{w} o-$
IE cognates: e.g. Skt. kás, káa, kát/kím, OCS kbto, čbto, Gr. tíৎ, tí, Lat. quis, quid, Goth. has, ho, ha

PIE * $k^{w} i-/ *^{w} e-/ *^{w} o-$
See Puhvel HED 4: 218f. for attestations. All Anatolian languages show reflexes of the relative and indefinite pronoun $* k^{w} e-/ * k^{w} i-/ * k^{w} o$-, which is abundantly attested in the IE languages. Since it is not easy to reconstruct the PIE paradigms for these pronouns, and since therefore the exact relation between the stems $*^{w} e$-, $*^{w} i$ - and ${ }^{*} k^{w} o$ - is unclear, I will focus on the Anatolian material only.

Within the Hittite paradigm, we find the stem $k u i-<* k^{w} i$ - (nom.sg.c. $k u i s ̌$, acc.sg.c. kuin, nom.-acc.sg.n. kuit, nom.pl.c. kuieš, acc.pl.c. kuiuš) and kue- < $*^{w} e$ - (gen.sg. kuēl, dat.-log.sg. kuedani, abl. kuez, dat.-loc.pl. kuedas̆). The nom.-acc.pl.n.-form $k u e$ can either reflect $* k^{w} o i$ or $* k^{w} e i$ (although this is morphologically an awkward form from a PIE point of view), or $* k^{w} i h_{2}$ if one assumes lowering of $* i$ to /e/ due to the following *h2 (compare $a-a \check{s}-s ̌ u-u / \mathrm{Ra} \mathrm{So} /$ 'goods' $<{ }^{*}-u h_{2}$ in which $* h_{2}$ caused lowering of $* u$ to /o/). A stem kuua- $<*^{w} o$ is found in kuuāt 'why' and kuuāpi(t) 'where, whither', both showing - $\bar{a}-<{ }^{*}-o ́-$
 exact interpretation of kuššan 'when' is unclear to me. It seems to reflect * $k^{w}$ som, and would therefore reflect a 'zero-grade' stem $* k^{w}$-.

In Palaic, we only find evidence for a stem $k u i-<*^{w} i$-. This also goes for CLuwian, where we only find $k u i-<* k^{w} i-$. In HLuwian, however, we find besides REL- $i-=/ \mathrm{k}^{\mathrm{w}} \mathrm{i}-/<* k^{w} i$ - also forms that seem to point to a stem $/ \mathrm{k}^{\mathrm{w}} \mathrm{a}-/$, namely nom.-acc.sg.n. REL- $a-z a=/ \mathrm{k}^{\mathrm{w}} \mathrm{at}=\mathrm{s} a /^{\text {? }}$ (which contrasts with CLuw. nom.acc.sg.n. $k u i$ ) and dat.-loc.sg. REL- $a-t i=/ \mathrm{k}^{\mathrm{w}} \mathrm{adi} /$ ?. If $k u-m a-n a$ 'because' stands for $/ \mathrm{k}^{\mathrm{w}} \mathrm{man} /$, we would here see a 'zero-grade' stem $* k^{w}$ - as well. The Lydian stem qi- clearly reflects * $k^{w} i$-. The exact interpretation of $k u d$ 'where' and $k o t$ 'as' is not fully clear to me. One of these probably reflects $* k^{w} o$-. In Lycian, we find the stem $t i$-, which with palatalization due to $*_{-i-}$ reflects $* k^{w} i$-. The adjectives $k \tilde{m} m e / i$ - and $k \tilde{m} m \tilde{e} t(i)$ - do not show palatalization and therefore must reflect $* k^{w} o$ or, perhaps less likely, $* k^{w}-C$.

Some of the syntactic formations are found in several Anatolian languages, and sometimes even outside Anatolia. For instance, the Hittite generalizing pronoun $k u i-+=(i) a$ 'everyone' must be etymologically cognate with CLuw. kui- + =ha 'someone', HLuw. kui- + =ha 'someone' and Lyc. $t i-+=k e$ 'someone' < PAnat. $* k^{w} i-+*=h_{3} e$ (see at $=$ (i) $a$ for this reconstruction and the fact that Hitt. $=(i) a \sim$ Luw. =ha and Lyc. =ke), although this formation has received an indefinite meaning in the Luwian branch. The generalizing relative use of Hitt. kuiš kuiš 'whoever' is also attested in CLuwian kuiš kuiš and HLuwian REL-sa REL-sa 'whoever' and has an outer-Anatolian cognate in Lat. quisquis 'whoever', which points to a PIE usage ( $*^{w}$ is $\left.k^{w} i s\right)$.

The Hitt. formation $k u i-+=k k i /=k k a$ 'someone' is quite interesting. The distribution between $=k k i$ and $=k k a$ is not fully clear, but one gets the impression that originally $=k k i$ is used in the nominative and accusative, whereas $=k k a$ is used in the oblique cases. If this is correct, then this distribution is blurred in PreHittite times already, however (cf. OS kuedani=kki). Within Anatolian, this formation is cognate with Lyd. qi- $+=k$ 'someone' and Lyc. $t i-+=s e$ 'someone'.

Especially this last form is important as it shows that we have to reconstruct the elements $=k k i$ and $=k k a$ as $*=k i$ and $*=k^{\prime} o$ respectively ( ${ }^{*} k^{\prime}$ because of Lyc. $s$ ). Scholars have always been tempted to equate $k u i-+=k k i /=k k a$ with Lat. quisque 'whoever', which generally is derived from $* k^{w} i s-k^{w} e$. Attempts to derive Hitt. kuiški through dissimilation from ${ }^{*} k^{w} i s-k^{w} e$ (e.g. Oettinger 1983: 182, $185^{17}$, who also adduces Av. ci-ca) have no merit: if $* k^{w} i s-k^{w} e$ would have been altered through dissimilation, we would expect $* k^{w} i s-k e$ (with a plain velar), which is contradicted by the palatovelar that is reflected in Lyc. tise $\left(<* k^{w} i(s)\right.$ - $k^{\prime} o$ ). If one insists on upholding the connection between Hitt. kuiš-ki and Lat. quisque and Av. ci-ca, one should rather assume that $* k^{w} i s-k^{w} e$ as reflected in Latin and Avestan is a reshaped form itself, which arose out of $* k^{w} i s$ - $k^{\prime} e$ through assimilation. One could then assume that this assimilation is triggered by the formation $*^{w}$ is $k^{w}$ is. Note that the enclitic $*$-ke is also visible in Lat. nunc 'now' < *num-ḱe (cf. Hitt. kinun < *kí-num), hic, haec, hoc (OLat. hoce < *hod-ke) < $*^{h} e l o-+-k e$.
kukkurš- / kuuakuūarš- (Ib1) 'to cut up, to mutilate': part. ku-kur-ša-an-t- (NS), ku-gur-ša-an-t- (NS); impf. ku-ua-ku-ua-ar-<aš-»ke/a- (NS), ku-ug-gur-aš-ke/a(OH/NS), ku-uk-ku-ra-aš-ke/a- (NS), ku-uk-ku-ri-eš-ke/a- (OH/NS); broken ku$u k-k u-u ́[r-\ldots]$ (OS).

PIE * $k^{w}-k^{w} r s-$
See Puhvel HED 4: 235 for attestations. This verb seems to display a reduplication of the verb $k u e r \check{s}_{-}^{-z i}$, for which see under kuer- ${ }^{z i}$ / kur- / kuuar-. As I have argued in Kloekhorst fthc.e, the form kuuakuuaraške/a- is the regular outcome of *- $k^{w} r s$-sk'ée/o-, whereas kukkuraške/a- and kukkureške/a- are younger formations in which the synchronic weak stem has been introduced. See at $k u e r z^{z i}$ for further etymology.
$\boldsymbol{k u k u s ̌ s}{ }^{z i}$ (Ib1) 'to taste': 3sg.pres.act. $k u-k u-u s ̌\left[-z i{ }^{?}\right]$ (OS), $k u-k u-u s ̌-z i(\mathrm{OH} / \mathrm{NS})$.
IE cognates: Skt. joṣ- 'to enjoy', Gr. $\gamma$ عv́ouaı 'to taste', Lat. gustō 'to taste', Goth. ga-kiusan 'to test', ModHG kiesen 'to choose', ModHG kosten 'to taste'.

PIE *ǵeus-
The verb occurs twice only. The first context,
KBo 20.39 r.col.
(6) LUGAL-uš[ ... ]
(7) $k u-k u-u s ̌\left[-z i^{?} \ldots\right]$
is too broken to base any conclusion on. The second context is better preserved: it describes a ritual:

KUB 10.99 i
(24) ${ }^{\text {LÚALAM.ZU }}{ }_{9} A-N A$ NINDA.GUR 4. RA $1=\check{S} U$
(25) $m e-m a-i ~ t a-u a-l i=m a 2=S ̌ U$ me-ma- $a-[(i)]$
(26) LUGAL ú-e-il-la-la-i ú-e-el-la[(-i)]
(27) nu ú-e-il-la-i lu-ú-i[(-li)]
(28) $[(k i-i \check{s}-s ̌)] a$-ạn $A-N A$ LUGAL GEŠTIN ${ }^{\text {NINDA }}$ har-za-zu-un- $n\left[a^{?}\right]$
(29) $[\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-z] i n=a-a n k u-k u-u s ̌-z i$
//
KBo 47.247 vi ?
(10) $\left[\left({ }^{\text {LÚ }}\right.\right.$ ALAM.ZU ${ }_{9}$ NI) $)$ NDA. GUR $_{4} \cdot$ RA $1=\check{S} U$
(11) $[($ me-ma-i ta-ua-li=m)]a $2=$ ŠU me-ma-i
(12) [(LUGAL ú-e-il-la-l)]a-i ú-e-il-la-i
(13) [(nu ú-e-il-la-i lu-)]ú-i-li ki-iš-ša-an
(14) [ANA LUGAL GEŠTIN ${ }^{\text {NINDA }}$ har-za-zu-u] $n-n=a^{?}$ pa-ra-a
(15) $[\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-z(i n=a-a n k u-k u-u s ̌-z)] i$
'The clown speaks once to the thick-bread and speaks twice to the taual-. The king uelala-s (and) uella-s. He uella-s thus in Luwian. [They bring?] forth wine and harzazu-bread to the king, and he kukuš-s him/it'.

Watkins (2003) quite convincingly argues that a translation 'tastes' would fit the expected course of events in such rituals. He therefore compares kukušzi with the PIE root *'geus- 'to taste', and especially with the Indo-Iranian formations Skt. jujuṣ- and Av. zūzuš-.
gulašš- ${ }^{z i}$ : see gulš- ${ }^{z i}$
$\boldsymbol{g u l s ̌ s} \mathbf{-}^{z i}$ (Ib1) 'to carve, to engrave, to inscribe, to write, to decree': 1sg.pres.act. gul-aš-mi (MS), 3sg.pres.act. gul-aš-zi (OH/MS), 3pl.pres.act. gul-ša-an-zi ( $\mathrm{OH} / \mathrm{NS}$ ), gul-ǎ̌-ša-an-zi (NS), 1sg.pret.act. gul-šu-un (NH), gul-aš-šu-un (NS), 2sg.pret.act. gul-aš-ta (OH/MS), 3sg.pret.act. gul-aš-ta (MH/MS), 3pl.pret.act. gul-aš-še-er (NS), 3sg.imp.act. gul-aš-du (MH/NS), 2pl.imp.act. gul-aš-tén (MS); part. gul-ša-an-t-, gul-aš-ša-an-t-; verb.noun gul-šu-u-ua-ar (NS), gul-aš-šu-uaar (NS); impf. gul-aš-ke/a-(OH/NS).

Derivatives: ${ }^{\mathrm{d}}$ Gulšal- (c.) 'fate-goddess' (nom.sg. ${ }^{\mathrm{d}}$ Gul-ša-aš, ${ }^{\mathrm{d}}$ Gul-aš-ša-aš, dat.-loc.sg. ${ }^{\mathrm{d}}$ Gul-ši, nom.pl. ${ }^{\mathrm{d}}$ Gul-še-eš, acc.pl. ${ }^{\mathrm{d}}$ Gul-šu-us̆), gulzi- (c.) 'engraving, tracing’ (acc.sg. gul-zi-in (NS), nom.pl. gul-zi-eš (MH/NS), acc.pl. gul-zi-uš (undat.)).
Anat. cognates: Pal. ${ }^{\text {d }}$ Gulzannikeš 'fate-godesses' (nom.pl. gul-za-an-ni-ke-eš, dat.-loc.pl. gul-za-an-ni-ga-ắ); CLuw. gulzā(i)- 'to draw' (part. gul-za-a-i-ma, inf. gul-za-a-ú-na), ${ }^{\mathrm{d}}$ Gulza- (c.) 'fate, fate-goddess' (acc.sg. ${ }^{\mathrm{d}}$ Gul-za-an, gen.adj.nom.-acc.pl.n. gul-za-aš-ša), ${ }^{\text {GIŠ(.HUR) }}$ gulzattar (n.) 'sketch, rough draft, wooden tablet' (nom.-acc.sg. gul-za-at-tar, gul-za-tar, nom.-acc.pl. gul-za-at-tara, Hitt.abl. gul-za-at-ta-na-az, gul-za-da-na-za).
IE cognates: Skt. karṣati 'to plough', Av. karšaiti 'to draw furrows', Gr. т $̇ \lambda \sigma o v$ 'furrow'.

PIE * $k^{w} l s$-ént $i$
See Puhvel HED 4: 239f. for attestations. All forms are spelled $g u l-a s ̌-C^{\circ}, g u l-s ̌ V^{\circ}$ or gul-ǎ̌-š̌ $V^{\circ}$. The spellings with geminate $-\check{s} \check{s}$ - point to a phonological $/ \mathrm{k}^{\mathrm{w}} 1 \mathrm{~S}-/$. The verb denotes 'to carve, to inscribe'. From it the noun gulša- '* what has been inscribed $>$ fate' has been derived, which is deified as ${ }^{\text {d }} G u l \check{s} a$ - 'fate-goddess'. The noun gulzi- 'engraving' probably is a Luwianism, showing the specific Luwian development $*-l s->-l z-$. This Luwian noun $* g u l z a / i-$ (which is borrowed as an $i$ stem in Hittite) underlies the CLuwian verb gulzai- 'to draw' and gulzattar 'draft, wooden tablet'.
On the IE etymon of this verb there are mainly two visions. Puhvel (1.c) supports Carruba (1966: 36) in assuming that $g u l \check{s}$ - derives from $* g^{w} l-s-$ - 'to sting' (from a root ${ }^{*} g^{w} e l-$ as visible in Lith. gélti 'to sting', Gr. $\beta \alpha \lambda$ óv $\eta$ 'needle' (which in fact must reflect $* g^{w} e l H$ - because of the acute in Lithuanian)). The main objection against this etymology is the fact that * $g^{w}$ should have yielded Luw. $u$. Oettinger (1979a: 204), Starke (1990: 464) and Melchert (1994a: 150) all connect $g u l s ̌$ - with PIE * $k^{w} e l s$ - 'to draw furrows' (probibly an $s$-extension from * $k^{w} e l$ - 'to turn'), as seen in Skt. karṣati 'to plough', Av. karšaiti 'to draw furrows', Gr.
 as formally much more convincing.
We would expect that $* k^{w}$ éls-ti $/ * k^{w} l s$-énti should regularly yield Hitt. **kuualšzi / kulšanzi, but apparently the weak stem was generalized.
kuluиana-: see kueluuana-
kunna- (adj.) 'right (hand or side); right, favourable, succesfull' (Sum. ZAG): nom.sg.c. ZAG-aš (OS), ku-un-na-aš (MS), acc.sg. ZAG-an (OS), ku-un-na-an (NS), nom.-acc.sg.n. ku-un-na-an (OH/MS), ku-u-un-na-an (KBo 19.136 i 9 (MH/NS)) dat.-loc.sg. ku-un-ni (OS), all.sg. ku-un-na (MS), abl. ku-un-na-az (OS), ku-u-un-na-az (KBo 19.136 i 14 (MH/NS)), instr. $k u$-un-ni-t=a (OS), ZAG$n i-i t$, nom.pl.c. ZAG-ni-iš (NS), acc.pl.c. ZAG-nu-uš (OH/MS), nom.-acc.pl.n. ZAG-na.

Derivatives: *kunnatar (n.) ‘rightness, success’ (nom.-acc.sg. ZAG-tar), kunnahh- ${ }^{i}$ (IIb) 'to set aright, to get it right, to succeed' (1sg.pres.act. ZAG-ah$m i \quad(\mathrm{NH})$, 3pl.pres.act. ZAG-na-ah-ha-a-an-zi (MH/NS), part. ZAG-an-t-; verb.noun ku-un-na-ah-hu-u-ua-aš (NS); impf. ZAG-na-ah-hi-iš-ke/a- (MH/NS)), kunnēšš- ${ }^{z i}$ ( Ib 2 ) 'to turn out right' (3sg.pres.act. ku-un-ni-eš-zi (MH/MS)).

PIE *k'un-no- ?
See Puhvel HED 4: 245f. for attestations. The etymological interpretation of these words is difficul. Duchesne-Guillemin (1947: 89-90) connected kunna- with Av. spənta-, Lith. šveñtas, OCS svętъ ‘holy, sacred’, Skt. śunám 'success(fully)' that reflect a root *ḱuen-. A direct equation with Skt. śunám is impossible, however, since *ḱun-o- should have yielded Hitt. kuna- and not kunna- (cf. Melchert 1994a: 162). One could solve this by assuming an -no-stem *kiun-no-. Melchert (1.c.) rather derives kunna- from *k'uh $-n o$ - 'the strong one', connecting it with Skt. śávas- 'might' (*ḱeuh $h_{2}-o-$ ) and śúra- 'hero' (*k'uh $h_{2}$-ro-). If this is correct, then this would show that $* V h_{2} n V>H i t t . \operatorname{VnnV}$ (cf. the discussion about $* V h_{2} R V$ at ${ }^{\text {GIŠ }}$ māhla-, ${ }^{\text {UZU }}$ muhrai-/mahrai- and ${ }^{\text {GIŠzahrai-). Both etymologies are }}$ semantically possible, but I would be inclined to follow the first one.

Note that both etymologies preclude a connection with CLuw. kummaia/i-, Lyc. $k u m e / i$ - 'holy' since ${ }^{*} k$ '- would have yielded Luw. $z$ - and Lyc. $s$-.
${ }^{\mathrm{NA}_{4}}{ }^{\boldsymbol{k}}$ kunkunuzzi- (c.) 'rock’ (Sum. $\left.{ }^{\mathrm{NA}_{4} \mathrm{~S}} \mathrm{~S} U . \mathrm{U}\right)$ : nom.sg. $k u-u n-k u-n u-u z-z i-i s ̌, k u-u n-$ $k u-n u-z i-i s ̌, ~ a c c . s g . ~ k u-u n-k u-n u-u z-z i-i n, k u-u n-k u-n u-z i-i n$, gen.sg. $k u-u n-k u-n u-$ $u z-z i-i a-a \check{s}, k u-u n-k u-n u-z i-i{ }_{2} a-a s ̌, ~ d a t .-l o c . s g . ~ k u-u n-k u-n u-u z-z i$, instr. $k u-u n-k u-$ nu-zi-it.

PIE $* g^{w h} n-g^{w h} n-u-t i-$
See Puhvel HED 4: 251f. for attestations and semantic treatment. The word ${ }^{\mathrm{NA}_{4}}$ kunkunuzzi- denotes 'rock' and is predominantly attested in the Song of Ullikummi, which tells about ${ }^{\mathrm{NA}_{4}}{ }^{\text {kunnkunuzzi- }}{ }^{\mathrm{d}}$ Ullikummi- 'the Rock Ullikummi'. Because of contexts like KUB 41.ii $39{ }^{\mathrm{NA}_{4} k u-u n-k u-n u-u z-i t ~ u a-a l-a h-h a-n a-i ~ ' h e ~}$
strikes with a kunkunuzzi-' and KUB 22.70 rev. (55) nam-ma $=a t^{\mathrm{NA}_{4}} k u-u n-k u-n u-$ $u z-z i-i t$ (56) GUL-an-zi 'they strike them with a kunkunuzzi-', already Carruthers (1933: 154-5) convincingly analysed kunkunuzzi- as a word showing the suffix -uzzi-, which is used to form implements and tools, derived from the stem kunkun-, a reduplication of the verb kue(n) - ${ }^{z i} / k u n-/ k u u a n-$ 'to strike, to kill'. For the reconstruction of -uzzi- as *-u-ti-, cf. Rieken (1999a: 476). For a treatment of kue(n)- ${ }^{z i}$ / kun- / kuuan-, see there.
kur-: see kuer- $^{z i}$ / kur- / kuuar-
${ }^{\text {(TúG) }} \boldsymbol{k} \boldsymbol{k} \boldsymbol{u}$ ēššar / kurešn- (n.) 'piece of cloth; (+ SAG.DU-aš) (woman’s) headdress': nom.-acc.sg. ku-re-eš-šar (often), ku-re-e-eš-šar, ku-e-eš-šar (2x), ku-še$e \check{s}$-šar (1x), gen.sg. ku-re-eš-na-aš, ku-ri-iš-na-aš, dat.-loc.sg. ku-re-eš-ni, instr. $k u$-re-eš-ni-it, ku-ri-iš-ni-it, nom.-acc.pl. ku-re-eš-šar ${ }^{\text {HI.A }}$.
Derivatives: ${ }^{\text {TÚG }}$ kurešnae- ${ }^{-\quad}$ (Ic2) 'to provide with head-dress' (part. ku-re-eš$n a-a n-t$-, ku-ri-iš-na-an-t- 'coiffed').

$$
\text { PIE * } k^{w} r \text {-é } h_{l} s h_{l}-r /-n-
$$

See Puhvel HED 4: 262f. for attestations. Just as hukeššar / hukešn- 'slaughter' is derived from huek- ${ }^{z i}$ / huk- 'to slaughter' and ašeššar / ašešn- 'meeting' from eš${ }^{a(r i)}$ / aš- 'to sit', so does kureššar / kurešn- belong to kuer- ${ }^{z i}$ / kur- / kuuar- 'to cut' and reflects $* k^{w} r$-é $h_{l} s h_{1}-r$. The original meaning therefore must have been '*cut piece (of cloth) > piece of cloth'. See at kuer- / kur- / kuuar- for further etymology.
kureuana- / kueruana- (adj.) describing a foreign person or country in relation to a superior potentate: nom.pl.c. ku-re-e-ua-ni-eš (MH/MS), ku-re-ua-ni-eš (NH), [ku-]re-ú-ua-nu-uš (NS), ku-re-ua-na[-aš] (MH/NS), [k]u-e-ru-ua-nu-uš (NH), ku-er-ua-na-aš (NH), nom.-acc.pl.n. ku-re-ua-na (NH).

See Puhvel HED 4: 265 for attestations. According to Puhvel, this adjective describes "a foreign person, people or country in relation to a superior potentate or power" and "expresses a status of dependency without actual formal subjection or incorporation (distinct from vassaldom ...)". The word shows forms with a stem kureuana- and a stem kueruana-, which is quite remarkable. If the word is of IE origin, it apparently shows an ablaut kuer-u- vs. kur-eu-. Neumann (1961a: 93) analyses the word as showing a Luwian suffix -uana- 'pertaining to' attached to the stem kuera- 'field' (q.v.). He states that "[d]ie beiden Wechselformen
könnten etwa verschiedene Dissimilationsprodukte eines *kuiriuana- sein", which seems quite unattractive to me.
${ }^{(\dot{E})} \boldsymbol{g u r t a}$ - (c.) 'town, citadel, acropolis': acc.sg. gur-ta-an (NH), dat.-loc.sg. gur-ti (NH), abl. gur-da-az (NS).
Derivatives: ${ }^{\text {LÚ }}$ gurtauanni- (adj.) 'man of the citadel' (nom.sg. gur-ta-ua-an-niiš (MH/NS)), kurtalli- 'citadel-dweller(?)' (acc.sg. kur-ta-al-li-in).

See Puhvel HED 4: 275f. for attestations. Already since Benveniste (1932: 139), gurta- has been compared with PIE *g'ór-to- (Gr. дó $\rho \tau$ тos 'yard', Lat. hortus 'garden') and *g' ${ }^{h} r$ - $d^{h} \delta^{\prime}-$ (Skt. grhá- 'house', OCS gradz 'city' etc.). Although the formal and semantical similarity is indeed attractive, there are no known sound developments by which Hitt. -ur- can derive from either *-or- or -r-. Because of its late attestation (NH only) and the derivative gurtauanni- that shows a Luwian suffix -uanna/i-, it is quite possible that this word is a loan from Luwian. Melchert (1994a: 260) therefore assumes that gurta- is the Luwian outcome of ${ }^{*} g^{h} r d^{h} o$-. Nevertheless, because in Luwian the normal outcome of ${ }^{*} \mathrm{Cr} C$ is also CarC, this etymology remains problematic. Kimball (1999: 250) suggests a reconstruction $* g^{w} r$ to-, derived from a root $* g^{w}$ er- 'mountain, height' as visible in Skt. giri- 'mountain', Av. gairi- 'mountain', OCS gora 'mountain'. These forms rather point to ${ }^{*} g^{w}$ er $H$-, however.
 dat.-loc.sg. gur-ta (NS), abl. kur-ta-za (NS), gur-ta-za (NS), gur-da-za (NS), dat.loc.pl. kur-ta-aš (MS), gur-da-aš (NS).

PIE $* k^{w} r$-to-
See Puhvel HED 4: 276-7 for attestations. Usually, this word is translated as 'wooden tablet', but this is rejected by Puhvel (l.c.), who assumes that kurta "most probably denoted the wooden crates in which the tablets were stored, and hence be identical with the *kurta- postulated as underlying kurtal(l)i- 'crate'". This opinion is based especially upon the following context:

KUB 38.19 + IBoT 2.102 rev.
(4) $k a-r u-u ́[-i]-l i-i \underline{i} a-z=a-a t=k a ́ n$ GIŠ.HुUR $_{\text {gur- }} d a-[z a]$
(5) ar-hha gul-aš-ša-an-za $\times$ [ ... ]
which Puhvel (who reads GIŠ.HUUR gur-da-[za]) translates as "from an old wooden tablet from the g. it [is] recopied": according to him in this sentence the
meaning 'wooden tablet' is already expressed by GIŠ.HUR which means that gurda[za] cannot denote 'wooden tablet' either. Starke (1990: 458) translates this sentence as "Auf einer alten Holztafel (sind) sie ausgewiesen als ...", however, taking GIŠ.HUR as a determinative of $g u r d a[z a]$. As a parallel he cites KUB 42.103 iii (13) an-na-la-z=a-at=kán (14) GIŠ.HUR gul-za-da-na-za ar-ha gul-ša$a n[-d a]$ "Auf einer alten Holztafel (sind) sie ausgewiesen ...". Starke further remarks that kurta- should be derived from kuer- ${ }^{-2 i}$ / kur- 'to cut' (q.v.), originally meaning "das Abgeschnittene" (although Starke assumes a Luwian origin, and subsequently derivation from CLuw. kuuar- 'to cut'). This latter translation and etymological account seems attractive to me, and I therefore reconstruct $* k^{w} r$-to-. See at kuer- $^{z i}$ / kur- / kuuar- for further etymology.
$\boldsymbol{k} \boldsymbol{u} r u r-(\mathrm{n}$.$) 'enmity, hostility, war(fare)', kūrura- (c.) 'enemy’: nom.-acc.sg.n. ku-$ ru-ur (OS), ku-u-ru-ur (MH/MS), nom.sg.c. ku-u-ru-ra-aš (MH/MS), ku-ru-ra$a s ̌$, gen.sg. $k u-u-r u-r a-a s ̌$ (MH/MS), ku-ru-ra-aš, dat.-loc.sg. $k u-u-r u-r i(\mathrm{OS}), k u-$ $r u-r, \quad k u-r u-r i-i(\mathrm{OH} / ?)$, erg.sg. ku-u-ru-ra-an-za (OH/MS), ku-ru-ra-an-za (MH/NS), nom.-acc.pl. $k u-r u-u r^{\text {HI.A }}, k u-r u-r l^{\text {HI.A }}, k u-u-r u-r i^{\text {HI.A }}$, dat.-loc.pl. $k u-u-$ $r u-r a[-a \check{]}]$.

Derivatives: kūruriiela- ${ }^{z i}$ (Ic1) 'to be hostile' (3.sg.pret.act. ku-u-ru-ri-e-et (MS?), 3pl.pret.act. ku-u-ru-ri-e-er (OS)), kururae- ${ }^{z i}$ (Ic2) 'to be hostile' (3sg.pres.act. ku-ru-ra-iz-zi (NS)), kūruriịahh- ${ }^{i}$ (IIb) 'to wage war (on), to act hostile (towards) (+ dat.), to become enemies’ (2sg.pres.act. ku-ru-ri-ia-ah-ti (NH), ku-ru-u-ri-ia-ah-ti (OH/NS), 3sg.pres.act. ku-ru-ri-i_ia-ah-zi, 1sg.pret.act. ku-ru-ri-ia-ah-hu-un, 3sg.pret.act. ku-u-ru-ri-ia-ah-ta, ku-ru-ri-ia-ah-ta, ku-ru-ri-ah-ta, 1pl.pret.act. ku-ru-ri-ah-hu-u-en, 3pl.pres.act. ku-u-ru-ri-ia-ah-he-er, ku-u-ru-ri-i-i, $a-a h-h e-e r, ~ k u-r u-r i-i a-a h-h e-e r, ~ k u-u-r u-r i-a h-h e-e r, ~ 3 s g . i m p . a c t . ~ k u-r u-~$ ri-ía-ah-du; part. ku-ru-ri-i_a-ah-ha-an-t-, ku-u-ru-ri-ia-ah-ha-an-t-, ku-u-ru-ri-ah-ha-an-t-; inf.I ku-ru-ri-i_i-ah-hu-an-zi; impf. ku-u-ru-ri-i_a-ah-hi-eš-ke/a-, ku-u-ru-ri-i_ia-ah-ḩi-iš-ke/a-), *kururatar / kururann- (n.) 'enmity, hostility’ (dat.-
 acc.sg. ${ }^{\text {LÚ }} \mathrm{KÚR}-a n$, dat.-loc.sg.c. ${ }^{\text {LÚ }} \mathrm{KÚR}-n i$ (MH/NS), nom.pl.c. ${ }^{\text {LÚ.MEŠKÚR, }}$ acc.pl.c. ${ }^{\text {LÚ.MEŠKÚR-uš, }}{ }^{\text {LÚ }} \mathrm{KÚ}^{\mathrm{MES}}-u s ̌, ~ d a t .-l o c . p l . c . ~(~ L U ́ K U ́ R-n a-s ̌=a-a t ~(O S)), ~$


See Puhvel HEd 4: 280f. for attestations. The word kūrur- and its derivatives are often spelled $k u-u-r u$-, with a plene $-u$-. This points to a phonological form /kóror/. The neuter stem kūrur- 'enmity, hostility' is clearly original, from which the occasionally attested commune stem kūrura- 'enemy' is derived, probably
through hypostasis of the genitive kūruraš '(man) of enmity' > 'enemy'. Usually, this commune stem kūrura- is equated with the sumerogram ${ }^{\text {LÚ }} \mathrm{KU}$ R 'enemy' (thus e.g. Puhvel 1.c.), but all occurrences of ${ }^{\text {LÚ }} \mathrm{KÚR}$ with an unambiguous phonetic complement point to a stem in -na- (dat.-loc.sg. ${ }^{\text {LÚKÚKR-ni, dat.-loc.pl. }}$ ${ }^{\text {LÚ }}$ KÚR-naš, adv. ${ }^{\text {LÚ }}$ KÚR-nili): we never find $* *{ }^{\text {LÚ }}$ KÚR-ra-, which would have pointed to an equation with kūrura-. I therefore have chosen to gather all occurrences of ${ }^{\text {LÚ }} \mathrm{KÚR}$ and separate them from kūrura-. One may even ask oneself whether the stem kūrur- and ${ }^{\text {LÚ }} \mathrm{KÚR}-n a$ - could etymologically be connected at all.
There is only a small group of words in Hittite that end in -ur- and do not show the heteroclitic inflection -ur- / -u(e)n- (like e.g. pahhhur / pahhuen- or mēhur / mēhun-). Nevertheless, these are usually regarded as old *-ur-/-u(e)n-stems that have lost their heteroclitic inflection (see Rieken 1999a: 319f. for a treatment of these words). In this way, it would be possible to assume that ${ }^{\text {LÚ }} \mathrm{KÚR}$-na-goes back to the old oblique stem *kūrun- or *kūruen-.
The etymological interpretation of kūrur- is difficult. The first proposal, comparing it with Skt. krūrá- 'bloody', etc. (Holma 1916: 66), implies an unattractive dissimilation from *krūrur. Sturtevant (1933: 119, 148, followed by e.g. Oettinger 1979a: 102 and Rieken 1999a: 320-1) rather saw kūrur- as a derivative from kuer- $^{z i}$ / kur- 'to cut'. Although semantically certainly possible (cf. Rieken l.c.), Eichner (1980: 139) points out that the reflexes of $* K^{W} R$ - are never spelled $k u-u-R$ in Hittite (cf. the total absence of e.g. a spelling $* * k u-u-r a-$ $a n-z i$ 'they cut' or $* * k u-u-n a-a n-z i$ 'they kill'; the only counter-example I know of is $k u-u-u t-r u-u a-a-i z-z i\left(\mathrm{KBo} 6.4\right.$ iv $7(\mathrm{OH} / \mathrm{NS})$ if this really reflects $* k^{w} t-r u-$, but this is strictly speaking no example of $* K^{w} R$ ). Therewith a reconstruction * $k^{w} r$-ur- has become unattractive. Eichner (1973a: 75, 99) rather connects kūrurwith Skt. hvárate 'to deviate', Av. zūrah- 'iniquity' from *g' ${ }^{h}$ uer- 'to walk crookedly', but these Indo-Iranian forms might better be compared with Lith. pažulnùs 'crooked, oblique', Gr. $\varphi \eta \lambda$ óc 'deceitful' and OCS zъlъ 'bad, evil' and then must reflect * $g^{h}$ uel-. Puhvel (o.c.: 286) suggests to compare kūrur- to Gr. $\theta$ ŋ́ $\rho$, OCS zvěrb, Lith. žvérìs, Lat. ferus 'wild beast', for which he reconstructs a PIE root *g' ${ }^{\prime}$ uer- 'to be savage, to rage'. However, all forms point to a root *g' ${ }^{h}$ ueh $_{1} r$ - (cf. the broken tone in Latv. zvȩ̂rs; Lat. ferus then must show Dyboshortening, cf. Schrijver 1991: 337), which would mean that we have to reconstruct * $g^{h} u h_{l} r$-ur-. Such a form would indeed account for the plene spelling $-u$-, but the semantic probability remains a point of discussion.

All in all, none of the proposed etymologies surpasses the others in all respects. Nevertheless, a preform $* g^{h} u h_{l} r$ - ur- would explain the formal facts best.
${ }^{\text {(LÚ) }} \boldsymbol{k} \bar{u} \mathbf{s ̌} \boldsymbol{a}$ - (c.) 'daughter-in-law, bride; son-in-law’: acc.sg. ku-ú-ša-an (OS), nom.pl.c. ku-ú-še-eš (OS).
Derivatives: $\boldsymbol{k} \boldsymbol{u} s ̌ a ̄ t a-(n) ~ ' b r i d e-.p r i c e ’ ~(n o m .-a c c . s g . ~ k u-u ́-s ̌ a-a-t a ~(O H / ?), ~ k u-u ́-~$ $\check{s} a-t a(\mathrm{OH} / ?), k u-s \check{a} a-a-t a(\mathrm{OH} / \mathrm{NS}), k u-s ̌ a-t a(\mathrm{MH} / \mathrm{MS})$, gen.sg./pl. $k u-u ́-s \check{a}-d a-a \check{s}$ (MH/NS), nom.-acc.pl. $k u-u ́-s ̌ a-t a(2011 / f, 6))$.

IE cognates: Skt. joṣ- 'to enjoy', Gr. $\gamma \varepsilon v v^{\prime} \mu \alpha ı$ 'to taste', Lat. gustō 'to taste', Goth. gakiusan 'to test', ModHG kiesen 'to choose'.

PIE *ǵéus-o-?
See Puhvel HED 4: 288f. for attestations. Note that the words are consistently spelled with plene $u$ and never with $u$. This points to a phonological interpretation /kúsa-/. The semantic interpretation of these words are difficult. Nevertheless, Weitenberg (1975) convincingly showed that kūša- must mean 'son-in-law' or 'daughter-in-law; bride', whereas kūs̄āta- should mean 'bride-price'. His etymological connection with Gr. кúбӨos 'female sex-organ' was not very convincing, however. Rieken (1999a: 258) rather reconstructs *ǵeus-o- 'the chosen one'. In her view, kūšāta- would be a derivation in *-teh $2^{-}$. Although more appealing, it is a slight problem that PIE *g'eus- did not mean 'to choose', but rather 'to taste' (Hitt. kukuš- ${ }^{z i}$ 'to taste', Skt. joṣ- 'to enjoy', Gr. $\gamma \varepsilon$ ćóoua 'to taste', Lat. gustō 'to taste'). Nevertheless, a semantic development to 'to choose' is also visible in some Germanic languages (ON kjósa 'to choose', ModHG kiesen 'to choose'). See at $k u k u s^{-2 i}$ for another reflex of PIE *geus-.
kuššan- / kušn- (n.) 'pay, salary, fee, hire' (Akk. IDU): nom.-acc.sg. ku-uš-ša-an (OS), dat.-loc.sg. ku-uš-ša-ni (OS), ku-uš-ša-ni-i (OS), ku-uš-ni (OH/NS), abl. ku$u s ̌-s ̌ a-n a-a z(\mathrm{OS}), k u-u s ̌-n a-a z(\mathrm{OH} / \mathrm{NS})$, nom.-acc.pl. ku-uš-ša-ni (OH/NS).
Derivatives: kuššaniie/a- ${ }^{z i}$ (Ic1) 'to hire, to employ' (3sg.pres.act. ku-uš-ša-ni$e z-z i(\mathrm{OS}), k u$-uš-ša-ni-i-e-ez-zi (OH/?), ku-uš-ša-ni-ía-zi (OH/NS), ku-uš-ne-ez-zi (OH/NS)), ${ }^{\text {LÚ }} \boldsymbol{k u s ̌ s ̌ a n ( i i i ) a t a l l a - ~ ( c . ) ~ ' h i r e l i n g , ~ m e r c e n a r y ' ~ ( n o m . s g . ~ k u - u s ̌ - s ̌ a - n i - i ́ a - ~}$ tal-la-aš (MH/MS), ku-uš-ša-na-at-tal-la-aš (MH/NS), acc.sg. ku-uš-ša-na-at-tal-la-an (MH/NS)).

IE cognates: OE hȳr, OSax. hūria, MLG hure, ModDu. huur 'hire'.

$$
\text { PIE *kuh } h_{1 / 3} s-n
$$

See Puhvel HED 4: 290f. for attestations. The word and its derivatives predominantly occur in the Hittite Laws. It is consistently spelled $k u-u s ̌-s ̌ a-a n$ and $k u-u \check{s}-s \check{s} a-n^{\circ}$, except in KBo 6.10 (a NS copy of the Hittite Laws), in which we
find the spelling $k u-u s ̌-n i, k u-u s ̌-n a-a z$ and $k u-u s ̌-n e-e z-z i$. Despite their restricted occurrence, these spellings show that we are dealing with a phonological /kuSn-/ (or $/ \mathrm{koSn}-/$ although in that case we may have expected a spelling $k u-u-u s ̌-s ̌ a^{\circ}$ ). Many etymological proposals have been given (see an overview in Puhvel 1.c.), the best one of which is Goetze's suggestion (1954: 403) to connect kuššan- with OE $h \bar{y} r$ 'hire' from *kuHs-. Not only formally, semantically as well this etymology seems impeccable. The laryngeal (which is needed to explain long $\bar{u}$ in Germanic) can only be $* h_{1}$ or $* h_{3}$, since $* h_{2}$ would have yielded Hitt. - $h$ - in front of $-s-$. The original paradigm probably was $* k e u h_{1 / 3} S-n$ or $* k u e h_{1 / 3} s-n$ (depending on where the full-grade vowel was located, which cannot be determined from the available evidence), $* k u h_{1 / 3} S$-én-s, which was secondarily changed to $* k u h_{1 / 3} s-n$, *kuh $h_{1 / 3} s-n$-ós, yielding attested kuššan, kuššan-.
$\boldsymbol{k u} t t-$ / kutt- (c.) 'wall': nom.sg. ku-ú-uz-za (NS), ku-uz-za (MH/MS), acc.sg. ku-ut-ta-an (MH/MS), gen.sg. ku-ut-ta-aš (OS), dat.-loc.sg. ku-ut-ti (OS), all.sg. ku-ut-ta (MH/NS), abl. ku-ut-ta-az (MH/MS, OH/NS), ku-ud-da-az (MH/NS), ku-ut-ta-za (NS), nom.pl. ku-ut-te-eš (MH/NS), ku-ut-ti-e-eš (MH/MS), acc.pl. ku-ud$d u-u s ̌$ (NH), dat.-loc.pl. ku-ut-ta-aš (MH/NS).
Anat. cognates: CLuw. ${ }^{\mathbf{N A}_{4}}{ }^{\text {kinttaššara/i- }}$ 'orthostat' (dat.-loc.sg. ku-ut-ta-aš-šari); HLuw. SCALPRUMkutasara/i- (c.) 'orthostat' (dat.-loc.sg. "SCALPRUM"ku-ta$s a_{5}+r a / i-i$ (KARKAMIŠ A13d §5, KARKAMIŠ A16b), nom.pl. ${ }^{\text {SCALPRUM }} k u$-ta$s a_{5}+r a / i-z i \quad$ (KARKAMIŠ A11a $\quad \S 15$ ), acc.pl. ${ }^{\text {SCALPRUM }} k u$-ta-sa $a_{5}+r a / i-z i$ (KARKAMIŠ A11a §23, KARKAMIŠ A27e §4), ${ }^{\text {SCALPRUM }^{k} u \text {-tá-s } a_{5}+r a / i-z i}$ (KARKAMIŠ A18e §5), [ $\left.{ }^{\text {SCALPRUM }}\right] k u-t a-s a_{5}+r a / i-z i-i$ (KARKAMIŠ A11 $b+c$ §23), dat.-loc.pl. ${ }^{\text {SCALPRUM }} k u-t a-s a_{5}+r a / i-z a$ (KARKAMIŠ A11b+c §24, KARKAMIŠ A20a1 §3), kutasara- 'to "orthostat"' (1sg.pret.act. SCALPRUM$s a_{5}+r a / i-h a$ (KARKAMIŠ A11a §16)).
IE cognates: Gr. $\chi \varepsilon ́ \varepsilon(F) \omega$ 'to pour', Skt. juhóti 'to pour, to sacrifice'.
PIE * $g^{h} e^{e} u-t-s,\left[* g^{h} u\right.$-ét-m], * $g^{h} u-t-o ́ s$
See Puhvel HED 4: 296f. for attestations. Occasionally, the sumerographically spelled word BÀD-eššar 'fortification, stronghold' is interpreted as *kutteššar (primarily on the basis of Luw. kuttaššara/i- 'orthostat'), but we should rather read it as šaheššar (see at šaheššar / šahešn-).
Since Kronasser (1956: 228), this word is usually regarded as an abstract noun in $-t$ - of the PIE root ${ }^{\prime} g^{h} e u$ - 'to pour' $(G r . \chi \dot{\varepsilon}(F) \omega$ 'to pour', Skt. juhóti 'to pour, to sacrifice' etc.). The semantic development must have been '*out-pouring' > '*earthen wall' > '(stone) wall' (compare Gr. $\chi \omega$ ' $\mu \alpha$ 'embankment'). A priori, we
would expect that a commune $-t$-stem would show a hysterodynamic ablaut pattern, namely $*^{*} g^{h} e ́ u-t-s, *^{\prime} g^{h} u$-ét-m, * $g^{h} u$-t-ós. In my view, (part of) this ablaut is still visible in the Hittite opposition nom.sg. $k u-u ́-u z-z a$ : gen.sg. $k u-u t-t a-a \check{s}=$ /kúts/ : /kutás/. The acc.sg.-form $*^{\prime} g^{h} u$-ét-m, which should have yielded Hitt. **kuettan, apparently was levelled out to attested kuttan.
It is not fully clear whether Luw. kuttaššara/i- belongs here as well. If so, it would reflect $*^{\prime} g^{h} u-t$-esr and show that PIE $* g^{h}$ remains as $k$ - in Luwian in front of the back vowel - $u$ - (cf. Kimball 1994c: 82).
kutruuan- / kutruuen- (c.) 'witness': nom.sg. ku-ut-ru-ua-aš (KBo 15.25 obv. 35 (MH/MS), KUB 58.108 iv 14 (NS)), ku-ut-ru-aš (KUB 17.20 iii 11 (NS)), dat.loc.sg. ku-ut-ru-i (KUB 6.45 iv 56 (NH)), nom.pl. ku-ut-ru-e-ni-eš (KUB 23.77a obv. 10 (MH/MS), HT 1 i 57 (MH/NS)), [ku-]ut-ru-e-ni-iš (KBo 16.25 iii 67 (MH/MS)), ku-tar-ú-e-ni-eš (KUB 23.78, 9 (MH/MS)), ku-ut-ru-ú-e-ni-eš (KBo 12.18 iv 2 (OH/NS), KUB 8.35 ii 13 (NS)), ku-ut-ru-ú-e-ni-išs (KUB 26.41 obv. 5 (MH/NS)), [k]u-utt-rụ-e-nị-eš (KUB 17.18 iii 6 (NS)), ku-ut-ru-e-eš (KUB 9.31 ii 4 (MH/NS), KBo 4.10 obv. 49, 51 (NS), KUB 60.161 ii 9 (NS), Broze Tablet iii 81 (NH)), ku-ut-ru-ua-aš (KUB 13.6 ii 27 (OH/NS)), ku-ut-ru-u-uš (KUB 13.4 ii 36 ( $\mathrm{OH} / \mathrm{NS}$ ) ).

Derivatives: kutruuae- ${ }^{-3}$ (Ic2) 'to bear witness, to provide testimony' (3sg.pres.act. ku-u-ut-ru-ua-a-iz-zi (OH/NS), ku-ut-ru-ua-a-iz-zi), kutruuatar / kutruŭann- (n.) ‘witnessing’ (dat.-loc.sg. ku-ut-ru-ua-an-ni), kutruē̌̌šar / $\boldsymbol{k u t r u e ̄ ̌ ̌ n - ~ ( n . ) ~ ' w i t n e s s i n g ' ~ ( d a t . - l o c . s g . ~ k u - u t - r u - e - e s ̌ - n i ) , ~ k u t r u u a h h ~}{ }^{i}$ (IIb) 'to summon as witness' (1pl.pres.act. [ku-u]t-ru-ua-ah-hu-u-e-ni, 1sg.pret.act. ku-ut-ru-ua-ah-hu-un, 1pl.pret.act. ku-ut-ru-ua-ah-hu-u-en, 2sg.imp.act. ku-ut-ru-ua$a h$; verb.noun gen.sg. $k u-u t-r u-u$ u-ah-hu-u-ua-aš).
Anat. cognates: HLuw. trwan(i)- (c.) 'judge' (nom.sg. "IUDEX" tara/i-wa/i-ni-i-sa (EĞRİKÖY §3), ${ }^{\text {IUDEX }}$ tara/i-wa/i-ni-sa (KARKAMIŠ A11a §1), "IUDEX" $t a r a / i$ -wa/i-ni-sa (TELL AHMAR 1 §1), "IUDEX" tara/i-wa/i-ni-sá (MARAŞ 1 §1e), "IUDEX" ${ }^{t a r a / i-w a / i-n i-s a ̀ ~(M A R A S ̧ ~} 1$ §1a), "IUDEX" ${ }^{\text {tara/i-wa/i-ní-sa }}$ (BABYLON 1 §1, MARAŞ 4 §1), etc. acc.sg. IUDEX-ni-i-na (IZGIN 1-2 §14), dat.-loc.sg. IUDEX-ni-i (MALPINAR §2), nom.pl. IUDEX-wa/i-ni-zi (TELL TAYINAT 2 line 1)), trwana/i- 'justice' (abl.-instr. ${ }^{\text {IUSTITIAA }}$ tara/i-wa/i-na-ti (SHEIZAR §2, AKSARAY §5), "UUSTITIA" tara/i-wa/i-na+ra/i (MARAŞ 1 §7), <">IUSTITIA"-wa/i-ní-ti (KARKAMIŠ A11a §4), "IUSTITIA"-ni-ti-i (KARKAMIŠ A12 §10)).
IE cognates: Skt. catvar-, TochA śtwar, TochB śtwer, Gr. 七éto Lat. quattuor, OIr. cetheoir, Goth. fidwor, Lith. keturì, OCS četyre 'four'.

PIE * $k^{w}$ tru-en-

The oldest (MS) attestations of this noun are nom.sg. kutruuaš, nom.pl. kutruueneš, which point to an original $n$-stem inflection kutruuan- / kutruuen-. On the basis of nom.sg. kutruuaš (< *kutruuan-s), an $a$-stem inflection kutruua- is analogically created in NH times. Note that the form in KUB 17.18 iii 6 is often cited as ku-ut-ru-ua-ni-eš (thus e.g. Puhvel HED K: 299), but according to Oettinger (1982: $165^{12}$ ) the photograph of the tablet also allows a reading [ $\left.k\right] u$-ut-rụ-ę-nị-eš, which I have taken over. The derivatives kutruuae-, kutruūātar, kutruēššar and kutruuahh- seem to be derived from a stem *kutru-.

Since Carruthers (1933: 152) this noun is generally seen as a derivative of the PIE numeral $* k^{w}$ etuor- 'four', reflecting the zero-grade formation $* k^{w}$ tur that has metathesized *-ur- to -ru- (cf. Av. čaӨru-dasa- 'fourteenth', Lat. quadrupes ‘animal walking on four feet', Gr. т $\rho \cup \varphi$ á $\boldsymbol{\varepsilon \varepsilon \iota \alpha}$ 'having four $\varphi$ ádoı’). For the semantics, we can compare Lat. testis 'witness' < *tristis 'third party', but in Hittite we are apparently dealing with a 'fourth party'.
The formal details are not fully clear. Oettinger (1982b: 164f.) treats this word extensively and argues that we are dealing with an $n$-stem. Because of the remarkable $e$-grade in the suffix in nom.pl. kutrueneš < * $k^{w}$ tru-én-es, he assumes that nom.sg. kutruuaš must have had $e$-grade as well and reflects $* k^{w} t r u$-én-s. For a long time it was thought that this was impossible in view of the idea that *-ēn+s yielded Hitt. -anza (on the basis of šumanza "binding" $<*_{s} h_{1} u-m e ́ n+s$ ) (cf. Harđarson 1987: 118-121 for an extensive treatment) in contradistinction to *-ōn+s that yielded Hitt. -aš (hāraš 'eagle’ < *h $\left.h_{3} e ́ r-o ̄ n+s\right)$. Since šumanza now has been identified as '(bul)rush' rather than 'binding', its reconstruction $*{ }_{s h_{l}} u$ mén+s cannot be upheld anymore. Therewith disappears the need to assume that *-ēn+s would yield Hitt. -anza. As long as counter-evidence is lacking, I assume that kutruuaš reflects * $k^{w} t r u$-én $+s$ (compare the development of gen.sg. *-uén-s > Hitt. -uaš).
As a parallel formation Oettinger (1982: $174^{46}$ ) mentions "hier.-luw. tri-w-an-i-" 'judge', which he interprets as 'third party' > 'judge' (with reference to Eichner). This HLuwian word is consistently spelled tara/i-wa/i-n ${ }^{\circ}$. Although an interpretation /triwan-/ in principle is possible, it is not imperative. We could also read /trawan-/ or even /trwan-/. I wonder to what extent it is possible to assume that this last interpretation, /trwan-/, is the correct one, and that this word reflects $* k^{w}$ truen- with loss of initial $* k^{w}$ in front of $*$-tr-, and therewith is directly congate with Hitt. kutruuan- / kutruen-. This interpretation has the advantage over an analysis *tri-uan-i- (as if derived from *tri- 'three') that we now do not have to assume a suffix -uan- which is further unknown.

Puhvel (HED K: 299f.) rejects the etymological connection with PIE * $k^{w}$ etuorbecause the Hitt. word for 'four' is me(i)u- / meiau- (q.v.). He rather assumes a connection with Lith. gudrùs 'wise', proposing a proto-meaning 'expert (witness)' for kutruuan-. Although formally and semantically possible, the fact that Lith. gudrùs has a variant gùdras and can easily be an inner-Lithuanian derivative of gùdinti 'to train' is not favourable to this etymology.
*kuuan- (c.) 'woman' (Sum. MUNUS): nom.sg. MUNUS-an-za (KUB 30.29 obv. 1 (MS?)), MUNUS-za (OS), MUNUS-na-aš (KUB $33.86+8.66$ iii 3, 10 (MH/NS), MUNUS-aš (KBo 4.6 obv. 15 (NH)), acc.sg. MUNUS-na-an (OS), MUNUS-an, gen.sg. MUNUS-na-aš, MUNUS-aš, dat.-loc.sg. MUNUS-ni, MUNUS-ni-i, nom.pl. MUNUS ${ }^{\text {MEŠ }}$-iš, acc.pl. MUNUS ${ }^{\text {MEŠ }}-u s ̌$.

Derivatives: MUNUS-nili (adv.) 'in woman's way, in female fashion' (MUNUS-ni-li).
Anat. cognates: CLuw. $\boldsymbol{\mu} \overline{\boldsymbol{a}} \boldsymbol{n} \overline{\boldsymbol{a}}-$ (c.) 'woman' (dat.-loc.sg. una-a-ni, dat.-loc.pl. ua$n a-a n-z a$, ưa-na-a-an-za, gen.adj.nom.-acc.sg.nt. [una-a-]na-aš-ša-an, [ua-n]a-a$a s ̌-s ̌ a-a n$, gen.adj.nom.pl.c. una-na-aš-ši-in-zi), $\boldsymbol{u}(\boldsymbol{a}) \mathbf{n a t t}(\boldsymbol{i})-$ (c.) 'woman' (nom.sg. ua-na-at-ti-iš, u-na-at-ti-iš, MUNUS-iš, acc.sg. MUNUS-in, acc.pl. MUNUS-at-ti-in-za); HLuw. FEMINA-nat(i)- (c.) 'woman' (nom.sg. "FEMINA"-na-ti-i-sa (SULTANHAN §47), FEMINA-na-ti-sa (BOYBEYPINARI 1 §1, BOYBEYPINARI 2 §1), FEMINA-na-tí-sa (SHEIZAR §1), acc.sg. FEMINA-ti-$i-n a$ (TELL AHMAR 2 §16), dat.sg. FEMINA-ti-i (KARKAMIŠ A11a §19, KARKAMIŠ A11b+c §34), nom.pl. FEMINA-ti-zi (KARATEPE 1 §35, HAMA 4 §3, SULTANHAN §33b), acc.pl. FEMINA-ti-zi (TİLSEVET §2)); Lyd. kãna'wife' (nom.sg. $k \tilde{n} n a(\dot{s})=k=a v$, dat.-loc.sg. $k a \tilde{n} a \lambda$, nom.-acc.pl. $k a ̣ n s$ ').

The Hittite word for 'woman' only occurs sumerographically written with the sign MUNUS 'woman'. Attemps have been made to identify phonetically spelled words as 'woman', but none of these have been convincing. E.g. Neu (1990) interprets $k u$-in-na[-aš]-ša-an (KUB 12.60 i 24) as kuinnan=šan 'his wife', but this interpretation is not supported by the context (cf. Güterbock 1992). Carruba (1994) draws the attention to a form ${ }^{\mathrm{d}}$ Kuuanšeš as found in the following lists of deities, which are parallels of each other:

KUB 43.30 iii
(5) [(ne-pí<-ša>-aš $\left.\left.{ }^{\mathrm{d}} \mathrm{U}-a s ̌ ~ k a t-t i-i=\check{s}-\check{s}\right)\right] i=m a$ an-na-aš ta-ga-a-an-zi-pa-aš
(6) $\left[\right.$ ( ${ }^{\mathrm{d}} \mathrm{UTU}-u s ̌$ kat-ti-i=$\left.\left.\check{s}\right)\right]-s \check{i}=m a{ }^{\mathrm{d}} M e-e z-z u-l a-a \check{s}$
(7) $\left[\left({ }^{\mathrm{d}} \mathrm{NIN} . U R T A-a \check{s}\right.\right.$ kat-ti-i) $]=\check{s}-s \check{i}=m a{ }^{\mathrm{d}} \mathrm{H}$ al-ki-iš
(8) $\left.\left[{ }^{\mathrm{d}} \mathrm{S}_{1} N-a \check{s} k a t-t\right)\right] i-i=\check{s}$-šs $=m a{ }^{\mathrm{d}}{ }^{\mathrm{s}} \check{s}-p a-a n-z a-\check{s} e-p a-a \check{s}$
(9) $\left.\left[{ }^{\mathrm{d}} H a-a-a \check{s}-s \check{a} a k\right)\right] a t-t i-i s ̌-s ̌ i=m a{ }^{\mathrm{d}} H i-l a-a \check{s}-s ̌ i-i s ̌$

(11) [ ${ }^{\mathrm{d}} M a-l i-i$
(12) [ $\left.\left.{ }^{\mathrm{d}} U a-a \check{s}-k u-u\right] a-a t-t a-a s ̌-s ̌ i-i s ̌ ~ 〈 k a t-t i-i=\check{s}-s ̌ i=m a\right\rangle{ }^{\mathrm{d}} K u-u a-a n-s \check{e}-e s \check{s}$

KBo 11.32 obv.
(31) ne-pí $-s \check{a} a\rangle-a s^{\mathrm{d}} \mathrm{U}-a \check{s} \mathrm{GAM}-s ̌ i=m a=s ̌ i ~ a n-n a-a \check{s} \mathrm{KI}-a \check{s}$
(32) ${ }^{\mathrm{d}} \mathrm{UTU}-u s ̌$ KI.MIN ${ }^{\mathrm{d}}$ Me-zul-la-aš
(33) ${ }^{\mathrm{d}}$ NIN.URTA-aš KI.MIN ${ }^{\mathrm{d}}$ Hal-ki-iš

(35) GUNNI KI.MIN ${ }^{\mathrm{d}} \mathrm{H} \mathrm{Hi}$-la-ši-iš
(36) ${ }^{\mathrm{d}} \mathrm{LÚ}^{\text {MEŠ }}$-aš KI.MIN ${ }^{\mathrm{d}}$ Ma-li-aš
(37) ${ }^{\mathrm{d}}$ Ma-li-aš KI.MIN ${ }^{\mathrm{d}}$ LÚ ${ }^{\text {MEŠ }}$
(38) ${ }^{\mathrm{d}} U a$-ašs-ku-at-ta-ši-iš KI.MIN ${ }^{\mathrm{d}} \mathrm{Ku}$-ua-an-š[e-eš]
(40') ${ }^{\mathrm{d}} \mathrm{LU}^{\mathrm{MES}}-a \check{s}{ }^{\mathrm{d}}$ Ma-li-aš GUNNI-aš ${ }^{\mathrm{d}}{ }^{\hat{H}} \boldsymbol{H}-l a-s ̌ i-i[\check{s}]$
KBo 43.75
(1) $[(n e-p i ́<-s ̌ a\rangle-a \check{s})]{ }^{\mathrm{d}} \mathrm{U}-a[(\check{s}$ kat-ti-i=š-ši=ma an-na-aš ta-ga-a-an-zi-pa-ắ)]
(2) $\left.\left[{ }^{\mathrm{d}} \mathrm{UTU}-u\right)\right] s \check{k} k a t-t i-i=\check{s}-s ̌\left[i=m a{ }^{\mathrm{d}} M e-e z-z u-l a-a \check{s}\right]$
(3) ${ }^{\mathrm{d}}{ }^{\mathrm{S}} u$-una-li-az kat-t $\left[\left(i-i=s ̌-s ̌ i=m a{ }^{\mathrm{d}} \mathrm{H} a l-k i-i s ̌\right)\right]$
(4) ${ }^{\mathrm{d}} S \hat{I} N-a \check{s}$ kat-ti-i=š-ši $\left[\left(=m a{ }^{\mathrm{d}} I \check{s}-p a-a n-z a-s ̌ e-p a-a \check{s}\right)\right]$
(5) ${ }^{\mathrm{d}} H a-a-a \check{s}-s \check{a}$ kat-ti[ $\left.\left(-i=\check{s}-5 ̌ i=m a{ }^{\mathrm{d}} H i-l a-a \check{s}-s ̌ i-i \check{s}\right)\right]$
(6) ${ }^{\mathrm{d}} P i ́-s ̌ e-n i-i \check{s} k a t\left[\left(-t i-i=\check{s}-m i=m a{ }^{\mathrm{d}} M a-a-l i-i a-a \check{s}\right)\right]$
(7) ${ }^{\mathrm{d}} M a \operatorname{a}-a-l i-i \underline{i} a-a s ̌\left[\left(k a t-t i-i=s ̌-s ̌ i=m a{ }^{\mathrm{d}} P i ́-s ̌ e-n i-i \check{s}\right)\right]$
(8) $\left[\left({ }^{\mathrm{d}} U\right)\right] a-a \check{s}-k u-u a-a t\left[\left(-t a-a s ̌-s ̌ i-i s ̌ ~ k a t-t i-i=s ̌-s ̌ i=m a{ }^{\mathrm{d}} K u-u a-a n-s ̌ e-e s ̌\right)\right]$
(9) $[$... $] x-x-x[\ldots]$
'The Storm-god of Heaven with Mother Earth beside him; the Sun-goddess with Mezzula beside her; the Fertility Deity NIN.URTA / Šuunaliaz with the Deity of the Grain beside her; the Moongod with the Deity of the Night beside her; the Deity of the Hearth with the Deity of the Courtyard beside her; the Male Deities with the Deity Māliia beside them; the Deity Māliiia with the Male Deities beside her; the Deity Uaškuuattaššiš with the Deity (or Deities) Kuûanšeš beside him'.

According to Carruba, the ending -eš implies that ${ }^{\mathrm{d}}$ Kuuanšeš is a plural form, and since the only other plural deity in this list are the ${ }^{\mathrm{d}} \mathrm{L} \mathrm{U}^{\mathrm{MES}}={ }^{\mathrm{d}}$ Pišeneš 'Male Deities', it is in his view likely that ${ }^{\mathrm{d}}$ Kuunanšeš should be interpreted as the
counterpart of ${ }^{\mathrm{d}}$ Pišeneš and therefore denotes the 'Female Deities'. Although at first sight this interpretation seems attractive, there are some problems with it. First, in KBo 11.32 most of the divine names for which a sumerographic spelling is possible, are spelled sumerographically, including ${ }^{\mathrm{d}}$ Pišeneš, which is written as ${ }^{\mathrm{d}} \mathrm{LU}{ }^{\mathrm{MES}}$ here. If ${ }^{\mathrm{d}}$ Kuüanšeš indeed would denote 'female deities', we would rather have expected the spelling ${ }^{\mathrm{d}} \mathrm{MUNUS}^{\text {MEŠ }}$. Secondly, there is no contextual argument to be given on the basis of which one can state with certainty that ${ }^{\mathrm{d}}$ Kuuanšeš correspond to ${ }^{\mathrm{d}}$ Pišeneš. If we look at contexts like

KUB 55.39 iii
(26) ${ }^{\mathrm{d}} \mathrm{IM}-a{ }^{\mathrm{d}} I n-n a-r a-a s ̌-m i[-i] \check{s}^{\mathrm{d}} D a-s ̌ i-m i-i z{ }^{\text {! }}$

(28) ${ }^{\mathrm{d}} H a-a n-t a-a \check{s}-s \check{a} a-a \check{s}{ }^{\mathrm{d}}[s ̌-t a-m a-n a-a \check{-}-s ̌ a-a s ̌$
(29) ${ }^{\mathrm{d}} K i-i s ̌-s ̌ a-r a-a s ̌-s ̌ a-a s ̌ ~{ }^{\mathrm{d}} G e-n u-u a-a s ̌-s ̌ a-a s ̌$
(30) ${ }^{\mathrm{d}}$ Iš-pa-an-za ${ }^{\mathrm{d}}$ In-na-ra-u-ua-an-za
(31) ${ }^{\mathrm{d}} U s ̌-k u-u{ }^{2} a-a t-t a-a \check{s}$-ši-iš ${ }^{\mathrm{d}} K u$-ua-an-ši-iš
(32) ${ }^{\mathrm{d}} \mathrm{IM}-a s ̌{ }^{\mathrm{d}} I-n a-r a-a s ̌-m i-i s ̌ ~ L U G A L-u s ̌ ~ U S ̌-K E ́-E N ~$
'The Storm-god, the Deity Innarašmiš, the Deity Dašimiz, the Deity of the Soul, the Deity of the Eye, the Deity of the Fore-head, the Deity of the Ear, the Deity of the Hand, the Deity of the Knee, the Deity of the Night, the Vigorous Deity, the Deity Uškuuattaššiš, the Deity Kuunanšiš, the Storm-god (and) the Deity Inarašmiš. The king bows (for them)'.
or

KUB 20.24 iii
(36) [ ${ }^{L} \mathrm{D}$ DUB.SAR hal-za-a-i] ${ }^{\mathrm{d}} U a-a \check{s}-k u-u a-a t{ }^{\prime}-t a-a \check{s}-s ̌ s i-i s ̌$
(37) [ ${ }^{\mathrm{d}} K u-u$ - $u-a n-s ̌ i-i s ̌$ DUMU É.]GAL LUGAL- $i$ I NINDA.GUR 4 .RA
(38) [pa-a-i LUGAL-uš pár-ši-i ia] ${ }^{\text {LÚ }}$ DUB.SAR ḩal-za-a-i
(39) [ $\left.{ }^{\mathrm{d}} U a-a \check{s}-k u-u a-a t-t a-a \check{s}-s \check{-} i-i\right] \check{s}^{\mathrm{d}} K u-u a-a n-s ̌ i[-i s ̌]$
(40) [DUMU É.GAL=kán LUGAL-i NINDA.GUR 4 .RA e]-ep-zi
'The writer screams "duaškuuattaššiš, ${ }^{\text {d Kuunanšiš!'. The palace servant gives }}$ one thick-bread to the king. The king breaks it. The writer screams ${ }^{\text {d }}$ Uaškuuattaššiš, ${ }^{\text {d Kuunanšiš'. The palace servant takes the thick-broad from the }}$ king'
it is more likely that the presence of ${ }^{\mathrm{d}}$ Kuuanšeš in the first three texts is determined by the presence of ${ }^{\mathrm{d}}$ Uaškuuattaššiš, and does not have anything to do with the mentioning of ${ }^{\mathrm{d}}$ Pišeneš.
An extra argument in favour of interpreting ${ }^{\text {d }}$ Kuuanšeš̌ as 'female deities' was put forth by Carruba in claiming that the context

KUB 2.13 ii
(51) LUGAL-uš É.ŠÀ-na pa-iz-zi šu-up-pí-ía-aš
(52) ${ }^{\text {GIŠ }}$ kiš-hi-aš nu ${ }^{\text {GIŠ }} \mathrm{BANŠUR} \mathrm{pé-ra-an} \mathrm{ti-an-zi}$
(53) $n=a$-aš-ta LUGAL-uš 1 UDU ${ }^{\text {d }}$ Ši-ua-at-ti
(54) ${ }^{\mathrm{d}} K u-u a-a n-s ̌ a-i-1 a ~ s ̌ i-p a-a n-t i$
'The king goes to the inner-chamber of the clean throne. They bring forth a table and the king sacrifices one sheep to the Deity of the Day (and) to ${ }^{\text {d}}$ Kuunanšaia'
must be regarded as a parallel to

KUB 56.45 ii
(4) $n=a-a s ̌-t a 1$ MÁŠŠ.GAL $A-N A{ }^{\mathrm{d}} P$ í-ir-ua ${ }^{\mathrm{d}} \mathrm{MUNNUS.LU[GAL]}$
(5) ${ }^{\mathrm{d}} A \check{s}-k a-s ̌ e-p a{ }^{\mathrm{d}}$ IMIN.IMIN.BI ${ }^{\mathrm{d}} \check{S} u$-u-u-li-i $a-a t[-t i]$

(7) DINGIR ${ }^{\text {MEŠ URU }} K a-n i-i \check{s}{ }^{\mathrm{d}} H i-l a-a s ̌-s ̌{ }^{\mathrm{d}}{ }^{\mathrm{d}} \mathrm{U} . G U R$
(8) ${ }^{\mathrm{d}} Z u-l i-i$
'He sacrifices one billy-goat to Pirưa, to ${ }^{\text {d}}$ MUNUS.LUGAL, to Aškašepa, to the Pleiads, to Šuunaliiat, to the Female Deities, to Šiunat, to Hašammeli, to the gods of Kaniš, to the Deity of the Courtyard, to Nergal (and) to Zuliià ${ }^{2}$.

Although the latter context indeed shows the ${ }^{\mathrm{d}} \mathrm{MUNUS}^{\text {MES }}$-ia 'female deities', it can in my view not be used as proof that this word has to be equated with ${ }^{\mathrm{d}}$ Kuuanšaia as found in the former context.

All in all, I do not take any of the alleged phonetic spellings into account and will focus on the phonetic complements in Hittite and the evidence from the other Anatolian and Indo-European languages only.
The Hittite forms that show phonetic complements to the sumerogram MUNUS are the following: nom.sg. MUNUS-anza (OH and MH), MUNUS-naš (NS), acc.sg. MUNUS-nan, gen.sg. MUNUS-naš, dat.-loc.sg. MUNUS-ni. These
clearly show that originally we are dealing with a consonant stem in ${ }^{\circ} a n-$, which was thematicized in NH times. In CLuwian, we find a stem $u \bar{a} n \bar{a}-$ (dat.-loc.sg. ūāni, dat.-loc.pl. ưanānza, unananza, gen.adj. [ūā]našša/i-, [unan]āšša/i-) as well as a derived stem uanatti-, unatti-. In HLuwian, we find the logographically spelled FEMINA-nati-, which undoubtedly must be equated with CLuw. uanatti-, unatti-. In Lydian, we find a sten kãna-, which possibly means 'wife'.
It is quite obvious that CLuw. u $\bar{a} n \bar{a}-$ and Lyd. $k \tilde{a} n a$ - in one way or another must be cognate to words like Gr. $\gamma v v \eta ́$, Skt. jánis, gen.sg. gnás, OIr. ben, gen.sg. mná, OCS žena, etc. 'woman' that reflect $* g^{w} e ́ n-h_{2},{ }^{*} g^{w} n$-é $h_{2}-s$. Gusmani (1985) argues that Lyd. $k-<*^{w}$ can only be explained if we assume that it precedes an $*_{o}$, because normally, ${ }^{*} g^{w}>$ Lyd. $q$. This means that $k a \tilde{n a}$ - reflects $* g^{w}$ óneh $_{2}$-. This reconstruction is supported by CLuw. unān $\bar{a}$-, which seems to point to $* g^{w}$ óneh $_{2^{-}}$ as well, since a preform *g'éneh $2^{-}$would have undergone Čop's Law and subsequently yielded ${ }^{* *} u \bar{a} n n n \bar{a}-$. These considerations still do not shed much light to the Hittite forms, however, since they show that the original paradigm was athematic and that therefore a reconstruction $* g^{w}$ oneh $_{2}$ - is not possible.
The interpretation of the Hittite material for a large part has been based on the assumption that nom.sg. MUNUS-anza points to the "šumanza-inflection". For instance, Oettinger (1980: 59-60) interprets MUNUS-anza as ${ }^{*} g^{w}$ enanz $a<{ }^{*} g^{w}$ en$\bar{o} n+s$, with acc.sg. MUNUS-nan as *g enanzanan and gen.sg. MUNUS-naš as * $g^{w}$ enanzanaš (thus also Starke (1980: 74-86): MUNUS-anza $={ }^{*} g^{w}$ enanz).

Harđarson (1987: 118-122) has a slightly different view. He introduces the idea that šumanza 'cord, band' must reflect *sh ${ }_{l} u-m e ́ n+s$ (cf. Gr. $\dot{v} \mu \eta$ ŋ́v), whereas e.g. hāaraš reflects *h $h_{3} e ́ r-o ̄ n+s$ (cf. OHG aro). He therefore interprets MUNUS-anza as $/ \mathrm{k}^{\mathrm{w}} \mathrm{ant}^{\mathrm{s}} /<{ }^{*} g^{w} \bar{e} n+s$, with acc.sg. MUNUS-nan $=/ \mathrm{k}^{\mathrm{w}}$ ant ${ }^{\mathrm{s}}$ anan $/$ and gen.sg. MUNUS-naš $=/ \mathrm{k}^{\mathrm{w}}$ ant ${ }^{\mathrm{s}}$ anas/. According to Harđarson, $* g^{w} \bar{e} n$ as reflected in $/ \mathrm{g}^{\mathrm{w}} \mathrm{anz} /$ must be identical to OIr. bé $<{ }^{*} g^{w} \bar{e} n$.

Problematic, however, for these theories is the fact that the interpretation of šumanza has proven to be incorrect. This word in fact means '(bull)rush' and therefore cannot be etymologically connected with Gr. $\dot{u} \mu \eta \eta^{\prime} v$. Moreover, the basic stem probably was šumanzan-, which means that the "šumanza-inflection" nom.sg. ${ }^{\circ}$ anza, acc.sg. ${ }^{\circ}$ anzanan, gen.sg. ${ }^{\circ}$ anzanaš does not exist as such.
I therefore want to propose a new look at the word for 'woman'. If we take etymological consideration into account, and especially compare CLuw. uānāand Lyd. kãna-, it is in my view very likely that the Hittite sumerographic spelling MUNUS-anza stands for $/ \mathrm{k}^{\mathrm{w}} \mathrm{ant}^{\mathrm{s}} \%$. The difference with hāaraš 'eagle' < * $h_{3} e ́ r-\bar{o} n+s$ in my view can be explained by assuming that $/ \mathrm{k}^{\mathrm{w}} \mathrm{ant}^{\mathrm{s}} /$ does not reflect $* g^{w} e n+s$, but rather $* g^{w} e n h_{2}+s$. Just as in medial position $* V n s V>V$ šš $V$ behaves
differently from ${ }^{*} V n H s V>V n z V$ (compare genzu < *ǵenh $h_{l}$-su-), I think that in word-final position these clusters behaved differently as well: *Vns $>V \check{s}$ whereas $* V n H s>V n z$ (the difference in the vowel between *ǵenh $h_{1}$-su- > genzu vs. $* g^{w} e n h_{2}-s>/ \mathrm{k}^{\mathrm{w}} \mathrm{ant}^{\mathrm{s}} /$ is due to the difference between $* h_{1}$ and $* h_{2}$ ). This means that acc.sg. MUNUS-nan stands for $/ \mathrm{k}^{\mathrm{w}} \mathrm{aNan} /$ or $/ \mathrm{k}^{\mathrm{w}} \mathrm{eNan} /<* g^{w} e n h_{2}-o m$ and gen.sg. MUNUS-naš for $/ \mathrm{k}^{\mathrm{w}} \mathrm{aNas} /$ or $/ \mathrm{k}^{\mathrm{w}} \mathrm{eNas} /<{ }^{2} g^{w} e n h_{2}$-os.
 ku-u_a-na-an, gen.sg. ku-ú-na-aš.

Anat. cognates: HLuw. swan(i)- (c.) 'dog’ (nom.sg. sù-wa/i-ní-i-sa (KARKAMIŠ A4a §10), sù-wa/i-ni-i-sá (KULULU 1 §11)).
IE cognates: Gr. кv́ $\omega v$, Skt. śvá̀, Arm. šun, Lith. šuõ, etc. ‘dog'. PIE *ḱuōn, *ḱuón-m, *ḱun-ós

See Melchert 1989 for his excellent treatment of these words and their context. He convincinly suggests that ${ }^{\text {LÚ }}$ kuuan- must denote something like 'hound-man' and that nom.sg. kuuaš, acc.sg. kuúanan, gen.sg. kūnaš reflect PIE *ḱuōn+s, *k'uón-m, *k'u-nós ‘dog’ as attested also in e.g. Skt. śvá, śvắnam, śúnas. The exact interpretation of gen.sg. $k u-u$ ú-na-aš has been debated, especially with regard to the plene -ú-. Melchert assumes that it reflects /kúnas/ with a retraction of the accent (just as in Skt. súnas), but also leaves open the possibility that we are dealing here with a contracted *-uua-, so kūnaš < *kuuanaš < *ǩuón-os. This latter scenario seems unlikely to me. In my view, the spelling with plene $-u$ - is used to stress the fact that it contains the phoneme $/ \mathrm{u} /$, which would have been unexpected because normally the phoneme $/ \mathrm{u} /$ was lowered to $/ \mathrm{o} / \mathrm{in}$ front of $/ \mathrm{n} /$ from MH times onwards (cf. § 1.3.9.4.f). In /kunā́s/, which regularly should have yielded $* * /$ konā́s/, the /u/ was restored in analogy to the full grade stem /kuắn-/.

In HLuwian, the stem suuan(i)- reflects the generalized full grade *kiuon-
kuuar-: see kuer- $^{z i}$ / kur- / kuuar-
 $a \check{s}-z i, k u-u a-a-a \check{s}-z i($ KBo 30.101 iii 12 (OH/MS)), 3pl.pres.act. ku-una-ǎ̌-ša-an-zi, 3sg.pret.act. ku-uূa-aš-ta; impf. ku-u्रa-aš-ke/a-.
Derivatives: kuuašnu- ${ }^{z i}$ (Ib2) 'to make kiss' (3pl.pres.act. ku-ua-aš-nu-an-zi).
IE cognates: Gr. кuvé $\omega$ 'to kiss', Skt. śvásiti 'to puff, to snort'.
PIE *k'u-en-s- ??

See Puhvel HED K: 311f. for attestations. The formal as well as semantic similarity to Gr. кvvé $\omega$ 'to kiss' (*ku-ne-s-) and OHG kussan 'to kiss' is striking. Nevertheless, it is impossible that the Hittite verb is cognate to both, since Gr. кdoes not regularly correspond to OHG $k$-. Puhvel therefore rightly remarks that it is quite possible that we are dealing with words of onomatopoetic origin instead of inherited forms (he also compares Skt. śvásiti 'to puff, to snort', cúṣati 'to suck, to smack', cúmbati 'to kiss').
If Hitt. kuuašš- nevertheless is of inherited origin, the vowel -a- would be quite awkward since $m i$-verbs in principle show $* e$-grade. This is e.g. for $\mathrm{LIV}^{2}$ the reason to reconstruct kuuašš- as PIE * $k^{\prime} u a s$-, reflecting a PIE phoneme *a. Since the existence of such a phoneme is highly dubious (cf. Lubotsky 1989), we rather search for another solution.
It is often disregarded that this verb shows a consistent spelling of geminate -š̌s(so kuuašš- instead of kuuaš- as often cited). This geminate must be the product of assimilation: one of the possible sources is $*_{-n s}$. If we combine this knowledge with the fact that a sequence *-ens yields Hitt. -aš (compare gen.sg.ending -uaš of the verbal nouns in -uar, which reflects *-uen-s), we arrive at a reconstruction *Kuens-. If this $-n$ - is an infix, it would be comparable to the $n$ infix that is also present in Gr. кvvé $\omega$ < *ku-ne-s-. For the formation -en- $(* K u$ -en-s-) instead of -ne- compare hamanki 'ties' < *h2m-ón-g' ${ }^{h}$-ei.
If we take Hitt. kuuašš- together with Gr. kvvé $\omega$ and Skt. śvas-, we arrive at a root *k'ues-, which shows a formation *k'u-ne-s- in Greek and *k'u-en-s- in Hittite.
${ }^{*} \boldsymbol{k} \boldsymbol{u} \boldsymbol{u} \bar{a} \boldsymbol{u}$ - (c.) 'cow' (Sum. $\mathrm{GU}_{4}$ ): nom.sg. $\mathrm{GU}_{4}$-uš (KBo 25.122 iii 14 (OS), KBo 34.70 r.col. 1 (MS), KUB 31.105, 4 (MS), KUB $24.8+$ KUB 36.60 iv 27 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 17.27 iii 13 (MH/NS), KBo $23.9 \mathrm{i}^{?} 8$ (NS), KUB 12.58 iv 8 (NS)), $\mathrm{GU}_{4}-a s ̌ ~\left(K B o ~ 6.3\right.$ iii $68(\mathrm{OH} / \mathrm{NS})$ ), acc.sg. $\mathrm{GU}_{4}-u n(\mathrm{KUB} 36.106$ obv. 1 (OS), KBo 6.2 iii 58, iv 10 (OS), KBo $17.1+25.3$ i 5, 41 (OS), KBo 5.2 iii 35 (MH/NS), etc.), $\mathrm{GU}_{4}-a[n]$ (KBo 40.337 obv. ${ }^{?} 6$ (NS)), gen.sg. GU 4 -aš (KBo 7.14 + KUB 36.100 rev. 10 (OS), KBo 6.2 ii 31, iv 8 (OS), etc.), dat.-loc.sg. $\mathrm{GU}_{4}-i$, instr. $\mathrm{GU}_{4}{ }^{\text {HI.A }}$ - it (KBo 23.90 i 5 (NS)), acc.pl. $\mathrm{GU}_{4}{ }^{\text {HI.A }}$ - $u s{ }^{\text {s }}$ (StBoT 25.13 i 10 (OS), etc.), gen.pl. $\mathrm{GU}_{4}{ }^{\text {HI.A }}-a s ̌$.

Derivatives: $\mathrm{GU}_{4}-l i$ (adv.) 'like a cow' (KBo 3.34 i 16 (OH/NS), KBo 22.253 rev. 2 (NS)).

Anat. cognates: CLuw. uaua/i- (c.) 'cow' (nom.sg. $\mathrm{GU}_{4}-i \check{s}$, acc.sg. $\mathrm{GU}_{4}-i n$, acc.pl. $\mathrm{GU}_{4}-i n-z a$; broken $u a-a-u-i-[\ldots]$ (although appurtenance to 'cow' is far from assured); HLuw. wawa/i- 'cow' (nom.sg. ${ }^{\text {BOS.ANIMAL }}$ wa/i-wa/i-sa (KARATEPE $1 \S 48$ Ho.), acc.sg. ${ }^{\text {BOS.ANIMAL }} w a / i$-wa $/ i=p a=w a / i=t u!$ (MARAŞ 3
§5), abl.-instr. "BOS.ANIMAL" wa/i-wa/i-ti-i (KULULU 1 §6), "BOS" wa/i-wa/i-ti-i (ARSLANTAŞ §6), BOS ${ }^{\text {ANIMAL }}-r i+i-i$ (SULTANHAN §3)); Lyc. wawa-, uwa(c.) 'cow' (acc.sg. wawã, wawu, abl.-instr. uwadi, coll.pl. uwa, wawa, gen.adj.nom.sg.c. uwehi, gen.adj.dat.-loc.pl. [u]wahe).

IE cognates: Skt. gav-, Gr. ßoũ¢, Lat. bōs, Latv. gùovs, TochA ko, TochB ke $e_{u}$, OHG chuo 'cow'.

PIE $* g^{w} e^{h_{3}} h_{-s,}{ }^{*} g^{w} h_{3}$-éu-m, ${ }^{*} g^{w} h_{3}$-u-ós
In Hittite, the word for 'cow' is consistently written with the sumerogram $\mathrm{GU}_{4}$, on the basis of which its full phonetic shape cannot be determined. Nevertheless, it is of importance that the bulk of the phonetic complements (which are attested in OS texts already) point to a stem in $-u$-: nom.sg. $\mathrm{GU}_{4}-u \check{s}$, acc.sg. $\mathrm{GU}_{4}-u n$. The rare NS attestations nom.sg. $\mathrm{GU}_{4}-a \check{s}$ and acc.sg. $\mathrm{GU}_{4}-a[n]$ may show that this stem in younger times occasionally was thematicized. The alleged attestation nom.sg. $\mathrm{GU}_{4}-i \check{s}$ (KUB 12.58 iv 8 ), cited thus in HW: 275, in fact is $\mathrm{GU}_{4}$-uš (cf. Götze \& Sturtevant 1938: 20).
In the Luwian languages, we do find phonetic spellings of the word for 'cow', however. In HLuwian, we come across ${ }^{\text {BOS.ANIMAL }}$ wa/i-wa/i- 'cow' and in Lycian we find wawa- 'cow'. This latter word clearly is an $a$-stem (cf. acc.sg. wawã). The exact interpretation of HLuw. wa/i-wa/i- is less clear because of the ambiguity of the sign wa/i that can stand for $w a$ as well as wi. On the basis of the fact that in CLuwian we are clearly dealing with an $i$-Motion stem $\mathrm{GU}_{4}(-i)$-, it is likely that the HLuwian word should be interpreted as waw(i)- as well. The fact that in Lycian this word was taken over into the $a$-stem class is clearly due to the fact that 'cow' refers to a female animal.
At first sight it seems obvious that the Luwian languages point to a PLuwian form *uau(i)-, with an *-a- on the basis of Lyc. -a-, but this is not necessarily correct. Lyc. wawa- can easily show $a$-umlaut from older *wewa-, which means that it cannot be decided whether the PLuwian form was *uau(i)-, *ueu(i)- or *uou(i)-.

It is quite clear that the Luwian forms must be cognate to words for 'cow' in other IE languages like Skt. gav-, Gr. ßoṽc, Lat. bōs, Latv. gùovs, TochA ko, TochB $k e_{u}$, OHG chuo. Although the exact reconstruction of the word for 'cow' in PIE is still a debated issue, I reconstruct a hysterodynamically inflecting $u$ stem $* g^{w} e^{\prime} h_{3}-u-s, * g^{w} h_{3}$-éu-m, $* g^{w} h_{3}-u$-ós as the most original paradigm (for the stem $* g^{w} e h_{3}$-u-compare e.g. Kortlandt 1985: 118). Whether the oblique stem $* g^{w} h_{3}$ - $u$ - already in PIE times was altered to $* g^{w} e h_{3}-u$ - or $* g^{w} h_{3}$-eu- is of little concern here. In Anatolian, we would expect that $* g^{w}$ é $h_{3} u s, * g^{w} h_{3}$ éum yields

PAnat. *g $g^{w}$ ópus, * $g^{w}$ óum. In Hittite, these forms would regularly yield **/k ${ }^{\mathrm{w}}$ áus/ and $* * / k^{\mathrm{W}}$ áun/ respectively, which would have been spelled as $* * k u-u{ }_{c} a-a-u s ̌$ and **ku-ua-a-un. This is the reason for me to treat this lemma in this book under the reconstructed stem *kuūāu-. In the Luwian languages, PAnat. *g regularly yields $\underline{u}$, which means that, with the rise of the $i$-mutation, PAnat. $* g^{w}$ ópus and ${ }^{*} g^{w}$ óum yielded the PLuwian stem *úu(i)-. In Luwian, this regularly develops into attested /uāu(i)-/, whereas in Lycian the expected outcome **wew(i)- apparently was changed to an $a$-stem noun *wewa-, which with $a$-umlaut regularly yields attested wawa-.

## L

$\boldsymbol{l} \bar{a}^{-}{ }^{i} / \boldsymbol{l}$ - (IIa1a>lic2) 'to loosen, to release, to untie, to relieve, to remove (ailments)' (Sum. $\mathrm{DU}_{8}$ ): 1sg.pres.act. la-a-mi (NH), 2sg.pres.act. la-a-š̌i (NH), 3sg.pres.act. la-a-i ( OH or MH/MS), la-a-iz-zi (MH/MS), la-a-i-iz-zi (MH/MS), 1pl.pres.act. la-a-u-e-ni (NH), 3pl.pres.act. la-an-zi (OS), la-a-an-zi (NH), 1sg.pret.act. la-a-nu-un (OH/NS), 2sg.pret.act. la-i-iš (NH), 3sg.pret.act. la-a-it (NH), 1pl.pret.act. la-a-u-en (MH/NS), la-a-u-e-en (NH), 3pl.pret.act. la-a-er ( $\mathrm{OH} / \mathrm{NS}$ ), la-a-e-er, 2sg.imp.act. la-a (OH/MS), la-a-a (MH/MS), la-a-i $(\mathrm{OH} / \mathrm{NS}), 3$ sg.imp.act. $l a-a-u u^{\prime}(\mathrm{OH}$ or $\mathrm{MH} / \mathrm{MS}$ ), $l a-a-a d-d u(\mathrm{NH}), 2$ pl.imp.act. $l a-$ a-at-te-en (MH/MS), la-a-at-tén (NH), 3pl.imp.act. la-a-an-du (Bo 6405 obv. 6 (undat.)); 3sg.pres.midd. la-a-it-ta-ri (NH), la-it-ta-ri (NH), 3sg.pret.midd. la-a-at-ta-at, la-at-ta-at (NH), 3sg.imp.midd. la-a-at-ta-ru (NH); part. la-a-an-t(MH/MS); verb.noun la-a-u-ua-ar (NS), gen.sg. la-a-u-ua-aš; inf.I la-u-an-zi (MH/MS); impf. la-a-iš-ke/a- (MH/MS)
Derivatives: lätar / lānn- (n.) 'release' (nom.-acc.sg. la-a-tar (NS), dat.-loc.sg la-a-an-ni).
IE cognates: Goth. letan 'to let', Alb. la 'he let', Latv. laũju 'to let, to allow'.

$$
\text { PIE *lóh } h_{1}-e i, \text { *lh } h_{1} \text {-énti }
$$

See CHD L-N: 1f. and Puhvel HED 5: 28f. for semantics and attestations. The verb shows forms of both the $m i$ - and the $h i$-conjugation. The oldest attestations (3sg.pres.act. la-a-i and 3sg.imp.act. la-a-ú) clearly show that the $h i$-flection must be original. On the basis of 3 sg . lāi a $m i$-inflected lāizzi was created in MH times, on the basis of which a NH paradigm according to the hatrae-class inflection was created. The oldest plural form, 3pl.pres.act. lanzi shows a weak stem $l$-, which
means that $l \bar{a}-{ }^{i} / l$ - originally inflected as $d \bar{a}^{-}{ }^{i} / d$ - (thus also Oettinger 1979a: 637, against this Puhvel HED 5: 31).
An ablauting verb $l \bar{a}-/ l-$ can only go back to a root * $l e H-$. This root is generally compared with PIE *leh $l^{-}$'to let go' as visible in Alb. la 'he let', Goth. letan 'to let go' (with *d-Erweiterung) and Latv. ļaũju 'to let, to allow' (u-present), which means that lāi, lanzi reflects *loh $h_{1}$-ei, *lh $h_{1}$-enti.
lae- ${ }^{z i}$ : see $l \bar{a}^{-}{ }^{i} / l-$
lāh-: see lāhu- ${ }^{i} /$ lahu-
$\boldsymbol{l} \bar{a} h \boldsymbol{h}$ - (c.) 'military campaign; journey, trip, voyage': dat.-loc.sg. la-a-ah-hi $(\mathrm{OH}$ or MH/MS), la-ah-hi (OH/NS, MH/MS), all.sg. la-a-ah-ha (OS), la-ah-ha (OS), abl. la-a-ah-ha-az (OH/MS), la-ah-ha-az (OH/NS), la-ah-ha-za (OH/NS), acc.pl. la-a-ah-hu-u-uš (OH/NS).
Derivatives: lahhiie/a- ${ }^{z i}$ (Ic1) '(intr.) to travel, to go on an expedition, to roam; (trans.) to attack’ (1sg.pres.act. la-ah-hi-ia-mi (NH), la-hi-ia-am-mi (NH), 2sg.pres.act. [la-ah-h]i-ía-ši (NH), 3sg.pres.act. la-ah-hi-ia-ez? ${ }^{-z i}$ (KUB 26.17 i 4 (MH/MS)), la-hi-ia-iz-zi (NH), la-ah-hi-ia-az-zi(NS), 2pl.pres.act. la-ah-hi-ia-at-te-ni (MH/MS), 3sg.pret.act. la-ah-hi-i्टa-it (NH), 2sg.imp.act. la-ah-hi-ia-ia (NH), 2pl.imp.act. la-ah-hi-ia-at-tén (MH/MS); part. la-ah-hi-ia-an-t- (NH); verb.noun gen.sg. la-ah-hi-i_ia-u-ua-aš (MH/MS); inf.I la-ah-hुi-i-ia-(u-)ua-an-zi (MH/NS), la-ah-ḩi-u-ưa-an-zi (NH), la-hi-ía-u-an-zi (NH); impf. la-ah-hni-eš-ke/a- (NH), la-ah-hi-iš-ke/a- (NH), la-ah-hi-ia-iš-ke/a- (NH)), lahhiiianna- ${ }^{i}$ / lahhiiianni- (IIa5) 'id.' (impf. la-ah-hi-ia-an-ni-iš-ke/a- (NH)), lahhiiiatar /
 'campaigner, (field-)fighter, warrior, infantry' (nom.sg. la-ah-hi-ia-la-aš ( $\mathrm{OH} / \mathrm{MS}$ ), acc.sg. la-ah-hi-ina-la-an (OH/MS), dat.-loc.sg. la-ah-hi-ina-l[i] (MS?), nom.pl. la-ah-hi-ia-le-eš (OS)), lahhema- (c.) 'military field action, raid, maneuver' (acc.pl. la-ah-hé-mu-uš).

Anat. cognates: CLuw. lahhi(ia)- 'to travel, to campaign' (3pl.pres.midd. la-ah-hi-i[n]-ta-ri), lalhiial- (c.) 'journey, campaign' (acc.sg. la-al-hi-i्2a-an); Lyd. $\lambda a i ́ \lambda a c \cdot$ ó túpavvoç únò $\Lambda v \delta \tilde{\omega} v$; Mil. la $\chi$ - 'to strike(?)' (3sg.pres.act. laұadi).
IE cognates: Gr. $\lambda \bar{\alpha}(F)$ óc 'men, troops, army, folk', Myc. ra-wa-ke-ta 'armyleader', OIr. láech 'warrior'.

PIE * leh $_{2}{ }^{-}$

See CHD L-N: 4f. and Puhvel HED 5: 1f. for semantics and attestations. From the attestations of the noun itself it is not fully clear whether the noun originally is an $a$-stem lāhha- or a root noun lāhh-. The abl.-form la-a-ah-ha-az (OH/MS) in principle seems to point to a thematic stem lāhha- (otherwise we would expect **lāhza, cf. šūhza 'roof'), but because the OH abl.-ending -z is replaced by $-a z$ from MH times onwards (cf. $-(\bar{a}) z$ and the replacement of OS $\check{s} u-u-u h-z a$ by younger $\check{s} u-u h-h a-a z$ ), this form is non-probative. The fact however, that verbal derivative of this root is lahhiie/a- and not **lahhae- (from *lahha-ie/a-), in my view strongly indicates that the noun was lāhh- originally. The derivative lahhiie/a- (occasionally secondarily changed into lahhiiae-) is predominantly spelled with $-h h-$, showing spellings with single $-h$ - in texts from the time of Hattušili III only.
An etymological connection with Gr. $\lambda \bar{\alpha}(F)$ ó 'men, troops, army, folk' and OIr. láech 'warrior' was suggested already by Sturtevant (1931a: 120) and is generally accepted. It points to a root $* l e h_{2^{-}}$and consequently a reconstruction $* l o ́ h_{2}-s, * l o ́ h_{2}-m, * l e ́ h_{2}-s\left(o r ~ o t h e r w i s e ~ * l e ́ h h_{2}-s, * l e ́ h_{2}-m, * l h_{2}-o ́ s ~ ?\right) . ~$
lahhanzan- ${ }^{\text {MuŠen }}$ (c.) a water-bird, a duck: nom.sg. la-ah-ha-an-za-aš (OH/NS), [l]a? $a^{?} h a-a n-z a-n a-a \check{s}(\mathrm{NH})$, dat.-loc.sg. la-ha-an-za-ni (OH/NS), la-ah-ha-an-za ( $\mathrm{OH} / \mathrm{NS}$ ), la-ha-an-za (OH/NS), acc.pl. la-ah-ha-an-za-nu-uš (OH/NS), la-ha-an$z a-n u-u s ̌(\mathrm{OH} / \mathrm{NS}), l a-a h-h a-a n-z u-u s ̌(\mathrm{OH} / \mathrm{NS})$, la-ha-an-zu-uš (OH/NS), la-ha$a n-z i-u s ̌ \quad(\mathrm{OH} / \mathrm{NS})$, gen.pl. la-ah-ḩa-an-za-na-aš (OH/NS), la-ḩa-an-za-na-aš ( $\mathrm{OH} / \mathrm{NS}$ ).

PIE * leh ${ }_{2}$-ent-i-on- (?)
See CHD L-N: 7 for attestations. Since almost all forms are attested in one text, KUB 39.7 // KUB 39.8, it is not possible to chronologically order the forms. Nevertheless, if we compare the situation of e.g. ištanzan- (q.v.), we can assume that the original inflection was an $n$-stem lahhanzan-, and that the forms that show a thematic stem lahhanzana- (nom.sg. lahhanzanaš) and the forms that show a stem laḩhanz- (nom.sg. lahhanza, acc.pl. lahhanzuš and even lahanziuš) are of secondary origin.

As Melchert 2003d has argued, the suffix -anzan- (also in ištanzan-, šumanzan-) can hardly reflect anything else than *-ent-i-on- (verbal adjective in -ent- is the basis for an action noun -ent-i-, of which an "individualizing" noun -ent-i-on- is derived). The identification of the root lahh- is less clear, however. Melchert (o.c.: 136) starts from a participle *lahhant- 'travelling, migrating' implying an etymological connection with lahhiie/a- ${ }^{-2 i}$ to travel, to go on an
expedition' (see sub lāhh- 'military campaign'). Because this latter word probably had an original meaning 'to go an a military campaign' (cf. Gr. $\lambda \overline{\boldsymbol{\alpha}}(F)$ ós 'men, troops, army, folk', OIr. láech 'warrior'), I would be rather hesitant in accepting this etymology. Katz (2001: 210) interprets lahhanzan- as derived from *(s)né $h_{2^{-}}$'to swim'. Problematic here is that the development of $n^{n-}>$ Hitt. $l$ only occurs when there is a clear reason for nasal dissimilation (e.g. lāman < $*_{3} n^{n} h_{3} m n$, lammar $<*$ nomr $)$. In my view, a development ${ }^{*} n_{2}$-ention- > lahhanzan- would be unexpected. Another possibility could be a connection with the root *leh $2^{-}$'to cry out loud' (Skt. ráayati 'to bark', YAv. gā $\theta r o ̄ . r a i i a n ̣ t-~ ' c r y i n g ~$ out songs', Lat. lāmentum 'lament', Arm. lam 'to lament', Lith. lóti 'to bark', OCS lajQ 'to bark'. The preform *leh2-ent-i-on- could then mean 'the quacking one' which yielded Hitt. lahhanzan- 'duck'.
$\boldsymbol{l} \bar{a} h u^{-}{ }^{i} / \boldsymbol{l a h} \boldsymbol{u}-(I I a 2>\operatorname{IIa} 1 \gamma, \mathrm{Ic} 2)$ 'to pour, to cast (objects from metal); (intr.) to (over)flow': 1sg.pres.act. la-hu-uh-hi (NS), 2sg.pres.act. la-ah-hu-ut-ti (MH/NS), 3sg.pres.act. la-a-hu-i (OS), la-a-hu-u-i (OH/MS), la-hu-i (MH/NS), la-a-hu-ua-i ( $\mathrm{OH} / \mathrm{NS}$ ), la-hu-ua-i, la-a-hu-u-ua-i, la-a-hu-ua-a-i, la-hu-ua-a-i, la-hu-u-ua-a-i, la-a-ḩu-u-ua-a-i, la-ah-ḩu-u-ua-i, la-ḩu-uz-zi (NH), la-a-ḩu-u-ua-a-iz-zi (NH), 1pl.pres.act. la-ḩu-e-ni (OS), la-a-h[u]-e-ni (NS), 3pl.pres.act. la-hu-an-zi (OS), la-a-ḩu-an-zi (NH), la-ḩu-u-an-zi, la-a-hu-u-an-zi, la-hu-uaa-an-zi, la-hुu-u-una-anzi, la-a-hu-u-ua-an-zi, la-a-hu-ua-a-an-zi, 1sg.pret.act. la-a-hu-un (MS), la-a-hu-ua-nu-un (NH), 3sg.pret.act. la-a-hu-š (KBo 32.14 i 42, 43 (MS)), la-a-ah-hुu-uš ( $\mathrm{OH} / \mathrm{NS}$ ), la-a-hu-ua-aš (OH/NS), la-a-hu-u-ua-iš, 3pl.pret.act. la-hu-ua-a-er (NS), 2sg.imp.act. la-a-ah (OH/MS), 2pl.imp.act. la-ah-hu-tén (NS), la-a-ah-hu-ua-tén (NS), 3pl.imp.act. la-hu-ua-an-du (NS), la-a-hu-una-an-du (NS), la-hu-ua-$a-a n-d u \quad(N S), \quad l a-a-h u^{-u-u} a-a n-d u \quad$ (NS), la-a-ḩu-u-ua-a-an-du (NS); 3sg.pres.midd. la-hुu-ua-a-ri (OH/MS), la-ḩu-u-ua-a-ri (OH?/NS), la-hu-ut-ta-ri (MH/NS), la-a-hुu-ut-ta-ri, 3sg.pret.midd. la-hu-ut-ta-at (OH/NS), 3pl.pret.midd. la-a-hu-u-ua-an-da-at, 3sg.imp.midd. la-hu-u-ua-ru (MH/NS); part. la-hu-a-an-t(OS), la-a-hu-an-t- (OH/MS?), la-a-ḩu-ua-a-an-t-; verb.noun la-a-hu-ua-ar, la-a-hu-u-ua-ar, gen.sg. la-hu-aš, la-a-hu-ua-aš; inf.I la-a-ḩu-ua-an-zi; inf.II la-a-hu-ua-an-na; impf. la-hu-uš-ke/a- (MH/MS), la-hu-iš-ke/a- (MH/NS), la-hu-ua-iš-ke/a-
Derivatives: lahhu- (c.) 'container' (Sum. DAG.KISIM $\left.{ }_{5} \times L A, A k k . ~ L A H C T A N U\right) ~$ (nom.sg. la-ah-ḩu-uš), lahhuēššar / lahhuēšn- (n.) 'pouring cup' (instr. la-ah-ȟu-e-eš-ni-it), lalhuuant- 'poured(?)' (instr. la-al-hu-u-ua-an-ti-it (KUB 36.2b ii 20), lilahu- ${ }^{i}$ (IIa2) 'to pour' (3sg.pres.act. li-la-hu-i), see lahhura- and lilhuua- ${ }^{\text {i }}$ lilhui-.

Anat. cognates: CLuw. $\boldsymbol{\operatorname { l a }}(\boldsymbol{h}) \mathbf{u n}(\boldsymbol{a}) \boldsymbol{i}$ ' 'to wash' (1sg.pret.act. la-hu-ni-i-ha, part. la-a-ú-na-i-mi-š=, la-ú-na-i[-mi-š=]), lйu- 'to pour' (3pl.pret.act. lu-u-ūa-an-da, lu-ú-un-ta).

PIE *lóh ${ }_{2} u$-ei, $* l h_{2} u$-énti
In CHD, two verbs are cited, namely "lāh- 'to pour"" and "lah(h)uwai-, lah(h)u'to pour'" (L-N: 4 and 13f. respectively). Of the verb lāh- only a few forms are cited: 1sg.pret.act. lāhun, 2sg.imp.act. lāh and 1pl.pres.act. lahueni, lāhueni, although of these latter forms it is stated that they could belong to lāhu- as well (cf. akueni of $e k u_{-}{ }^{2 i} / a k u-$ ). This would mean that we have to phonologicaly analyse this form as /lah ${ }^{\mathrm{w}}$ uéni/, showing the phoneme $/ \mathrm{h}^{\mathrm{w}} /$, for which see Kloekhorst fthc.c. In my view, the same is true for lāhun which can be compared to ekun 'I drank' of $e k u-{ }^{z i} / a k u$ - (and not **ekunun) and therefore must represent /láh ${ }^{\mathrm{w}}$ on/. We only have to assume that it secondarily has taken the $m i$-ending instead of expected **lāhuhhhun. This would only leave 2 sg.imp.act. lāh as evidence for a verbal root lāh-. In my opinion, it is more attractive to assume that lāh belongs to lāhu-. We could envisage that a form /láh ${ }^{\mathrm{w}} /$ would lose its labialization and give /lắh/ (but cf. 2sg.imp.act. $e k u / \mathrm{Reg}^{\mathrm{w}} /$ where the labialization was retained), or even read the form as $l a-a-u h / l^{\prime} \hat{a}^{\mathrm{w}} /$ (compare spellings like tar$u h-=/ \operatorname{tarh}^{\mathrm{w}}-/$ ).
The oldest forms of this verb clearly shows that the original paradigm was 3sg. lāhui, 3pl. lahuanzi. In NH times we find forms that inflect according to the tarn(a)-class (lahuuai, lahuuaš) and the hatrae-class (lahuuāizzi, lahuuanun), but also occasionally a $m i$-inflected form (lahuzzi, lāhun).
The singular stem lāhu- (which phonologically was /lāh ${ }^{W}-/$ ), can only reflect a preform *ló $h_{2} u$-. We would expect that the corresponding plural stem was $* l h_{2} u$-. The latter form regularly probably should have given $* * l u$ - (compare māi 'grows' $<*_{m} h_{2}$-ói-ei), in which the $-h$ - of the singular was reintroduced. This explains why we find a lenited - $h$ - in the plural as well and not a stem *lahhu- as we might expect when comparing verbs like $\bar{a} k i / a k k a n z i$ etc.

Hitt. lāhu- is often compared to Gr. $\lambda$ o $\varepsilon \omega$, $\lambda$ ov́ $\omega$, Lat. lavō 'to wash' (first suggested by Sturtevant 1927a: 122). These latter verbs reflect PIE *leuh $h_{3^{-}}$, however, which is an impossible reconstruction for Hittite, where we would expect it to yield ${ }^{* *} l \bar{u}$ - (likewise if we assume laryngeal-metathesis $* l e h_{3} u-$ ).

With the disappearance of a verb lāh- 'to pour', there is no reason to assume that lāhu-reflects an $u$-extension of a root $* l e h_{2}$ ( as argued e.g. by Puhvel HED 5: 23f.).

Note that the derivatives lahhu- and lahhuēššar show a geminate -hhe which indicates that these words reflect $e$-grade: $* l e h_{2} u$ - and $* l e h_{2} u$-é $h_{1} s h_{1} r$. These forms must be the source of the few NH forms within the paradigm of lāhu- that show a stem lahhu- (clearly in e.g. KUB 9.31 ii 9 where we find la-ah-hu-u-ua-i because of la-ah-hu-ri in the preceding line, see lahhura-).
A hypothetical *lahuzzi- is possibly attested in OAssyrian texts from Kültepe as luhuzzinnum, a vessel, cf. Dercksen (fthc.).
${ }^{(G 1 s ̌)} \boldsymbol{l} \boldsymbol{a} \boldsymbol{h} \boldsymbol{h} \boldsymbol{u} \boldsymbol{r a r a}$ - (c.) 'offering table(?) or stand (for pots and offerings)' (Sum.
 $a h-h u-u-r a-a n$, dat.-loc.sg. la-ah-hu-ri, la-ah-hुu-u-ri, la-a-hu-ri, all.sg. la-ah-hu-$u-r a$, nom.pl. la-ah-hu-u-ri-iš, la-ah-ḩu-u-ri-e-eš, dat.-loc.pl. la-ah-hnu-u-ra-aš.

PIE *leh ${ }_{2} u$-ro-
See CHD L-N: 15 and Puhvel HED 5: 13f. for attestations and semantics. The word denotes a stand, made (partly) of wood, that is placed in the vincinity of the altar. It is used to place objects upon (mostly cups and pots). Puhvel (l.c.) translates lahhura- as 'bench' on the basis of a supposed connection with Russ. lávka 'bench' and Lith. lóva 'bed'. This seems incorrect to me as there is no indication that the lahhura- was used to lie upon.
Some contexts of lahhura- show a connection with lāhu- ${ }^{i}$ / lahu- 'to pour', which might point to an etymological connection between the two, e.g.

KUB 9.31 ii
(8) $n=a-a t=\check{s ̌ a-a n}{ }^{\text {GIŠ }} l a-a h-h ̧ u-r i ~ s ̌ u-u h-h a-i ~ n u ~ m e-n a-a h-h a-a n-d a ~$
(9) GEŠTIN $l a-a h-h u-u-u a-i$
'He scatters them (broken pieces of thick-bread) on the lahhura- and pours wine over (them)'.

This connection with lāhu-/lahu- (either real or folk-etymologically) might explain the occasional spellings lāhura-.
If the connection with lāhu-/lahu- 'to pour' is real, the word probably goes back to *leh ${ }_{2} u$-ro- (e-grade because of the fortis $-h h-$ ). See at $l \bar{a} h u-{ }^{i} / l a h u$ - for further etymology.
${ }^{\text {(GIŠ) }} \boldsymbol{I} \boldsymbol{a h h u r n u z z i - ~ ( n . / c . ) ~ ' l e a f a g e , ~ l e a v y ~ b r a n c h e s , ~ f o l i a g e , ~ g r e e n e r y ' : ~ n o m . - ~}$ acc.sg./pl.n. la-ah-hu-ur-nu-(uz-)zi, la-ah-hur-nu-uz-zi, la-hur-nu-zi, dat.-loc.sg. la-ah-h̆ur-nu-uz-zi, nom.pl.c. [l]a-[h]ur-nu-uz-zi-e-eš (NH), la-ah-hur-nu-(uz-)zi-
uš (NH), la-ah-hur-nu-zi-aš, dat.-loc.pl. la-(ah-)hur-nu-uz-zi-(ía-)aš, erg.pl. la-ah-hu-ur-nu-uz-zi-ịa-an-t[e-eš] (OS); broken la-ah-hu-úa-ar-nu-u[z-zi(-)...] (KBo 22.216, 4).

Originally this word was neuter, as can be seen by the OS erg.pl. lahhurnuzziant $[$ eś $]$ and the many neuter singular forms. Only in NH times, we find commune forms being used for the plural. The one attestation lahhuuarnuzziis caused by the fact that phonologically this word was $/ \mathrm{laH}^{\mathrm{w}}$ rnut ${ }^{\mathrm{s}} \mathrm{i}$-/ (for the phonemic status of $/ \mathrm{H}^{\mathrm{w}} /$ see Kloekhorst fthc.c), in which the $-r$ - occasionally was realized vocalically: [laHwrnut $\left.{ }^{\text {si}} \mathrm{i}-\right]$.
Formally, the word looks like a derivative in -uzzi- of a stem lahhurn-, but semantically this is unlikely as -uzzi- is used for instruments and tools. Moreover, a stem lahhurn- is further unknown.
Puhvel's connection (HED 5: 27f.) with lahhura- and lāhu- ${ }^{i}$ / lahu- 'to pour' does not makes sense semantically. His comparison to the Germanic words for 'foliage', ModDu. loof, ModEng. leaf from PGerm. *laub- (*leh ${ }_{2} u-b^{h}-$ ?) may have more merit, but still leaves us with the problem of the Hittite formation. Puhvel's claim that lahhurnuzzi- originally was a compound does not convince.
${ }^{\text {GIŠ̌ }}$ lahhuuarnuzzi-: see ${ }^{(\mathrm{GIS})}$ lahhhurnuzzi-
$\boldsymbol{l} \overline{\boldsymbol{a}} \boldsymbol{k}-{ }^{\boldsymbol{i}}$ / lak- (IIa2; IIIf) '(act.) to knock out (a tooth), to turn (one's ears or eyes towards), to train (a vine); (midd.) to fall, to be felled, to be toppled': 3 sg.pres.act. la-a-ki (OS), 2sg.imp.act. la-a-ak (OH/MS); 3sg.pres.midd. la-ga-a-ri (MH/NS), la-ga-a-it-ta-ri (NH), 3sg.imp.midd. la-ga-a-ru (MH/NS), la-a-ga-a-ru (MH/NS); part. la-ga-an-t- (OS), la-ga-a-an-t-(OH/MS); impf. la-ak-ki-iš-ke/a(OH/NS).
Derivatives: laknu- ${ }^{z i}$ (Ib2) 'to fell, to knock over, to train (a vine)' (2sg.pres.act. la-ak-nu-ši (NH), 3sg.pres.act. la-ak-nu-uz-zi (NH), la-ak-nu-zi (NH), 3pl.pres.act. la-ak-nu-an-zi (NH), la-ak-nu-ua-an-zi (NH), la-ak-nu-u-ua-an-zi (NH), 3sg.pret.act. la-ak-nu-ut (MH/MS); 2sg.imp.act. la-ak-nu-ut (NH); impf. la-ak-nu-uš-ke/a-(OH/MS)), lilak(k)- ${ }^{i}$ (IIa2) 'to fell' (3sg.pres.act. li-la-ak-ki), lagan- (n.) 'inclination, disposition' (nom.-acc.sg. la-ga-a(n)=š-mi-it, gen.sg. la-ga-na-ắ).

IE cognates: OCS ložiti 'to lay down', Goth. lagjan 'to lay down'. PIE *lógh-eie-.

See CHD (L-N: 17f.) and Puhvel (HED 5: 33f.) for attestations and contexts. The active forms of this verb occur in OH texts only, its function being taken over by laknu- ${ }^{z i}$ from MH times onwards. It is used in specific contexts only. When used with 'tooth' as object, it means 'to knock out'. Its use with 'eyes' and 'ears' probably is an expresion that is difficult to literally translate and denotes the attentively listening to and looking at someone. The use with 'vine' as object probably is an expression too and denotes the training of it. Note that Puhvel's translation of the active, 'to lie, to recline' is based on a false interpretation of the last case (+ 'vine') and probably is based on etymological considerations only.
The middle forms denote the falling down of people (out of a chariot, out of bed), the being toppled of stelas and the falling of countries to the enemy.

The etymon of this verb has been clear since Sturtevant (1930c: 216-7) and generally acceted: PIE *leg ${ }^{h}$ - 'to lie down'. The exact morphology is not very clear, however. If we want to describe the meaning of the Hitt. verb in terms of 'to lie down', then the active forms go back to '*to make lie down', and the middle forms to '*to be made lie down'. Semantically as well as formally, lāki 'to make lie down' resembles OCS ložiti 'to lay down' and Goth. lagjan 'to lay down' that reflect a causative formation ${ }^{*} \log ^{h}$-eie-. This seems to indicate that here the causative $*$ CoC-eie- ended up in the Hittite hi-conjugation (but see lukke-). The middle forms formally reflect $* l g^{h}-o ́-$, but probably are a specific Hittite formation.
Note that the impf. lakkiške/a- shows a geminate $-k k$-, which reminds us of other cases of fortition in front of -ške/a- as e.g. akkuške/a-from $e k u u^{z i} / a k u$ - 'to drink' or hukkiške/a-from huek- ${ }^{z i}$ / huk- 'to butcher'.
(TÚG/GAD) lakkušanzani- (c.) 'sheet, bedcover’: nom.sg. la-ku-ša-an-za-ni-iš, nom.pl. la-ak-ku-ša-an-za-ni-eš, Luw.nom.pl. la-ak-ku-ša-an-za-ni-en-zi, acc.pl. la-ak-ku-ša-an-za-ni-uš; broken. la-ak-ku-uš-ša-an[-..].

See CHD L-N: 20 and Puhvel HED 5: 39 for attestations and semantics. Puhvel suggests a connection with OHG lahhan, ModHG Laken 'sheet' etc., but this is formally impossible as these reflect $*_{-}-g_{-}$, vs. Hitt. *- $k^{(w)}-$. The formation of lakkušanzani- is unclear to me. The one Luwian inflected form may point to a Luwian origin.
läla- (c.) 'tongue, blade, speech, talk' (Sum. ${ }^{(U Z U)}$ EME): nom.sg. la-a-la-aš (MH/MS), la-la-aš (MH/NS), acc.sg. la-a-la-an (OS, often), la-la-a-an (1x), gen.sg. la-la-aš (MH/NS), la-la-a-aš (1x, NH), dat.-loc.sg. la-a-li ( OH or

MH/MS), abl. EME-az, EME-za, instr. la-a-li-it (OH/NS), nom.pl. la-a-le-eš (OS), acc.pl. la-a-lu-uš (OS).

Anat. cognates: CLuw. lāla/i- (c.) 'tongue, gossip' (nom.sg. la-li-iš, acc.sg. la-$a-l i-i n, ~ E M E-a n ~(1 x), ~ n o m . p l . ~ E M E-i n-z i, ~ a b l .-i n s t r . ~ E M E-t i, ~ g e n . a d j . ~ ' ~ L a-l a-a s ̌-~$ ši-); HLuw. *lalant(i)- (c.) 'language’ (acc.sg. "LINGUA"-la-ti-i-na (KARKAMIŠ A15b §20), dat.-loc.sg. "LINGUA"-la-ti (KARKAMIŠ A15b §21)).

PAnat. *lólo- or *lālo-
See CHD L-N: 23f. and Puhvel HED 5: 40f. for attestations and semantics. Both dictionaries state that the word occasionally is attested as neuter, but this is valid for the Sumerogram EME only. It is not impossible that EME is used for another, neuter Hittite word that denotes 'tongue'. The word is attested in Luwian as well and therefore must be of PAnatolian date. I know of no IE cognates, however. It is likely that the word is of onomatopoetic origin.
$\boldsymbol{l a l a}(\boldsymbol{k}) \mathbf{u e} / \mathbf{i s ̌ a}-$ (c.) 'ant': nom.sg. la-la-ú-e-ša-aš, acc.sg. la-la-ku-e-ša-an, la-la-ú-$e-s ̌ a-a n$, gen.pl. la-la-ú-i-iš-ša-aš.

Derivatives: lala(k)uēěšar / lala(k)uēšn- (n.) 'ant-colony, ant swarm' (nom.acc.sg. la-la-ku-e-eš-šar, gen.sg.(?) la-la-ú-e-eš-na-aš, la-la-ú-i-iš-na-aš, la-la$u i_{5}-i s ̌-n[a-a \check{s}],[l] a-l a-u i_{j}-s ̌ a-n a-a[\check{s}]$.

See CHD L-N: 27 and Puhvel HED 5: 44f. for attestations. The word shows two stems, namely lalakueša- besides lalaueša-. This can be explained if we assume that the stem lalakueša- is Hittite, the $/ \mathrm{g}^{\mathrm{w}} /$ of which corresponds to Luwian $/ \mathrm{u} /$ in lalaueša-.

Puhvel suggests a connection with PIE *leg ${ }^{w h}$ - 'light' as cited in Pokorny 660-1. This root nowadays is reconstructed as $* h_{l}$ leng $^{w h}$ - 'to move lightly' (cf. LIV ${ }^{2}$ ), which, apart from the semantic unattractiveness, makes a connection with lala(k)ueša- unlikely. In my view, the word probably is of local origin.

According to Melchert (1994a: 171), lala(k)uě̌šar must show haplology from original *lala(k)uešeššar.
lalami- (c./n.) 'receipt': nom.sg.c. la-la-mi-iš, \& la-la-mi-eš, la-la-me-eš, nom.acc.pl.n. \& la-la-a-ma.

See CHD L-N: 26 for attestations. The mulitple uses of gloss wedges indicate a foreign (Luwian) origin. Semantically as well as formally a connection with

CLuw．lāla－＇to take＇（see at $d \bar{a}^{-}{ }^{i} / d$－）is attractive，which means that lalami－is to be seen as a Hittitized adaptation of the Luwian part．lalama／i－．
lalaue／iša－：see lala（k）ue／iša－
lālu－（n．）＇penis＇（Akk．${ }^{\text {UZU }}$ IŠARU）：nom．－acc．sg．la－a－lu．
Anat．cognates：Lyd．入á入ov＇juvenile penis＇．
See CHD L－N： 28 for attestations．Puhvel（HED 5：47）adduces a Greek hapax入ádov used by Straton of Sardes，who possibly was Lydian．The word probably originates in child language．
lalukke ${ }^{z i}$（ Ib 2 ）＇to be or become luminous＇：3sg．pret．act．la－lu－uk－ke－et．
Derivatives：lalukkeuant－（adj．）＇luminous＇（nom．sg．c．la－lu－uk－ke－u－ua－an－za， nom．－acc．sg．n．la－lu－（uk－）ke－u－ua－an，la－lu－ke－ua－an，nom．pl．c．la－lu－uk－ke－u－ （ua－）an－te－eš），lalukkima－（c．）＇light source’（Sum．ZÁLAG．ZA，nom．sg．la－lu－ $u k-k i-m a-a s ̌, l a-a-l u-k i-m a-a s ̌$（1x），acc．sg．la－lu－uk－ki－ma－an，la－a－lu－ki－ma－an （1x），dat．－loc．sg．la－lu－uk－ki－mi，nom．pl．la－lu－uk－ki－mi－iš）．

See CHD L－N：28f．and Puhvel HED 5：48f．for attestations．Although the only verbal form la－lu－uk－KI－IT in principle could be read as la－lu－uk－ki－et，as if showing a stem lalukkiie／a－${ }^{z i}$ ，the derivative la－lu－uk－KI－ua－an－t－clearly shows that this interpretation is improbably，as verbs in－ie／a－usually have a derivative in－iíauant－（cf．āššiiauant－，kardimizu＿ means that the verbal form must be interpreted as la－lu－uk－ke－et and its derivative as la－lu－uk－ke－ua－an－t－，both belonging to the stem lalukke－${ }^{z i}$ ，a＇stative＇in＊－eh $l_{1-}$ （cf．Watkins 1973a：76）．See at $l u k k-{ }^{1 t a}$ for further etymology．

Ialuk（k）e／ǐšs－${ }^{z i}$（Ib1）＇to light up，to become luminous＇：3sg．pres．act．la－lu－uk－kiš－ $z i(\mathrm{OH} / \mathrm{NS}), l a-l u-u k-k i-i s ̌-z i(\mathrm{OH} / \mathrm{NS}), l a-l u-k i-i s ̌-z i(\mathrm{NH})$ ，la－lu－ki－eš－zi（NH）， 3sg．imp．act．la－lu－uk－ki－eš－du（MH／MS），la－lu－uk－ki－iš－du（NH），la－lu－kiš－du （NH）；part．［la－l］u－uk－ki－iš－ša－an－t－（MH／MS）．

Derivatives：laluk（k）e／išnu－${ }^{-i}$（Ib1）＇to give light to，to illuminate＇（3sg．pret．act． la－lu－uk－ki－iš－nu－ut，3sg．imp．act．la－lu－uk－k［i－iš－nu－ud－du］；part．la－lu－ki－iš－nu－ua－ $a n-t-;$ impf．la－lu－uk－ki－eš－nu－uš－ke／a－）．

PIE＊lo－louk－s－or＊lo－leuk－s－
See CHD L－N：29f．and Puhvel HED 5：48f．for attestations．The verb clearly is derived from lukk－${ }^{11 a}$（q．v．）．Puhvel interprets this verb as a fientive in $-\bar{e} s \check{s} \check{s}$－，but
this is incorrect, as shown by Watkins (1985: 252), who argues that fientives in - $\bar{e} \check{s} s{ }_{s}-$ never show a derived causative in -nu-. He rather analyses this verb in the same way as nanakušš(iie/a)- 'to be(come) dark' (q.v.), which must reflect *no$n o g^{w h}-s$ - or $* n o-n e g^{w h}-s-$, derived from neku- ${ }^{z i}$ (q.v.). This means that $\operatorname{laluk}(k) e / i s ̌ s ̌-$ must reflect *lo-louk-s- or *lo-leuk-s- and that -e/i- is an anaptyctic vowel to solve the cluster /-ksC-/ comparable to the one in takš- 'to undertake, to unify' (q.v.) that is spelled takke/išC-. Note that the part. [lal]ukkiššant- (instead of expected **lalukšant-) corresponds to the younger spellings takke/iššanzi besides OS takšanzi.
lāman / lamn- (n.) 'name; reputation' (Akk. ŠUMMU): nom.-acc.sg. la-a-ma-an $(\mathrm{OH} / \mathrm{MS})$, la- $a-a m-m a-a(n)=m i-i t(\mathrm{OH} / \mathrm{NS})$, la-ma-an $(\mathrm{OH} / \mathrm{NS})$, lam-an (NS), lam-ma-an (NS), gen.sg. la-am-na-aš, lam-na-aš, dat.-loc.sg. la-am-ni, lam-ni, loc.sg. lam-ma-an, abl. $\quad \stackrel{S}{U} U-z a, ~ S ̌ U M-a z$, instr. lam-ni-it, nom.-acc.pl. $\check{S} U M^{\mathrm{MEŠ} / \mathrm{HI} . \mathrm{A}}$, dat.-loc.pl. lam-na-aš.

Derivatives: lam(ma)niie/a- ${ }^{z i}$ (Ic1) 'to name, to call, to summon, to assign' (2sg.pres.act. lam-ni-iac-ši, 3sg.pres.act. lam-ni-ez-zi (MH/MS), lam-ni-e-ez-zi (NH), lam-ni-az-zi, lam-ni-ía-zi, lam-ni-ia-az-zi, 1pl.pres.act. lam-ma-ni-i-e-u-eni (MH/MS), 3pl.pres.act. lam-ni-ia-an-zi, 1sg.pret.act. lam-ni-i्2a-nu-un, 3sg.pret.act. lam-ni-ia-at, 1pl.pret.act. $\check{S} U M$-(u-)en, 3pl.pret.act. lam-ni-er, lam-ma-ni-er, lam-ni-e-er; part. lam-ni-(ia-)an-t-; impf. lam-ni-iš-ke/a-).
Anat. cognates: HLuw. álaman- (n.) 'name’ (nom.-acc.sg. /Rlaman=t ${ }^{\mathrm{s}} \mathrm{a}^{\prime} / a^{-}-t a_{4 / 5^{-}}$ $m a-z a$, nom.-acc.pl.(?) /Rlamni/ á-ta $a_{5}-m a-n i$ (BOYBEYPINARI 1-2 §19), á-ta $a_{5}$ ma-ni-i (TELL TAYINAT 2 fr.11)), lamni- 'to proclaim' (impf.3pl.pres.act. /lamnisanti/ ${ }^{\text {LOQUI }}$ la-ma-ní-sà-ti (KARKAMIŠ A31+ §9)); Lyc. alãman- 'name' (nom.-acc.pl. alãma).

PAnat. *?lámn, *Plāmn-'
IE cognates: Lat. nōmen, Skt. nắman-, Goth. namo, Gr. ővo 1 , OIr. ainm, etc. 'name'.

PIE * $h_{3}$ né ${ }_{3} m n$
See CHD L-N: 31f. and Puhvel HED 5: 51f. for attestations and contexts. It has been clear since long that this word is to be connected with Lat. nōmen, Skt. nắman-, Gr. ővo $\mu \alpha$ etc. 'name', but the exact reconstruction of these words is in debate. The difference in length between $\bar{o}$ in Lat. nōmen and $\breve{o}$ in Gr. oैvo $\mu \alpha$ points to an ablauting complex ${ }^{*}-e h_{3^{-}}$vs. ${ }^{*}-h_{3}-$. The initial o- of Gr. oैvoua must be due to an initial laryngeal, but the question is which one, $* h_{1}$ - or $* h_{3^{-}}$. Many scholars argue that we have to reconstruct an initial $* h_{l}$ - on the basis of one Doric
and two Laconian inscriptions that show an element $\varepsilon v v \mu \alpha-$ as the first part of names (assuming that obvo $\mu \alpha$ shows a vowel-assimilation from *e่vo $\mu \alpha$ ) and because of the absence of a reflex $h$ - in Anatolian. As I have argued in Kloekhorst fthc.c, the absence of $h$ - in Anatolian is non-probative as initial $* h_{3}$ merged with the reflex of $* h_{l}$ in preconsonantal position in PAnat. and is consequently lost in Hittite, but preserved as $\dot{a}$ - in HLuwian and $a$ - in Lycian. For the non-Anatolian languages, see Beekes 1987 who convincingly argues that on the basis of Gr.
 * $h_{3}$.

The word for 'name' therefore has to be reconstructed as * $h_{3} n e ́ h_{3} m n$. In my view, this word further can be analysed as $* h_{3} n e ́ h_{3}-m n$, which is a derivative of the verbal stem $* h_{3} n e h_{3}$ - that is visible in Hitt. hanna- ${ }^{i}$ / hann- 'to sue' (q.v.) and Gr. ővoual 'to call names'.

Already in PAnat., the preform *?nāmn was subject to nasal dissimilation, yielding *Plāmn (for my interpretation of HLuw. $\dot{a}-t a_{4 / 5}-m a$ - as /Rlāman-/ and for the reading of Lyc. alãma instead of aḍãma, see Kloekhorst 2004: 39-40), which development can be compared to lammar 'moment' (q.v.) < *nomr.
The derived verb lam(ma)niie/a- (~ HLuw. lamni-sa-, showing aphaeresis from original *Plamni-sa-) must be equated with Gr. óvo $\mu \alpha i ́ v \omega$, Goth. namnjan 'to call' $<* h_{3} n(e) h_{3} m n-i e / o-$. Phonologically it is to be interpreted as /laMnie/a-/, spelled lamniie/a-, which occasionally was phonetically rendered [lam:nje/a-], which is expressed in the spelling lammaniie/a-.

Puhvel rightly remarks that the Hitt. expression lāman dai- ${ }^{i}$ / ti- 'to name (someone)' is to be equated with e.g. Skt. ná̀ma dhā-, Av. nāmqn dadāt, Gr. тí $\theta \varepsilon \sigma \theta^{\prime}$ ővo $\alpha$, OLat. nōmen facere, all reflecting the PIE syntagm $* h_{3} n e h_{3} m n$ $d^{h} e h_{l^{-}}$'to name'.
lammar / lamn- (n.) 'moment, instant', (adv.) 'instantly, immediately': nom.acc.sg. lam-mar, gen.sg. lam-na-aš, dat.-loc.sg. lam-ni-i, la-am-ni-i, la-am-ni, loc.sg. lam-mar.

Derivatives: lamarhandatti- (adj.) 'hour-fixing' (nom.sg.c. la-mar-ha-an-da-at$t i-e s ̌$, Luw.gen.adj.nom.sg.c. la-mar-hुa-an-da-at-ta-aš-ši-iš).

Anat. cognates: HLuw. lam(i)ni (adv.) 'at the time' (la-mi-ni-' (KARAHÖYÜK §1)).

IE cognates: Lat. numeros 'number, measure'.
PIE * $n o ́ m-r, n(o) m-n$-ós

See CHD L-N: 36 and Puhvel HED 5: 57f. for attestations and semantics. The etymological connection with Lat. numeros 'number, measure' (first suggested by Duchesne-Guillemin 1947: 85) is generally accepted. This means that lammar reflects an $r / n$-stem *nom- $r$, *nom- $n$ - besides the $s$-stem visible in Lat. numeros < *nom-es-, both derived from the verbal root *nem- 'to allot' (Gr. vé $\mu \omega$ 'to allot', Goth. niman 'to take', Skt. namas- 'worship').

In lammar the same nasal dissimilation occurs as in lāman 'name' (q.v.). The geminate -mm- is caused by the adjacent $r$, cf. keššar 'hand' < *g' $g^{h} e ́ s-r$.
$\boldsymbol{l} \bar{a} p \mathbf{p}^{z i}$ / lapp- (Ia4) 'to glow, to flash': 3sg.pres.act. la-ap-zi (NH), 3sg.pret.act. $l a-a-a p-t a(\mathrm{OS})$, la-ap-ta (NH).
Derivatives: $\boldsymbol{\operatorname { l a p }}(\boldsymbol{p a}) \boldsymbol{n u}$ - $^{z^{i}}$ (Ib1) 'to kindle, to cause to flash' (part. la-ap-pa-nu-(ua-)an-t-; impf. la-ap-nu-uš-ke/a-), lappiia- (c.) 'fever' (nom.sg. la-ap-pí-
 wood, wood-ember' (nom.sg. la-ap-pí-ia-aš), lappina- ${ }^{(S A R)}$ 'wick(-like plant)?' (acc.sg. la-ap-pí-na-an, la-pí-na-a-an, instr. la-ap-pí-ni-it; case? la-ap-pí-na-as̆), lappinae- ${ }^{z i}$ (Ic2) 'to insert a wick(?)' (3pl.pres.act. la-ap-pí-na-an-zi).

Anat. cognates: CLuw. lappiia- 'heat?' (acc.sg. la-ap-pí-an, la-ap-pí-ia-an).
IE cognates: Gr. $\lambda \alpha ́ \mu \pi \omega$ 'to shine' ( $\left.{ }^{l} l_{0} 2-n-p-\right)$, Lith. lópé 'light', Latv. lãpa 'torch'.

PIE *leh ${ }_{2} p-/ * l h_{2} p-$
See CHD L-N: 39-40, 44f. for attestations and contexts. Oettinger (1979a: 443) states that this verb originally belonged to the hi-conjugation, but there is no indication for this. On the contrary, all forms point to the mi-conjugation. Oettinger's assumption probably is based on the $\bar{a}$-vocalism in the root, which is normal in $h i$-inflected verbs. In this verb $-\bar{a}$ - reflects $*-e h_{2^{-}}$, however, and not an $o$-grade. The geminate -pp- is visible in the derivatives lap(pa)nu- and lappiia-. Although the weak stem of this verb is not attested itself, the causative lap( $p a$ ) nushows that it must have been lapp-, which contrasts with the strong stem lappvisible in 3sg.pret.act. lāpta.
Since Mudge (1931: 252) this verb is connected with Gr. $\lambda \alpha ́ \mu \pi \omega$ 'to shine' and Lith. lópé 'light'. These forms point to a root $* l e h_{2} p$ - (with Gr. $\lambda$ á $\mu \pi \omega<* l h_{2}-n$ -$p$-), which means that the Hitt. ablauting pair lāpp- / lapp- reflects *leh $p$ - / * $l h_{2} p$ -

The appurtenance of lappina- and its derived verb lappinae- ${ }^{z i}$ is not ascertained, but possible if the words indeed denote 'wick' and 'to insert a wick' respectively (see CHD L-N: 45 for these meanings).

The interpretation of CLuw. lappiia- is not clear, but cf. Starke's claim (1990: 63) that it must mean 'heat' and therefore be connected to these Hittite words.
${ }^{\text {(URUDU) }}$ lāppa- (n.) a metal implement, 'scoop(?)': nom.-acc.sg. la-a-ap-pa, ?abl. la-ap-pa-za, instr. la-a-ap-pí-it.

See CHD L-N: 40 and Puhvel HED 5: 60 for attestations and contexts. Puhvel (l.c.) mentions Lith. lopetà and Russ. lopáta 'spade, shovel' as possible cognates, but these forms are rather BSl. derivations of a stem visible in Lith. lãpas 'leaf'.
labarna-, tabarna- (c.) PN which became title of Hittite kings: nom.sg. la-ba-ar$n a-a s ̌$ (OS), ta-ba-ar<-na〉-aš (OS), ta-ba-ar-na-aš (OH/NS), la-pa-ar-na-aš ( $\mathrm{OH} / \mathrm{NS}$ ), la-bar-na-aš (OH/NS), ta-bar-na-aš (NH), acc.sg. ta-ba-ar-na-an (OS), la-ba-ar-na-an (OH/NS), la-bar-na-an (OH/NS), gen.sg. la-ba-ar-na-aš (OH/NS), la-bar-na-aš (OH/NS), dat.-loc.sg. ta-ba-ar-ni (OH/MS), la-ba-ar-ni (OH/MS?), la-bar-ni, [l]a-pa-ar-ni, la-bar-na-i (OH/NS), ta-ba-ar-na-i, acc.pl. [l]a-bar-nu-uš.

See CHD L-N: 41ff. for attestations. Much has been said about this word, for which see the list of references in Tischler HEG T: 34f. It is clear that $l /$ tabarnais used as a title for Hittite kings. It is also clear that l/tabarna- is a personal name of one of the early kings (and some princes) of Hattuša (note that Starke's argumentation (1980-83) that all attestations of l/tabarna- must be interpreted as a title and not as a personal name is unconvincing). The question now is whether an original personal name has been taken over as a title (in the same way as Lat. caesar), or whether we are dealing with an original noun 'ruler (vel sim.)' that was also used as a personal name. According to CHD (L-N: 43), "[t]he distribution seems to confirm the theory that labarna or tabarna was first a PN".
It may be instructive to look at the spelling of this word. CHD states that it "was predominantly spelled with $l a$ - in Hittite rituals; Hattic and Palaic ritual texts use only the form with $t a$-, which was taken over in a few of the Hittite rituals". Moreover, the Hittite-Akkadian bilingual of Hattušili I "follows the pattern in that it spells the name of the king with $l a$ - in the Hittite version but with $t a$ - in Akkadian". So we seem to be dealing with a situation in which Hitt. lacorresponds to non-Hitt. $t a$-. The labial consonant is almost consistently spelled with the signs BA and BAR, which both are extremely rare in Hittite. Moreover, in Hattic texts, we come across the spelling ta-u $a_{a}$-ar-na (cf. Schuster 1974: 88). Already on the basis of these spelling peculiarities alone, I would conclude that
l/tabarna- must be of non-IE origin (seemingly an adaptation of something like [tfafarna-]). And if we are indeed dealing with an original personal name that only secondarily came to be used as the title of the Hittite kings, the original meaning cannot be determined. All in all, I see no possible way to etymologize this word.
Recently, Melchert (2003b: 19) has tried to etymologize l/tabarna- by connecting it with the verb tapariie/a-, but see there for my rejection of it.
laplappa-, laplippa- (c.), laplapi-, laplipi- (n.) 'eyelash(es)': acc.sg.c. la-ap-la-ap-«<-pí»-pa-an, la-ap-li-pa-an, la-a-ap-li-ip-pa-an, la-ap-li-e[-pa-an], nom.acc.sg. or pl. la-ap-la-pí, la-ap-li-pí, abl. la-ap-la-pa-za, la-ap-li-pa-az-za, la-ap-li-pa-az, instr. la-ap-li-pí-it, acc.pl.c. la-ap-li-ip-pu-uš, la-ap-li-pu-uš, la-ap-li-pa$a \check{s}$, dat.-loc.pl. la-ap-li-pa-aš.

Anat. cognates: CLuw. lalpi- (c.) ‘eyelash’ (acc.sg. la-al-pí-in, la-al-pí-i-in).
See CHD L-N: 45f. and Puhvel HED 5: 62f. for attestations. The word shows different stems and both neuter and commune forms, which clearly point to a non-IE origin.
lauarr(iia)- (CLuw. verb) 'to despoil, to strip': 3sg.pret.act. la-ua-ar-ri-it-ta; part. nom.acc.pl.n. la-ua-ar-ri-ma; inf. la-u-ua-ar-ru-na.

Although this verb is attested in Hittite contexts (for which see CHD L-N: 49), it shows Luwian inflected forms only. It is translated 'to despoil, to strip' in CHD. Puhvel (HED 5: 67) and Melchert (1993b: 126) translate 'to break, to destroy', however. These latter translations seem especially prompted by the idea that lauarr(iia)- is the Luwian counterpart of Hitt. duuarni- ${ }^{z i}$ / duuarn- 'to break' (q.v.) (cf. Carruba 1966: 17-8), which view is generally accepted. In my opinion, this connection is impossible, however. Hitt. duuarni-/duuarn- must reflect * ${ }^{h} u r$ -$n-(e) h_{l^{-}}$, the nasal-present of a root $* d^{h}$ uerh $h_{l^{-}}$, of which I do not see how it could have yielded Luw. lauarr-, especially with regard to the first $-a$-. Note that Carruba's comparison to the $a u-: u$ - correspondence in CLuw. aui- $\sim$ Hitt. uua'to come' is invalid, of course. If the $* d^{h}$ - of $* d^{h}$ uerh $_{l}$ - indeed would have yielded CLuw. $l$ - (which is possible, cf. la- 'to take' $<* d^{-} h_{3^{-}}$), we would expect an outcome **luuarr-, and not lauarr-. Melchert (1994a: 238) seems to be aware of this problem and stealthily cites the verb as l(a)uarri-, but this is incorrect: the verb is always spelled la-ua-ar- and never **lu-ua-ar-. I therefore reject this etymology and the supposed connection between Luw. lauarr(iia)- and Hitt.
duuarni-/duuarn-. Unfortunately, I have no alternative etymology to offer for lauarr(iiia)-.
lāuatt- (c.?) '?’: gen.sg. la-a-ưa-at-ta-aš (OS).
The word is hapax in KBo 20.21 rev . (1) [ha-m]e-eš-hi la-a-ua-at-ta-aš me-h[u$n i]$ 'in the spring, in the time of $l$. '. On the basis of this context alone, a meaning cannot be determined. Puhvel (HED 5: 67) nevertheless translates 'mire, slush, muddiness', but does so on the basis of a presupposed etymological connection with Lat. lutun 'mud, mire' etc. only. This is methodologically unacceptable. Melchert (1993b: 126) states that the word probably is a Luwian neuter noun in -atta-, but this seems unlikely to me because of the fact that the word is attested in an OS texts. The word would make perfectly sense as the gen.sg. of a Hitt. $t$ stem, cf. šiuatt-, tarnatt- etc., which would mean that we should rather look for a root *lāu- (e.g. *leh ${ }_{3} u$ - 'to wash', cf. spring cleaning?).
${ }^{\text {(GIŠ) }} \boldsymbol{l a z z a i -}$ / lazi- (c.) 'sweet flag, calamus' (Sum. GI.DÙG.GA): nom.sg. la-az$z a-i s ̌ ;$ broken la-z[i-...].

See CHD L-N: 49f. and Puhvel HED 5: 68 for attestations. It is generally accepted that lazzai- can be equated with Sum. GI.DÙG.GA and Akk. qanū tā̄bu (lit. 'good reed') 'sweet flag' (cf. Puhvel l.c. and Tischler HEG L/M: 48, but doubted in CHD l.c.). If this equation is justified, it is likely that, just as the Sumerian and Akkadian words literally mean 'good reed', Hitt. lazzai- as well is derived from the adj. lazzi- 'good' (q.v.).
lazzi- (adj.) 'good, right' (Sum. SIG $_{5}$, DÙG.GA): nom.sg.c. la-az-zi-iš (OS), acc.sg.c. $\left[l a^{?}-a z^{?}-z\right] i^{?}-i a-a n-n=a$ (KUB 29.38 i 2 (OS)).

Derivatives: lāzziiiela- ${ }^{z i}$ '(act.) to set straight, to prosper; (midd.) to be good, to be right, to be favourable, to get well' (1sg.pres.act. SIG Si-zi-ina-mi, 3sg.pres.act. $^{2}$ $\mathrm{SIG}_{5}-e z-z i, 2$ pl.pres.act. $\mathrm{SIG}_{5}$-at-te-ni, 3pl.pres.act. $\mathrm{SIG}_{5}$-an-zi; 3sg.pres.midd. la-$a-a z-z i-a t-t a(\mathrm{OS})$, la-az-zi-at-ta, $\mathrm{SIG}_{5}-a t-t a(-r i), 3 \mathrm{pl} . \mathrm{pres} . \mathrm{midd}$ SIG $_{5}-(i a-) a n-t a(-$ $r i), 1$ sg.pret.midd. la-az-zi-ah-háat, 3sg.pret.midd. SIG $-t a-t i$, SIG $_{5}-i a-a t-t a-a t$, 3pl.pret.midd. $\mathrm{SIG}_{5}$-ia a-an-ta-at, 3sg.imp.midd. la-az-zi-ía-at-ta-ru; part. $\mathrm{SIG}_{5}$ ant- (= āššuuant-?); verb.noun la-az-zi-i_ia-u-ûa-ar 'wellness'; impf. SIG Siš̌s- $^{\text {- }}$ $k e / a-$ ), *lazziē̌̌̌̌- ${ }^{z i}$ (Ib2) 'to become good, to get well' (3sg.pret.act. SIG ${ }_{5}$-eš-ta, 1pl.pret.act. $\mathrm{SIG}_{5}$-eš-šu-u-en), *lazziiahh ${ }^{i}$ (IIb) 'to make right, to repair, to cure; to give a favourable sign' (1sg.pres.act. $\mathrm{SIG}_{5}-a h-m i, 2 \mathrm{sg}$. pres.act. $\mathrm{SIG}_{5}-a h-t i$,

3sg.pres.act. $\mathrm{SIG}_{5}-a h-h i, \mathrm{SIG}_{5}-a h-z i, 1 \mathrm{pl} . \mathrm{pres} . \operatorname{act.} \mathrm{SIG}_{5}-a h-h u-e-n i, 2$ pl.pres.act. $\mathrm{SIG}_{5}-a h$-te-ni, 3pl.pres.act. $\mathrm{SIG}_{5}-a h-h a-a n-z i, \quad 1 \mathrm{pl}$ pret.act. $\mathrm{SIG}_{5}$-ah-hu-en, 3pl.pret.act. SIG $_{5}$ (ia-) $a h-h e-e r, 3 p l . i m p . a c t$. SIG $_{5}-a h-h a-a n-d u$; part. SIG $_{5}-i a-a h-$ ha-an-t-; impf. $\mathrm{SIG}_{5}$-ah-hi-iš-ke/a-, $\mathrm{SIG}_{5}$-ah-hi-eš-ke/a-).

Anat. cognates: HLuw. arha lada- 'to prosper, to flourish' (3sg.pret.act. /ladata/ la-tà-ta (AKSARAY §1), 3pl.pret.act. /ladanta/ la+ra/i-ta (BULGARMADEN $\S 4$, SULTANHAN §6), arha ladanu- 'to cause to prosper' (1sg.pret.act. la+ra/i-$a$-nú-ha (KARATEPE 1 §4)).

See CHD L: 50f. for attestations. The adjective 'good' is usually written with the sumerogram $\mathrm{SIG}_{5}$, which is the reason that only a few attestations of lazzi- are known. Within Anatolian, it has been suggested that HLuw. lada- 'to prosper' may be cognate (cf. Hawkins \& Morpurgo Davies 1978: 105 for identification of lada- and etymology). If this is correct, then Hitt. -z- must be the result of assibilation (*lāt-i-), and HLuw. $-d$ - must be the result of lenition (*lót- $V-$ ?). For outer-Anatolian, Sturtevant (1934: 270) compared lazzi- with Gr. $\lambda$ cótov 'better'. This latter form has an inner-Greek comparandum in $\lambda \tilde{\eta} \nu$ 'to wish' (so $\lambda \omega$ óïov originally 'wanted more'), however, which probably reflects *ulh $h_{1}$ ie/o-, from the root *uelh ${ }_{l}$ - as visible in Skt. var ${ }^{(i)}$ - 'to choose', Lat. volō 'to want', Goth. wiljan 'to want', etc.
$\boldsymbol{l e}$ (prohibitive particle) 'not': le-e (OS).
PIE * leh $h_{1}$
See CHD L: 55f. for a semantic treatment. There has been some debate on the origin of this particle. E.g. Hrozný (1917: 92) regarded le as a borrowing from the Semitic negation $l \bar{a}$; Puhvel (HED 5: 77) suggested an Indo-Uralic connection with e.g. Finnish älä; Friedrich (1936-37: 77) regarded le as the outcome of PIE *nē with dissimilation comparable to lāman 'name' $<* h_{3} n e h_{3} m n$. All these are less attractive in my view.
In the other Indo-European languages, this prohibitive function is expressed by the particle $* m e h_{l}$ (Skt. $m \bar{a}$, Gr. $\mu \eta$, Arm. $m i$, TochAB $m \bar{a}$ ), which is likely a petrified 2 sg.imp. of a verb ${ }^{*}$ meh $_{l^{-}}$'to refuse', which is still attested as such in Hitt. mimma- ${ }^{i}$ / mimm- 'to refuse' (q.v.). That this is possible for Hitt. le as well was already seen by Pedersen (1938: 163-4) and Sommer (1947: 65), who compared $l e$ with OHG $l \bar{a}$ 'don't!'. This latter verb ultimately must be cognate with the Hittite verb $l \bar{a}_{-}{ }^{i} / l-$ 'to let, to loosen' (q.v.), which means that le must reflect *leh . Prof. Melchert rightly points out to me that a convincing scenario is
still lacking that can explain how the attested syntax of the prohibitive particle, which goes together with an inflected indicative finite verb, developed out of the use of a 2 sg.imp.-form.
lela- (c.) 'conciliation, pacification': acc.sg. le-la-an, gen.sg. le-e-la-aš, le-la-aš, all.sg. li-i-la, Luw. abl.-instr. [l]e-la-ti.
Derivatives: lelae- ${ }^{z i}$ (Ic2) 'to conciliate, to pacifiy' (3pl.pres.act. le-la-an-zi, le$l a-a-a n-z i, 3$ sg.pret.act. le-la-a-it, 3sg.imp.act. le-e-la-ad-du; verb.noun le-la-u-ua-ar, gen.sg. le-la-u-ua-aš; inf.I le-la-u-ua-an-zi; impf. le-li-iš-ke/a-, le-li-eš-ke/a-), lilǎ̌šalla- (adj.?) 'propitiatory, conciliatory?' (nom.-acc.sg.n.? li-la-aš-ša-al-la), lilāre/iške/a- ${ }^{z i}$ (Ic6) 'to conciliate, to pacifiy' (1pl.pres.act. li-la-a-ri-iš-ke-ua-n[i] (MH/MS), [l]i-la-ri-iš-ke-ua'-ni (MH/MS), 3sg.imp.act. li-la-ri-eš[ke-ed$d u](\mathrm{OH} / \mathrm{MS}),[l i-l a-] a^{\prime}$-ri-eš-ke-ed-du (OH/NS)).

Anat. cognates: CLuw. līla(i)- 'to pacifiy, to conciliate, to soothe' (3pl.pres.act. li-la-an-ti, li-i-la-an-ti, 1sg.imp.act. li-la-i-lu, 2sg.imp.act. li-i-la, 3pl.imp.act. li-la-an-du, li-i-la-an-du).

See CHD L-N: 57f. and Puhvel HED 5: 77 for attestations. In Hittite, we find two spellings, namely LI-la- and LI-e-la-. Because the sign LI can be read $l i$ as well as $l e$, both spellings can be read as lela-. The Luwian forms, however, consistently are spelled li-la- or li-i-la-, which points to a stem līla-. Note that in Hittite we find a spelling li-i-la once, namely in KUB 46.38 ii 24 (NH). Because on the same line we find the Luwian inflected form li-i-la-an-ti (cf. the ending -anti), it is clear that li-i-la must be a luwianism as well. All in all, we are dealing with a Hitt. stem lela- that corresponds to Luw. līla-. If these words are cognate in the sense that they derive from a single PAnat. form, this form must have been *lēlo-

According to Puhvel (1.c.) and Tischler (HED L/M: 56f.), these words are to be interpreted as reduplicated forms of the verb $l \bar{a}^{-}{ }^{i} / l-$ 'to loosen, to release' (q.v.). If this is correct (semantically it is possible), then we should assume that Hitt. lela- and Luw. līla- are parallel but separate formations (Pre-Hitt. *le-la- vs. PreLuw. *li-la-). Alternatively, we could assume a preform *leh $l_{1}$ lo-, which by regular sound laws would on the one hand yield Hitt. lela- and, on the other, Luw. lila-. It may be slightly problematic, however, that the verb $l \bar{a}-/ l$ - is not attested in Luwian. For further etymology see at the lemma $l \bar{a}^{-} / l l$-.

The formation of the verb lilāri/eške/a-, which seems to be similar in meaning to lelae- ${ }^{z i}$, is unclear.
lelaniiela- ${ }^{\text {tua(ri) }}$ (IIIg) 'to infuriate': 3sg.pres.midd. le-e-la-ni-at-ta (OS), 3sg.pret.midd. [le-e-la]-ni-e-et-ta-at (OH/MS), [le-e-l]a-ni-et-ta-a[t] (OH/MS); part. le-e-la-ni-i्da-an-t-(OH/MS), le-la-ni-ia-an-t-(OH/NS).

The word is attested in OH texts only, see CHD L-N: 58f. It is likely that it is derived from a further unattested noun *lelan-. Further unclear.
lelhuиa- ${ }^{i}$ / lelhui-: see lilhuиa- ${ }^{i}$ / lilhui-
leliuant- (adj.) 'travelling swiftly, winged(?); urgent': nom.sg.c. le-li-ua-an-za $(\mathrm{OH} / \mathrm{NS})$, acc.sg. le-e-li-ua-an-da-an (OH/MS), le-li-ua-an-da-an ( $\mathrm{OH} / \mathrm{NS}$ ), nom.-acc.sg.n. le-li-ua-an (MH?/NS), acc.pl.c. le-li-ua-an-du-uš (NH).

Derivatives: leliuahh- ${ }^{i}$ (IIb) 'to make haste, to hurry' (3sg.pret.act. le-li-ua-ahta, 3pl.pret.act. le-li-ua-ah-he-er, 2pl.imp.act. le-li-ua-ah-tén; inf.I le-li-ua-ah-hu-u-an-zi (MH/MS); impf. le-li-ua-ah-hi-eš-ke/a-).

See CHD L-N: 61f. for attestations and semantics. Although the bulk of the attestations is spelled LI-li-ua-, I take the OH/MS spelling LI-e-li-ua- as an indication that all spellings (including LI-li-ua-ah-) are to be read le-li-ua-, and I therefore cite leliuant- and leliuahh-.

On the one hand, one could assume that leliuant- and leliuahh- are derived from an unattested stem leliu(a)-, which itself looks like the reduplication of a stem *liu(a)-. Such a stem does not look particularly IE to me. On the other hand, one could analyse the words as leli-uant- and leli-uahh- (cf. araua- and arauahhfrom $\operatorname{ar} \bar{a}$ - (see at $\bar{a} r a)$ ), which would mean that we are dealing with a stem *leli-, itself probably a reduplication of a root * $l i$. I know of no convincing IE cognates, however.
$\boldsymbol{l e}(\boldsymbol{n}) \boldsymbol{k -}^{z i}$ : see $l i(n) k_{-}^{z i}$
leššs- ${ }^{z i}$ / lišš- (Ib1) 'to pick, to gather': 3pl.pres.act. li-iš-ša-an-zi (KBo 2.8 iii 1 (NH)); 3sg.pres.midd. li-iš-ša-ta-ri (KBo 13.24, 6 (NS)); inf.I le-eš-šu-u-una-an-zi (KUB 30.15 obv. 1, 7, 17 (MH/NS)).
Derivatives: leššalla- (c.) 'gathering(?), collection(?)' (nom.sg. le-eš-šal-la-aš).
IE cognates: Goth. lisan 'to pick, to gather', Lith. lèsti 'to pick up'.
PIE *lésH-ti?
See CHD L-N: 72 and Puhvel HED 5: 97 for attestations and contexts. Usually, this verb is equated with lǐšae- ${ }^{z i}$ (q.v.), but I do not see why: first there is a clear
formal difference (single $-\check{s}$ - vs. geminate $-\check{s} \check{s}$-) and secondly there is a semantic distinction (lě̌š- / lišš- is transative, whereas lišae- is intransitive). I have therefore chosen to separate these verbs and treat $l \bar{l} \bar{s} a e e^{z i}$ under its own lemma.
The verb leš̌s- ${ }^{-i}$ / lišš- clearly denotes 'to pick up, to gather' (see the contexts in CHD) and therefore hardly can be separated from Goth. lisan 'to pick, to gather' and Lith. lèsti 'to pick up', which reflect PIE *les-. It is unclear, however, why we find a geminate -šš- in Hittite (cf. šeš- 'to sleep' < *ses-, which is consistently spelled with single $-\check{s}$-). Perhaps it could show that the root in fact was $*$ lesH-. The difference between lešss- and lǐ̌š- may be explained due to accentuation: *léss- vs. ${ }^{*}$ less- ${ }^{\prime}$.
leš(š)i-, lišši- (n.) ‘liver’ (Sum. ${ }^{\text {UZU }}$ NÍG.GIG, Akk. KABITTU): nom.-acc.sg. le-e$\check{s} i$, dat.-loc.sg. li-iš-ši; case? le-eš-ši.

Derivatives: liššiiala- (adj.) 'liver-related, located in the liver(?)' (nom.acc.pl.n. li-iš-ši-ía-la).

See CHD L-N: 72 for attestations. See Tischler HEG L-M: 54-5 for the several (unconvincing) IE comparisons that have been made. In my view it is likely that this word is of foreign origin, just as the practice of hepatoscopy is.
lik- ${ }^{z i}$ : see $l i(n) k-{ }^{z i}$
lila-: see lela-
lilhuйa- ${ }^{i}$ /lilhui- (IIa5 > IIa1 $\gamma$ ) 'to pour': 3sg.pres.act. li-il-hu-ua-i (MH/MS), le-el-hu-u-ua-i (MH/MS? le-el-hu-ua-i (MH/NS), [le-]el-hu-ua-a-i (MH/MS?), 3pl.pres.act. le-e-el-hu-an-zi (NS), 3pl.imp.act. le-el-ḩu-ua-an-du (OH/NS); sup. li-il-hu-ua-an (MH/MS); impf. li-il-hu-uš-ke/a- (MS).
Derivatives: ${ }^{\text {DUG }}$ lelhuntai- (c.) 'vessel for pouring' (acc.sg. le-el-hu-u-un-da-in (MH?/NS)), ${ }^{\text {DUG }}$ lelhuntalli- (c.) 'vessel for pouring' (acc.sg. le-el-hुu-un-ta-al-liin (MH?/NS)), lelhuntae- ${ }^{z i}$ (Ic2) 'to use a pitcher, to pour from a pitcher' (3pl.pres.act. le-el-ḩu-u-un-da-an-zi, le-el-hu-u-un-ta-an-zi; inf.I le-el-hu-u-un-da-u-uа-an-zi, le-el-hu-u-un-ta-u-ua-an-zi), lelhu(ua)rtima- (c.) 'outpourings(?), inundations(?)' (nom.pl. le-el-hu-ur-ti-ma-aš (NH), le-el-hu-ưa-ar-ti[-ma-aš(?)] (NH)).
Anat. cognates: CLuw. lilūuna- 'to pour' (2sg.imp.act. li-lu-u-ua, li-lu-u-ua-a).
PIE *li-lh $h_{2}$ u-oi-ei, $* l i-l h_{2} u$-i-enti

See CHD L-N: 59f. and Puhvel HED 5: 81f. for attestations. The verb is spelled both with LI-il- and LI-el- (once even LI-e-el-), but the spellings with LI-il- seem to be older (all MS texts, cf. also CHD). That is why I cite this verb as lilhuua/ihere. The development of original lilhuua/i- to younger lelhuua/i- is probably due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before clusters containing -h- (cf. § 1.4.8.1.d).
On the basis of the available evidence we cannot decide whether this verb belongs to the dāi/tiianzi-class or to the méma/i-class. As I have argued under the treatment of this latter class (see $\S 2.2 .2 .2 . \mathrm{h}$ ), the $m e \bar{e} m / i$-class consists of original dāi/tiiianzi-verbs that were secondarily changed because of the fact that they are polysyllabic. In this case, I therefore assume that this verb is mema/i-inflected as well (lilhuıa- ${ }^{i}$ / lilhui-), although this inflection goes back to pre-Hitt. *lilhuuai- ${ }^{i}$ / lilhui-. Note that 3 pl.pres.act. *lilhuianzi (which we would expect in a méma/iclass verb) would regulary yield lilhuuanzi (cf. išhuuanzi < *išhuianzi in the paradigm of išhuuai- $^{i} /$ išhhui- 'to throw, to scatter'). $^{\text {' }}$

The verb clearly shows a reduplication of $l \bar{a} h \overline{V^{-}}{ }^{i} / l a h u-$ 'to pour' (q.v.). It must be quite recent as we can see by the retention of the cluster -lh-. It reflects virtual *li-lh $h_{2} u$-oi-ei / *li-lh $h_{2} u$-i-enti. See for the forms lilahui and lalhuuant- at the lemma of lāhu- $/$ lahu- itself.

## liliuant-: see leliuant-

$\boldsymbol{l i}(\boldsymbol{n}) \boldsymbol{k}^{-{ }^{\boldsymbol{i}}}$ (Ib3) 'to swear, to take an oath, to state under oath': 3sg.pres.act. li-ik-zi (OS), li-in-ga-zi (NS), li-in-ik'-zi (NS), 1pl.pres.act. li-in-ku-u-e-ni (MH/NS), 3pl.pres.act. li-in-kán-zi (MH/MS), 1sg.pret.act. li-in-ku-un (OS), le-en-ku-un (NH), 3sg.pret.act. li-ik-ta (OS), li-in-kat-ta (NH), le-en-kat-ta (NH), li-ni-ik-ta (NH), li-in-ki-eš-ta (NH), 1pl.pret.act. li-in-ku-(u-)en (NH), li-in-ga-u-en (MH/NS), 3pl.pret.act. li-in-ker (MH/MS), li-in-ke-er (MH/MS), 2sg.imp.act. li-iik (NH), li-in-ki (NH), 3sg.imp.act. li-ik-du (NH), 2pl.imp.act. le-e-ek-te-en ( $\mathrm{OH} / \mathrm{NS}$ ), li-ik-te-en (MH/MS), le-en-ik-tén (NH), li-in-ik-tén (MH/NS), 3pl.imp.act. li-in-kán-du (NH); part. li-in-ga-an-t- (MH/MS), li-in-kán-t- (NH), le-en-ka ${ }_{4}$-an-t- (NH); impf. li-in-ki-iš-ke/a- (MH/MS), li-in-kiš-ke/a- (MH/NS).

Derivatives: lingai-, lengai- (c.) 'oath; perjury' (Sum. NAM.ERÍM, Akk. $M \bar{A} M \bar{I} T U, N \bar{I} \check{S}$; nom.sg. li-in-ga-iš (OH/NS, MH/MS), li-in-ga-i-iš (NS), acc.sg. li-in-ga-en (OS), li-in-ga-in (MH/MS), li-in-ka $4_{4}$ en (NH), li-in-ka ${ }_{4}$-in (NS), gen.sg. li-in-ki(-ía)-aš (MH/MS), le-en-ki-aš (MH/NS), le-en-ki-ia-ǎ̌ (NH), li-in-ga-ia-aš (NH), dat.-loc.sg. li-in-ki-i_ia (MH/MS), le-en-ki-ia (MH/NS), li-in-ki-i-ia (NH), loc.sg. li-in-ga-e (MH/MS), li-in-ga-i (MH/NS), le-en-ga-i (MH/NS), le$e n-k a_{4}(-a)-i \quad(\mathrm{NH})$, erg.sg. li-in-ki-ia-an-za (MH/MS), abl. li-in-ki-(ina-)az
(MH/MS), le-en-ki-ia-az (NH), li-in-ki-ía-za (NH), le-en-ki-i̇a-za (MH/NS), acc.pl.c. li-in-ga-a-uš (MH/MS), li-in-ga-uš (MH/NS), le-en-ga-uš (NH), erg.pl. li-in-ki-ía-an-te-eš (OS), li-in-ki-an-te-eš (MH/NS)), linganu- ${ }^{j}$, lenganu- ${ }^{z i}$ (Ib2) 'to make swear' (1sg.pres.act. li-in-ga-nu-mi (MH/MS), li-in-ga-nu-zi (NH), 1pl.pres.act. li-in-ga-nu-ma-ni (MH/MS), 3pl.pres.act. li-in-ka ${ }_{4}-n u-a n-z i(N H)$, 1sg.pret.act. li-in-ga-nu-nu-un (MH/MS), le-en-ga-nu-nu-un (NH), 3sg.pret.act. li-in-ga-nu-ut (MH/MS), le-en-ga-nu-ut (NH), 1pl.pret.act. li-in-ga-nu-me-en (NS), 3pl.pret.act. li-in-ka4-nu-e-er (NH); part. li-in-ga-nu-(ua-)an-t- (NH), li-in$k a_{4}-n u-u a^{2} a n-t-\quad(N H)$, le-en-ka $a_{4}-n u-u a_{1}-a n-t-\quad(N H) ; ~ i m p f . ~ l i-i n-g a-n u-u s ̌-k e / a-$ (MH/MS)).
IE cognates: Gr. $\dot{\varepsilon} \lambda \varepsilon ́ \gamma \chi \omega$ 'to disgrace, to question', OHG ant-lingen 'to answer'.

$$
\text { PIE *hl léng }{ }^{\prime}-t i, * h_{l} \ln { }^{()^{h}} \text {-énti }
$$

See CHD L/N: 62f. and Puhvel HED 5: 85f. for attestations. The verb seems to have three stems, namely link-, lik- and lenk-, besides which CHD cites a stem linga- as well.

The stem lenk- is spelled le-en- and only found in NS and NH texts. It is the regular outcome of OH link- through the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-n$ (cf. § 1.4.8.1.d).
The stem linga- cited by CHD apparently is based on the one attestation 1pl.pres.act. le-en-ga-u-en (HT 1 i 43 (MH/NS)), which in my view has little value (note that all other attestations of li-in-ga- (e.g. li-in-ga-zi and li-in-ga-nu-) are found in front of consonants and denote /linkC-/).

The original distribution between link- and lik- is that link- is found when the stem is followed by a vowel (e.g. linkun (OS)), whereas lik- is found when a consonant follows (e.g. likzi (OS), likta (OS)). Compare for this distribution the
 kiš-.

It has been suggested that $l i(n) k$ - is the nasal-present of the root visible in Lat. ligāre 'to bind' (Hrozný 1917: 16), but this is unlikely because all Hittite nasalinfixed verbs with a root-final velar show an infix -ni(n)-.

Formally, a better alternative is a connection with Gr. $\dot{\varepsilon} \lambda \varepsilon ́ \gamma \chi \omega$ 'to disgrace, to question' (suggested by Sturtevant 1930c: 218), which is followed by many scholars (see the references in Tischler HEG L-M: 61, who further adduces OHG ant-lingen 'to answer'). If this connection is justified, we must reconstruct *hl $h_{l}$ leng $^{\prime}{ }^{h}$-. Just as all $m i$-inflected verbs, this verb must have shown ablaut as

/lingant ${ }^{\mathrm{s}} \mathrm{i} /$ is paralleled by $h_{2} m n g^{h}$-enti > haminkanzi (cf. hamank- ${ }^{i}$ / hame/ink-). Note that initial preconsonantal $* h_{l}$ is dropped without a trace.
$\boldsymbol{l i p}(\boldsymbol{p})^{-{ }^{z i}}$, lipae- ${ }^{z i}(\mathrm{Ib} 1>\operatorname{Ic} 2)$ 'to lick (up)': 3sg.pres.act. li-ip-zi (OH/NS), li-pa-iz$z i$ (NS), 3pl.pres.act. li-ip-pa-an-zi (MH/NS), li-pa-a-an-zi (MH/NS), 3sg.pret.act. li-ip-ta (OH/NS), 3pl.pret.act. li-i-pé-er (OH/MS?), 3sg.imp.act. li-ip-tu (OS).

Derivatives: lel(l)ipa- ${ }^{i}$ (IIa5?) 'to lick (up)' (3sg.pres.act. \& le-li-pa-a-i (NS), le-el-li-pa-a-i (MH/NS), Luw.3pl.pres.act. le-li-pa-an-ti; impf. le-li-pa-iš-ke/a(MH/NS), le-li-pa-aš-ke/a- (MH/NS)).

See CHD L/N: 71 for attestations, where it is stated that "the only unambiguous exx. of lipai- are in a broken context and may prove to be of a different verb". Nevertheless, the form 3pl.pres.act. lipānzi clearly means 'to lick' and shows a stem lipae- as well. The verb shows an alteration between single -p- vs. geminate -pp-. This, together with the fact that verbs for 'to lick' often show a structure lVP- (e.g. Lat. lambere, OE lapian, OHG laffan, Gr. 入á $\pi \tau \omega$ 'to lick', Arm. lap 'em 'to slurp') indicates that the verb is onomatopoetic in origin. The derivative lel(l)ipa- may belong to class IIa5 (and should then be cited lel(l)ipa- ${ }^{i} /$ lel(l)ipi-), just as other reduplicated verbs like $m \bar{e} m a-^{i} / m \bar{e} m i-$, paripara ${ }^{i} /$ paripari-, etc.
lišš-: see lešš-
$\boldsymbol{l}$ І̆šae- ${ }^{z i}$ (Ic2) '? (to clear out?)': 3sg.pres.act. li-i-ša-iz-zi (KUB 15.31 ii 15 (MH/NS)), li-ša-iz-zi (KUB 15.32 ii 9 (MH/NS)).

Usually, these verbal forms are regarded as belonging with leš̌s-zi/lišš- 'to pick up, to gather' (q.v.), but this is improbable. Firstly, because of the formal differences (līšae-vs. lešš- / liššs-), and secondly because of the fact that ll̄šae- is an intransitive verb whereas lešš- / lišš- is transitive. I therefore propose to separate them.
The verb līšae- occurs in one context only:
KUB 15.31 ii

| $\begin{aligned} & (11) \\ & (12) \end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| (13) |  |  |  |  |
|  |  |  |  |  |
| (15) |  |  |  |  |
| (16) $p$ |  |  |  |  |

> 'They open up nine pits. Quickly he takes a pick-axe and digs. Then he takes a brooch and digs on that side. Thereupon he takes a šatta, a spade and a huppara-vessel and šarā līšae-s. Then he libates wine and oil in (it). He breaks thin-breads and places them around on all sides'.

CHD (L/N: 72, under the lemma leššai-, liššai-, lišai-) translates "and he clears out (the loose soil, stones, etc. from the holes)". Although this interpretation is possible (but notice that the absence of an object is not favourable to it), the fact that it seems to be specifically chosen on the basis of a presupposed connection with lešš-, lišš- 'to gather' must make us cautious: other interpretations are possible as well. A definite decision is only possible if other attestations of this verb are found.
Formally, līsuae- seems to be a denominative derivative of a further unattested noun $* l \overline{s ̌} a$ -
lišši:- see leš(š) $i-$
-lit (1sg.imp.act.-ending): see -llu
-llu, -lit (1sg.imp.act.-ending): ak-kal-lu (KUB 14.1 rev. 94 (MH/MS)), a-aš-ša[($n u$ )]-ul-lu (KUB 14.11 iii $20(\mathrm{NH})$ ) // aš-nu-ul-lu (KUB 14.8 rev. 7 (NH)), e-eš-liit (KUB 26.35, 6 (OH/MS?), KUB 23.82 rev. 16 (MH/MS), KBo 5.3 iv 33 (NH)), e-eš-lu-ut (KUB 7.2 ii 23 (NS), KUB 8.35 iv 23 (NS)), a-ša-al-lu (KBo 4.14 i 43 (NH)), ha-aš-ši-ik-lu (KUB $24.5+9.13 \mathrm{rev} .1$ (NS)), ha-aš-ši-ig-gal-lu (KUB 36.93 rev. 6 (NS)), ha-ši-ig-gal-lu (KBo 15.14, 4 (NS)), kar-ša-al-lu (KUB 32.138 rev. 7, 8, 9 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 34.37 obv. 5 ( $\mathrm{OH} / \mathrm{NS}$ )), me-ma-al-lu (KUB 30.14 iii 74 (NH), KUB 6.46 iv 42 (NH)), nu-un-tar-nu-ua-a[l-lu] (KUB 21.38 obv. 37 (NH)), še-eg-ga-al-lu (KBo 13.88 i 3, 5 (NS), KUB 23.88 obv. 6 (NH)), ši-ig-ga-al-lu (KBo 18.2 rev. $12(\mathrm{NH})$ ), ta-li-it (KBo 3.38 rev. 16 ( $\mathrm{OH} / \mathrm{NS}$ )), tar-uh-ha-al-lu (KBo 12.58+ obv. 5 (NS)), te-pa-u-e-eš-ša-al-lu (Tischler HEG T: 317); $u$-da-al-lu (KBo 17.62+63 iv 15, 18 (MS?)), $\dot{u}$-ua-al-lu (KUB 14.8 rev. 42 (NH)), ú-ues-el-lu-ut (KUB 3.110, 15 (NS)), za-am-mu-ra-al-lu (KUB 36.85, 7 (MS?))
Anat. cognates: CLuw. -llu (1sg.imp.act.-ending): ku-una-ia-ta-al-lu.
The ending of 1sg.imp.act. (also called voluntative) has the form -llu in akkallu (MH/MS), ašallu (NH), āšša[nu]llu // ašnullu (NH), haššiklu // haššiggallu // hašigallu (NS), karšallu (OH/NS), memallu (NH), nuntarnuuaa[lu] (NH),
šeggallu (NH), taruhhallu (NS), tepaūēššallu, udallu (MS?), uuallu (NH), zammurallu (MS?) (note that in most cases the $-a$ - can be interpreted as part of the stem or as a graphic vowel to write $/{ }^{\circ} \mathrm{CLu} /$ : it is phonetically real in a few NH forms only where it can be regarded as analogical to the verbs in which $-a$ belongs to the stem), it has the form -lit in ēšlit ( $\mathrm{OH} / \mathrm{MS}$ ?), talit ( $\mathrm{OH} / \mathrm{NS}$ ), and the form -llut in ēšlut (NS) and uuellut (NS) (the origin of $-e$ - in the latter form is unclear to me: perhaps it represents anaptyctic /if/). It seems to me that -llut must be regarded as a conflation of -llu on the one hand and -lit on the other.
Just as in English one could say 'let me do this' in the function of a voluntative, I regard -llu and -lit as cognates with the verb $l \bar{a}^{-} / l$ - 'to let'. The $-u$ may be equated with the imperatival $-u$ as visible in the endings $-t t u$, $-u$, -antu, -ttaru, -aru and -antaru (see especially at $-u$ ), whereas $-t$ may be regarded as the imperatival 2 sg.act.-ending $-t<*_{-} d^{h} i$. So we arrive at the virtual reconstructions * $l(e / o) h_{l}-u$ (lit. 'he must let me ...') and *leh $h_{l} d^{h} i($ lit. 'you must let me ...').
${ }^{(G I S ̌)} \boldsymbol{l} \boldsymbol{u} \overline{e ̄ s ̌ s ̌ a r ~ / ~ l u ̄ e ̄ s ̌ n-~(n .) ~ ' s h a v i n g ~ o f ~ i n c e n s e-w o o d ': ~ n o m .-a c c . s g . ~ l u-u-e-e s ̌-s ̌ a r ~}$ (MH/MS), lu-u-eš-šar (MH/NS), lu-e-eš-šar (NH), lu-u-eš-ša (NH), lu-i-eš-šar (NH), dat.-loc.sg. lu-u-e-eš-ni (NH), erg.sg. lu-u-e-eš-na-an-za (NS), gen.pl. lu-u$i s ̌-n a-a n(\mathrm{NS}),[l] u-u-e-e s ̌-n a-a s ̌$ (NS).

PIE *luh $h_{1 / 3}-e ́ h_{l} s h_{1}-r$
See CHD L/N: 73-4 for attestations. The word denotes pieces of wood or shrub that are used as incense. According to Melchert (1988a: 229), these pieces probably were shavings (of cedar) and he assumes that this word shows an abstract noun in -ēššar of the PIE root *leuH- 'to cut (off)' (cf. Skt. lunáti 'to cut (off)').

This etymology was rejected by Puhvel (HED 5: 128f.) who implausibly assumes that lūēššar is the Luwian variant of tuhhuēššar, which he translates as 'incense', Apart from the fact that the meaning of tuhhuēěšar (q.v.) is not clear, there is no single indication that lūēššar would be of Luwian origin.
lūha- (c.) '?’: nom.sg. \& lu-u-ḩa-aš, acc.sg. \& lu-u-ha-an, dat.-loc.sg.? lu-u-ha
The word only occurs in Luwoid lists of good things and is in most attestations preceded by gloss wedges. This clearly indicates that the word is Luwian. Laroche (1959: 63) translates it as 'light', which is followed by e.g. Puhvel (HED 5: 102) and CHD (L/N: 73), but rejected by e.g. Melchert (1993b: 128) and Tischler (HEG L-N: 64f.). It indeed seems as if Laroche based his translation
primarily on a formal similarity with Hitt. lukk-, assuming that Hitt. -kkcorresponds to Luw. - $h$-. Unfortunately, there are no other examples of medial $* k$ in Luwian, so this equation can neither be proven nor disproven. Semantically, however, a translation 'light' does not seem very appropriate to me.
${ }^{\text {(GIŠ) }} \boldsymbol{l u i n}{ }^{2}$ ēššar : see ${ }^{(\text {GIŠ })}$ lūēššar / lūēšn-
$\boldsymbol{l u k k}{ }^{\text {tta }}$ ( $\mathrm{IIIb}>\mathrm{Ib} 1$ ) 'to get light, to light up, to dawn': 3sg.pres.midd. lu-uk-ta (OS), lu-uk-kat-ta (OS), lu-ug-ga-at-ta (OS), lu-uk-ka4-ta (MH/NS), lu-kat-ta ( NH ), lu-uk-ka-ta (NH), 3sg.pret.midd. lu-uk-ta-at (OS), lu-uk-kat-ta-ti (OH/NS); 3sg.pres.act. lu-uk-zi (NH), 3sg.pret.act. lu-uk-ta (NH).
Derivatives: lukk(iie/a)- ${ }^{z i}$ (Ib1/Ic1) 'to set fire to' (sg.pres.act. lu-uk-ki-ez-zi (OS), lu-uk-zi (NS), 3pl.pres.act. lu-uk-kán-zi (OH/MS), lu-kán-zi (NH, 1x), 1sg.pret.act. $l u-u k-k u-u n(\mathrm{NH})$, [lu-u]k-ka $-n u-u n(\mathrm{KBo} 3.46 \mathrm{rev} .27$ (OH/NS)), 3sg.pret.act. lu-uk-ki-et (OH/NS), 3pl.pret.act. lu-uk-ki-e-er (MH/MS), 2pl.imp.act. lu-uk-tén (NH); part. lu-uk-kán-t- (OH/MS); impf. lu-uk-ke-eš-ke/a(NH)), lukke/iš- ${ }^{z i}$ (Ib1) 'to become light' (3sg.pres.act. lu-ki-iš-zi (NH), 3sg.pret.act. lu-uk-ke-eš-ta), lukkanu- ${ }^{z i}$ (Ib2) 'to make it light(?)' (3pl.pres.act. lu$\left.u k-k a_{4}-n u-u a-a n-z i(N H)\right)$, see lalukkiie/a- ${ }^{z i}$, laluk(k)e/ǐ̌š- ${ }^{z i}$ and lukkatt-.
IE cognates: Skt. rócate 'to shine', TochA lyokät 'it dawns', Arm. lowc 'anem 'to lighten'.

PIE *leuk-to; *léuk-t / *luk-ént; *luk-ié/ó-
See CHD L/N: 74f. for attestations and semantics. It has been clear since long and generally accepted that these words reflect the PIE root *leuk-. The exact formations of the different verbs is not without discussion, however.
The verb lukk- 'to dawn' originally was middle only (all OH and MH examples are middle), showing active forms in NH texts only. It denotes 'to get light, to dawn' and is, according to CHD (L/N: 75-6) "confined to describing the faint but growing sunlight in the atmosphere at dawn just before the sun rises". The form lukta (OS) must reflect *léuk-to (or, less likely, *luk-tó?), but the interpretation of lukkatta (OS) is less clear. Is this form to be phonologically interpreted as /lukta/ or as /lukata/? In the first case, it is to be equated with lukta $<* l(e) u k$-to, but in the second case it must reflect *l(e)uk-o-to, which implies the existence of an older *lukka<*l(e)uk-o (cf. argatta beside arga, halziiatta beside halziïa).
The verb that I cite as $\operatorname{lukk}\left(\right.$ iie/a) ${ }^{z i}$ is active only and transitive, denoting 'to set fire to'. It is difficult to judge this verb formally, especially because the signs KI, IT and IZ are ambiguous regarding their readings (they can be read ki or ke, it or
et and $i z$ or $e z$, respectively). So a form like $l u-u k-K I-I Z-z i$ (attested from OS to NH texts) can in principle be read as $l u-u k-k i-i z-z i / l u k i t^{\mathrm{s}} \mathrm{i} /$, $l u-u k-k i-e z-z i / l u k i e t^{\mathrm{s}} \mathrm{i}^{2}$ or lu-uk-ke-ez-zi /luket ${ }^{\mathrm{s}} \mathrm{i}$ /, pointing to a stem lukki-, lukke- or lukkiie-. This goes for 3sg.pret.act. lu-uk-KI-IT (from OH/NS to NH texts) and 3pl.pret.act. lu-uk-KI-e-er (once in a MH/MS text) as well. Note that Alp (1993: 366) cites a verb.noun gen.sg. lu-uk-ki-u[-ua-aš ?] (Bo 69/1260, 7), which would point to a stem lukki- or lukke-. Because the tablet on which this form occurs has not been published yet, this reading cannot be verified. Moreover, the form is broken at a crucial point, and I therefore wonder whether Alp's reading is as certain as he seems to claim: I would not be surprised if the form turned out to actually be $l u$ $u k-k i-i[a-u-u a-a \check{s}]$. All in all, I will leave this form out of consideration here. The other forms of this verb seem to show a stem lukk-: 3 sg.pres.act. $l u-u k-z i$ (once in a NS text), 3pl.pres.act. lu-uk-kán-zi (OH/MS to NH), 1sg.pret.act. lu-uk-ku-un (once in a NH text), 2pl.imp.act. lu-uk-tén (once in a NS text), and part. lu-uk-kán-t- (from OS to NH texts). Note that 3pl.pret.act. lu-uk-KI-e-er, when read as $l u-u k-k e-e-e r$ could show a stem lukk- as well. The one NS attestation 1sg.pres.act. [lu-u]k-ka4-nu-un (OH/NS) seems to show a stem lukkae- ${ }^{z i}$ according to the hatrae-class inflection. Because this inflection was highly productive in the NH period, I regard this form as a secondary creation.

Oettinger (1979a: 273-7, referring to Hoffmann 1968) interprets these active forms as belonging to an "einfach thematischer Stamm" lukkezzi < *léuk-e-ti. Apart from the fact that this preform would not yield "lukkezzi" by regular sound laws (we would rather expect lūkizzi with lenition of $* k$ due to the preceding accentuated diphthong), the direct comparison to Skt. rocate 'shines' < *leuk-e-to is false, because this latter form is middle. Moreover, this verb would be the only verb known to me in whole of Anatolian that shows a thematically inflected stem.
Watkins (1973a: 68-69) compares the verb "lukkezzi, lukkanzi" with Lat. lūcēre 'to kindle' and reconstructs both as a causative formation *loukéieti, *loukéionti (followed by e.g. Melchert 1984a: 34). Although semantically this comparison and reconstruction seems attractive, there are formal problems. First it is suspect that the stem-form lukka-, which would be the regular outcome of *loukéio-, is attested in 3pl.pres.act. lukkanzi and part. lukkant- only, where $-a$ - would have been inherent to the ending anyway (note that I regard the one NS form [lu]kkanun as non-probative, cf. above). Secondly, a development *loukéionti > lukkanzi is improbable in view of ${ }^{\text {Lú }}$ patteiant- 'fugitive' $<$ *pth $e i-e n t-$ and ${ }^{\text {Lú }}$ maiant- 'adult man' $<{ }^{*} m h_{2} e i-e n t-$ (see the lemmas pattai- ${ }^{i} /$ patti- and ${ }^{\text {LÚ }}$ maiant- respectively). Thirdly, there are several examples where a PIE causative verb of the structure $* \mathrm{CoC}$-eie- ends up in the Hitt. hi-inflection (e.g.
lāk- 'to fell' < *log' ${ }^{h}$-eie- '*to make lie down'). Note that the alleged example uašše/a- ${ }^{z i}$ 'to dress' < *ưos-eie- must be explained otherwise, cf. uešš- ${ }^{\text {ta }}$, unašše/a${ }^{z i}$. All in all, I reject this interpretation too.

In my view, we must interpret the forms like $l u-u k$-KI-IZ-zi as showing a stem lukkiie-. In that way we would be dealing with a situation in which we find a -ie/a-derived stem lukkiie/a- besides an underived stem lukk-. This resembles the situation as discussed by Melchert (1997b: 84f.) who states that some verbs (e.g. $\operatorname{karpp}\left(i i_{C} / a\right)$ - (q.v.)) reflect an old opposition between a root-aorist and a -ie/oderived present. In this case, we would be dealing with the reflexes of a rootaorist *léuk-t / *luk-ént (for which compare the Skt. root-aorist form rucāná-) besides a present *luk-ie/o- (for which compare Arm. lowc 'anem 'to lighten'). So all in all, we are dealing with a situation in which we are dealing with an intransitive middle *léuk-to that contrasts with the transitive active inflection that shows two stems, namely a root-aorist *léuk-t besides a -ie/o-present *luk-ié-ti.

The verb lukke/iš- ${ }^{z i}$ 'to become light' is attested a few times only, and it is difficult whether it is to be regarded as a fientive in $-\bar{e} s \check{s} \check{s}^{-}\left(l u k k \bar{e} \check{s} \check{s}_{-}^{z i}\right)$, or as an $s$ extension comparable to lalukke/iš-zi 'to become light' (q.v.). The form lu-ki-e-eš$z i$ (KBo $6.25+$ KBo 13.35 iv 2), cited by Puhvel (HED 5: 105), seems to point to lukkēšs- but is attested in such a broken context that neither its meaning can be determined, nor whether it is the latter part of a longer word: [...] $\mathrm{x}(-) l u-k i-e-e s ̌-z i$ (note that Puhvel cites this very same form as la]-lu-ki-e-eš-zi on p. 48, as if belonging to lalukke/iš-).
lukkatt- (c.) 'dawn, next morning': gen.sg. lu-uk-kat-ta-aš (NH), dat.-loc.sg. lu$u k-k a t-t i\left(\mathrm{OH} / \mathrm{NS}\right.$, often), lu-uk-ka ${ }_{4}-t i(\mathrm{NS})$, lu-uk-kat-te (MH/NS), lu-kat-te (NH), lu-kat-ti (NH), lu-kat (NH), lu-uk-kat (NH), all.sg. lu-uk-kat-ta (OS).

PIE *l(e)uk-ot-
See CHD L/N: 76f. and Puhvel HED 5: 108f. for attestations. Because of the homography of lukkatta 'it dawns' and lukkatta 'at dawn', it has often been suggested (e.g. Oettinger 1979a: 275-6) that they actually are to be equated and that the adverbially used lukkatta 'at dawn' is in fact a petrified form of verbal lukkatta 'it dawns'. This is not very likely, however. On the one hand, different cases of a nominal stem lukkatt- are attested (which are difficult to explain if a verbal lukkatta were the source), but also because we then would have to assume that an adverbially used petrified 3sg.pres.midd. lukkatta 'it dawns $>$ at dawn' coexists with the very lively lukkatta 'it dawns'. I therefore assume that all forms belong to a nominal stem lukkatt- (note that Rieken 1999a, who devotes a whole
chapter to $t$-stems (100-69), does not even mention the possibility that these forms are nominal).

This lukkatt- is a $t$-stem of lukk- 'to dawn' (q.v.) comparable to šiuatt- 'day' (q.v.). It must reflect *l(e)uk-ot-, which can be compared with Goth. liuhap 'light' <*leuk-ot-.
Note that gen.sg. lu-uk-kat-ta-aš (KUB 36.90 obv. 15) is not noticed by CHD, although they cite the specific context: lu-uk-kat-ta-aš=kán UD.KAM-ti 'on the day of the (next) dawn (i.e. tomorrow)' (cf. Puhvel HED 5: 109).
lūli- (c.) 'pond, lake, spring, well, basin' (Sum. TÚL): nom.sg. lu-li-iš (OH/NS), acc.sg. lu-li-in (OH/MS), lu-ú-li-in (NH), lu-li-ịa-an (NH), gen.sg. lu-li-ía-aš ( $\mathrm{OH} / \mathrm{MS}$ ), lu-ú-li-aš (OH/MS?), lu-ú-li-ịa-aš (OH/NS), dat.-loc.sg. lu-ú-li ( $\mathrm{OH} / \mathrm{NS}$ ), lu-ú-li-i-ia (OH/NS), all.sg. lu-li-ịa (OS), abl. lu-ú-li-az (OH/MS), lu-ú-li-ịa-az (OH/NS), lu-li-i_ia-za (MH/NS), gen.pl. lu-ú-li-ịa-aš (MH/NS).
Derivatives: see lūliíašha-.
See CHD L/N: 80 and Puhvel HED 5: 111f. for attestations. Both dictionaries cite two stems, namely luli- and luliia-. See Tischler HEG L-M: 72f., however, who convincingly argues that the forms that seemingly show a stem luliia- (e.g. acc.sg. luliian and the PN Šuppiluliama-) are secondary formations. Note that whenever the $-u$ - is written plene, it is done with the sign Ú, and never with $U$. This points to a phonological interpretation /lúli-/.
There are no known cognates (apart form luliiašha- q.v.), and Tischler (1.c.) argues that we are dealing with an "einheimisches" word on the basis of the fact that a place name $\check{S} u$-pi-lu-li-a is attested in the Old Assyrian texts already. This seems like false reasoning to me as some names are known from these texts built up from words that have a good PIE etymology (e.g. Šu-pí-ah-šu = Šuppiahšu-, see haššu-). Nevertheless, I agree that lūli- hardly can be of IE origin.
lūliiáašha- (c.) 'marsh, marshland': gen.sg. lu-li-i-ia-aš-hha-aš; broken lu-ú-li[-ía-ašha $(-)]$.

See CHD L/N: 82 for attestations. It is likely that lūliiašha- in some way is derived from lūli- 'pond, lake' (q.v.) but the exact formation is unclear. The suffix -šha- normally is deverbal, which could indicate that we have to assume the existence of a verb $* l u \bar{u} l i j e / a-{ }^{z i}$. See at $l \bar{u} l i$ - for further treatment.
lūri- (c. > n.) 'loss of honour, disgrace, humiliation; financial loss; shortage(?)' (Sum. I.BÍ.ZA): nom.sg.c. lu-ú-ri-iš (OH/NS), lu-ú-ri-eš (OH/NS), lu-u-ri-iš (MH/NS), acc.sg. lu-u-ri-in (OS), nom.-acc.sg.n. lu-u-ri (MS), dat.-loc.sg. lu-u-ri (NH), abl. lu-ri-ía-az (MH/MS), nom.pl.c. lu-u-ri-e-eš (OS), acc.pl. lu-u-ri-uš (OS).

Derivatives: lūriiiatar (n.) 'disgrace, humiliation' (nom.-acc.sg. [l]u-u-ri-ia-tar (NH)), lūriiahh- (IIb) 'to humiliate, to disgrace' (3sg.pret.act. lu-ri-ia-ah-ta (NH), 2sg.imp.act. lu-u-ri-ía-ah (NH), 3pl.imp.act. lu-ri-ía-ah-ha-an-du (OH/NS), impf. lu-u-ri-ía-ah-hi-eš-ke/a-(NH)).

PIE *lé $h_{l} u-r i-s, * l e ́ h_{l} u-r i-m, * h_{l} u-r e ́ i-s ?$
See CHD L-M: 86f. for attestations. About the semantics it states: "the unifying idea seems to be 'loss', whether of possessions, honour or station". The word shows many plene spellings of the $-u$-, for which predominantly the sign $U$ is used. Twice, we find the sign Ú, however. Either these two instances are scribal errors, or we are dealing with traces of an original ablaut between $l u-u$-ri- = /lóri-/ and $l u-u ́-r i-=/$ ū́ri-/ (see § 1.3.9.4.f and below). The oldest attestations show commune gender, whereas the one neuter form is attested in a NH text only.
According to Puhvel (HED 5: 123), lūri- is to be analysed as a deverbal noun in -ri-, just as edri- 'food', ešri- 'shape' etc. that are derived from ed- ${ }^{z i}$ / ad- 'to eat' and $e \check{s c}^{-2 i} / a \check{s}-$ 'to be' respectively. If this is correct, we may think of a connection with the verbal root $* l e h_{1^{-}}$, which shows a $u$-present in e.g. Goth. lewjan 'to betray', Lith. liáutis 'to stop', Ukr. livýty 'to omit, to neglect'. Perhaps lu-ú-ri-= /lứri-/ reflects *leh ${ }_{l} u-r i-$, whereas $l u-u-r i-=/ l o ́ r i-/$ reflects $* l h_{1} u-r i-$.
-llut (1sg.imp.act.-ending): see -llu
${ }^{(G I S ̌)} \boldsymbol{l u t t a ̄ i}$ / lutti- (n. > c.) 'window' $\left(S u m .{ }^{\text {GIŠ }} \mathrm{AB}\right.$, Akk. $A P T U$ ): nom.-acc.sg.n. lu-ut-ta-i (KUB 30.29 obv. 17 (MH/MS?)), lu-ud-da-a-i (OH/NS), gen.sg. lu-ut-tiia $a$ - $a \check{s}$ (OH/MS), dat.-loc.sg. lu-ut-ti-ía (OH/MS), abl. lu-ut-ti-íia-az (OH/MS), lu-ut-ti-i_ia-za (NH), lu-ti-ía-az (NH), lu-ut-ti-an-za (OH/NS), lu-ut-ta-an-za ( $\mathrm{OH} / \mathrm{NS}$ ), erg.sg. lu-ut-ta-an-za (OH/MS), nom.-acc.pl.n. lu-ut-ta-i (OH/MS), nom.pl.c. ${ }^{\text {GIŠ }} \mathrm{AB}^{\mathrm{MEŠ}}-u s ̌(\mathrm{NH})$, acc.pl.c. lu-ut-ta-a-uš (OH/MS), dat.-loc.pl. lu-ut-tiia $a-a \check{s}(\mathrm{OH} / \mathrm{MS})$, lu-ut-ti-aš (OH/NS).

Derivatives: see kattaluzzi-.
IE cognates: Gr. Arc. $\lambda \varepsilon v \tau \tau v \tau-$ 'seeing', Gr. $\lambda \varepsilon v ́ \sigma \sigma \omega$ 'to see'.
PIE *lut-ōi, *lut-i-

See CHD L/N: 88f. for attestations. It states that this word is neuter in its singular forms, but commune in its plural forms, but this is strange a distribution, of course. In the singular, I indeed know of neuter forms only, which coincides with the use of the erg.sg. luttanza (*luttai-ant-) when the word functions as the subject of a transitive verb. In the plural we indeed find a few commune forms, of which especially acc.pl. luttāuš is remarkable: KUB 17.10 i (5) ${ }^{\text {GIŠ }} l u-u t-t a-a-u s ̌$ kam-ma-ra-a-aš IṢ-BAT 'Mist seized the windows' (OH/MS). A parallel sentence is found on the same tablet, namely ibid. iv (21) ${ }^{\text {GIŠ }}$ lu-ut-ta-i kam-ma-ra-aš tar$n a-i$, which CHD translates as 'Mist let go of the window'. In my view, it would be better to assume a plural form here as well, so nom.-acc.pl.n. luttai. This could indicate that in the original, OH version of this text, the form luttāi 'window(s)' was used in the first context as well, which was replaced by a less ambiguous commune form luttāuš in the MH copy. So, instead of a distribution neuter singular vs. commune plural, I would rather assume that luttāi originally was neuter, and that commune forms (which are coincidentally found in plural forms only, cf. the absence of nom. or acc. singular forms in NH texts) make their way into the paradigm from MH times onwards.
This word has throughout the years received several etymological explanations. Sturtevant (1933: 84, 157) reconstructed *luk-to- (repeated by Puhvel HED 5: 127) from *luk- 'to shine' (cf. lukk-ta' 'to dawn'), but a cluster *-kt- does not yield Hitt. -tt- (cf. Melchert 1994a: 156). Eichner (1973a: 80) reconstructs *luH-tófrom *leuH- 'to cut' (Skt. lunā́ti), which seems widely followed. I do not see, however, how a preform *luH-to- would yield a Hitt. diphthong-stem (Melchert's assumption of a 'collective' *luH-t-ōi (1984a: 59f.) does not make sense to me).
If we compare luttāi to e.g. haštāi 'bone' < *h $h_{3}$ esth $h_{1}$-oi-, hurtāi 'curse' < * $h_{2} u r t-$ oi-, lelhuntāi 'vessel for pouring' < *le-lh $h_{2} u-n t-o i-$, šakuttāi 'a body part, thigh?' $<{ }^{*} \operatorname{sok}^{w} t(H)$-oi-(?), we would expect that luttāi is derived from a root *lutt-. Such a root is cited in $\mathrm{LIV}^{2}$, namely *leut- 'to see' (Arc. Gr. 入evtovt- 'seeing', Gr. $\lambda \varepsilon v ́ \sigma \sigma \omega$ 'to see' < *leut-ie/o-). Formally as well as semantically a connection with this root would make perfect sense. I therefore reconstruct *lut-ōi, *lut-i-. In the oblique cases, the $-t$ - regularly should have been assibilated due to the following $-i$-, but the un-assibilated variant from the nom.-acc. was generalized. See at kattaluzzi- 'threshold' for my idea that here we do find the assibilated variant of luttai- / lutti-.
Note that the CLuw. form ${ }^{\text {GIŠ }} l u-u-d a-a n-z a$, which often is regarded as denoting 'window' (e.g. Melchert 1993b: 130), is found in such a broken context that its meaning cannot be determined. The designation 'window' is given to it because
of a formal similarity with the Hittite word only, which is methodologically false, of course.
luцarešša- (n.?) a topographic feature: dat.-loc.sg. lu-ưa-re-eš-ši, Luw.gen.adj.nom.sg.c. lu-u-ua-re-eš-ša-aš-ši-iš, lu-u_a-ri-iš-ša-aš-ši-iš; unclear


See CHD L/N: 73 and Puhvel HED 5: 127f. for attestations. The word denotes a topographical feature, the exact meaning of which is unclear. Puhvel assumes that it means 'level ground, flatland', but does so on the basis of etymological considerations only (an unprovable connection with Gr. $\lambda \varepsilon$ voós 'even, level, smooth'). Because of the use of the Luwian gen.adj., it is likely that this word is Luwian.
${ }^{\text {(GIŠ) }} \boldsymbol{l}$ uūēššar : see ${ }^{(\mathrm{GIŠ})}$ lūēššar / lūēšn-
luzzi- (n.) 'forced service, public duty, corvée': nom.-acc.sg. lu-uz-zi (OS), dat.loc.sg. lu-uz-zi-ía (NH), lu-uz-zi (NH), abl. lu-zi-ịa-za (MH/NS), lu-uz-zi-íla-za (NH), lu-uz-zi-i-ia-az (NH), instr. lu-uz-zi-it (OH/NS, MH/MS).

PIE * $l_{1}-u t i-$
See CHD L/N: 90-1 for attestations and semantics. Although a connection with Gr. $\lambda$ ú̃ıৎ 'release; and Lat. so-lūti-ōn 'looseness, payment' (suggested by R. Kellogg 1925: 46), which impies *luH-ti-, is generally accepted (e.g. Puhvel HED 5: 131, Tischler HEG L-M: 83-4), a suffix -ti- is further unknown in Hittite. I therefore rather follow Neu (1974b: 261) in analysing this word as $l-u z z i-$, a derivative in -uzzi- (cf. e.g. išpanduzzi-, tuzzi- etc.) from $l \bar{a}^{-}{ }^{i} / l$ - 'to release'. This would mean that the word originally meant '(work) which releases one from one's obligation' (cf. Melchert 1984a: 166) and reflects * $l h_{1}$-uti-. See at $l \bar{a}-{ }^{i} / l$ for further etymology.

## M

$=(\boldsymbol{m}) \boldsymbol{a}$ (enclitic clause conjunctive particle) 'and, but'.
Anat. cognates: Pal. =ma 'but(?)'; Lyd. =m(-) (encl. part.) '?'; Lyc. me (sentence initial part.)

$$
\mathrm{PIE} *=h_{l} o \text { and } *=m o
$$

This enclitic conjunction, which has a slight adversative meaning, displays two allomorphs in the oldest texts: when the particle is attached to a word ending in a consonant, it turns up as $=a$ that does not geminate the preceding consonant (unlike $=a$ 'and' that is an allomorph of $=(i) a$ (q.v.)); when the particle is attached to a word ending in a vowel or to a logogram, it turns up as $=m a$. This distribution, $C=a$ vs. $V=m a$, is absolute in OS texts: e.g. $a$ - $a p-p a=m a$ vs. $a$ - $a p-$ $p a-n=a$ (note that the latter is different from $a$-ap-pa-an- $n=a=\bar{a} p p a n+=(i) a)$. In MS texts, this distribution is getting blurred: the allomorph $=m a$ is spreading in disfavour of $=a$ and is now found after words ending in consonants as well. In my corpus of $\mathrm{MH} / \mathrm{MS}$ texts, the new combination $C=m a$ is attested 71 times ( $41 \%$ ), whereas the original combination $C=a$ is attested 103 times ( $59 \%$ ). It must be remarked, however, that the high number of $C=a$ is especially due to the (already then) petrified combinations $k i n u n=a(23 x), z i g=a$ (21x) and others ( $u g=a$, $a m m u g=a$ ). Without these, the distribution would have been somewhat like $60 \%$ $C=m a$ vs. $40 \% C=a$. In NH texts, $C=a$ is only found in the petrified combination kinun $=a$ (which in these texts therefore is better read as one word: kinuna, cf. attestations like ki-nu-na=ma=mu (KBo 18.29 rev. 20 (NH)) and ki-nu$n a=m a=u a($ KBo 18.19 rev. $28(\mathrm{NH}))$ ) and an occasional $z i g=a$ or $u g=a$, whereas $=m a$ by that time is the only allomorph that is still alive.

In the case of $=m a$, it is clear that it loses its $-a$ before a following vowel, e.g. $t a-i=m=u-u \check{s}=z a=t a i+=(m) a+=u \check{s}+=z$ (KBo 20.32 ii 9). This is the reason for me to cite e.g. $a n-d a-m a-a n$ as $a n-d a=m=a-a n=a n d a+=(m) a+=a n$, or $k e-$ $e-m a-a \check{s}-t a$ as $k e-e=m=a-a s ̌$ sta $=k \bar{e}+=(m) a+=a s ̌ t a$. In the case of the allomorph $=a$, this loss of $-a$ must have taken place as well. This means that there is no formal way of telling whether e.g. ta-ma-i-5̌a-an is to be analysed as tamais $+=a n$ or as tamais $+=(m) a+=a n$, or, even worse, whether parr-ta-ú-ni-tu-uš is to be analysed as partaunit $+=u s \check{s}$ or as partaunit $+=(m) a+=u \check{s}$. This 'invisibility' of $=a$ when followed by another particle that starts in a vowel probably was the major cause for the its replacement by the allomorph = $m a$ from MH times onwards.
In the case of $=(i) a$, I have argued that the two allomorphs ( $C=a$ vs. $V=i a)$ probable are different outcomes of a particle $+=h_{3} e$ in different phonetic surroundings. In the case of $=(m) a$, however, this is unlikely to be the case: I would not know how to explain an allomorphy $C=a$ vs. $V=m a$ through phonological processes. It therefore might be better to assume that both allomorphs have its own etymological origin. The allomorph $=a$ (which is nongeminating) can hardly reflect anything else than $*=h_{l} o$. We can imagine that when this particle was attached to a word ending in a vowel, it was lost at a very early stage. This may have been the reason that $*=h_{1} o$ was replaced by another particle, $=m a$ (which must reflect *=mo), in these postvocalic positions first. This is the situation we encounter in OS texts. When $*=h_{l} O$ was lost in postconsonantal position as well (during the OH period), it was replaced by $=m a$ in this position as well.
It is quite likely that $=a<*=h_{l} o$ belongs with the demonstrative $a s ̌ i / u n i /$ ini (q.v.), just as e.g. $=k k i /=k k a$ belongs with $k \bar{a}-/ k \bar{u}-/ k i-$ and $=k k u$ ultimately belongs with kui- / kuua-. The particle =ma seems to have cognates in other Anatolian languages as well (especially Lyc. me (sentence initial particle) shows that we have to reconstruct ${ }^{*}(=) m o$ ), and likely belongs with the pronominal stem *mo- that is visible in e.g. mašiuant- (q.v.). Note that the connection between $=a$ and $=m a$ resembles e.g. the connection between Hitt. māhhhan and CLuw. ähha.
$=\boldsymbol{m a}$-: see $=m i-/=m a-/=m e-$
$\boldsymbol{m a} \boldsymbol{-}^{-{ }^{i}}$ (Ia2?) 'to disappear' (?): 3sg.imp.act. $m a-d u(\mathrm{OH} / \mathrm{MS}) ;$ impf. $m a-a \check{s}-k e / a-$ (MS).

See CHD L/N: 99 for attestations. Unfortunately, the verb is attested twice only, which makes it hard to determine what it means exactly. Nevertheless, CHD's proposal 'to disappear' is attractive. On the basis of 3 sg .imp.act. madu we must conclude that the verb must have been $m i$-inflected. It then would belong to class Ia2 ( $a / \varnothing$-ablauting $m i$-verbs). This means that if this verb is from IE origin, it must reflect $* m e h_{2}$ - or $* m e h_{3}-$. I know of no cognates, however.
$\boldsymbol{m a} h \boldsymbol{h} \boldsymbol{a n}$ (postpos., conj.) 'like (postpos.); as, just as (conj.); how (in indirect statement or question); when, as soon as' (Sum. GIM-an): ma-a-ah-ha-an (OS), ma-ah-ha-an (MS).

PIE * món $h_{2}$ ent ?
This word is spelled both with and without plene $-a-$. The spelling ma-a-ah-ha-an is very common, and found from OS onwards, whereas the spelling ma-ah-ha-an is first attested in $\mathrm{OH} / \mathrm{MS}$ texts. Semantically, māhhan is in virtually all respects synonymous to mān (q.v.). It therefore has been claimed that mān must be the contracted form of māhhan. Since both words are found from OS texts already and are used next to each other, this is quite unlikely.
Within Hittite, we must compare māhhan with māhhanda (subord. conj.) 'just as' (q.v.), which is also spelled mānhanta (OS), and even once mān handa (MS) (with word space). These forms make it likely that we are dealing with petrified compounds of the element $m \bar{a} n$ and the noun hant- 'face' (q.v.). It is then possible that māhhan is an old endingless locative or an adverbially used nom.-acc.sg., in which the original *hant lost its final -t (cf. e.g. part.nom.-acc.sg. kunan < * $g^{w h} n e n t$ ) whereas māhhanda is a variant with an original nom.-acc.pl. *handa< * $h_{2}$ ente $h_{2}$. As I have argued under its own lemma, mān is derived from the pronominal stem *mo- that is also visible in OIr. ma, $m \bar{a}$ 'when' and TochA mänt 'how?', TochB mant (conj.) 'so'.
Sometimes it is claimed that CLuw. āhha 'when, as (temporal and comparative)' and Lyc. ẽke are cognate, but these more likely reflect * $h_{1}$ om + * $=h_{3} e$ (for the latter element compare at $\left.=(i) a\right)$.
māhhanda (subord. conj.) 'just as': ma-a-ah-ha-an-da (OS), ma-a-an-ha-an-da (OS), ma-a-an ha-an-da (MS), [m]a-a-ah-ḩa-an-ta (OH/MS).

See at māhhan for a treatment.
${ }^{\text {(GIŠ) }} \boldsymbol{m a ̄ h l a - ~ ( c . ) ~ ' b r a n c h ~ o f ~ a ~ g r a p e v i n e ' : ~ n o m . s g . ~ m a - a - a h - l a - a s ̌ ~ ( O S ) , ~ m a - a h - l a - ~}$ $a s ̌(\mathrm{MH} / \mathrm{NS})$, acc.sg. ma-ah-la-an ( $\mathrm{OH} / \mathrm{NS}$ ), dat.-loc. ma-a-ah-li ( $\mathrm{OH} / \mathrm{MS}$ ), ma$a h-l i(\mathrm{OH} / \mathrm{NS})$, acc.pl. ma-ah-lu-uš (OH/NS).

Anat. cognates: Lyd. $\mu \tilde{\omega} \lambda \alpha \xi \cdot$ عĩ oĩvov (Hes.)

PIE *mé/óh $h_{2} l o-$ ?
See CHD L/N: 112f. for attestations and semantics. Often, this word is connected with Gr. $\mu \tilde{\alpha} \lambda o v$, Lat. mālum 'apple(tree)' (cf. references in Tischler HEG L-M: 89 f .) but this is semantically uncompelling.
Within māhla-, the cluster -hl- is remarkable and of importance for the etymological interpretation, because it is not fully clear whether this can reflect PIE *Vh2lV or not. Normally, we see that * $h_{2}$ disappears word-internally in front of another consonant (e.g. lāpp- ${ }^{z i}$ 'to glow' < *leh ${ }_{2} p-$, šāgāi- 'sign' < *seh ${ }_{2} g-\bar{o} i-$,
 'to protect' $<*{ }^{*} p_{2} s-$, antuȟs- 'human being' $<* h_{1} n-d^{h} u h_{2}-s-$ ). It is possible, however, that $* h_{2}$ does not disappear in front of resonants either, compare zahrai$' \operatorname{knocker}(?)$ ' < *tieh ${ }_{2}$ roi- (?) and mahrai- / muhrai- (a body part) < *m(e) $h_{2}$ roi(?) (note that Kimball's only example (1999: 400) of a development $*-h_{2} R$ - > $-R R$ - is false: see at uannum(m)iia-). If this is correct, then this would mean that, at least formally, māhla- could be of IE origin and reflect *meh ${ }_{2} l o-$ or *moh ${ }_{2} l o-$. Nevertheless, since no convincing IE cognates are known and since no other convincing examples of the development $*-h_{2} l->$ Hitt. -hl- can be found, this reconstruction and this supposed phonetic development remain speculative.
${ }^{\text {UZU }}$ mahrai- / muhrai- (c.) a body parts of animals: nom.sg. or pl. mu-uh-ra-iš ( $\mathrm{OH} / \mathrm{NS}$ ), acc.sg. ma-ah-ra-en (OS), mu-uh-ra-in (MH/NS), mu-u-uh-ra[-in], [mu-u]h-ra-a-in (NS), mu-uh-ha-ra-in (NH), mu-uh-ra-an, gen.sg. or pl. mu-uh-ri-aš (OH/MS), loc.sg.(?) mu-uh-ra-i (MS?), acc.pl. mu-uh-ra-a-uš (OS), mu-uh$r a-u s ̌$ (NS), mu-uh-ha-ra-uš (NS).
IE cognates: ?Gr. $\mu \eta \rho o ́ c ~ ' t h i g h(b o n e) ' . ~$

$$
\text { PIE *mé }{ }_{2} r \text { rooi-, } * m h_{2} r-i-(?)
$$

See CHD L-N: 317 for attestations. This word is predominantly attested in lists of meaty body parts of sacrificed animals (cattle, sheep, lambs and mice), but it is unclear which body part this word denotes exactly. It is mostly spelled mu-uh-ra-
 form ${ }^{\mathrm{UZU}}$ ma-ah-ra-en that denotes an object made of flesh that is eaten. Because
of the close formal and semantic similarity it is usually regarded as identical to muh(ha)rai-. Puhvel HED 6: 174f. also adduces the form ma-hu-ra-i[n] (ABoT 35 ii 9) to this lemma, but because on the one hand it is not accompanied with the determinative UZU, and because, on the other, the context in which it occurs does not indicate that it must denotes a body part, I follow CHD (L-N: 318) in separating this form from mahrai- / muhrai-.
The word clearly is a diphthong-stem, on which see Weitenberg (1979). If the form mahraen really belongs with muhrai-, the alternation mahrai- / muhrai- is difficult to explain from an Indo-European point of view. Nevertheless, Weitenberg (1979:303) proposes to assume that the alternation is due to ablaut: full grade ${ }^{m}$ me/oHr- yielded mahr-, whereas zero grade $* m H r$ - developed an anaptyctic vowel which was $u$-coloured because of the preceding $m$ (for colouring of anaptyctic vowels compare e.g. takke/išzi $=/$ tákist $^{\text {s }} \mathrm{i} /<*^{\prime}$ téks-ti besides pahhašzi $=/$ páHst $^{\mathrm{s}} \mathrm{i} /<{ }^{*}$ péh $\left._{2} s-t i\right)$. Furthermore, he hesitatingly connects it with Gr. $\mu \eta \rho$ ó $\varsigma$ 'thigh(bone)'. If Weitenberg's interpretation is justified, we have to reconstruct a paradigm $* m e ́ h_{2} r-o i-s, * m h_{2} r-i$-os. If this etymology is correct, it would show retention of internal $* h_{2}$ in front of resonant, which is possibly also visible in ${ }^{\text {(GIŠ) }}$ māhla- 'apple' and ${ }^{\text {GIŠ̌ }}$ zahrai- 'knocker(?)' (for the falseness of Kimball's only example (1999: 400) of a development $*-h_{2} R->-R R$, see at uannum(m)ii_a-).
$\boldsymbol{m a i} \boldsymbol{-}^{\boldsymbol{i}} / \boldsymbol{m i}$ - (IIa4 > Ic1; IIIf) 'to grow (up); to thrive, to prosper; (midd.) to be born': 3sg.pres.act. ma-a-i (OH/MS), 3pl.pres.act. ma-a-i-an-zi (OH or MH/NS), 1sg.pret.act. mi-ía-hu-un (NH), 3sg.imp.act. ma-a-úu (OS), 2pl.imp.act. ma-iš-teen (MH/MS); 3sg pres.midd. mi-ia-ri ( OH or $\mathrm{MH} / \mathrm{NS}$ ), mi-i-ia-a-ri (NH), 3sg.pret.midd. mi-i $i a-t i(\mathrm{OS})$, 3sg.imp.midd. mi-i-ia-ru (OH/NS); part. mi-ia-a$a n-t-(\mathrm{MH} / \mathrm{MS})$, mi-i $a_{-}-a n-t-(\mathrm{OH} / \mathrm{NS})$, mi-i-i-ia-an-t-; impf. ma-iš-ke/a- $(\mathrm{OH}$ or MH/MS), mi-ia-aš-ke/a- (NH).
Derivatives: miē̌̌̌̌- ${ }^{z i}$ (Ib2) 'to grow; to be born' (3sg.pres.act. mi-i-e-eš-zi (MH/MS?), mi-eš-ša[-an-zi] (NH), 3sg.pret.act. mi-e-eš-ta (NH), [mi?-]e-eš-ta (MS), 3sg.imp.act. mi-e-eš-du (NS), 3pl.imp.act. mi-e-eš-ša-<an->du (NH); 1sg.pret.midd. mi-eš-ḩa-ti (MH/MS); impf. mi-i-e-eš-ke/a- (NH)), miìātar / miiann- (n.) 'growth, increase, proliferation, abundance' (nom.-acc.sg. mi-ia-tar (OS), mi-ia-a-tar (MH/MS), mi-ia-ta (OH/NS), mi-i-ia-ta (NH), gen.sg. mi-ía-an$n a-a \check{s}(\mathrm{NH})$, me-íia-an-na-ač (NS)), miiantila- (adj.) 'fruitful' (loc.sg. mi-ia-an-tili), miianu- ${ }^{z i}$ ( Ib 2 ) 'to make (branches) fruit-bearing' (3sg.pres.act. mi-ia-nu-zi


Anat. cognates: CLuw. mašhāhit- (n.) 'growth, prosperity' (nom.-acc.sg. ma$a \check{s}-h a-a-h i-s ̌ a, ~ m a-a s ̌-h a-h i-s ̌ a)$; HLuw. mashani- 'to make grow' (3sg.pres.act. ma-sa-ha-ni-i-ti (SULTANHAN §23)); Lyc. ?miñt(i)- 'assembly (of adult men)' (nom.sg. miñti, dat.sg. miñti, mñti, gen.adj.nom.sg.c. miñtehi, gen.adj.nom.acc.pl.n. miñtaha, miñta, gen.adj.dat.-loc.pl. miñte).
IE cognates: OIr. már, mór, MWe. mawr 'big', Goth. mais, OHG mēro 'more'.
PIE *mh $h_{2}$-ói-ei $/ * m h_{2}$-i-énti
See CHD L-N: 113f. for attestations and semantics. In its oldest forms, the verb clearly inflects according to the dāi/tiiianzi-type (3sg.pres.act. māi, 3sg.imp.act. $m \bar{a} u, 2 \mathrm{pl} . \mathrm{imp}$.act. maišten, part. miiant-). In NH times, we find a few forms showing a stem miie/a $-^{z i}$, which is trivial for dāi/tiianzi-inflecting verbs. Despite the fact that all other dāi/tiiianzi-verbs have good IE etymologies, the etymological interpretation of mai- $^{i} / m i$ - has always been unclear.

Oettinger (1979a: 471) connected mai- ${ }^{i} / m i$ - with $m \bar{u} u$ - 'soft' and reconstructs a verbal root $*$ meih $_{1 / 3^{-}}$'to ripen'. Semantically, this is unattractive because neither Hitt. mīu- 'soft, gentle' nor its cognate Lat. mītis 'soft' has any connotation 'ripened'. Melchert (1984a: 46) adduces a formal argument: if we would apply Oettinger's reconstruction to the derivative ${ }^{\text {LÚ }}$ maiant- 'adult' (q.v.), we would have to assume a pre-form ${ }^{*}$ moih $_{1 / 3}$-ent-, but this would probably have yielded Hitt. **mēant-.
As I have argued extensively in Kloekhorst fthc.a, the bulk of the daii/tiianziverbs reflect a structure ${ }^{*} C C$-oi- $/ * C C$ - $i$ - (i.e. the zero-grade of a verbal root extended by an ablauting suffix $-o i-/-i-)$. In the case of $m a i^{i} / m i-$, this means that we should analyse it as reflecting either $* \mathrm{Hm}$-oi- or $* \mathrm{mH}$-oi-, derived from a root *Hem- or *meH-, respectively. Only one of the several formal possibilities is semantically likely as well, namely a comparison with OIr. már, mór 'big’ ~ MWe. mawr 'big' < PCl. māros (cf. Schrijver 1995: 196), which belongs with Goth. mais, OHG mēro 'more' < PGerm. *mō-isa-, both reflecting a root *meh $2^{-}$ 'big, much'. If we apply this root-structure to mai- / mi-, we arrive at a reconstruction $* m h_{2}$-ói-ei, $* m h_{2}$-i-énti, which would regularly yield Hitt. māi, miianzi.
For a detailed account of ${ }^{\text {(LÚ) }}$ maiant- 'adult' $<{ }^{*} m h_{2}$-ei-ent-, see its own lemma. The Luwian forms mašhāhit- and mashani- derive from a basic noun *masha- (cf.

${ }^{\text {(LÚ) }}$ maiant- (c.) 'young, adult man, (adj.) adult, powerful' (Sum. ${ }^{\text {LÚ GURUŠ): }}$ nom.sg. ma-i $a-a n-z a(\mathrm{OH} / \mathrm{MS})$, acc.sg. ma-ia-an-ta-an (OH or MH/NS), gen.sg.?
$m a-i=-a n-t a-a \check{s}$, dat.-loc.sg. ma-i्1a-an-ti, acc.pl. ma-íia-an-du-uš, gen./dat.-loc.pl. ${ }^{\text {LÚGURUŠ-aš. }}$

Derivatives: maiantahh- (IIb) 'to rejuvenate, to install youthfull vigor' (3pl.pres.act. ${ }^{\text {LÚ }}$ GURUŠ-ah-ḩa-an-zi (NS), 3pl.pret.act. ma-ía-an-da-ah-he-er ( $\mathrm{OH} / \mathrm{NS}$ ), 2sg.imp.act. ma-ịa-an-ta-ah (OH/NS); impf. ma-ía-an-ta-ah-hi-eš$k e / a-$ ), (LÚ) maiantatar / maiandann- (n.) 'young adulthood, youth, youthful vigor' (nom.-acc.sg. ma-ia-an-da-tar (OH/NS, MH/MS), ma-ia-an-ta-tar, ma-i्da-ta-tar ( $1 \mathrm{x}, \mathrm{OH} / \mathrm{NS}$ ), dat.-loc.sg. [ma' $\left.{ }_{-i}\right] a-a n-d a-a n-n i(\mathrm{OS})$ ), maiantili (adv.) '?' (ma-íla-an-ti-li), maiantēšš- ${ }^{i}$ (Ib2) 'to become a young man, to become young again' (3sg.pres.act. ${ }^{\text {LÚGURUŠ-an-te-eš-zi (NH), 3pl.pret.act. ma-íd-te-eš-še-er }}$ ( NH ), 2sg.imp.act. ma-ia-an-te-eš (OH/MS)), ${ }^{\text {LÚ }}$ maiananna- (c.) 'young man(?)' (dat.-loc.sg. ma-ía-na-an-ni).


$$
\text { PIE } * m h_{2} \text {-ei-ent- }
$$

See CHD L-N: 116f. for attestations. This word and its derivatives clearly belong with the verb mai- ${ }^{i} / m i-$ 'to grow'. Because a sequence -aia- cannot reflect *-oio-, which should regularly contract to - $\bar{a}$ - (cf. e.g. hatrāmi $<h_{2}$ etro-io-mi), it has often been claimed that ${ }^{(\text {LÚ })}$ maiant- can only be explained by either assuming a root *meiH- (thus Oettinger 1979a: 471: *moih ${ }_{1 / 3}$-ént-) or a root *meHi- (thus Melchert 1984a: 46: moh $_{l}$ i-ent-) in which the laryngeal prevented the $*$-i- from dropping. I do not agree with this, however. In my view, the relationship between ${ }^{\text {(LUU) }}$ maiant- and mai- ${ }^{i} / m i$ - must be compared to the relationship between ${ }^{\text {Lú }}$ patteiant- 'fugitive' and the verb pattai- ${ }^{i}$ / patti- 'to flee' (q.v.), which reflect *pth $h_{1}$-ei-ent- and *pth ${ }_{1}$-oi- $/{ }^{*}$ pth $_{1}-i$ - respectively. With the reconstruction of mai- ${ }^{i}$ / mi- (q.v.) as $* m h_{2}$-oi- / $* m h_{2}-i-$, we should consequently reconstruct maiant- as *mh ${ }_{2}$-ei-ént-. Although in *pth $h_{1}$-ei-ent- > PAnat. */pteiant-/ > Hitt. /pteant-/, realized as [pte ${ }^{i}$ ant-], spelled pát-te-(ina-)an-t-, the sequence $-e(i) a$ - is phonetically regular, I believe that $*_{m} h_{2} e i$ i-ent- should first have given PAnat. */maiant-/, which regularly developed into Hitt. **/mānt-/, spelled ${ }^{* *} m a-a-a n-t-$. In my view, it is trivial, however, that $-i$ - was analogically restored on the basis of the verb (thus also Kimball 1999: 367).
maišt- (c.) 'glow’: nom.sg. ma-iš-za-aš=ti-iš (OH/MS), dat.-loc.sg. ma-iš-ti (MH/MS).

PIE *mois-t- ?

See Kimball (1994b: 14-17) for a treatment of this word. It only occurs in the following contexts:

KUB 57.60 ii
(11) nu tu-ua-ad-du ne-pí-ša-aš ${ }^{\mathrm{d}} \mathrm{UTU}-u-i$
(12) $m a-i s ̌-z a-a \check{s}=t i-i s ̌ k u$-e-el mi-iš-ri-una-an-za
(13) ha-ap-pár-nu-ua-aš-hi-iš ku-e-el la-lu-uk-ki-u-an-te-eš
'Have mercy, o Sun-god, whose $m$. is mišriúant-, whose beams are radiant'
KBo 32.14 ii
(43) $n=a$-an šu-up-pí-iš-du-ua-ri-it
(44) da-iš n=a-an gul-aš-ta nu-u=š-ši-e=š-ta ma-iš-ti
(45) an-da la-a-lu-uk-ki-iš-nu-ut
'He provides it with ornaments, ciseled it and made it beam in $m$. .
Kimball assumes that the word denotes 'sun-disc', but Rieken (1999a: 137f.) more convincingly translates 'Glanz, Leuchten'. Both Kimball and Rieken connect maišt- with Hitt. mišriuant- 'shining(??)', which is usually connected with Skt. miṣ- 'to blink, to open the eyes'. This does not seem very convincing semantically ('to blink' does not have anything to do with 'glowing': see also at mišriuant- for doubts). Nevertheless, if maišt- is of IE origin, it can only reflect *mois-t-
(síG) maišta- (c.) 'fiber, flock or strand of wool'(?): acc.sg. ma-iš-ta-an.
IE cognates: Skt. meṣá- 'ram, male sheep', Lith. maǐšas 'bag, sack', Latv. màiss 'bag', Russ. mex 'skin, fur', ON meiss 'wicker carrying basket'.

PIE *mois-to- ??
See Kimball (1994b: 14-17) for separating this word from the noun maišt- 'glow' (q.v.). The noun ${ }^{\text {(SÍG) }}$ maišta- only occurs in the expression ${ }^{\text {SíG }} m a-i \check{s}$-ta-an ma-ši-ua-an-ta-an, lit. 'as much as a (woolen) maišta-'. On the basis of the contexts where this expression is used, we can conclude that it must be metaphorical for 'something useless' (cf. CHD L-N: 119). CHD therefore translates maišta- as 'fiber, flock or strand of wool'. Kimball (1.c.) suggests a connection with PIE *moiso- 'sheep, skin of sheep' (Skt. meṣá- 'ram, male sheep', Lith. maĩšas 'bag, sack’, etc.), and therefore proposes that maišta- may mean something like a bale of wool, or a fleece.

So although the precise meaning of maišta- is not totally clear, we know that it must refer to something of wool (because of the SÍG-determinative), and therefore Kimball's etymology may be attractive.
$\boldsymbol{m a k k} \overline{e ̌ s ̌ ̌ s}^{-3 i}$ (Ib2) 'to become numerous': 3sg.pres.act. ma-ak-ke-eš-zi (MH/MS), $m a-a k-k e-e-e \check{s ̌ z i}(\mathrm{MH} / \mathrm{NS})$, 3sg.pret.act. ma-ak-ke-e-eš-ta (OH/MS), ma-ak-ke$e \check{s}-t a(\mathrm{OH} / \mathrm{MS}), m a-a k-k i-i \check{s}-t a(\mathrm{OH} / \mathrm{NS})$, ma-ak-keš-ta (NS), 3pl.pret.act. ma-ak$k i-i s ̌-s ̌ e-e r ~(N S), ~ 3 p l . i m p . a c t . ~ m a-a k-k e-e s ̌-s ̌ a-a n-d u ~(p o s t-O H / N S) ; ~ p a r t . ~ m a-a k-~$ $k e s ̌-s ̌ a-a n-t-(\mathrm{NH}), m a-a k-k i-i s ̌-s ̌ a-a n-t-(\mathrm{NH}) ; ~ i m p f . m a-a k-k i-i s ̌-k e / a-(\mathrm{NS})$.
Derivatives: see mekk-, mekki-/ mekkai-.
PIE *mǵ $h_{2}$-eh $h_{1} s h_{1-}$
See CHD L-N: 120 for attestations and semantics. The verb clearly is a fientive in -ē̌̌š- derived from mekk-, mekki- / mekkai- 'much, many' (q.v.). Whilst mekkreflects the e-grade root ${ }^{*}$ meǵ $_{2} h^{-}$, makkēšš- ${ }^{z i}$ must reflect zero grade ${ }^{*} m g h_{2}-$. Although the sequence $* m g ' 2_{2^{-}}$regularly would have yielded Hitt. /mk-/, phonetically realized as [əmk-], this was analogically changed to /mək-/ on the basis of the full grade mekk-. See at mekk-, mekki- / mekkai- for further etymology of the root and at $-\bar{e} \tilde{s} \check{s}$ - for the history of the fientive suffix.
makita- (gender unknown) '?’: dat.-loc.pl. ma-ki-ta-aš (OS).
This word is hapax in the following context:
KUB 31.143 ii
(15) $[n u-u=\check{s}-s \check{s} a-a n] 8-i n-z u$ ne-pí-ši e-eš-[ši] nu=za=kán 2-išs 8-ta-aš ki-išs-[tu-na-aš]
(16) [ak-ku-uš-ke-š]i nu-u=k-kán 2-iš 8-ta-aš ma-ki-ta-aš ak-ku-uš-ke-e-ši
(ibid. 8-9 shows the same text)
'As an octad you remain seated in the sky. You will [drink] twice on the 8 kištuna- and you will drink twice on the 8 makita-' (cf. CHD L-N: 121).

The exact meaning of makita- cannot be determined. Tischler (HEG L/M: 97-8) suggests "ein Trinkgefäß", but CHD (1.c.) argues that drinking from a cup is always expressed by an acc. or instr. and never by a dat.-loc, so that an interpretation 'drinking cup' does not really fit.
${ }^{\text {É }} \boldsymbol{m} \overline{\boldsymbol{a}} \boldsymbol{k}(\boldsymbol{k i z}) \boldsymbol{z i}(\boldsymbol{i} \boldsymbol{a})$ - (gender unknown) a building in which the king and queen wash and dress themselves: gen.sg. ma-a-ak-ki-iz-zi-ia-aš (OS), ma-ak-zi-aš (OH?/NS), all.sg. ma-ak-zi-ía (OS), abl. ma-a-ak-zi-ía-az (OS), ma-az-ki-ia-az.

See CHD L-N: 123 for attestations and semantics. Because of the different spellings ( $m \bar{a} k k i z z i-, m a \bar{a} k i-$ and $m a z k i-$ ), the word is likely of foreign origin, just as many other words for buildings (e.g. ${ }^{\text {Éhišt }} \bar{a} /{ }^{E} h i s ̌ ̌ t \bar{\imath},{ }^{\text {É }} k \bar{a} s ̌ k a ̄ s ̌ t i p a-, ~{ }^{\text {Éhalent(i)u- }}$ etc.). Appurtenance of the word ma-aš-gaz-zi (KUB 51.33 i 14) that denotes a building, too, is uncertain (pace Popko 1986: 475). The IE etymology suggested by Puhvel HED 6: 19 (*makti- ~ Lat. mactus 'magnified, glorified') makes no sense.
maklant- (adj.) 'thin, slim (of animals)': acc.sg.c. ma-ak-la-an-ta-an (OH or MH/NS), ma-ak-la-an-da-an, nom.pl.c. ma-ak-la-an-te-eš (OH/NS, MS).

Derivatives: maklātar / maklann- (n.) 'emaciation' (abl. ma-ak-la-an-na-az).
IE cognates: PGerm. *magrá- 'meagre, slim' (ON magr, OHG magar), Gr. $\mu \propto \kappa о ́ \varsigma ~ ‘ l o n g, ~ t a l l ’, ~ L a t . ~ m a c e r ~ ' m e a g e r, ~ l e a n ', ~ G r . ~ \mu \tilde{\eta} \kappa о \varsigma, ~ D o r . ~ \mu \tilde{a ̃ \kappa о \varsigma ~ ' l e n g t h ' ~(<~}$ * meh $_{2} k$ k-os).

PIE *m(e) $h_{2} k^{k}$-lo-nt-
See CHD L-N: 121-2 for attestations. Since Benveniste (1932: 140), this word is generally connected with PGerm. *magrá- 'meagre, slim', Gr. $\mu \alpha \kappa \rho o ́ s ~ ' l o n g, ~ t a l l ' ~$ and Lat. macer 'meager, lean' < *mh $h_{2} k$-ró- (full-grade visible in Gr. $\mu \tilde{\eta} \kappa о \varsigma$, Dor. $\mu \tilde{\alpha} \kappa 0 \varsigma$ 'length' $<{ }^{*} m e h_{2}{ }^{k}$-os). This means that Hitt. maklant- must reflect a formation $* m h_{2} k$-lo-nt- or $* m e h_{2} k$-lo-nt-.
$\boldsymbol{m a k n u}$ - $^{z i}$ (Ib2) 'to make abundant, to increase, to multiply': 1sg.pret.act. ma-ak-nu-nu-un (OH/NS), 3sg.pret.act. ma-ak-nu-ut (KBo 32.14 iii 15, 31 (NS)); impf. $m a-a k-n u-u s ̌-k e / a-(\mathrm{OH} / \mathrm{NS}), m a-a-a k-n u-u s ̌-k e / a-(\mathrm{NH}$ ?).

PIE *mǵh $h_{2}$-neu-
See CHD L-N: 122 and Puhvel HED 6: 123 for attestations. The verb is predominantly spelled $m a-a k-n u$-, but we find a spelling $m a-a-a k-n u$ - once (KUB 41.20 obv. 6). As this latter spelling is found in a very late NH text only, it may not have much value.

The verb clearly is derived from mekk-, mekki- / mekkai- 'many, much' (q.v.), showing a zero-grade makk- vs. the e-grade of mekki- (cf. also makkēšs ${ }^{z i}$ ). This means that we have to reconstruct $* m g ' h_{2}-n e u-$. Although the sequence $* m g ' h_{2}-$ regularly would have yielded Hitt. /mk-/, phonetically realized as [əmk-], this was
analogically changed to /mək-/ on the basis of the full grade mekk-. See at mekk-, mekki- / mekkai- for further etymology.
makkuia- (gender unknown) 'churn’: acc.sg. ma-ak-ku-i्ia-an, dat.-loc.pl. ma-ak$k u-i a-a s ̌$.

PIE *m(o) $k^{w}-i o-$ ??
See CHD L-N: 122-3 for attestations and semantics. Note that the form that I interpret as dat.-loc.pl. (KUB 39.35 iv (4) $n u{ }^{\text {LÚ }} \mathrm{SAGI}$.[A ... ] (5) ši-pa-an-ti ma$a k-k u-i a-a \check{s}=s ̌ a-a n k u-i s ̌ a n-d a$ [ ... ] 'The cup-bearer libates [ ... ], who [ ... ] in the churns'), is marked 'unclear' by CHD.
Puhvel (HED 6: 20) states that makkuia- phonetically has to interpreted as [mak ${ }^{\mathrm{w}}$ ia-], which he connects with Skt. mac- 'to pound, to grind'. If this connection is correct, we might have to reconstruct * mok $^{w}$-io-

$\boldsymbol{m a} \boldsymbol{l} \boldsymbol{l}(\mathrm{n}$.$) 'mental power(?)': nom.-acc.sg. ma-a-al (MH/NS), ma-al (NS).$
Derivatives: mālant- (adj.) 'having māl-' (acc.sg.c. ma-a-la-an-ta-an, nom.acc.sg.n. ma-a-la-an).
Anat. cognates: CLuw. māl- 'thought, idea' (dat.-loc.sg. ma-a-li-i), mal(a)i- 'to think, to suppose' $\left(1 \mathrm{sg}\right.$. pres.act. $m a^{\prime}-l i-u i_{5}, 2$ sg.pres.act. $m a-l i-s ̌ i$, part. $m a-l a-a-i<-$ im>-mi-in).
IE cognates: Gr. $\mu \varepsilon ́ \lambda \omega$ 'to be an object of care and thought, to care for'. PIE * mól-

See CHD L-N: 124 and 128 for attestations and context. It is not easy to determine the exact meaning of this word. CHD describes $m \bar{a} l$ as "a quality desirable for men in combat, such as boldness, ferocity, skill". According to Rieken (1999a: 49-51), the word denotes "Verstand, Geist, Geistesstärke", which she deduces on the basis of the context

KUB 33.87+ i
$m a-a l=u=z a$ te- $p u=i a$
(35) Ú- Ú-UL $[\check{s} a-a] k-k i$ UR.SAG-tar $=m a-a=s ̌-s ̌ i \quad 10-p a$ pi-ina-an
'He knows not for himself even a little mal, but courage has been given to him tenfold' (transl. CHD).

According to Rieken, mal is used here as an opposite to UR.SAG-tar '(physical) courage', and therefore must denote 'mental power'. She then connects this word with CLuw. māl- 'thought, idea' and mal(a)i- 'to think, to suppose'. As an IE cognate, she adduces Gr. $\mu \varepsilon ́ \lambda \lambda \omega$ 'to be destined, to be about to', but this is semantically unattractive. A better cognate would be Gr. $\mu \varepsilon ́ \lambda \omega$ 'to be an object of care and thought, to care for' (cf. also Puhvel (HED 6: 21)), which would point to a PIE root $*$ mel- .
mall-: see malla- ${ }^{i}$ / mall-
 $l a-a-s ̌ i(\mathrm{NH}), m a-a-l a-a-s ̌ i(\mathrm{NH})$, ma-la-ši (NH), 3sg.pres.act. ma-l[a]-a-i(NH), ma-a-la-i (NH), 3pl.pres.act. ma-a-la-an-zi (NH), 3sg.pret.act. ma-la-a-iš (NS), ma-la-a-it (NS), 3pl.imp.act.? [m]a-a-la-an-d[u]; part. ma-la-a-an-t- (often, NH), ma-a-la-an-t- (2x, NH), ma-la-an-t-; inf.I ma-ạ-la-ua-an-zi (NH); impf. ma-li-eš$k e / a-(\mathrm{NH})$.
Derivatives: (4) maliịašha- (c.) 'approval' (nom.sg.? [ma-l]i-ía-aš-ha-aš, abl. (4) $m a-l i-i$

See CHD L-N: 126-7 for attestations. This verb is attested in NS and NH texts only and shows forms that inflect according to the tarn(a)-class (3sg.pret.act. mālai, malāi, 3sg.pret.act. malāiš) as well as forms that inflect according to the h́atrae-class (malāši, mālāši, malāit). Since both inflections are highly productive in NH times, it cannot be decided if one of them is more original, or if they both replaced another inflection, of which no specific forms are found anymore. This unclear situation, together with the lack of a convincing IE cognate, makes etymologizing difficult.
malla- ${ }^{i} /$ mall- $(I I a 1 \gamma>\mathrm{Ic} 1$, ) 'to mill, to grind': 3 sg.pres.act. $m[a-a l-l] a-a-i$ ( $\mathrm{OH} / \mathrm{MS}$ ), ma-al-la-i $(\mathrm{NH})$, ma-al-li-ez-zi (MH/NS), ma-al-li-ia-az-zi (NH), ma-al-li $(\mathrm{OH}$ or $\mathrm{MH} / \mathrm{NS})$, 3pl.pres.act. ma-al-la-an-zi ( $\mathrm{OH} / \mathrm{MS}$ or NS), ma-la-an-zi (NH), ma-al-la-<an-»zi (VSNF 12.111 obv. 12, KUB 17.35 i 4), 3sg.pret.act. ma-al-li-e-et (NH), 3pl.imp.act. ma-al-la-an-du (MH/NS); part. ma-al-la-an-t-; inf.I? ma-al-lu-ua-an-zi; verb.subst. ma-al-lu-ua-ar; impf. ma-al-li-iš-ke/a-(NH).
Derivatives: see mēmal(l)-.
Anat. cognates: CLuw. mal(h)u-'to break' (3sg.pret.act. ma-a-la-hu-u-ta, part. ma-al-ua-am-mi-iš, ma-al-ua-a-am-mi-iš), mammal(h)u- 'to crush, to break'
(3sg.pres.act. ma-am-ma-lu-ua-i, [ma-am]-ma-al-ua-i=a, 1pl.pres.act. ma-am-ma-al-hu-un-ni).

IE cognates: Skt. mrṇáti 'to crush', Lat. molō 'to mill', Goth. malan 'to mill', Lith. málti 'to mill', etc.

PIE * mólh $_{2}$-ei, *mlh ${ }_{2}$ énti
See CHD L-N: 125-6 for attestations. Note that "3sg.pres.act." ma-al-la-zi (VAT $7502=$ VSNF 12.111 obv. 12) probably is to be read as 3pl.pres.act. ma-al-la-«an-»zi and that 1sg.pret.act. ma-al-la'-nu-un (HT 35 obv. 7) actually is written ma-al-ku-nu-un, of which an emendation to ma-al-la!-nu-un is not obligatory (cf. Puhvel HED 6: 30 for another interpretation). This means that there are no forms left that show a stem malla $-^{z i}$. The oldest texts (MS) show forms that inflect according to the $\operatorname{tarn}(a)$-class (mallāi, mallanzi). In younger texts, we find a few forms that inflect according to the productive -ie/a-class (malliezzi, malliiazzi, malliet). Note that in CHD, a stem malli- is cited as well, probably on the basis of 3 sg.pres.act. ma-al-LI-IZ-zi. This form has to be read as ma-al-li-ez-zi/maLiet ${ }^{\mathrm{s}} \mathrm{i}$, however, and belongs with the stem malliie/a-. Only the form malli, which is attested only once in a NS text, shows a stem mall-. Although in my view it is quite obvious that the original inflection must have been malla- ${ }^{i}$ / mall-, there has been some debate about the interpretation of the form malli. According to Tischler (HEG L/M: 102, following e.g. Melchert 1984a: 16f.) the form malli must be more original as it is a general fact that 'athematic' hi-verbs are being replaced by 'thematic' ones, like OS māldi vs. NH maltai 'recites' and OS lāhui vs. NH lāhuuāi 'pours'. Although in principle this is true (the tarn(a)-class becomes highly productive), these secondary 'thematic' forms are found in NS texts only. This scenario then does not fit the attestation $m[a l l] \bar{a} i$ which is found in a $\mathrm{OH} / \mathrm{MS}$ text already, whereas malli is attested only once in a NS texts. I therefore conclude that the original paradigm of this verb was mallai / mallanzi, a perfect example of the $\operatorname{tarn}(a)$-class.

Since Friedrich (1922: 159), the etymological connection between Hitt. malla- ${ }^{i}$ / mall- and the other IE verbs for 'to mill' (Lat. molō 'to mill', Goth. malan 'to mill', Lith. malù 'to mill', etc.) has been generally accepted. These verbs are generally reconstructed $*_{m e l h_{2}-}$ (a laryngeal is necessary for Skt. mrṇáti $<* m l-$ né- $\mathrm{H}-\mathrm{ti}$ and Lith. málti where the acute points to *molH-; on the basis of CLuw. $\operatorname{mal}(h) u$-, the laryngeal can be determined as $\left.* h_{2}\right)$. This means that for Hittite we must reconstruct a paradigm $*$ molh $_{2}$-ei $/ * m_{2} h_{2}$-enti, which regularly yielded preHitt. *mollai, *mlHanzi. At this stage, the stem *moll- is introduced into the plural, in order to avoid the alternation -ll- vs. -lh-: *mollai, mollanzi. At this
point, the 3 sg.pres.-ending *-ai does not match the 'normal' 3 sg.pres.-ending of the hi-class, which is $*-\bar{e}<*_{-e i}$. In my view, this is the reason why the ending -ai in this verb is not replaced by $-i$ as in the other hi-verbs, but was retained as such and ultimately merged with the ending -ai of the $\operatorname{tarn}(a)$-class inflection $\left({ }^{*}{ }^{\circ} \mathrm{CoH}\right.$ $e i>{ }^{*} \mathrm{CaP} \bar{e} \gg{ }^{*}{ }^{\circ} \mathrm{CaPi}>{ }^{\circ} \mathrm{Cai}$ ), yielding attested mallāi , on the basis of which the whole verb was taken over into the $\operatorname{tarn}(a)$-class (see at harra- / harr- 'to grind', iškalla- ${ }^{i}$ / iškall- 'to split', išparra- ${ }^{i}$ / išparr- 'to trample', padda- ${ }^{i}$ / padd- 'to dig' and šarta- ${ }^{i} /$ šart- 'to wipe, to rub' for similar scenarios).
The CLuw. forms show a stem $\operatorname{mal}(h) u$-, mammal $(h) u$ - (the $-h$ - is retained when $-u$ - is vocalic, but lost when $-u$ - is consonantal, cf. Melchert 1988b: 215-6). It probably reflects a $u$-present and goes back to $* m(e) l h_{2}$ - $u$-.
malae- ${ }^{z i}$ : see $m \bar{a} l a-{ }^{i} / m \overline{\bar{a}} l-$
$\operatorname{malekk}(\boldsymbol{u})^{z^{i}}$ (Ia5?) verb expressing a negative consequence of illness: 1sg.pret.act. ma-le-ek-ku-un (OH/MS).

IE cognates: ?Gr. $\beta \lambda \alpha ́ \pi \tau \omega$ 'to disable, to mislead, to damage'.

$$
\text { PIE *mlek }{ }^{w}-?
$$

The verb is hapax, and its only attested form is spelled $m a$-LI-IG- $k u-u n$. Since the signs LI and IG can be read $l i$ and $l e$ and $i k$ and $e k$ respectively, this form can in principle be read ma-li-ik-ku-un as well as ma-le-ek-ku-un (and even ma-li-ek-ku$u n$, but this is unlikely). Since we are dealing with a $m i$-inflecting verb and since $m i$-inflecting verbs in principle show $*_{e}$-grade in this form, I read the form as $m a$ -le-ek-ku-un. It is attested in the following context:

KUB 30.10 rev.
... $n u=m u$ ku-iš DINGIR $=I A$ i-na-an pa-iš nu=mu ge-en-zu
(4) [da-a-ú ... i-n]a-ni pé-ra-an ta-re-eh-hu-un ma-le-ek-ku-un nu=za nam-ma Ú-UL tar-uh-mi
'May my god, who has given me the illness, [have] pity on me. [ ... ]because of the [ill]ness I have become tired and $m$.-ed. I cannot succeed any longer'.

It is likely that, just as tarehhun 'have become tired', malekkun, too, denotes some negative consequence of the illness.
If malekkun is of IE origin, there are two possible reconstructions: *mle $k^{k^{\prime}-}$ and *mlek' - (cf. ekun /Rég ${ }^{\text {w }}$ on/ 'I drank' from $e k u z^{z i} / a k u-$ ). I only know of one other IE word that reflects one of these roots, namely Gr. $\beta \lambda \alpha \dot{\pi} \tau \omega$ 'to disable, to
mislead, to damage', which could reflect $* m l k^{w}-i e / o-$. Usually, this word is connected with Skt. marc- 'to damage, to hurt, to destroy' and reconstructed as *melk ${ }^{w}$-, but if for some reason Skt. marc- cannot reflect *melk ${ }^{w}$ - (e.g. because of a possible tie-in with Hitt. markiie/a- ${ }^{z i}$ 'to disapprove of' (q.v.)), it is possible that the Greek verb goes back to a root ${ }^{*} m l e k^{w}$-, since all its attested forms reflect the zero-grade root $* m l k^{w}$-. Semantically, we then would have to assume that in Hittite, malekku- has a passive meaning 'to have become damaged' when used intransitively, vs. the transitive meaning 'to damage' of Gr. $\beta \lambda \alpha ́ \pi \tau \omega$. But this is all highly speculative of course.
malliie/a- ${ }^{z i}$ : see malla- $^{i} /$ mall-
$\operatorname{malikk}(\boldsymbol{u})_{-}^{z i}$ : see $\operatorname{malekk}(u)_{-}^{-z^{i}}$
mališku-, milišku- (adj.) 'weak; light, unimportant': nom.sg.c. mi-li-iš-ku-uš (NH), nom.-acc.sg.n. ma-li-iš-ku (OH/MS), abl. ma-li-iš-ku-ua-az (OH/NS), nom.pl.c. ma-li-iš-ku-e-eš (NS).
Derivatives: maleškuēšš- ${ }^{i j}$ (Ib2) 'to become weak' (3sg.pres.act. ma-le-eš-ku$e s ̌-z i(\mathrm{NH})$ ), mališkunu- ${ }^{z i}$ (Ib2) 'to make weak' (2pl.pres.act. ma-li-iš-ku-nu-ut-ta$n i$ (MH/MS), ma-li-iš-ku-nu-ut-tén (NH)).
IE cognates: Gr. $\mu \alpha \lambda \alpha \kappa$ ć ‘weak, soft', Gr. $\beta \lambda \bar{\alpha} \xi$ 'weak, soft', Skt. mlāta- 'weak, soft', ModHG mulsch 'weak'.

PIE *mlh $h_{2}$-sk-u-?
See CHD L-N: 130 for attestations and semantics. The alternation between mališku- and milišku- points to an initial cluster /ml-/. Furthermore, the spelling maleškuešzi may point to an interpretation/mlisku-/, containing the phoneme /i/d that is spelled $e / i$. An etymological connection to Gr. $\mu \alpha \lambda \alpha \kappa o ́ \varsigma ~ ' w e a k, ~ s o f t ' ~ h a s ~$ been suggested by Pisani (1953: 309), but details are unclear. Because of Gr. $\beta \lambda \bar{\alpha} \xi$ 'weak, soft', Skt. mlāta- 'weak, soft' etc., the root must be *mleh2-. This root can only be connected to Hitt. /mlisku-/ if we reconstruct $* m l h_{2}-s K-$. The development of ${ }^{*} \mathrm{ClHsC}>$ Hitt. ClisC is then comparable to ${ }^{*} \mathrm{CrHsC}>$ Hitt. CrisC (e.g. paripriške/a- < *pri-prh $h_{1}$-sḱe/o-). It is unclear to me what kind of suffix -šku- is: within Hittite it is unparalleled. In the Germanic languages, we find some traces of a -sko-suffix (Goth. un-tila-malsks 'rash, impetuous' and ModHG mulsch 'weak'), but this leaves Hitt. - $u$ - unexplained.
malitt-: see militt- / mallit-
$\boldsymbol{m a} \mathbf{a} k \boldsymbol{k}^{\boldsymbol{i}}$ / malk- (IIa2 > Ic1) 'to spin'; $\overline{\boldsymbol{a} p p a}$ parza $\sim$ 'to unravel': 3sg.pres.act. ma$l a-a k-z i(\mathrm{OH} / \mathrm{NS})$, ma-al-ki-i-ez-zi (KUB 58.82 ii 7 (NS)), ma-al-ki-ez-zi (NS), 3pl.pres.act. ma-al-ki-ía-an-zi (OH/NS), 1sg.pret.act. ma-al-ki!?-nu-un (HT 35 rev. 7 (NS)), 3sg.pret.act. ma-al-ki-ịa-at (MH?/NS); verb.subst. ma-a-al-ku-uua $[-a r](\mathrm{NH})$, ma-al-ki-ia-ua-ar (NH).

Derivatives: malkeššar (n.) 'spun wool (?)' (nom.-acc.sg. [m]a-al-ke-eš-šar (OH?/NS)).
IE cognates: TochAB mälk- 'to put together'.
PIE *mólK-ei / *mlK-énti

See CHD L-N: 131-2 for attestations and semantics. Usually this verb is interpreted as showing a stem malk- ${ }^{z i}$ besides malkiie/a- ${ }^{z i}$. Yet the one attestation with plene $-a$-, ma-a-al-ku-u-ua[-ar], is remarkable: none of the mi-conjugated verbs of the structure $\mathrm{CaRC}_{-}{ }^{z i}$ (class I4a) ever shows plene spelling (except in the verb $\bar{a} r s s_{-}^{z i} / a r s ̌-\quad$ 'to flow', but here the spelling $a$-ar-aš- is used to indicate the full-grade stem /RarS-/, cf. its lemma) and it is therefore difficult to link the spelling ma-a-al-k to this class. We therefore may have to assume that this verb was *hi-conjugated originally and showed a stem mālk- ${ }^{i} / m a l k-$. The taking over into the mi-conjugation (ma-la-ak-zi) as well as the -ie/a-class (malkiie/a- ${ }^{z i}$ ) can then be regarded as trivial NH developments.

Of the several etymological proposals (for which see Tischler HED M: 108-9), the best one is by Kronasser (1957: 121), who connects mālk- / malk- with TochAB mälk- 'to put together'. Because both languages do not give any insight to the nature of the velar consonant, we can only reconstruct *molK- / *mlK-.
$\boldsymbol{m a} \boldsymbol{l} \boldsymbol{l d}^{-}{ }^{i} /$ mald- (IIa2 > IIa1 $\gamma$ ) 'to recite, to make a vow' (Akk. KAR $\bar{A} B U$ ): 1sg.pres.act. ma-al-da-ah-hi (NH), ma-al-ta-ah-hi (NS), 3sg.pres.act. ma-a-al-di (OS: 5x), ma-a-al-ti (OS: 1x), ma-al-di (OS: 3x), ma-al-ti (OS: 2x), ma-al-te $(\mathrm{OH} / \mathrm{NS}, 1 \mathrm{x})$ ma-al-ta-i $(\mathrm{NH})$, ma-al-da-i (NH), 1sg.pret.act. ma-a-al-tah-hu-un (OS), ma-al-da-ah-ḩu-un (OH/NS), 3sg.pret.act. ma-al-ta-aš (NH), 2sg.imp.act. ma-al-di (NH); part. ma-al-ta-an-t- (MH/MS); verb.noun ma-al-du-ua-ar (MS?); inf.I ma-al-tu-u-an-zi (NH); impf. ma-al-za-ke/a- (NS), ma-al-za-aš-ke/a-.
Derivatives: mammalt- (IIa2?) 'to recite' (impf.part. ma-am-ma-al-zi-ka-an-t$(\mathrm{OH} / \mathrm{NS})$ ), malteššar / maltešn- (n.) 'recitation, vow, votive offer, ritual' (Akk. IKRIBU; nom.-acc.sg. ma-al-te-eš-šar (NH), ma-al-de-eš-ar (MH/NS), gen.sg. ma-al-te-eš-na-aš (NH), abl. ma-al-te-eš-na-az (NH)), nom.-acc.pl. ma-al-[te$e s ̌]-s ̌ a ̣ r ~(N S), ~ g e n . p l . ~ m a-a l-t e-e s ̌-n a-a s ̌, ~ d a t .-l o c . p l . ~ m a-a l-t e-e s ̌-n a-a s ̌ ~(O S)), ~$
malteš(ša)nala- (c.) 'recipient of malteššar' (acc.sg. ma-al-te-eš-na-la-an, ma-al-te-eš-ša-na-la-an), melteššar / meltešn- (n.) 'votive offering’ (nom.-acc.sg. mi-el-te-eš-šar (NH), abl. mi-el-te-eš-na-az (NH)), maltalli- (adj.) 'obliged to make a malteššar(?)' (nom.sg.c. ma-al-ta-al-liš (NH), acc.sg.c. ma-al-ta-al-li-in (NH), dat.-loc.sg. ma-al-ta-al-li (NH)).
IE cognates: Arm. malt'em 'to pray', OSax. meldon 'to tell', Lith. maldà 'prayer', meldžiù 'to pray', OCS moliti 'to ask, to pray'.

$$
\text { PIE *móld }{ }^{h} \text {-ei } / * m l d^{h} \text {-énti }
$$

See CHD L-N: 132ff. for attestations. The verb shows a stem māld- in the strong forms and mald- in the weak forms, going back to o-grade vs. zero-grade. The verb clearly inflects according to class IIa2 (māldi). Only in NH texts we find sporadically forms that inflect according to the tarn(a)-class (maltai, maldai and possibly 3 sg.pret. maldaš). It is hard to determine whether the one attestation 3sg.pres.act. ma-al-te (IBoT 2.44, $5(\mathrm{OH} / \mathrm{NS})$ ) shows a mixing up of the signs TE and TI (a phenomenon not unknown from NS texts, cf. Melchert 1984a: 137), or really shows the archaic 3 sg.pres.act.-ending $-e$, which is attested only sporadically (see e.g. uaršs ${ }^{i}$ : 3sg.pres.act. u_a-ar-aš-še (OS)).
The etymology of this verb has been known since Hrozný (1919: 44 ${ }^{1}$ ), i.e. *meld'- (e.g. Arm. malt'em 'to pray', OSax. meldon 'to tell', Lith. meldžiù 'to pray').

Note that if the noun melteššar is a real form (it is attested only twice in NH texts), it shows an e-grade stem $*^{\text {meld }}{ }^{h}$-, which contrasts with the $o$-grade in the strong-stem forms ( $m \bar{a} l d i<*^{\prime}$ móld $^{h}-e i$ ) and the zero-grade in the weak-stem forms (maltant- $<{ }^{*}$ mld ${ }^{h}$-ent-).
\& mamanna- 'to look at': 2pl.imp.act. \& ma-ma-an-na-tén.
Anat. cognates: CLuw. mammanna- 'to look at $>$ to regard with favour' (3sg.pret.act. ma-am-ma[-an-na-at-ta], 2sg.imp.act. ma-am-ma-an-na, 3sg.imp.act. ma-am-ma-an-na-ad-du, ma-a-am-ma-an-na-ad-du, Hitt.2pl.imp.act. ma-am-ma-an-na-tén).

See CHD L-N: 138 for discussion. This verb, used in a Hittite context and with a Hittite verbal ending, is likely to be regarded as Luwian, as can be seen by the use of the gloss wedges. The CLuw. counterpart is mammanna-, which is derived from CLuw. manā- 'to see' (see at manā-). Cf. Melchert (1988b: 218f.) for a detailed treatment.
$\boldsymbol{m a n},=\boldsymbol{m a n}$ (particle of optative, irrealis and potentialis)
Derivatives: see manka.

$$
\text { PIE } *-m n ?
$$

This particle is usually written with a short $a$ : ma-an or ma-n=. From MS texts onwards, we occasionally find spellings with plene spelling: $m a-a-a n$ and $m a-a$ $n=$. Note that the one OS form with plene spelling cited in CHD (L-N: 139), ma-$a-n[e(\mathrm{KBo} 6.2 \mathrm{ii} 54)$, should be read $m a-a-a m[-m a-a n]=m \bar{a} n=m a n$.
The particle stands in sentence-initial position, either as a loose word that can bear sentence initial-particles (e.g. ma-an, ma-an=ua-a=n-na-aš, ma-n=a$a n=k a ́ n$ ) or as an enclitic that is attached to the first word of the sentence, occupying the slot between $=(i) a /=(m) a$ on the one side and $=u a(r)$ on the other (e.g. $a-s ̌ i=m a-a n=u a, ~ a n-z a-a-a \check{s}=m a-a n=u a, a-p i ́-i a=i a=m a-a n=u a=m u, k a-a-$ $a \check{s}-t i-t=a=m a-a n$ ). When used attached to the conjunction mān 'if', it can show an assimilated form (e.g. ma-a-am-ma-an, ma-am-ma-an, but also $m a-a-a n=m a-$ $a n)$.
The particle denotes the optative (wish of the speaker), irrealis ('would (have)') and potentialis ('could (have)'). According to CHD L-N: 143, the negative of man in the function of 'wish of the speaker' is expressed by $l e=m a n$, whereas the negative in the function of 'wish of the subject (which is not the speaker)' is expressed by nūman, nūūan (q.v.).

The etymology of this particle is unclear. Formally, it seems to go back to ${ }^{*} m_{n}$. Within Hittite, it might have some connection with mān 'if' (q.v.). As an outerAnatolian comparandum, one occasionally mentions the Greek modal particle ${ }^{\circ} v$, but this is usually connected with the question particles Lat. an and Goth. an.
$\boldsymbol{m} \overline{\boldsymbol{a}} \boldsymbol{n}$ (conj. and postpos.) '(postpos.) like; (conj.) just as, as; how; if, whether; when, whenever, while' (Sum. GIM-an, BE-an): ma-a-an (OS, often), ma-a-n= (OS, often), ma-an, ma-n=.

Anat. cognates: Pal. mān (conjunction) 'when' (ma-a-an=ti, ma-a-n=a-aš); CLuw. mān 'if, whenever; whether ... or' (ma-a-an, ma-a-n=, ma-an, ma-a$a m=p a)$; HLuw. man ... man 'whether .. or'; Lyc. mé 'as; so, likewise'.

PAnat. *món?
See CHD L-N: 143 for semantics. The word is usually spelled with plene $-a$ - ( $m a-$ $a-a n, m a-a-n=)$, and can as such be distinguished from the modal particle man (q.v.). Occassionally, however, one finds spellings without plene - $a$ - (ma-an, ma$n=)$.

Semantically, the word is virtually identical to māhhan (q.v.), but the exact connection between the two is unclear. Both occur from OS texts onwards, so it is difficult to regard mān as a contraction of māhhan. Moreover, the Anatolian cognates (especially Lyc. $m \tilde{e}$ ) seem to point to a preform *món. Outer-Anatolian cognates may be OIr. ma, mā 'when', TochA mänt 'how?', TochB mant (conj.) 'so'. These forms seem to point to a pronominal stem *mo- that is visible in Hitt. $=(m) a$, māhhan and maši- as well.
$\boldsymbol{m a n a} \bar{a}^{-}$'to see’: broken: \& ma-na-a[-..] (KUB 31.76 rev. 21).
Anat. cognates: CLuw. manā- 'to see' (3sg.pres.act. ma-na-a-ti, 1sg.pret.act. $m a-n a-a-h a, 3$ sg.pret.act. $m a-n a-a-t a, 3$ sg.imp.act. ma-na-a-du).

$$
\text { PIE *mn-eh } 2_{2}
$$

In Hittite texts, this verb is attested only once (with gloss wedges), in a broken context. Nevertheless, it is likely to be equated with CLuw. manā- 'to see'. According to Melchert (1988b), this verb reflects $* m n$-eh $2^{2}$, a derivative of the root *men- 'to stay', but the semantic connection is not evident to me. See at mamanna- for the reduplicated form of this verb.
mānhanda: see māhhanda
maniiahh- ${ }^{\boldsymbol{i}}$ (IIb) 'to distribute; to entrust (with dat.); to hand over; to show; to govern': 1sg.pres.act. ma-a-ni-ia-ah-mi (MH/NS), ma-ni-ia-ah-mi (NH), 2sg.pres.act. ma-ni-į्a-ah-ti (NH), 3sg.pres.act. ma-ni-ia-ah-hi (OS), ma-a-ni-i्वa$a h-h i(\mathrm{OH} / \mathrm{MS}$ ?), ma-ni-ah-hi (OH/NS), ma-ni-ia-ah-zi (NH), 3pl.pres.act. ma-ni-ia-ah-ha-an-zi (OH?/NS), 1sg.pret.act. ma-ni-ịa-ah-hu-un (OH/MS?), 2sg.pret.act. ma-ni-ia-ah-ta ( OH or $\mathrm{MH} / \mathrm{MS}$ ), 3sg.pret.act. ma-ni-ia-ah-hi-iš ( $\mathrm{OH} / \mathrm{NS}$ ), ma-ni-ah-ta ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pret.act. ma-ni-ia-ah-he-er ( NH ), 2sg.imp.act. ma-ni-ia-ah (OH/NS), 3sg.imp.act. ma-ni-ia-ah-du, 2pl.imp.act. ma-ni-ah-tén (OH/NS), ma-ni-ia-ah-tén (NS); 3sg.pres.midd. ma-ni-ía-ah-ta-ri (MH/MS), 1sg.pret.midd. ma-ni-ia-ah-ha-ah-h[a-ti']; part. ma-ni-ia-ah-ha-an-t(NH); verb.noun gen.sg ma-ni-i्2a-ah-hu-u-ua-aš; inf.I ma-ni-i्तa-ah-hu-u-una-an-zi; impf. ma-ni-ịa-ah-hi-iš-ke/a-, ma-ni-ia-ah-hi-eš-ke/a-, ma-a-ni-i_a-ah-hi-iš-ke/a(1x, MH/NS).

Derivatives: maniiahha- (c.) 'confidant'? (nom.sg. ma-ni-i्रa-ah-ha-aš), maniiahhai- (c.) 'administrative district; government' (nom.sg. ma-ni-ia-ah-ha-iš (MH/NS), [ma-n]i-ia-ah-ha-a-iš (NS), acc.sg. ma-ni-i-ia-ah-ha-en (OH/NS), ma$n i-\frac{i}{2} a-a h-h a-i-i[n], m a-n i-a h-h a-i n, ~ g e n . s g . ~ m a-n i-i \underline{i}[a-a h-] h a-i a-a s ̌(O H / N S), m a-$
ni-ia-ah-hi-ia-aš (MH/MS), dat.-loc.sg. ma-ni-íla-ah-hi-ía (MH/NS), acc.pl. ma-ni-ía-ah-ha-uš (NH)), maniiahhae- ${ }^{z i}$ (Ic2) 'to be in charge of, to administer, to govern' (2pl.imp.act. ma-ni-įa-ah-ha-it-tén ( $\mathrm{OH} / \mathrm{NS}$ )), ${ }^{\text {LÚ }}$ maniiahhhatalla- (c.) 'administrator, deputy, governor' (acc.sg. ma-ni-(ia-)ah-ha-tal-la-an (OH/NS)), maniiahhatar / maniiahhann- (n.) 'administration' (dat.-loc.sg. ma-ni-ia-ah-ha-an-ni), maniiahhiiatt- (c.) 'allotment(?), consignment(>)' (dat.-loc.sg. ma-a-ni-ia-ah-hi-ia-at-ti (NS)), maniiahheššar (n.) 'allotment(?), consignment(?)' (nom.acc.sg. ma-ni-įa-ah-he-eš-šar), maniiiahhiškattalla- 'administrator, deputy' (= maniįahhatalla-) (acc.sg. ma-ni-ia-ah-hi-iš-kat-tal-la-an).

IE cognates: Lat. manus 'hand', OIc. mund, OE mund, OHG munt 'hand', OIr. muin 'patronage, protection'.

PIE *mn-ieh $h^{-}$
See CHD L-N 163ff. for attestations. Although the bulk of the attestations is spelled ma-ni(-ia)-ah-, we occasionally find spellings with plene -a-: ma-a-ni-ia-ah-. Since these spellings are found in three texts only (KUB 13.3 (MH/NS), KUB $13.20(\mathrm{MH} / \mathrm{NS})$ and KBo $17.74(\mathrm{OH} / \mathrm{MS}$ ?: note however that Košak (2005b: 207) dates this text as "ah.?", but this can hardly be correct, cf. for instance the slanted DA's and IT's)), and since the spelling ma-ni-ia-ah- is found in an OS text, I assume that ma-ni-ia-ah- is the original spelling (cf. also Oettinger 1979a: 458 ${ }^{143}$ : "[d]ie Pleneschreibung $m a-a-^{\circ}$ ist jh. Neuerung").
The verb maniiahh- looks like a fientive in -ahh- of a further unattested stem *man(iia)-. According to Oettinger (l.c.), we should compare maniiahh- with e.g. Lat. manus 'hand'. He reconstructs *mən-ié-, but assuming "-д-" (i.e. $-h_{2}$ ) is unnecessary: Schrijver (1991: 458) reconstructs Lat. manus as mon-u-. I therefore reconstruct maniiahh- as *mn-i-eh ${ }_{2}$.
maninku(иa)- (adj.) 'near': nom.pl. ma-ni'-in-ku-e-eš.
Derivatives: $\boldsymbol{m a n}(\boldsymbol{n}) \mathbf{i}(\boldsymbol{n}) \mathbf{k u} \boldsymbol{u} \boldsymbol{h} \boldsymbol{h} \boldsymbol{h}^{\boldsymbol{i}}$ (IIb) 'to draw near, to come/go near, to approach; to shorten' (1sg.pres.act. ma-an-ni-in-ku-ua-ah-mi (NH), 3sg.pres.act. ma-an-ni-in-ku-ua-ah-ḩi (OH?/NS, MH/MS), ma-an-ni-ku-ua-ah-ḩi (NS), 3pl.pres.act. ma-ni-in-ku-ua-ah-ha-an-zi (MH/NS), 2pl.pret.act. ma-ni-in-ku-ua-ah-tén (NH); verb.noun ma-a-ni-en-ku-ua-ah-hu-ua-ar)), ma-an-ni-in-ku-úa-ahhi (adv. MH/NS) 'nearby, in the vincinity', man(n)i(n)kuй̈̆n (adv.) 'near (of place), nearby; near (of time)' (Akk. QERUB; ma-an-ni-in-ku-an (OS), ma-an-ni-ku-ua-an (OH?/NS), ma-an-ni-in-ku-ua-an (MH/NS), ma-ni-en-ku-ua-an, ma-a-ni-in-ku-ua-an, ma-ni-in-ku-u-ua-a-an), man(n)i(n)kuuant- (adj.) 'short, low; close' (nom.sg.c. ma-ni-in-ku-ua-an-za (NS), ma-ni-in-ku-ua-a-an-za (NH),
acc.sg.c. ma-ni-in-ku-úa-an-da-an (NH), [ma-ni-i]n-ku-ua-an-ta-az (MH?/NS), nom.pl.c. ma-ni-in-ku-ua-an-te-eš (NH), ma-an-ni-in-ku-ua-an-te-eš (NH), ma-a-an-ni-in-ku-ua-an-te-eš (NH), acc.pl.c. ma-ni-ku-an-du-uš (OH/MS), ma-an-ni-in-ku-ua-an-du-uš (NS), nom.-acc.pl.n. [m]a-ni-in-ku-ua-an-da, ma-an-ni-in-ku-una-an-da (MH/NS), gen.pl. ma-ni-in-ku-ûa-an-ta-aš (NH)), manikuunandahh- ${ }^{i}$ (IIb) 'to make short' (2pl.imp.act. ma-ni-ku-an-da-ah-tén (OH/MS)), maninkuuantatar (n.) 'shortness' (nom.-acc.sg. ma-ni-in-ku-ua-an-ta-tar (NH)), maninkuцапи- ${ }^{z i}$ (Ib2) 'to bring near (?)' (forms? ma-ni-in-ku-ua-nu-ut), maninkuēšš- ${ }^{i}$ ( Ib 2 ) 'to be short' (3pl.pres.act. ma-ni-in-ku-e-eš-ša-an-zi (OH?/NS)).

Anat. cognates: CLuw. mannakuna/i- (adj.) 'short' (abl.-instr. ma-an-na-ku-na-$a-t i, m a-a n-n a-k u-n a-t i)$.

See CHD L-N: 170ff. for attestations. The words show quite a few different spellings: maninkuua-, manninkuua-, manikuu_-, māninkuua-, mānninkuua-, manenkuua-, mānenkuua-, which makes it difficult to etymologize. DuchesneGuillemin (1947: 82f.) assumed that the element -e/inkuua- must be compared to Lat. prop-inquus, Skt. praty-áñc- < *-enk ${ }^{w} o$-. One could then propose to connect the element $m \check{\bar{a}} n(n)$ - with mēni- 'face' (q.v.), but it still remains difficult to explain all the different spellings.
manka (adv.) 'in some way, in any way': ma-an-ga, ma-an-ka ${ }_{4}$
PIE *mn-ḱo?
See CHD L-N: 175f. for the view that manka means 'in some way, in any way', and when negated 'in no way'. It is remarkable that often the word occurs together with man, the particle of optative, potentialis and irrealis (q.v.), which is strengthened by the fact that manka is negated by numan. CHD states: "if there is more than mere coincidence in the frequent association of manka with the particle man and the negative numan, there might be a hint of the optative, potential or unreal ideas in its contexts". This then goes for the etymology as well: manka is likely to consist of the particle man followed by $=k k a$ as visible in e.g. kuiški / $k u i s ̌ k a$. See at man and $=k k i /=k k a$ for futher etymology.
mant- (c.) something harming: nom.sg. ma-an-za.
Anat. cognates: Lyd. mêtli-, something negative; Lyc. mẽte- 'harm (or sim.)' (acc.sg. mẽtê).

IE cognates: Lat. mendum 'fault, error', OIr. mind 'mark'.

The word manza is a hapax in a lexical list (KBo 1.45 obv! 10 ), of which the Sumerian and Akkadian translations are broken off. The word follows aluanzatar 'witch-craft' and iššalli 'spittle'. The interpretation of manza as a nom.sg.c. of a stem mant- is indicated by the adj. mantalli- (adj.), which describes evil tongues (q.v.) and by ${ }^{\text {SISKUR }}$ mantalli-, ${ }^{\text {SISKUR }}$ maltalli-, a ritual against evil (words?). In Lycian and Lydian we also find forms that seem to go back to a form ${ }^{*} m V n T$ - and denote something negative. Rieken (1999a: 42-3) connects these words to Lat. mendum 'fault, error' and OIr. mind 'mark' and reconstructs *mond-s. Note however, that we have to be careful as the exact meaning of all the Anatolian words are unknown.
mantalli- (adj.) 'venomous(?), poisonous(?), rancorous(?)': acc.pl. ma-an-ta-al-li-i-e-eš (MH/MS), ma-an-da-al-li-[i-e-eš] (NS).

Anat. cognates: Lyd. mẽtli-, something negative.
See CHD L-N: 176 for attestations. This adjective is only used to describe 'tongues' and probably denotes a negative quality of these. The suffix -alliseems to point to Luwian origin, which would be supported by the possibility that this adjective is to be equated with $\&{ }^{\text {SISKUR }}$ mantalli-, \& ${ }^{\text {SISKUR }}$ maltalli-, a ritual pertaining to rancor(ous words) (q.v.), which is of Luwian origin (cf. the gloss wedges). It is possible that these words are derivatives of a noun mant- that is attested as a hapax and probably denotes something harmful. See there for further etymological proposals.
\& SISKUR $_{\text {mantalli-, }}$ \& SISKUR $^{\text {maltalli- (c./n.) a ritual pertaining to rancor(ous }}$ words): nom.sg.c. \& ma-an-tal-li-iš (NH), ma-an-ta-al-li-iš (NH), Luw.acc.pl. ma-an-tal-li-ia-an-za (NH), acc.pl.n. ma-an-ta-al-li-ia (NH), ma-an-tal-li-ia (NH), ma-al-tal-li-ía (NH), ma-an-tal-li (NH).
Derivatives: ${ }^{\text {(SISKUR) } \boldsymbol{m a n t a l l a s ̌ ̌ ̌ a m m i - ~ ( a d j . ) ~ ' d e s i g n a t e d ~ f o r ~ m a n t a l l i - r i t u a l s ’ ~}}$ (nom.sg.c. ma-an-tal-la-aš-ša-am-mi-iš (NH)).

See CHD L-N: 176 for attestations. The word is usually found as mantalli-, but once an attestation ${ }^{\text {SISKUR }}$ maltalli is found. This form may have been the result of a crossing with maltalli- 'obliged to make a malteššar' and malteššar / maltešn'ritual, voting offering' (for both, see māld- ${ }^{i} /$ mald-).
The mantalli-ritual is used against evil curses, and therefore it is possible that ${ }^{\text {SISKUR }}$ mantalli- is identical to the adj. mantalli- (q.v.) which describes evil
tongues in a similar ritual. The word probably is of Luwian origin because of the gloss wedges, the Luwian suffix -alli-, and the Luwian inflected form mantalliianza. Moreover, its derivative mantallaššammi- is clearly a Luwian formation.
If the equation with the adj. mantalli- is correct, ${ }^{\text {SISKUR }}$ mantalli-, too, is possibly derived from the noun mant- (q.v.) that denotes something evil. See there for further etymology.
mar-: see mer- $^{z i} /$ mar-
marra- or marri- (gender unknown) '(sun)light' (Akk. ȘETU): dat.-loc.sg. mar-ri. IE cognates: Gr. $\mu \alpha \rho \mu \alpha i ́ \rho \omega$ 'to glitter', Maĩpa 'Sirius', Skt. márīci- 'particle of light'.

PIE ?*merH-
See CHD L-N: 185. This word is a hapax in KBo 15.2 iv (7) [ $n=a-a \check{s}=k a ́ n]$ marri IGI-an-da Ú-UL t[i-ia-zi?], which is duplicated by KUB 17.31, (8) $n=a$ $a \check{s}=k a ́ n ~ A-N A ~ S Q E-T I ~ m e-n a-a h-h a-a n-d a U ́ U-U[L \ldots]$ 'he does not s[tep] towards the daylight'. As no other forms are attested, we cannot determine whether the stem of the word is marra- or marri-.
According to Tischler (HEG L/M: 135f.), this word must be connected with Gr. $\mu \alpha \rho \mu \alpha i ́ p \omega$ 'to glitter', Maĩpa 'Sirius' and Skt. márīci- 'particle of light', which point to a root ${ }^{*} m e r H$-. If marri is derived from an $i$-stem marri-, the formal similarity between Skt. márī- < *me/orH-ih2- and Gr. Maĩ $\rho \alpha<{ }_{2} m_{6} H-i h_{2^{-}}$is even closer.
How this word must be regarded in view of the Hittite adv. marrī 'rashly' (q.v.) is not fully clear.
${ }^{\left(\mathbf{T U}_{7}\right)} \boldsymbol{m a r h} \overline{\boldsymbol{a}}$ - a kind of stew: acc.sg. mar-ha-an, mar-ha-a-an, dat.-loc.sg. mar-hi (MH?/MS), abl. mar-ha-za (Bo 4414, 10).

PIE * $m r h_{2 / 3}-\delta ́-?$ ?
See CHD L-N: 182 for attestations. The precise meaning of the word is unclear, but the use of the determinative $\mathrm{TU}_{7}$ indicates that it is some stew or cooked food. Note that Puhvel (HED 6: 65) reads TU 7 as UTÚL 'jar' and therefore interprets marh $\bar{a}$ - as a "dish, bowl".
Starke (1986: 161-2) connects marh $\bar{a}-$ with marriie/a- ${ }^{\text {ta(rii) }}$ 'to soften/melt/dissolve solid objects by heating them'. Semantically, this is possible
if marh $\bar{a}$ - indeed denotes a stew. Formally, we then would have to assume that marriie/a- shows a development *VRHV>VRRV, whereas marh $\bar{a}$ - must reflect *mrH-ó-. At this moment, this is quite speculative, though.
marhanuuamma- (adj.) 'brewed?': nom.-acc.sg.n.? [ma]r-ha-nu-ua-am-ma-an.
See CHD L-N: 182f.: this word is hapax in the following context:

KUB 1.13 ii
(26) ha-aš-ši-i=ma=kán MUN mar[-ra/i-]at-ta-ri
(27) $A-N A{ }^{\text {DUG }} N A M-Z I-T I=i a$ BULÙG AL.GAZ
(28) $[m a] r-h a-n u-u a-a m-m a-a n$
'Salt is being dissolved on the hearth. Crushed malt is $m$. in the fermenting pot'.

CHD translates [ma]rhanuuamman as 'brewed(?)', which would mean that it in some way could belong with ${ }^{\left(\mathrm{TU}_{\neg}\right)}$ marh $\bar{a}-$, a kind of stew (q.v.), and marriie/a- ${ }^{\text {tta(ri) }}$ 'to soften/melt/dissolve solid objects by heating them' (q.v.). Formally, marhanuuamma- looks like a Luw. part. in -mma/i- of a verb marhanu-.

Note that in the older literature this form sometimes incorrectly is cited as $[u] a-$ ha-nu-uа-ат-та-an.
${ }^{\text {(GIŠ) }} \boldsymbol{m} \overline{\mathrm{a}} \boldsymbol{r} \mathbf{r i}(\boldsymbol{t})$ - (c.) 'spear(?)': acc.sg. ma-a-ri-in (OS), ma-ri-in ( $\mathrm{OH} / \mathrm{NS}$ ), gen.sg. $m a-a-r i-i, a-a \check{s}$ (NS), dat.-loc.sg. ma-a-ri (NS), abl. ma-a-ri-ta-a[z] (MH?/NS), instr.(?) ma-a-ra-i-it (OS), nom.pl. ma-ri-uš (NH), acc.pl. ma-a-ri-uš (OS).
Derivatives: ${ }^{\text {NINDA }} \boldsymbol{m a} \boldsymbol{a} \boldsymbol{r} i-\quad$ 'bread in the form of a stick' (nom.pl. ma-a-ri-e-eš (OS), ma-ri-e-eš, (MS?), ma-ri-i-e-eš, ma-ri-i-iš (MS?), ma-ri-iš, ma-ri-uš).

See CHD L-N: 183f. for attestations. Puhvel (HED 6: 67) and Tischler (HEG $\mathrm{L} / \mathrm{M}: 133$ ) adduce the form ma-ra-a-i-it to this paradigm, which, if correct, would show that originally māri- had an ablauting paradigm. CHD takes marāiit as a separate entry, however (L-N: 181). It is unclear why abl. mārita[z] suddenly shows a -t-, but Puhvel (l.c.) calls this $-t$ - "pronominal", whereas Starke (1986: 162) states that it must go back to a Luwian stem mārit-. No further etymology.
marri (adv.) 'within a glimpse(?)': mar-ri (NH), mar-ri-i (1x: NH).
Derivatives: mekki marri (adv.) 'exceedingly, very much’ (me-ek-ki mar-ri).
PIE *mor $H-i$ ?

See CHD L/N: 185 for attestations. There, the adverb is translated 'in the heat of emotion or passion(?), rashly(?), impetuously(?)', seemingly based partly on the assumption that marr- has a notion of heat in it (because of a connection with marri- 'sunlight' (q.v.) and marriie/a- ${ }^{\text {tha(ri) }}$ 'to soften/melt/dissolve solid objects by heating them'). Tischler (HEG L-M: 135), too, assumes a connection with marri- 'sunlight', but proposes as original meaning of marri '(schon) bei Tagesanbruch, (ganz) früh'. It is remarkable that all attestations of marri cited in CHD occur in negated sentences 'I did not do this marri ...'. The connection with marri 'in the sunlight' (q.v.) seems plausible to me. Because the root of this word, *mer $H$-, probably meant 'to glitter, to glimpse', I would translate $\bar{U} L$ marri as 'not within a glimpse'.
marri-: see marra-
${ }^{\text {(GIŠ) }}$ mariiaunanna- (n.) 'railing?': nom.-acc.sg. ma-ri-i_ia-ua-an-na (MH/NS), ma-ar-ì $a-u a-a n-n a$, instr. ma-ri-i-ia-ua-an-ni-it (MH/NS).

See CHD L-N: 186 for attestations. Puhvel HED 6: 71f. interprets this word as 'railing, fence', which does not seem improbable. The formation is further unclear. Cf. annauanna- for the suffix -uanna-. Further unclear.
marriiela- ${ }^{\text {tatri) }}$, marra- ${ }^{\text {ta(ri) }}$ (IIIg / IIIh) 'to melt (down), to dissolve, to stew or cook until tender; to heat up(?), to bring to a boil(?)': 3sg.pres.midd. mar-ri-et-ta (OS), mar-ri-ịa-at-ta-ri (NH), mar[-ra/i-]at-ta-ri (NH), 3sg.pret.midd. mar-ra-at-ta-at (OH?/NS), 3sg.imp.midd. mar-ri-e-et-ta<-ru> (MH/NS), mar-ri-et-ta-ru (MH/NS); 2sg.pres.act. [m]ar-ri-et-ti (OH?/NS), 3sg.pres.act. mar-ri-ia-az-zi (MH/NS); part. mar-ra-an-t- (MH).

See CHD L-N: 180-1 for attestations and semantics. Most forms show a stem marriie/a-, but we also find forms that show a stem marra- (marrattat and marrant-, cf. at šārr- ${ }^{i}$ / šarr- for a similar middle paradigm). In CHD, it is stated that the verb denotes "that heat has been applied to the object, so that it undergoes a physical change [...] from a solid state to a liquid one". Oettinger (1979a: 27981) translates 'zerkleinert werden, zergehen', however, and bases his etymological interpretation on this: *merh $2_{2^{-}}$S Skt. mrrnááti 'to crush' (followed by e.g. $\mathrm{LIV}^{2}$ ). The root ${ }^{*} m^{2} h_{2}$ - rather seems to denote 'to crush, to quench' (cf. Gr. $\mu \alpha \rho a i ́ v \omega$ 'to quench'), however, whereas the Hittite verb denotes 'to soften/melt/dissolve solid objects by heating them'. In my view, this etymology
therefore is not very probable, yet I do not have an alternative. See at ${ }^{\mathrm{TU}_{7}}$ marh $\bar{a}$ for a possible inner-Hittite cognate.
$\boldsymbol{m} \overline{\boldsymbol{a}} \boldsymbol{r} \boldsymbol{k}^{-}$/ mark- (IIa2) 'to divide, to separate, to unravel; to distribute; to cut up, to butcher (animals)': 1sg.pres.act. ma-a-ar-ka-ah-hi (OS), 3sg.pres.act. mar-ak-zi (MH/NS?), 2pl.pres.act. mar-ak-te-ni (MH?/NS), 3pl.pres.act. mar-kán-zi (MH/NS), 3sg.pret.act. ma-ra-ak-ta (OH/NS), 3pl.pret.act. mar-ke-er (NH), mar-ke-e[-er]; part. mar-kán-t-; inf.I mar-ku-ua-an-zi (KUB 53.4 iv 16 (NS)), mar-ku$a n-z i$ (NS); impf. mar-ki-iš-ke/a-.
IE cognates: Lat. margō 'side-line, border', ModP marz 'region', Goth. marka 'border, area' (*morǵ-), OIr. mruig 'territory, area', We. bro 'country' (*mroǵi-).

PIE *morǵ-ei, *mrǵ-énti
See CHD L-N: 187f. for attestations. Although mi-inflected forms are attested (marakzi and marakta), the two OS attestations of 1 sg.pres.act. mārkahhi unambiguously point to an original hi-inflection. Moreover, the stem mārk- must reflect full-grade vs. the zero-grade found in 3pl.pres.act. markanzi. The original meaning of $m \bar{a} r k-{ }^{i}$ / mark- seems to have been 'to divide into parts' (cf. CHD 1.c. and Puhvel HED 6: 74).
Several etymological connections have been proposed. Sturtevant (1933: 117) was the first to connect mārk-/mark- with Skt. marc- 'to damage, to hurt, to destroy', which implies a reconstruction *merk-. Oettinger (1979a: 425) follows this suggestion and equates Skt. marcáyati with *mārki < *morkeie-. This equation is based on formal similarity more than on semantical grounds, as Skt. marcáyati is a causative denoting 'to make damage', which does not fit mārk-/mark- 'to divide into pieces'.
Braun (1936: 397) connects mārk-/mark- with e.g. Goth. marka 'boundary, area', OIr. mruig 'id.', from a root *merg'- (with a palatovelar on the basis of Pers. marz 'region', cf. Schrijver 1991: 459). These words indeed semantically fit the Hittite meaning 'to divide into parts' nicely. The absence of verbal forms of the root *merǵ- in languages other than Hittite is a bit awkward, though.

Most recently, Puhvel (1.c.) suggested a connection with Lat. merc- 'trades' and mercār $\bar{l}$ 'to trade', which he assumes to derive from 'distribution of wares'. This does not seem very appealing to me.
I would stick with the etymology proposed by Braun, and reconstruct *mórǵ-ei, *mrǵ-énti. For Skt. marc-, see at markiiela- ${ }^{z i}$.
markiie/a- ${ }^{z i}(\mathrm{Ic} 1)$ '(act. with $\left.=z\right)$ to disapprove of, to object to, to reject, to refuse; to forbid; (midd.) to be rejected, to be unacceptable': 1sg.pres.act. mar-ki-i_i-mi (NH), 2sg.pres.act. mar-ki-ía-ši (NH), mar-ki-ši (NH), 3sg.pres.act. mar-ki-ia-zi (NH), 2sg.pret.act. mar-ki-ia-at (NH), 3sg.pret.act. mar-ki-ia-at; 3pl.pres.midd. [mar]-ki-ia-an-ta-ri, 3pl.pret.midd. mar-ki-ía-an-da-at (NH), 3sg.imp.midd. [m]ar-ki-ia-ru (OH/NS); part. mar-ki-ia-an-t- (NH); verb.noun mar-ki-i_ia-u-ua-ar (NH); impf. mar-ki-iš-ke/a-(NH).
IE cognates: Skt. marc- 'to hurt, to damage', Lat. murcus 'mutilated'.

See CHD L-N: 189 for attestations and semantics. Often, this verb is seen as a derivative of $m \bar{a} r k-{ }^{i} /$ mark- 'to divide, to separate' (q.v.), but semantically this is not very appealing: markiie/a- ${ }^{z i}$ must rather be regarded as a separate verb.
According to Knobloch (1959: 39), followed by Oettinger (1979a: 346)), this verb belongs with Skt. marc- 'to hurt, to damage' and Lat. murcus 'mutilated'. Puhvel (HED 6: 76) agrees with him and provides convincing parallels for a semantic shift of 'to hurt, to damage' to 'to disapprove of'. Formally, we see a nice similarity between Skt. pres. mrcyati and Hitt. markiiazi < *mrk-ié-ti.
markištae- ${ }^{z i}$ (Ic2) 'to take someone by surprise (?)': 3 sg.pres.act. mar-ki-iš-ta-iz$z i$ (NH), ma-ar-ki-iš-da-a-iz-zi; verb.noun.gen.sg. mar-ki-iš-ta-u-ua-aš (NH), mar-kiš-da-u-ua-aš, [ma]r-ki-eš-ta-u-ua-aš (NH).

Derivatives: markištahh ${ }^{-}$(IIb) 'to take someone by surprise(?)' (1sg.pret.act. mar-ki-iš-ta-ah-hu-un, 3pl.pret.act. mar-ki-iš-ta-ah-he-er; broken mar-kiš-ta$a h[-\ldots])$.

See CHD L-N: 190 for attestations. The semantics of this verb are diffcult. The verb markištae- is poorly attested, except for the verb.noun.gen.sg. markištauuaš, which occurs often as a designation of a decease or plague. CHD translates 'death (plague?) which catches unawares(?)' and 'sudden death'. Tischler (HEG L/M: 138f.), however, translates 'Krankheit des Dahinschwindens', but this does not make much sense to me.

Formally, all forms seem to be derive from an unattested noun *markišta-, which Rieken (1999a: 224) analyses as *m(e/o)rk'es-to- from a root *merk'- 'to grab to seize’ (Pokorny 1959: 739). This root probably does not exist, however, as Skt. marś- 'to touch, to handle' must be connected with Lat. mulceō 'to brush, to stroke' and reconstructed as *melk', and all other forms cited by Pokorny as
reflecting *merk- are unconvincing without the Sanskrit support. I have no alternative etymology, however.
${ }^{\mathrm{d}}$ Markuuaia- '(plur.) deities in the depth of the earth': dat.-loc.pl. ${ }^{\mathrm{d}}$ Mar-ku-ua-inaaš.
Anat. cognates: CLuw. ${ }^{\text {d }}$ Maruai- (c.) 'dark deities’ (dat.-loc.pl. ${ }^{\mathrm{d}}$ Mar-ua-ia-an$z a)$.

This word is the genuinely Hittite counterpart of CLuw. ${ }^{\mathrm{d}}$ Maruaia-, derived from the basic Luwian word marua- 'black' that has been borrowed into Hittite (see at maruāi-). This means that we have to reconstruct a PAnat. form *marg ${ }^{w}$ aira-. See at maruāi- for further etymology.
marlant- (adj.) 'dumb, foolish, idiot' (Sum. ${ }^{(L U ́)}$ LIL): nom.sg.c. mar-la-a-an-za (KBo 32.14 ii 46, rev. 42 (fr.) (MS)), mar-la-an-za (NH), acc.sg.c. mar-la-an-da$a n$, gen.sg. ${ }^{\text {LÚLLLL-aš. }}$
Derivatives: marlahh- ${ }^{\text {i }}$ (IIb) 'to make foolish(?)' (form? mar-la-ah-ha-an[-...] (MS?)), marlae- ${ }^{z i}$ (Ic2) 'to become crazed, mad' (impf.3sg.pres.midd. [m]ar-la$i \check{s ̌-k e-e t-t a ~(O S), ~[m] a r-l i-i s ̌-k e-e t-t a ~(O S)), ~ m a r l a ̄ t a r ~(n .) ~ ' f o o l i s h n e s s, ~ i d i o c y, ~}$ stupidity' (nom.-acc.sg. mar-la-tar (MS)), marlēšš- ${ }^{i}$ (Ib2) 'to become foolish (?)' (part. mar-le-eš-ša-an-t-(NH)).

See CHD L-N: 191 for attestations. All words are derived from a stem *marla-. Eichner (1975a: 81) connected this word with Gr. $\mu \omega \rho$ ós ‘dumb, idiot' under the assumption that a preform *mōro-lo- could give Hitt. marla- through syncope. To my knowledge, such cases of syncope are unknown in Hittite, however. Nevertheless, a connection with Gr. $\mu \omega$ oó $\varsigma$ looks attractive. If we take Skt. mūrá'foolish' into account, the picture becomes more difficult, however. A connection between the Greek and the Sanskrit word would point to $* m u(e) h_{3}$-ró- (if *mū̄ro- indeed would yield Gr. $\mu \omega \rho$ óc?), but in such a scenario, Hitt. *marlacannot be cognate. Further unclear.
marnuиa-: see marnuuant-
marnuиant- (n. > c.) a kind of beer: nom.-acc.sg.n. mar-nu-an (OS), mar-nu-uaan ( OH or $\mathrm{MH} / \mathrm{MS}$ ), mar-nu-u-ua-an $(\mathrm{OH} / \mathrm{NS})$, acc.sg.c. mar-nu-ua-an-da-an ( $\mathrm{OH} / \mathrm{NS}$ ), gen.sg. mar-nu-ua-aš (OS), mar-nu-an-da-aš (OS), mar-nu-ua-an-da$a s ̌(\mathrm{OH} / \mathrm{NS})$, instr. mar-nu-an-te-it (OH/NS), mar-nu-it (KUB 55.38 ii 9 (NS)).

See CHD L-N: 193 for attestations. The bulk of the attestations shows neuter gender, whereas a commune acc.sg. is attested only twice in NS texts. I therefore assume that the word was neuter originally. The word shows two stems, namely marnuua- besides marnuuant-, which are both attested in OS texts already (gen.sg. marnuuaš vs. marnuandaš). The most likely source of this dichotomy lies in the fact that the nom.-acc.sg.-form of a stem marnuuant- is marnuuan, which is easily interpreted as belonging to a stem marnuua-. On the basis of OAss. marnu'atum, a kind of beer, which is only attested in the Kültepe-texts and therefore likely a borrowing from Hittite (cf. Von Schuler 1969 and Dercksen fthc.), it is probable that the stem marnuuant- is more original.
Formally, marnuuant- is identical to the participle of the verb marnu- ${ }^{z i}$ 'to make disappear' (caus. of mer- $^{z i} /$ mar- (q.v.)). The fact that this beer is sometimes referred to as being able to make evil disappear (cf. CHD l.c.), is more likely to be a folk-etymological interpretation of the name marnuuant- than an indication of a real historical connection between the two words. Further etymology is unknown.
maršant- (adj.) 'deceitful, dishonest; unholy, unfit for sacred use': nom.sg.c. mar$\check{s ̌ a-a n-z a(O H / N S), ~ a c c . s g . c . ~ m a r-s ̌ a-a n-t a-a n ~(O H / N S), ~ n o m .-a c c . s g . n . ~ m a r-s ̌ a-a n ~}$ (MH/NS), nom.pl.c. mar-ša-an-te-eš (NH), nom.-acc.sg.n. mar-ša-an-da ( OH or MH/NS).
Derivatives: maršahh- ${ }^{i}$ (IIb) 'to desecrate; to make treacherous' (part. mar-ša-$a-a h-h c^{2} a-a n-t-\quad(\mathrm{MH} / \mathrm{MS}), \quad m a r-s ̌ a-a h-h ̧ a-a n-t-\quad(\mathrm{NH})$ ), maršanu- ${ }^{z i}$ (Ib2) 'to desecrate, to profane; to falsify' (3sg.pres.act. mar-ša-nu-zi, mar-ša-nu-uz-zi (MH/MS), part. mar-ša-nu-(una-)an-t- (NH)), maršātar (n.) 'fraud, treachery, deception' (nom.-acc.sg. mar-ša-a-tar (OH/NS), mar-ša-tar (OH or MH/NS)), $\boldsymbol{m a r s ̌ e ̄}-{ }^{-3 i}$ (Ib2) 'to be/become corrupt' (3pl.pret.act. mar-še-e-er (OS)), maršēššz- ${ }^{i}$ (Ib2) 'to become desecrated, to become profane, to become unhloy; to become corrupt, to become deceitful' (3sg.pres.act. mar-še-eš-zi (MH/NS), mar-ši-eš-zi (NH), 3pl.pret.act. mar-še-eš-še-er ( $\mathrm{OH} / \mathrm{NS}$ ), mar-še-eš-šer (NH); broken mar-še$i \check{s ̌-s ̌ a-a n[-. .), ~ m a r s ̌ a s ̌ t a r r a / i-, ~ m a r z a s ̌ t a r r a-~(c .) ~ ' d e s e c r a t i o n, ~ p r o f a n e m e n t ' ~}$ (nom.sg. mar-ša-aš-tar-ri-iš (MH/MS), mar-ša-aš-tar-ri-eš (NH), mar-za-ǎ̌-tar-ri-iš (NH), acc.sg. mar-ša-aš-tar-ri-in (NH), gen.sg. mar-ša-aš-tar-ra-aš (NH), dat.-loc.sg. mar-ša-ǎ̌-tar-ri (NH), mar-za-aš-tar-ri (NH), dat.-loc.pl. mar-ša-aš-tar-ra-aš (NH)).

Anat. cognates: CLuw. marša- 'treachery' (gen.adj.nom.-acc.sg.n. \& mar-ša-aš-ša<-an〉), maršaza- '?' (case? mar-ša-za-an); Mil. mrss $\chi$ - '?'.

PAnat. *mrsa-

IE cognates: Skt. mŕṣā (adv.) ‘invain, falsely’; Skt. marṣ-'to forget', Lith. užmiřšti 'to forget', TochAB märs- 'to forget'.

PIE *mrs-o-
See CHD L-N: 195f. for attestations. Note that CHD cites a Hittite adjective marša- on the basis of two forms. "Com.sg.acc." mar-ša-an (KBo 5.2 i 4, 5) in my view is rather to be interpreted as a neuter nom.-acc.sg. from the stem maršant-. "Neut.sg.(acc.)" mar-ša (KBo 5.2 iv 64) is as such ununderstandable and therefore must be emended to mar-ša<-an», in my view again a nom.-acc.sg.n. of the stem maršant-. This means that in Hittite, no stem marša- can be found. In Luwian, on the contrary, a stem marša- is visible in the form mar-ša-aš-ša, found in a Hittite context with gloss wedges. In CHD it is cited as "Luw. neut. sg. nom.acc. in $-s a^{\prime \prime}$ ", but we then would rather expect *maršan=za. I therefore would emend it to $m a r-s ̌ a-a \check{s}-s ̌ a<-a n\rangle$, a nom.-acc.sg.n. of a gen.adj. of a stem marša-.

Despite the fact that a stem marša- is not attested as such in Hittite, all words cited here must be derived from a stem $*_{\text {marš- or }}^{*}$ marša-. As we saw, this marša- is found in other Anatolian languages as well: CLuw. marša- (as we saw above); Hitt. maršaštarra/i- which, according to Starke (1990: 393ff.) must be a Hittite adaptation of a Luw. noun *maršaštar-, a derivation in -štar- of marša-; Mil. mrssx- '?' which, at least formally, can be equated with Hitt. maršahh- ${ }^{\text {. }}$
The stem *marša- must reflect $* m r s o$ - since a preform ${ }^{*} m V r s o$ - would have given Hittite ${ }^{* *}$ marra- (cg. arra- 'arse' $<*$ Horso-). An etymological connection with Skt. mŕs $s a \bar{a}$ (adv.) 'invain, falsely’ (first suggested by Burrow 1964: 76) is therefore appealing. Ultimately, these words must be derived from the verbal root *mers- 'to forget'.
The verb marše $e^{-z i}$, which is only attested twice as 3pl.pret.act. mar-še-e-er, is found in an OS and a OH/NS copy. In another NS copy of the latter text, maršēer is duplicated by maršeššer, which indicates that the form maršer is not derived from a mere verb marš-. According to Watkins (1973: 74), the verbal stem therefore must have been marše $\bar{e}^{z i}$, showing the stative-suffix $*$-eh $h_{l}^{-}$.
maruāi- (Luw. verb) 'to blacken(?)': 3sg.pret.act. \& ma-ru-ua-a-ịt.
Derivatives: ${ }^{\left(\mathbf{N A}_{4}\right)} \boldsymbol{m a r}(\mathbf{r}) \mathbf{u n u}^{(a s ̌ h a-, ~ a ~ m i n e r a l ~ i m p o r t e d ~ f r o m ~ C y p r u s, ~(a c c . s g . ~ m a r-~}$ ru-ua-aš-ha-an, case? ma-ru-ua-aš-ha-ă̌).

Anat. cognates: CLuw. marruua- 'to blacken' (part. mar-ru-ua-am-mi-in), maruai- (adj.) 'black, dark-coloured(?)' (nom.pl.c. mar-ua-a-in-zi, dat.-loc.pl. ${ }^{\mathrm{d}}$ Mar-ua-íla-an-za), marušam(m)a/i- (part.) 'black, dark blue(?)' (nom.sg.c. ma$r u$-ša-me-eš, ma-ru-ša-mi-iš, nom.pl.n. ma-ru-ša-am-ma, [m]a-ru-ša-ma),
maruatar(?) 'blackness(?)’ (dat.-loc.sg.(?) mar-ua-ta-ni (interpretation unsure)); HLuw. DEUS marwawana/i- (adj.) '?’ (nom.sg "DEUS" ma-ru-wá/í-wá/í-ni-sa (KAYSERİ §8)).
IE cognates: OIc. myrkr 'dark', mjorkvi 'darkness', OSax. mirki, OE mierce 'dark'.

PIE *merg ${ }^{w}$ -
See CHD L-N: 201f. for attestations. This is a difficult set of words, especially because their meanings are not fully clear. We have to start with the Luwian adjective marušam ( $m$ ) a/i- (which is used in Hittite contexts). It was known for a long time that this word denotes a certain colour, and Güterbock (1956a: 122) remarks that in certain contexts marušamma/i- is used as the opposite of BABBAR 'white' and therefore may mean 'black'. He then connects this adjective with the hapax verb maruūai- (gloss wedged, so probably of Luwian origin), which he translates as 'to blacken'. This means that we would be dealing with a Luwian stem maru(a)- 'black', which would mean that e.g. the dingir.meš Maruäinzi denote 'black deities'. Of this last term, a Hittite counterpart has been found in ${ }^{\mathrm{d}}$ Markuuaia-, which then might mean 'black deity' as well (q.v.).

If Luw. ${ }^{\text {Dingir.meš }}$ Maruāinzi and Hitt. ${ }^{\mathrm{d}}$ Markuuaia- are really cognate, we have to reconstruct a PAnat. form *margwai-. Neumann (1973: 298) connects this with PIE *merg"- (misprinted as "*merq${ }^{u}-$-"), referring to Pokorny (1959: 734). Indeed, words like OIc. myrkr 'dark', mjqrkvi 'darkness', OSax. mirki, OE mierce 'dark' point to a root ${ }^{*}$ merg' $^{\prime}$ - 'dark'. Formally, Lith. mirgéti, mirgu 'to twinkle' could belong here as well, but semantically this remains far.
marzae- ${ }^{z i}$ (Ic2) 'to crumble(?)': 3sg.pres.act. mar-za-a-ez-zi (MS?), mar-za-iz-zi (MH/NS).

See CHD L-N: 203 for attestations. The verb always has as its object bread that has been broken. Formally, the verb looks like a derivative of a further unattested noun *marza-. Tischler HEG L/M: 153 (referring to Neumann) suggests a connetion with Skt. mrdnāti 'to make weak, to make soft' and Lat. mordeō 'to bite', but semantically this connection is not probable. No further etymology.
$\boldsymbol{m} \bar{a} s{ }^{s} \boldsymbol{a}-$ - (c.) 'locust, swarm of locusts' (Sum. BURU 5 ): nom.sg. [ $m$ ] $a-\check{s} a-a s ̌, ~ a c c . s g . ~$ $m a-a-s \check{a}-a n(\mathrm{NH})$, gen. $\check{S} A$ BUR[U5], acc.pl. BURU ${ }_{5}{ }^{\text {HI.A }}$, gen.pl. $\check{S} A$ BURU $_{5}{ }^{\text {HI.A }}$.

See CHD L-N: 203f. for attestations. The word has no clear etymology. A connection with Skt. math- 'to rob', as proposed by Tischler (HEG L/M: 153f.), is formally impossible: Skt. math- < *menth $2^{-}$, which cannot yield Hitt. māša-. On the basis of the incorrect reading of acc.sg. ma-a-ša-an (KUB 24.1 iii 17) as
 reconstructs "karša-" as *grsó-, derived from the root *gres- (Skt. grásate 'to devour').
*mašhuil(a)- 'mouse' (Sum. PÍŠ.TUR).
See Tischler (HEG L/M: 157f). On the basis of the phonetic spelling ${ }^{\mathrm{m}}$ Maš-hu-i-lu-ua- of the PN ${ }^{\text {m}} \mathrm{PI}$ ÍS(.TUR)-ua-, we must conclude that behind the sumerogram PÍŠ(.TUR) 'mouse', the Hittite word mašhuil(a)- has to be read. Although the name is almost always spelled with the sign MAŠ, which in principle can be read pár as well, the attestation Ma-aš-hu-u-i-lu-ua-aš (KBo 4.3 i 35) proves that we have to read Mašhuiluuá-. Despite some creative attempts (for which see Tischler 1.c.), the word has no credible etymology.
maši- (interrog. and indef. rel. pronoun) 'how many, however many, however much': acc.sg.c. ma-ši-in (NS), nom.pl.c. ma-ši-e-eš (OH/NS), ma-ši-i-e-eš (NH), acc.pl.c. ma-ši-e-eš (NH), ma-ši-ú-u[š̀ $]$, ma-še-e (NS) (with pron. inflection), dat.-loc.pl.(?) ma-ši-i $a-a \check{s}$.
Derivatives: mašiian (adv.) 'as much as' (ma-ši-ía-an (OH/NS)), mašiianki (adv.) 'however many times’ (ma-ši-ia-an-ki (MH/NS)), mašíiant- (adj.) 'however many times’ (dat.-loc.sg. ma-ši-ía-an-ti, ma-ši-i-ia-an-te (MH/NS), nom.pl.c. ma-ši-ía-an-te-eš), mašiúant- (adj.) 'equal in size or amount, as much/little as, as big/small as' (nom.sg.c. ma-ši-ua-an-za (NH), ma-a-ši-ua-an-za ( $1 \mathrm{x}, \mathrm{NH}$ ), acc.sg.c. ma-ši-ua-an-ta-an (MH/MS), nom.-acc.sg.n. ma-ši-úa-an, acc.pl.c. ma-ši-ua-an-du<-uš̀), mašiúun (adv.) 'as much as, as many as, how many (times)' (ma-ši-ua-an (OH/MS?), ma-a-ši-ua-an (1x, undat.)).

Anat. cognates: Pal. maš (adv.) 'as much as' (ma-ă̌).
PIE *mo-s $+-i$
See CHD L-N: 205f. for attestations. For the interpretation of Hitt. maši- and its derivatives, the Palaic form maš (adv.) 'as much as' is important, which was treated by Melchert (1984b: 34-6). He states that this forms shows that the Hittite stem maši- must be built on a petrified *maši, which must be analysed as *maš + $-i$, in analogy to $a s ̌ i{ }^{\prime}$ 'that', which reflects *aš + the deictic particle $-i$ (see at $a s ̌ i /$
uni / ini). Just as aši reflects a pronominal stem *h $h_{l} o-$, Melchert states that *maš reflects *mo-, a pronominal stem also visible in $m a \bar{n}, m a \bar{h} h a n$ etc. (q.v.).
 (NH).

Derivatives: maššaĩašši- (adj. describing garments) (nom.pl. maš-ša-ía-aš-ši$i s)$.

See CHD L-N: 205f. for attestations. It is not quite clear what kind of clothing is meant, although one time a hem ( ${ }^{\mathrm{TUG}}$ SISIKTUM) of a maššiza- is mentioned. According to Tischler (HEG L/M: 159f.), the word could be of IE origin, and he connects it with a root *mes- 'to tie, to knot'. The cognates that he gives, e.g. OHG masc 'net', Lith. mezgù 'to knot, to tie a net', point to a root *mesg-, however, which does not match Hitt. maššiza-. Rabin (1963: 129) suggested that maššiia- is a cultural Wanderwort (cf. Hebr. maeši 'silk' and Eg. mśj (a garment)).
$\boldsymbol{m a u}-{ }^{i} / \boldsymbol{m u}-$, maušš ${ }^{z}{ }^{i}$ (IIa1a) 'to fall': 1sg.pres.act. mu-uh-hi (OH/NS), $[m u]-u-$ $u h-h i(\mathrm{OH} / \mathrm{NS}), 3 \mathrm{sg} . \mathrm{pres} . a c t .{ }^{m a-u s ̌-z i}(\mathrm{OH}$ or $\mathrm{MH} / \mathrm{NS})$, ma-a-uš-zi (1x, NH), 1sg.pret.act. mu-uh-ḩu-un (Bo 5441, 5 (MS?)), 3sg.pret.act. ma-uš-ta (MH/NS), ma-a-uš-ta (1x, NS), 3pl.pret.act. ma-ú-er (OH/MS), ma-uš-še-er (MH/NS), 3sg.imp.act. [m]a-uš-du (NS); 2sg.pres.midd. ma-uš-ta (OH/NS), 3sg.pres.midd. $m a-u s ̌-t a-r i(N H), 1$ sg.pret.midd. ma-uš-ḩa-ha-at (NH), 3sg.pret.midd. ma-uš-taat (NH), 3sg.imp.midd. [m]a? ${ }^{2}-u s ̌-t a-r u$ (NS), 3pl.imp.midd. mu-ua-a-an-ta-ru (KBo 32.14 ii 60, 1.Rd. 4 (MH/MS)); part. ma-uš-ša-an-t- (NS); inf.I ma-uš-šu-u-ua-an-zi (NH); impf. ma-uš-ke/a- (MH/NS).

Derivatives: $\boldsymbol{m u m}(\boldsymbol{m})$ iied $\boldsymbol{a}^{-3}$ (Ic1) 'to keep falling, to crumble(?)' (3sg.pres.act. mu-mi-e-ez-zi (OH/MS?), mu-um-mi-i-e-e[z-zi] (OH or MH/NS), mu-um-mi-i.ia$a z-z i \quad(\mathrm{KBo} 44.158$ rev. 3 (NS)), 3pl.pres.act. [m]u-mi-an-zi (OH/NS); 3sg.pres.midd. mu-um-mi-i-e-et-ta (MH/NS); verb.noun mu-mi-ía-tar (NS) 'collapse, fall').
IE cognates: Lat. moveō 'to move', Skt. $m \bar{v} v-, m \bar{u}$ - 'to move, to push'.

$$
\text { PIE * } \text { móuh }_{1} \text {-ei } / \text { *muh }_{1} \text {-énti }
$$

See CHD L-N: 211f. and Puhvel HED 6: 101f. for attestations of mau-/mu-, and CHD L-N: 328 for attestations of $\operatorname{mum}(m)$ iie/a- ${ }^{z i}$. The verb mau-/mu-shows three stems: mau- (3pl.pret.act. mauer, 1sg.pres.act. muhhi, 1sg.pret.act. muhhun), mu(3pl.imp.midd. muūāntaru) and maušš- (e.g. maušzi, maušta, mauššer). This
immediately reminds of the situation in $a u-^{i} / u$ - 'to see'. Note that in the case of $a u-/ u$-, the stem $a u \check{s} \breve{s}_{-}^{-}$in OH and MH texts is only visible in 3 sg .-forms, and in NH texts sporadically in other forms as well. In the case of mau-/mu-, however, the stem mauš̌s- is more widespread, but all the instances of maušš- outside the 3sg. (3pl.pret.act. mauššer, part. mauššant-, inf.I mauššuuanzi, the middle paradigm) are found in NH texts. So basically, the verbs $a u-/ u$ - and mau-/mushow the same distribution (i.e. the stem ( $m$ ) auš̌š- originally in 3sg.-forms only, with a generalization of the stem (m)aušš- in other parts of the paradigm in NH texts), but the spread of the stem (m)aušš- went faster in $m a u-/ m u$ - than in $a u-/ u$-. All in all, we can conclude that, in analogy to $a u-/ u$-, the verb mau-/muoriginally inflected mūhhi, *mautti, maušzi, *mumeni, *mušteni, *muиanzi, in which 3 sg.pres.act. maušzi replaced an older $*$ māuni.
This verb is generally connected with PIE *m(i)euh $l^{-}$, which means that we have to reconstruct *móuh ${ }_{l}$-ei, ${ }^{*}$ muh $_{l}$-énti.

The interpretation of the verb mum $(m)$ iie $/ a^{z i}$ is quite difficult. The first thing that has to be noted is that all attestations with geminate -mm- are NH , and that spellings with single $-m$ - are older. The original form therefore must have been mumiie/a-. The verb cannot reflect a mere reduplication of $m a u^{-}{ }^{i} / m u$ - as we then cannot explain the $-u$ - of the reduplication syllable and the lack of $-u$ - in the stem (we would expect $* *$ mamu-). It therefore is more probable that the second $-m$ reflects an older ${ }_{\sim}^{u} u$ that has turned to $-m$ - next to $-u$-. Yet, reconstructing a correct preform remains difficult. A formation *muhile/o- should have given $* *$ muie/a(cf. huianzi 'they run' $<* h_{2} u h_{1}$-i-enti); a formation $* m h_{1} u$-ie/o- should have given $* *$ muue/a- (cf. *shu-ie/o- 'to push' > šuue/a-); a formation *mouh (thus Eichner 1973a: 90) shoud have given **muue/a- (cf. uezzi 'he comes' < *h $h_{2}$ ou- $\left.h_{1} e i-t i\right)$; and a formation mouh $_{1}$-ie/o- should probably have given $* *$ muie/a(cf. uiezzi 'he sends' $<* h_{2} O u-h_{1} i e h_{1}-t i$ ). In my view, the only possible solution is assuming that mumiie/a ${ }^{z i}$ is a rebuilding of an original verb $*$ mumai- ${ }^{i}$ / mumithat inflected according to the dāi/tiiianzi-class (note that all verbs of this class are eventually taken over in the -ie/a-class). In this verb then the development *CHuV > Hitt. CumV (e.g. *dh $h_{3}$-ueni $>$ Hitt. tumēni) must have taken place, which means that we must reconstruct *mh $u$-ói-ei.
$\boldsymbol{m a u s ̌ s ̌}-{ }^{z i}$ : see $m a u-{ }^{i} / m u-$
$\boldsymbol{m a z} \boldsymbol{-}^{\boldsymbol{i}}$ (IIa2) 'to withstand, to resist, to offer resistance; to dare to (with inf.)': 2sg.pres.act. ma-za-at-ti (NH), 3sg.pres.act. ma-az-zé (OS), ma-az-zi (OH/NS), $m a-a z-z a-a z-z i(\mathrm{OH} / \mathrm{NS})$, ma-(az-)za-zi ( OH or $\mathrm{MH} / \mathrm{NS}$ ), ma-an-za-az-zi $(1 \mathrm{x}$,

NH), 1pl.pres.act. ma-az-zu-u-e-ni (MH/NS), 2pl.pres.act. ma-az-za-aš-te-ni (HKM 88, 17 (MH/MS)), 2sg.pret.act. ma-az-za-aš-ta (MH/MS), 3sg.pret.act. $m a-a z-z a-a s ̌-t a(N H)$; verb.noun.gen. ma-az-zu-ua-aš (NH).
IE cognates: OE $m \bar{o} d$ 'courage, Goth. modags 'angry'. PIE * moh $_{3} d$-s-ei (?)

See CHD L-N: 213f. for attestations. There is debate on two points: what was the actual stem of this verb, and which inflection ( $h i$ or $m i$ ) did it have. These two questions are interrelated. On the basis of an attestation 3pl.pres.act. ma-t $[e-e r]$ in KBo 3.13 rev. 18, for which a meaning 'to withstand' would fit, it has been suggested that the stem actually was mat- and that the stem maz-, which is abundantly attested, is the result of assibilation of the root-final $-t$ - in front of endings that start in $-t$-. This implies that this verb was $m i$-conjugated, and that 3 sg . *mat-ti>/matst ${ }^{\mathrm{s}} \mathrm{i}$ / was the basis of a generalization of the stem $m a z$-. This is problematic in a few regards. First, CHD (1.c.) states that a reading ma-t[e-er] as cited above is highly questionable in view of the traces after the sign $m a$. If this form would have to be read differently, the whole basis for postulating a stem mat- has vanished. Secondly, the oldest attested form of this verb is 3 sg.pres.act. $m a-a z-z e ́$ (OS). Proponents in favour of a stem mat- and subsequently a miconjugation state that this form shows the ending $-z e$ for $-z i$ (e.g. Oettinger 1979a: 208). To my knowledge, this is unparalleled, however: the ending is always $-z i$ (apart from a few very archaic instances of $-z a$, the phonetic outcome of $*-t i$ ). Moreover, we would expect that /matst ${ }^{\mathrm{s}} \mathrm{i}$ / is spelled mazzazzi (like it is in some NS texts, and compare the MS spelling e-ez-za-zi 'he eats' (see at $e d-{ }^{z i} / a d-$ )). In my view, mazze is to be seen as a hi-conjugated 3 sg.pres.act., showing the ending $-e$, which is the archaic variant of the ending -i (compare the OS attestation uarašše (see at uaršs ${ }^{i}$ ) and the existence of -hhe besides less archaic -hhi). With the view that maz- originally was hi-conjugated, the idea that the stem actually was mat- has to be abandoned, too (note, however, that Tischler HEG L/M: 163 states that the stem originally must have been mat-, which was hi-conjugated, in which on the basis of $2(!)$ sg.pres. *mat-ti an assibilated stem maz- spread throughout the paradigm: this is highly unlikely because 2 sg.-forms are far too weak to instigate such a generalization).
All in all, I conclude that the stem was just maz-, which was a hi-inflected verb as is visible in the oldest forms (3sg.pres.act. mazze, mazzi and 2sg.pres.act. mazatti). In NH times, the verb was taken into the mi-inflection, yielding 3sg.pres.act. mazzazzi. The nasal in the one attestation 3sg.pres.act. manzazzi (KUB 33.120 i 21 ) is unexpected and hardly can be taken seriously.

The root-final $-z$ - /ts/ is not explicable through assibilation of original $* t$, so we have to assume a preform *moT(-)s-ei. Semantically, the verb has two notions: 1. 'to withstand', 2. 'to dare to'. These notions can be combined by the notion 'to have the courage'. Etymologically, a nice connection (cf. already Laroche 1965: 51f.) seems to be the one with PGerm. *mōda- 'zeal, anger, courage' (OE mōd 'courage, Goth. modags 'angry'), which, according to Oettinger (1979a: 209) reflects $* m e / o h_{3} d o-$. This would imply that Hitt. maz- is an $s$-extensions as also
 drink' < *poh ${ }_{3}-s$-, etc. All in all, I would reconstruct * mó $h_{3} d-s$-ei.

```
' Émazki(ia)-: see Émāk(kiz)zi(ia)-
```

=me-: see =mi- / =ma- / =me-
mēhur / mēhun- (n.) 'period, time': nom.-acc.sg. me-e-hur (OH/NS), me-hu-ur (NH), me-hur (NH) gen.sg. me-e-hu-na-aš (NH), me-hu-na-aš (MH/NS), loc.sg. me-e-hиu-ni (OS), me-e-hu-u-ni (OH or MH/NS), me-hu-u-ni (NH), me-hu-ni (MH/NS), me-e-hu-e-ni (1x, NS), me-eh-ni (1x, NS), me-e-hu-un-ni (1x, MS), nom.-acc.pl. me-hur-ri $i^{\text {HI.A }}(\mathrm{NH})$, gen.pl. me-e-hu-u-na-aš (OH or MH/NS), dat.loc.pl. me-e-hu-na-aš (NH).

Derivatives: mēhur (adv.) 'at/in the time' (me-e-hu-ur (OS), me-hu-ur (OS), me-e-hur (OH/MS?), me-hur (MS)).

PIE * méi $_{2}$-ur, * méih $_{2}$-un-(o)s
See CHD L-N: 239 for attestations. There, a distinction is made between nom.acc.sg. mēhur and adverbial mēhur. Yet it is likely that, at least historically, these forms are identical. Usually, mēhur / mēhun- is translated 'time'.

This word is one of the most discussed words in Hittite, especially due to the fact that we find the vowel -e- adjacent to -h-. The oldest etymology was put forward by Kretschmer apud Hrozný (1917: 70 ${ }^{3}$ ), who connected the word with PIE *meh $1^{-}$'to measure'. Although semantically attractive, formally this connection is improbable as * $h_{l}$ does not yield Hitt. - $h$ - (Puhvel's recent attempt (HED 6: 111) to revive the theory that $-h$ - can reflect an $e$-colouring laryngeal must be strongly rejected), and because a suffix -hur- is further unknown. The theory that *mée-ur would give mēhur, in which $-h$ - is a hiatus-filler, has now generally been denied.
Another etymological account was given by Eichner (1973a). First, he rightly notes that mēhur, mēhunaš inflects differently from e.g. paḩhur, pahhuenaš 'fire':
the latter word shows a proterodynamic paradigm (*pé $h_{2}$-ur, *ph ${ }_{2}$-uén-s), whereas the accent in mēhur, mēhunaš is found on the root-syllable only and therefore is static. He then assumes that the ablaut $e: \varnothing$ as found in the rootsyllable of *péh $h_{2}$-ur, ${ }^{*} p h_{2}$-uén-s, must have been $* \bar{e}: \check{e}$ in static inflected paradigms: *CéC-ur, *CéC-un-s. As an etymological cognate for mēhur, he proposes to interpret Lat. mātūrus 'mature', mānus 'good' as reflecting a root *meh ${ }_{2}$ - 'to be the right time'. When applied to the structure cited above, he comes to the reconstruction *mé $h_{2}$-ur, *mé $h_{2}$-un-(o)s. One of the consequences of this reconstruction is that a long $* \bar{e}$ apparently is not coloured by the adjacent $* h_{2}$. This rule (non-colouring of long vowels by laryngeals) is since then called 'Eichner's Law'. Note that this etymology must assume a levelling of the $\bar{e}$-grade throughout the paradigm, as the phonetic outcome of $* m e ́ h_{2}$-un- would have been **mahhun-. Eichner's etymology and his law has found wide acceptance.
Although Eichner's etymology formally seems well-crafted, the semantic side is rather weak: connecting a word for 'time' with words for 'good; mature' is quite far-fetched. Moreover, the presumption that ${ }^{*} \bar{e}$ is not coloured by a laryngeal in Hittite is further unfounded (see at hai(n)k- ${ }^{\text {tla(ri) }}$, ${ }^{\text {Éhilla-, }}{ }^{\mathrm{NA}_{4} h e k u r, ~ h e n k a n-, ~}$ ${ }^{\text {LÚ }}$ hippara-, ${ }^{\text {Éhištā, }}$ šehur / šehun- and kane/iššz- ${ }^{i}$ for other alleged instances of Eichner's Law in Hittite). I therefore do not find this etymology probable.

All other cases in Hittite where we find a sequence -eh-, we are dealing with original $i$-diphthongs: tēhhi 'I take' $<* d^{h} h_{1}$-oi- $h_{2} e i$, pēhhi $<* h_{1} p$-oi- $h_{2} e i$. It therefore is formally quite likely that mēhur reflects $*$ mo/eih $_{2}$-ur, derived from a root ${ }^{*}$ meih $_{2}$-. Semantically, the translation 'time' is a bit misleading. When looking at the contexts cited in CHD, we notice that all translations of mēhur have in common that they denote a (fixed, regularly recurring) period. So mēhur does not denote 'time' in its everlasting meaning, but 'time' as a period that is ticking away. I would therefore like to propose a connection with the IE root *meiH- 'to disappear' (Skt. minắti 'to diminish', Lat. minuō 'to diminish'), which would point to a reconstruction *méih $h_{2}$-ur, *méih $h_{2}$-un-(o)s $>$ Hitt. mēhur, mēhunaš (note that no analogic levelling within the paradigm is needed). For the semantics, compare 'minute' from Lat. minuō 'to diminish'.
mehuuant- (adj.) 'old, elderly', (n.) 'old man or woman, ederly person', (pl.) 'elders (a body with political-military, judicial and religious functions)' (Sum.
 loc.pl. ${ }^{\text {LÚ.MEŠŠU.GI-aš (OS). }}$
Derivatives: mehuuandahh- ${ }^{\text {i }}$, mïahuuantahh ${ }^{-}$- (IIb) 'to make old, to age; (midd.) to become old, to grow old' (2sg.pret.act. ${ }^{\text {LÚŠU.GI-ah-ta (NH); }}$

3sg.pret.act. ${ }^{\text {LÚŚS }} \mathrm{U} . \mathrm{GI}[-a h-t a-a(t)](\mathrm{OH} / \mathrm{NS}), 2$ sg.imp.midd. mi-hu-un-ta-ah-hu-ut $(\mathrm{NH}), m e-h u-u n-t a-a h-h u-u t(\mathrm{NH})$, mi-e-hu-ua-an-da-hu-ut (NH), mi-ia[-hu-ua-an-t]a-hu-ut (NH)), mihuntatar / miiahuandann- (n.) 'old age’ (nom.-acc.sg. mi-hau-un-ta-tar ( $\mathrm{OH} / \mathrm{NS}$ ), gen.sg. mi-i_a-hu-an-da-na-aš (OH/MS)), miiahunte- ${ }^{-2 i}$ (Ib2) 'to become old' (3sg.pres.act. mi-i-ia-hu-un-te-zi (OH/NS)), ${ }^{(L T)}$ miïahuntēšš${ }^{z i}$ (Ib2) 'to become an old man' (3sg.pres.act. mi-ina-hu-un-te-eš-z[i] (NH)).

See CHD L-N: 223f. for attestations. The basic word is only attested spelled sumerographically: ${ }^{\text {LÚŚU.GI-ant-. Its derivatives are found in phonetic spellings, }}$ however, but display a variaty of forms: mi-hu-un-t ${ }^{\circ}$, me-hu-un-t$t^{\circ}$, mi-e-hu-ua$a n-t^{\circ}, m i-i a-h u-u n-t^{\circ}$ and $m i-i a-h u-a n-t^{\circ}$. Since the oldest attestations (OS) are all spelled sumerographically, it is not possible to determine which of these spellings displays an older situation. This makes the formal analysis of these words quite difficult. Eichner (1973a: 56f.) assumes that the original form was *miiahuuant-, which he connects with mai- ${ }^{-} /$mi- 'to grow' $^{\prime}$ and reconstructs as * mih $_{13}$-eh $h_{2}$-uent(followed by Oettinger 1979a: 471). Problematic for this view, however, is the fact that the proposed pre-form in fact should have yielded **miiahhuuant-, with a geminate $-h h$-. Puhvel (HED 6: 153) tries to by-pass this problem by citing the stem as "miyahhuwant-", on the basis of KUB 14.12 obv. (9) "LÚ miyah[hunteszi", copying the reading as given in CHD L-N: 228: "LU' mi-ia- ${ }^{「} a h{ }^{\top}[-h u-u n-t e-e \check{s}-z i] "$ ". While looking closely at the hand-copy of this text as well as its photograph (available through Hetkonk), I have not been able to find a trace of a sign AH,
 that we can only read this form as ${ }^{\mathrm{LU}} m i-i a-h[u-u n-t e-e s ̌-z i]$. So the fact that $-h$ - is spelled single is real and contradicts the reconstruction given by Eichner.
In my view, the only way to explain the single $-h$ - is by assuming that the words are etymologically related to mēhur / mēhun- 'period, time'. This then would mean that the original form was mehuuant-. At an early stage already this mehuluant- was reinterpreted as belonging to the verb mai- / mi- 'to grow' on the basis of its 1 sg.-forms *me-hhi and *me-hhun. When the verb mai- $/$ mi- was secondarily changed to miie/a- ${ }^{z i}$ (like all daii/tiianzi-verbs end up in the -ie/aclass), the 1 sg.-forms were changed to ${ }^{*}$ miiia-mi and ${ }^{*}$ miiia-nun as well. With this change from the stem *me- into miia-, the etymologically unrelated stem mehulant- was secondarily changed to miiahunuant- as well. For further etymology, see at mēhur / mēhun-.
$\boldsymbol{m e}(\mathbf{i}) \boldsymbol{a n}$ - (c.) 'range (of a year), extent': gen.sg. mi-e-ni-ia-aš (OH/MS), me-e-ia$n i-(i a-) a \check{s}(\mathrm{MH} / \mathrm{MS})$, me-e-ia-an-ni-ia-aš (NS), me-e-ni-aš ( OH or MH/MS), me-
e-ne-ía-aš (MS), me-e-íla-na-aš (NH), me-ía-na-aš (NH), me-ía-an-na-aš (NH), me-e-a-na-aš (NH), me-e-na-aš (NH), me-i-i ia-na-aš (NH), mi-i-i_ia-na-aš (NH), $m i-i a-n a-a \check{s}(\mathrm{NH})$, loc.sg. me-íia-ni (OS), me-e-íia-ni (MH/MS), me-e-a-ni (MS), me-i-i ia-ni (MH/MS), me-e-ni (MS), me-i-e-ni (NS), me-e-e-ni (NH), mi-ia-ni ( $\mathrm{OH} / \mathrm{NS}$ ), me-an-ni, me-e-íia-an-ni, gen.sg. or loc.pl. me-e-a-na-aš (MS), me-e-ía$n i-i \underline{a}-a \check{s}$ (MH/NS).

PIE * meh $_{1}$-on-, * meh $_{1}$-en-
See CHD L-N: 229f. for attestations and semantics. This word mostly occurs in a fixed combination with uitt- 'year': uitti mēian(ii)aš, uitti mēiani and uittaš méianaš. The exact meaning of this construction is not totally clear but CHD translates them 'in the course of the year' as well as 'annually'. An important hint for the meaning is KBo 25.5, (3) $[(k u$-it-ma-an $)]$ (4) $\left[\left(\mathrm{MU}^{\mathrm{KAM}}-z a\right)\right]$ me-e-a-ni a-ri 'Until the year reaches $m$. ., which is duplicated by KBo 6.26 i (32) ku-it-ma-an $\mathrm{MU}^{\mathrm{KAM}}{ }_{-z}[a]$ me-e-hu-ni $a-r i$ 'Until the year reaches the time'. Here we see that mēani semantically must correspond to mēhuni 'period, time'. It therefore is likely that $m \bar{e}(i) a n$ - denotes something like 'course, duration'.

One instant without 'year' is found in the following context:
KUB 19.37 ii
(42) $\quad . . n u=z a$ LUGAL-uš I-NA É $=$ İ $A$
(43) [x ]x LI-ÌM 5 ME $30^{?}$ NAM.RA ${ }^{\text {HIAA }} u$ u-[ua]-te-nu-un
(44) $\left.{ }^{\text {URU }} H a-a t-t\right] u-s ̌ a-a \check{s}=m a=z a$ ÉRIN ${ }^{\mathrm{MES}}$ ANŠE.KUR.RA ${ }^{\mathrm{M}}\left[{ }^{\mathrm{ES}} k u-i\right] n$ NAM.RA [GU $\left.{ }_{4}\right]$ UDU
(45) [ú-una-te-er (?)] nu-u=š-ša-an ir-ha-aš mi-ina-na-ač NU.GÁL e-[ě̌-ta]
'I, the king, brought home X530 captives. But regarding the captives and livestock which the infantry and charioteers of Hattuša [brought in], there w[as] no boundary of (its) $m . .^{\prime}$.

Here, miidanaš must mean something like 'size, extent'. So, all in all, we have to conclude that $m \bar{e}(i) a n$ - denotes something like 'extent, range (of a year)'.
According to Tischler (HEG L/M: 175), another case of meian- without 'year' can be found in KUB 43.74 rev. (10) nu nam-ma mi-ia-ni-i=š-ši pa-x[ ... ] (11) [ $\left.\ldots{ }^{\mathrm{NA}_{4}} \mathrm{G}\right] \mathrm{UG}$ an-da-an hu-iz-za-ǎ̌-ta-ti, which he translates as 'Darauf an seinem $m$. ...., drinnen [aber?] hat sich r[otes Gl]as gebildet' with the suggestion that miiani here might mean 'on the surface'. CHD (L-N: 234), however, cites this form as a separate noun miidanišsi of which the meaning cannot be determined.
Formally, the word seems to show $a$-stem as well as $i$-stem forms (gen.sg. $m \bar{e}(i) a n a s ̌$ vs. $m \bar{e}(i)$ aniiacšs). The $i$-stem forms are only found in the expression uitti
meianiiiaš, which is likely a secondary formation on the basis of the petrified expression uitti mée(i)ani, the loc.sg. of the stem me(i)an-.
Because of the alternation between $m \bar{e}(i) a n$ - and $m \bar{e}(i) e n$ - (in me-i-e-ni, me-e-e$n i$ ), it is likely that we are dealing with an original $n$-stem (cf. also Oettinger 1982b: 173).
Etymologically, a connection with IE * meh $_{1^{-}}$'to measure' seems likely. This would mean that we have to reconstruct $*_{m e h_{l}-o n-, ~}^{*}$ meh $_{l}$-en-. For the development of *meh -on- to Hitt. mē(i)an-, compare zēé(i)ari 'is cooking' < * tieh $_{l}$-o ( $\mathrm{see} z \bar{e}_{-}^{\text {a(ri) }} / z$-).

The connection with mēni- 'face' (first suggested by Götze 1950 and repeated by e.g. Puhvel HED 6: 112f.) does not seem attractive to me, because mēni (q.v.) does not behave as an $n$-stem noun.
CHD (l.c.) cites under this lemma also the instances of MUŠEN ${ }^{\text {HI.A }}$ meiannašašši, for which no translation is offered. Tischler (l.c.) rightly remarks: "hier läßt die Doppelschreibung des Nasals (die sich bei den temporalen Belegen nicht findet) vermuten, daß es sich um ein anderes Wort handelt, wobei miyatar 'Wohlergehen' auch semantisch -- im Omen! -- passend erscheint". I therefore treat this word separately, q.v.
meinannašašši '?’: me-ía-an-na-ša-aš-ši.
See CHD L-N: 232 for attestations. The word occurs in the expression
 aš-ši (10) I-NA URU Hat-ti ta-ru-up-pa-an-ta-ru 'the m.-birds gather in Hattuša'. CHD interprets meiannašašši as belonging to the paradigm of $m \bar{e}(i) a n-\quad$ 'range, extent' (q.v.), apparently analysing the form as meiannaš=a=šši. This interpretation is unlikely, however, as this word occurs in NH texts only, and the occurrence of non-geminating $=a$ 'but' is unlikely in NH. Moreover, the frequent geminate spelling of $-n n$ - contrasts with the predominantly single spelling $-n$ - in the oblique cases of $m \bar{e}(i) a n-\left(\right.$ meinanaš, meiani). The one attestation MUŠEN ${ }^{\text {HIIA }}$ $m i-i, i a-n a-a \check{s}-s ̌ i(K U B 18.12$ obv. 3), which is conveniently cited first in CHD, seems to be more apt to an interpretation miianaš=ši, i.e. the gen.sg. of meianfollowed by the particle = $\check{s} s i$ 'for him', but the many other spellings meiannašašši in my view preclude this. Tischler (HEG L/M: 175), especially on the basis of the geminate spelling -nn-, rather suggests a connection with miiatar 'prosperity', but this is denied by CHD on the basis of the spellings with me-. Moreover, the problem of the non-geminating $=a$ remains. Further unknown.
$\boldsymbol{m e}(i) u$ - / meiaul- (adj.) 'four': nom.pl.c. mi-e-ua-aš (OH/NS), mi-e-íia-ua-aš (OH or MH/NS), acc.pl.c. mi-e-ú-uš (OH or MH/NS), 4-uš (OS), 4-aš, gen.pl. mi-i-ú-una<-aš〉 (OH/NS), dat.-loc.pl. mi-ú-ua-aš (MH/MS?), 4-ta-aš (OH/NS), inst. 4-it, uncl. me-u-ua-aš.
Derivatives: miuuaniiant-, mūuaniiant- (adj.) 'running in teams of fours(?)' (nom.pl. mi-u-una-ni-ia-an-ti-š(-) (MS?), mu-u-ua-ni[-ia-an-te-eš]).

Anat. cognates: CLuw. māuйa- 'four' (abl.-inst. ma-a-u-ua-a-ti, ma-a-u-ua-ti), maưalla/i- (adj.?) 'four-span(?)' (acc.sg. ma-u_a-al-li-in), māuúallašša/i- (adj.) 'of a four-span' (nom.-acc.pl.n. ma-a-ú?-[u]a-al-la-aš-ša), māuuani(iia)- 'to hitch as a four-span' (3pl.pret.act. ma-a-u-una-ni-in-ta); HLuw. *miwa-' (adj.) 'four' (nom.-acc.pl.c. "4"-wa/i-zi (ARSLANTAŞ §6), 4-zi (ASSUR letter a §10, c §9, $f+g \S 28)$ ); Lyc. mupm̃m- ‘fourfold?’(dat.-loc.pl. тир $\tilde{m} m e$ ).

PIE *méh ${ }_{l}-u$-, *méh $h_{l}$-eu- ?
See CDH L-N: 308f. for attestations. Because of nom.pl.c. meiauaš, we seem to be dealing with an $u$-stem adjective *mein- / meiau-. In CLuwian, we do not find evidence for a -i-, but perhaps māua- reflects *méiuo-. In HLuwian, the word is not attested in a phonetic spelling. Because of the fact that the HLuwian sign MI (IIII, $\backslash / /$ ) is made up of four strokes, we may have to assume that the word for 'four' actually was *miua-. On the basis of these forms, we must reconstruct a PAnat. *mei-(e) $u$ - or *me?-(e) $u$ - (if the -i- in Hitt. meiauaš can be regarded as a hiatus-filler for /méqauas/, cf. me(i)an- < *meh $h_{l}$-on-).
Further etymologizing has proven to be difficult. It has been argued that *meiumust belong to a root *mei- 'to diminish' (because 'four' is five minus one), but this root possibly is *meih2- (cf. at mēhur / mēhun-). If PAnat. *me?-(e)u- is a correct reconstruction, we could also assume connection with the root $*$ meh $_{l^{-}}$'to measure' (cf. Kimball's reconstruction (1999: 233) *meh $h_{1} i-u$ - $)$. At this point, too much is unclear to make any firm conclusions, however.
mekk-, mekki- / mekkai- (adj.) 'much, many, numerous': nom.sg.c. me-ek-ki-iš (MH/MS), acc.sg.c. me-e-ek-kán (OS), nom.-acc.sg.n. [m]e-e-ek (OS), me-ek-ki (OS), abl. me-ek-ka-i $a-a z(\mathrm{NH})$, nom.pl.c. me-e-ekr-ke-e-eš (OS), me-ek-ke-eš ( $\mathrm{OH} / \mathrm{NS}$ ), me-ek-ke-e-eš, me-ek-<ke->eš (KUB 42.29 ii 5 (NS)), me-eg-ga-eš $(\mathrm{OH} / \mathrm{NS})$, me-ek-ka - -e-ě̌ (NH), me-ek-ka $a_{4}-u s ̌(\mathrm{NH})$, ma-ek-ka ${ }_{4}$-uš (NH), acc.pl.c. $m e-e k-k u-u s ̌(\mathrm{OS}), m e-e k-k a_{4}-a-u s ̌(\mathrm{MH} / \mathrm{NS})$, me-ek-ka ${ }_{4}-u s ̌(\mathrm{NH})$, nom.-acc.pl.n. me-eg-ga-ía $(\mathrm{NH})$; case? me-ek-ka-i $a-a \check{s}(\mathrm{NH})$.

Derivatives: mekkaiaz (adv.) 'on many occasions, often' (me-ek-ka $a_{4}$-ia-az (NH)), mekki (adv.) 'greatly, much. in large numbers, very' (me-ek-ki-i (1x, OS), me-ek-ki), see makkēšš- ${ }^{z i}$, maknu- ${ }^{z i}$.

Anat. cognates: CLuw. maina- (adj.) 'much, many (??)' (nom.sg.c. ma-ía-aš (?), gen.adj. $m a-i-1 a-a \check{s}-s \check{a} / i-(?))$.
IE cognates: Gr. $\mu \varepsilon ́ \gamma \alpha-$, Skt. máhi, Arm. mec', Lat. magnus, Goth. mikils 'big'.
PIE * meǵ $h_{2^{-}},{ }^{*}$ meǵ $h_{2}-(e) i-$
See CHD L-N: 245 for attestations. We are dealing with two stems, mekk- (in acc.sg.c. $m \bar{e} k k a n$, nom.-acc.sg. $m \bar{e} k$, nom.pl.c. $m \bar{e} k k \bar{e} s ̌$ and acc.pl.c. $m e k k u s ̌)$ and mekki- / mekkai- (nom.sg.c. mekkiš, nom.-acc.sg.n. mekki, abl. mekkaiaz, nom.pl.c. mekkaeš, acc.pl.c. mekkauš and nom.-acc.pl.n. meggaina). The forms that display the stem mekk- are only found in OH texts, whereas the bulk of the attestations of mekki- / mekkai- occur in NH texts (but note nom.-acc.sg.n. mekki (OS) and nom.pl.c. mekkaēš (OH/NS)). The two attestations with single $-k$ - are spelled with the unusual 'broken' spelling (me-e-ek-e-eš and me-ek-eš), and therefore are likely to be emended to me-e-ekr-ker-e-eš and me-ekk-ker-eš.
The connection with PIE $* m e g h_{2}$ - is generally accepted. This means that nom.acc.sg.n. $m \bar{e} k$ is to be equated with Gr. $\mu \varepsilon ́ \gamma \alpha$ and Skt. $m a ́ h i<{ }^{*} m e ́ g h_{2}$ (so *-Ch $h_{2} \#$ $-C)$. In the inflected forms, e.g. acc.pl.c. mekkuš < *meǵ $h_{2}-m s$, the sequence *-ǵ $h_{2}$ - yields /k/.
The derivatives makkē̌̌š- ${ }^{z i}$ 'to become numerous' and maknu- ${ }^{z i}$ 'to multiply' (see at their respective lemma) reflect the zero-grade of the root, ${ }^{*} m g h_{2}-$.
The interpretation of the stem maia- is strongly debated. E.g. Starke (1990: 506, followed by Puhvel HED 6: 123)) assumes that this stem is Luwian (because of gen.adj. maiašša/i-), translates it as 'much, many' or substantivized 'multitude' and subsequently proposes that it is the CLuwian reflex of *még $h_{2}$-ei-. Melchert (1993b: 145), on the other hand, states that this stem must be interpreted as a Hittite stem that belongs with mai- ${ }^{i} / m i-$ 'to grow' and ${ }^{(L U)}$ maiant- 'adult' and therefore means 'young adult'.
Note that the one form "ma-ik-ka $4_{4}$-us" in KUB 26.1 iii 58, which is often seen as showing a 'reverse' or 'hypercorrect' spelling of -e- as -ai-, in fact should be read $k u$ - $i k-k a_{4}-u s ̌$ and therewith can only be regarded as a (rather big) scribal error for expected me-ek-ka $a_{4}$ uš and not as a hypercorrect form (see at hai(n) $k^{\text {tla(ri) }}$ for the consequences of this improved reading).
melteššar: derivative of māld- ${ }^{i} /$ mald- (q.v.)
memma- ${ }^{i}$ / memm-: see mimma- $^{i} /$ mimm-
$\boldsymbol{m e} \boldsymbol{m a} \boldsymbol{-}^{\boldsymbol{i}} / \boldsymbol{m} \overline{\boldsymbol{e}} \boldsymbol{m i} \mathbf{-}$ (IIa5 > Ic1, IIa1 $\gamma$ ) 'to speak, to recite, to tell' (Sum. DU ${ }_{11}$ ): 1sg.pres.act. me-e-ma-ah-hé (OS), me-e-ma-ah-hi (OS), me-ma-ah-hi (OH/NS), 2sg.pres.act. me-e-ma-at-ti (NH), me-ma-at-ti (NH), me-ma-ti (NH), me-em-ma-at-ti (1x, NH), 3sg.pres.act. me-e-ma-i (OS), me-e-ma-a-i (1x, OS), me-ma-i (OS), me-ma-a-i (OH?/NS), me-em!-ma-i (1x, NS), 1pl.pres.act. me-mi-u-e-ni (MH/NS), me-ma-u-e-ni (NH), me-mi-ịa-u-e-ni, 2pl.pres.act. me-mi-iš-te-ni (MH/MS), me-ma-at-te-ni (MH/MS or NS), me-ma-te-ni (NH), 3pl.pres.act. me-mi-an-zi (MH/MS), me-mi-ia-an-zi (MH/NS), me-ma-an-zi (MH/NS), 1sg.pret.act. me-ma-ah-hu-un (OH/NS, MH/MS), 2sg.pret.act. me-mi-iš-ta (NH), 3sg.pret.act. me-e-mi-iš-ta (MH/MS), me-mi-iš-ta (OH/MS), me-mi-eš-ta ( $\mathrm{OH} / \mathrm{NS}$ ), me-ma-aš (NS), 1pl.pret.act. me-ma-u-in (NH), me-mi-ĭa-u-en, 2pl.pret.act. me-mi-iš-tén (NH), 3pl.pret.act. me-e-mi-er (OS), me-mi-er ( $\mathrm{OH} / \mathrm{NS}$ ), me-mi-e-er (NH), me-em-mi-er (1x, OH/NS), 1sg.imp.act. me-ma-al-lu (NH), 2g.imp.act. me-e-m[i] (OH/MS), me-mi (OH/NS), me-ma (NH), 3sg.imp.act. me-e-ma-a-ú (MH/MS), me-e-ma-ú (OH/MS), me-ma-a-ú (OH or MH/NS), me-ma-ú (MH/NS), me-ma-at-tu $u_{4}, 2 \mathrm{pl} . i m p . a c t . ~ m e-m i-i s ̌-t e ́ n ~(M H / M S), ~ m e-m i-i s ̌-t e[-e n] ~$ (MH/MS), me-mi-eš-tén (OH or MH/NS), 3pl.imp.act. me-ma-an-du (KUB 14.3 i 67); 1sg.pret.midd. me-mi-ia-ah-ha-at (NH); part. me-mi-an-t- (MH/MS), me-mi-ia-an-t- (NH), me-ma-an-t- (NS); inf.I me-mi-ú-ua-an-zi (MH/MS), me-mi-ia-u$a n-z i$ (MH/MS), me-mi-i_ia-u-ua-an-zi (MH/NS), тe-em-ma-u-ua-an[-zi] (NH); verb.noun me-mi-ia-u-ua-ar, me-eт-ти-u-ua-ar; iter, me-e-mi-iš-ke/a- (OS), me-mi-iš-ke/a- (OH/MS), me-mi-ě̌-ke/a- (NS).
Derivatives: mem(iii)anu- ${ }^{z i}$ (Ib2) 'to have (someone) say, to recite, to make (someone) talk' (3sg.pres.act. me-mi-ia-nu-uz-zi (NS), 2pl.pret.act. me-ma-nu-ut-te-en ( $\mathrm{OH} / \mathrm{MS}$ ), impf.2sg.pret.act. mi-e-ma-nu-uš-ga'-ši (OH/NS)).

PIE *mé- $h_{1} m$-oi-ei $/$ *mé- $h_{1} m$-i-enti ?? or *mé-moi-ei $/ *$ mé-mi-enti ??
See CHD L-N: 254 for attestations. The oldest forms show a paradigm mēmahhe, mēmatti, mēmai, memiueni, memišteni, memianzi. Although these forms seems to display a distribution between $m \bar{e}$ - in the singular and $m \breve{e}$ - in the plural, this is a coincidental and due to the late attestation of the plural forms. For $m \bar{e}-$ in nonsingular forms, compare 3pl.pret.act. me-e-mi-er (OS) and impf. me-e-mi-iš-ke/a(OS). An alternation between a stem in $-a$ - in the singular and $-i$ - in the plural is prototypical of the méma/i-class. In younger Hittite (from the late MH period onwards) we see that the stem mema- is spreading throughout the paradigm, yielding $\operatorname{tarn}(a)$-class inflected forms like memaueni, mematteni and part.
memant-. On the other hand, we also see the occasional spreading of the stem memiie/a- (memiiaueni, memiiahhat, memiiauanzi), probably on the basis of 3pl.pres.act. memiianzi.
As I have argued in the treatment of the $m \bar{e} m a / i$-class in $\S 2.2 .2 .2$.h., this class contains original polysyllabic dāi/tiizanzi-class verbs, which are being influenced by the $\operatorname{tarn}(a)$-class from pre-Hittite times onwards. In the case of $m \bar{m} a / i$-, this means that the original paradigm must have been *mēmehhi, *mémaitti, mēmai, *mēmiüeni, *mēmišteni, *mēmianzi. This clearly has to be analysed as a reduplicated formation $m \bar{e}-m(a) i$-.
As I have explained in Kloekhorst fthc.a, most dāi/tiiianzi-class verbs reflect a structure ${ }^{* C C}$-oi- $/ * C C-i$-, i.e. the zero grade of a verbal root extended by an ablauting suffix ${ }^{*}$-oi-/-i-. If we apply this structure to $\bar{m} \bar{m} a / i-$, it would mean that we have to analyse it as $m \bar{e}-m$-(a) $i-: m \bar{e}$ - is the reduplication syllable, $-(a) i$ - is the reflex of the suffix *-(o) $i$ - and $-m$ - is the only remnant of the basic verbal root. At first sight, this situation seems comparable to $m a i^{-} / m i$ - 'to grow' in which $m$ - is the only remnant of the zerograde of a root ${ }^{*} m e h_{2}-$. Nevertheless, if we would assume that in $m \bar{e}-m-(a) i-,-m$ - is the zerograde of a root $* m e H$-, we would expect that in a formation $*$ mé-mH-oi-, the result of $*-m H$ - would have been geminate -mm- (cf. mimmanzi 'they deny' < *mi-mh $l_{1-e ́ n t i, ~ z i n n a n z i ~ ' t h e y ~ f i n i s h ' ~<~ * t i n h ~}^{l^{-}}$ énti, etc.). If we compare the situation of $z a i^{-} / z i-$ 'to cross', however, in which $z$ from assibilated $* t$ - is the only remnant of the zerograde of the root $* h_{l} e t$-, we could also assume a root *Hem- and a reconstruction *mé-Hm-(o)i-. Since * $h_{2}$ and $* h_{3}$ both would have coloured the $-e$ - to $-a$-, the only possibility is $* h_{1} e m$ here. In my view, a cluster $* h_{l} m$ - would after an accentuated vowel not yield a geminate -mm- (compare dānit- 'stele' < *d'óh $h_{1}-n i-d-$ - zēna- 'autumn' < *tiéh $l^{-}$ no- and zēri- 'cup' < *tiéh $h_{1}$ ri-). So, if mēma/i- reflects a structure *mé-m-(a)i-, the only possible reconstruction is $m e ́-h_{l} m-(o) i-$, from a root $* h_{l} e m-$. The only PIE root $* h_{l} e m$ - that I am aware of, is 'to take' (Lat. emō, Lith. imù, 'to take'). Although this semantically is a possibility ('to take (the word)' $>$ to speak'), it is not self-evident.

Another possibility is to assume that mema/i- is not an *-oi-/-i-suffixed verb, but just reflects a root *mei- or *meiH- (as nai- ${ }^{i} /{ }^{*} n i$ - 'to turn' < *nóiH-ei/*niHénti). In that case, we can either reconstruct *mé-moi-ei or *mé-moiH-ei. Formally, we could then think of *mei- 'to establish' (Skt. minóti 'to establish'). Semantically, this may be possible ('to establish' > 'to state' > 'to speak') but is not evident either.
All in all, on formal grounds the verb méma- ${ }^{i} / m \bar{e} m i-$, which must go back to an

root *h_em-, or *mé-moi-ei / *mé-mi-enti from a root *mei-. Semantically, neither possibilities are self-evident, however.
Etymologies that have been proposed in the past are all formally impossible. E.g. Sturtevant (1930a: 32f.) suggested a tie-in with PIE * men-, but a preform *me-mn- should have yielded Hitt. -mm- and does not explain the original dāi/tiiianzi-inflection. Hrozný (1915: $37^{2}$ ) connected mēma/i- with Skt. māa-/mī'to bellow' and OCS mbmati 'to stammer'. This latter verb likely is onomatopoetic, but the Sanskrit verb reflects a root ${ }^{*} m e H(i)-$. As we saw above, a reconstruction $* m e-m H-o i-/ * m e-m H-i$ - would also yield a geminate $-m m$ - in Hittite, which makes this reconstruction formally impossible.
$\boldsymbol{m e ̄} m a l l-$ (n.) 'coarsely ground meal': nom.-acc.sg. me-e-ma-al (OS), me-ma-al (OS), me-em-ma-al (NH), gen.sg. me-ma-al-la-aš (MH?/NS), me-ma-la-aš ( $\mathrm{OH} / \mathrm{NS}$ ), me-em-ma-la-aš, instr. me-ma-al-li-it ( OH ?/NS), me-ma-li-it.

PIE * mé-molh $2^{-}$-
See CHD L-N: 265 for attestations. This word has already since Hrozný (1920: $47^{1}$ ) been connected with malla- ${ }^{i} /$ mall- 'to mill, to grind' (q.v. for further etymology). We therefore have to reconstruct * mé- $_{\text {molh }}^{2}$, in which the $-h_{2}$ was lost after consonant (cf. mēk<még' $h_{2}$ ). The oblique cases show forms with single and with geminate - $l l-$. It is difficult to decide which spelling is more original, but we have to reckon with the possibility that geminate $-l l-$ reflects $*-l h_{2^{-}}$in e.g. gen.sg. *me-molh ${ }_{2}$-os.
memiian- (c.) 'word(s), speech, talk, message; deed; matter, subject' (Sum. INIM, Akk. $A U \bar{A} T U$ ): nom.sg. me-mi-aš (MH/MS), me-mi-ia-aš (NH), me-mi-i$i a-a \check{s}(\mathrm{NH})$, acc.sg. me-mi-an (MH/MS, OH/NS), me-mi-ia-an (MH/MS), gen.sg. me-mi-i ia-na-aš (NH), dat.-loc.sg. me-mi-e-ni ( $\mathrm{OH} / \mathrm{NS}$ ), me-mi-ni $(\mathrm{NH})$, me-mi$\underset{\sim}{a} a-n i(\mathrm{NH})$, me-mi-ia-an-ni (NH), abl. me-mi-ia-na-az (NH), me-mi-ía-an-na-az ( NH ), me-mi-na-za (NH), me-mi-az (NH), instr. me-mi-ni-it (NS), me-mi-ia-ni-it (NH), nom.pl. $A[U A T] E^{\mathrm{MEŠ}}$, acc.pl. me-mi-ia-nu-š=a (MH/MS), me-mi-ia-nu-uš (MH/MS), me-mi-į् a-ni-eš (MH/MS), me-mi-ia-aš (NH), gen.pl. me-mi-ia-na-aš (NH), me-mi-ía-an-na-aš (OH/NS).

PIE *mé-mi-on- or *mé- $h_{1} m-i$-on-
See CHD L-N: 268 for attestations. The acc.sg. memi(i)an occurs both with neuter and with commune concord, but CHD (1.c.) and Tischler (HEG L/M: 192f.) convincingly argue that this form must have been commune originally, and
that the cases with neuter concord are erratic. This coincodes with the MH/MS attestations of commune nom.sg. memiaš and acc.pl. memiïanuš. Tischler further argues that nom.sg.c. memiaš and acc.sg.c. memi(i)an point to an $a$-stem memiia-, but this is contradicted by the oblique cases that in the older texts all show $n$-stem forms: memiiian-. Nevertheless, we would expect that the acc.sg. of an $n$-stem would have been **memiiianan. Puhvel (HED 6: 145) therefore argues that we are dealing with a heteroclitic paradigm: a stem memiia- in nom. and acc. besides a stem memiian- in the oblique cases. This is not very convincing, however. It is best to assume that this word originally was an $n$-stem, but that on the basis of nom.sg. memiïaš < *mé-mi-ōn-s, a secondarily created acc.sg. memiian supplanted unattested *memiianan in MH times already.
The word is clearly derived from the verb méma- ${ }^{i}$ / mémi- 'to speak' and is an important argument for the view that $m \bar{e} m a / i$ - is a rebuilding of an original *memai- ${ }^{i} / m \bar{m} m i-$. This means that the $-i$ - is inherent to the stem, and not part of the suffix (as e.g. Tischler argues: he analyses the word as a stem mem- plus a -ien-/-ion-suffix). We therefore have to reconstruct *mé-mi-on-. The fact that the first $-e$ - is never spelled plene (unlike in $m \bar{e} m a-^{i} / m \bar{e} m i-$ ) is due to the fact that it is not attested in OS text: plene spellings are diminishing from MH times onwards. See at $m \bar{e} m a a^{i} / m \bar{e} m i-$ for further etymology.

## mēna-: see mēni-

mēnahhanda (adv. or postpos.) 'against, before, facing, opposite, in regard to': me-e-na-ah-ha-an-ta (OS), me-e-na-ah-ha-an-da (OS), me-na-ah-hha-an-da (OS), me-na-ha-an-da (1x, OS), IGI-an-da (NS).

See CHD L-N: 274f. for attestations and semantics. Despite the fact that at first sight we are tempted to assume an etymological connection with mähhan and māhhanda (q.v.), which reflect *món $+* h_{2}$ ent-, it is difficult to interpret the element mēna- as belonging to a pronominal stem *mo-. It is therefore better to assume that mēnahhanda is an old compound of mēna- 'face' + hant- 'face, forehead'. See there for further etymology.
$\boldsymbol{m e} \overline{n i}-(\mathrm{n}),. \boldsymbol{m e} \boldsymbol{n} \boldsymbol{a}-(\mathrm{n} .>\mathrm{c}$.$) 'face, cheek': nom.-acc.sg.n. me-e-ni-i=m-mi-it (OS),$ $m e-e-n i-e=\check{s}$-mi-it ( $\mathrm{OH} / \mathrm{NS})$, me-ne- $i=\check{s}$-ši-it ( $\mathrm{OH} / \mathrm{NS})$, me-e-na- $a=\check{s}$-še-et ( $\mathrm{OH} / \mathrm{NS}$ ), loc.sg. mi-e-ni ( $\mathrm{OH} / \mathrm{NS}$ ), acc.pl.c. me-nu-uš ( $\mathrm{OH} / \mathrm{NS}$ ).
Derivatives: mēnahhanda (q.v.)
PIE *mén-i $h_{1}$, *mén-eh ${ }_{2}$

See CHD L-N: 289 for attestations. There, an acc.pl. miniūš (KUB 52.52 rev. 7) is cited as well, but according to Rieken (1999a: 56) this word is to be read as ]x$m i-n i-u-u s ̌$, and therefore does not belong to mēni/a-. Rieken (1999a: 56f.) argues that nom.-acc.sg. mēni reflects the old dual-ending *-ih (cf. elzi-), whereas nom.acc.sg. mēna reflects the collective-ending *-eh 2 . Etymologically, she connects the word with CLuw. manā- 'to see' (q.v.), ultimately from the root *men- 'to think'. Melchert (1984a: $88^{17}$ ) rather suggests a connection with Lat. mentum 'chin', reconstructing a root *men- 'to stick out, to pertrude'.
${ }^{\text {Lút }}$ meneina- (c.) a cult functionary using a bow and arrows: nom.sg. me-ne-ía-aš (OS), me-e-ni-aš (OS), me-e-ni-i[a-aš] (MS), mi-ni-ia-aš (MH/NS), acc.sg. me-ne-an (OS), mi-ni-ia-an (OH/NS), gen.sg.(?) me-ne-ía- $\check{s}=a(\mathrm{OS})$.

See CHD L-N: 290 for attestation and the suggestion that ${ }^{\text {LÚ }}$ meneia- possibly denotes a hunter. Often, the word is cited meniia-, but the oldest attestations show that originally it must have been meneia-. The formal interpretation of the word is difficult. It has often been proposed that this word is connected with mēni-, mēna'face' (q.v.). For instance, Watkins (1986: 56) translates "'face'-man", CHD suggests "he of the face", whereas Tischler (HEG L/M: 198) proposes an original meaning 'masked', which perhaps could fit a meaning 'hunter'. If this were correct, I would not understand, however, how the second $e$ of meneia- has come about (note that the most OS spellings clearly show that the word is meneia-, which later on became meniia-). I am therefore sceptical about the etymological connections with mēni-, mēna- 'face'. As long as the precise function of ${ }^{\text {LÚ }}$ meneia- is unclear, it is nothing more than a possibility.
$\boldsymbol{m e r} \boldsymbol{-}^{\boldsymbol{i}}$ / mar- (Ia3) 'to disappear, to vanish': 3sg.pres.act. me-er-zi (MH/MS), mi-ir-zi (MH/MS), 2sg.pret.act. me-er-ta ( $\mathrm{OH} / \mathrm{MS}$ ), 3sg.pret.act. me-er-ta $(\mathrm{OH} / \mathrm{NS})$, 3pl.pret.act. me-re-er (OS), 3sg.imp.act. me-er-du (OH/NS, MH/MS), [me-]e?-er$d u(\mathrm{OH} / \mathrm{NS})$, me-e-er-tu $(\mathrm{OH} / \mathrm{NS}), 3 \mathrm{pl} . \mathrm{imp} . \mathrm{act}$. ma-ra-an-du (424/z, 5, 7 (NS)); 3sg.pres.midd. mar-ta-ri (NH), mar-ta (NS), 3sg.pret.midd. me-er-ta-at (NH), 3sg.imp.midd. me-er-t $[a-r u]$ (MH/NS), 3pl.imp.midd. me-er-ra-a-an-ta-ru ( $\mathrm{OH} / \mathrm{NS}$ ), me-er-ra-an-t[a-ru] (OH/NS); part. me-er-ra-an-t- (MH/NS).

Derivatives: marnuuala- (adj.) 'invisible(?)' (acc.sg.c. mar-nu-ua-la-an (OH/NS)), marnu- ${ }^{-3}$, mernu- ${ }^{-{ }^{i}}$ (Ib2) 'to cause to disappear, to dissolve' (2sg.pres.act. [m]ar-nu-ši (NS), 1sg.pret.act. me-er-nuィ-nuヶ-un, 3sg.imp.act(?) me-er-n[u-ud-du?]; part. mi-ir-nu-ua-an-t-).

Anat. cognates: HLuw. ?marnuwa- 'to make disappear' (see discussion).
IE cognates: Skt. ámrta 'he died’, mriyate 'he dies', Gr. है $\mu \mathrm{\rho} \tau \varepsilon v$ • à $\pi \varepsilon \in \theta a v \varepsilon v$ 'he died' (Hes.), Arm. mē̄aw 'he died', OCS mrěti 'to die', Lat. morior 'to die'.

PIE *mér-t / *mr-ént
See CHD L-N: 295 and Puhvel HED 6: 148f. for attestations. In the oldest texts we find only active forms that show an ablauting mi-inflecting stem $m e r-{ }_{-}^{z i} / m a r-$ (e.g. merer vs. marandu), which denotes 'to disappear, to vanish'. Middle forms are found in NS texts only and have the same meaning. Also in NS texts we find some forms that display a geminate -rr- (cf. § 1.4.6.2.b).
Since Sturtevant (1933: 135), mer- $^{z i} /$ mar- is generally connected with PIE *mer- which is usually glossed 'to die'. In my view, however, the Hittite meaning 'to disappear' must have been the original meaning, whereas the meaning 'to die' as found in the other IE languages only developed after the splitting off of Anatolian. It is likely that *mer- 'to disappear' was an euphemistic term for dying at first (cf. ModEng. euphemistic to pass away, to be gone vs. realistic to die), which later on took over the place of the original PIE word for 'to die', which is possibly reflected in Hitt. $\bar{a} k-{ }^{i} / a k k$ - 'to die' (which is unfortunately unattested in the other IE languages). Because of the fact that in Sanskrit mar- is a root-aorist, I reconstruct an aorist *mér-t / *mr-ént.
In HLuwian, the exact reading of the verb DELERE-nuua- 'to cause to disappear, to destroy' is not known. In the fragment KARKAMIŠ A28g 1. 2, we find [ ... ] ${ }^{\text {DELERE }} p\left[\dot{a}^{?}\right]+r a / i-n u-w[a / i-\ldots$ ] (cf. Hawkins 2000: 216), which might be a full phonetic spelling. The exact reading of the sign pá is debated, however, and Melchert (1988c: 34ff.) argues that the sign should be read $m a_{x}$. If so, then we would have to read [ ... $]^{\text {DELERE }} m\left[a_{x}\right]+r a / i-n u-w[a / i-\ldots]$, which would make it possible to assume that the HLuwian verb DELERE-nuwa- actually was marnuwa- and has to be identified with Hitt. marnu- ${ }^{z i}$ 'to make disappear' (cf. the discussion in Hawkins 2000: 154).

```
-mi(1sg.pres.act.-ending of the \(m i\)-flection)
    IE cognates: Skt. \(-m i\), Gr. \(-\mu\), Lith. \(-m i\), OCS \(-m b\), Goth. \(-m\), Lat. \(-m\).
        PIE *-mi
```

This ending is used as the 1 sg.pres.act.-ending of mi-verbs (which are named after it), and therewith semantically equal to its corresponding hi-conjugation ending -hhi. In the course of the Hittite period, the ending -mi is gradually replacing -hhi (see there for examples). I know of only one alleged form in which
an original mi-conjugating verb would show the hi-ending -hhi, namely "pár-ku$n u$-uh-hi" (708/z obv. 12) as cited by Neu (1967: 165). As long as this tablet is unpublished, I would remain quite sceptical regarding this reading and interpretation (Neu calls the context "bruchstückhaft" so perhaps we are in fact dealing with 3pl.pret.act. pár-ku-nu-uh-he[-er]).
Etymologically, -mi goes back to two endings. On the one hand, it directly reflects the PIE athematic primary 1sg.-ending *-mi used in PIE root-presents ( $\sim$ Skt. $-m i$, Gr. $-\mu$, Lith. $-m i$ ). On the other hand, it reflects the PIE athematic secondary ending *-m used in PIE root-aorists ( $\sim$ Skt. -(a)m, Gr. $-\alpha,-v$ ) extended with the 'presentic' $-i$.
$=\boldsymbol{m i} \boldsymbol{-} /=\boldsymbol{m a} \boldsymbol{-} /=\boldsymbol{m e}$ - (encl.poss.pron. 1sg.) 'my': nom.sg.c. $=m i-i s ̌$ (often), =mi-eš $(1 \mathrm{x}, \mathrm{NS}),=m e-i s ̌(1 \mathrm{x}, \mathrm{NS})$, voc.sg. $=m i(\mathrm{OH} / \mathrm{NS}),=m e(\mathrm{NS}),=m e-e t(\mathrm{OH} / \mathrm{NS})$, $=m i-i t(\mathrm{MH} / \mathrm{NS})$, acc.sg.c. $=m a-a n(\mathrm{OS}),=m i-i n(\mathrm{MH} / \mathrm{MS})$, nom.-acc.sg.n. $=m e-$ et $(\mathrm{OS}),=m i-i t(\mathrm{OH} / \mathrm{MS})$, gen.sg. $=m a-a s ̌(\mathrm{OS})$, dat.-loc.sg. $=m i(\mathrm{OS}), k a t-t i=m-$ $m i(\mathrm{OS}),=m i-i t(\mathrm{OH} / \mathrm{NS})$, all.sg. $=m a$, pár-na=m-ma $(\mathrm{OH} / \mathrm{NS})$, abl./instr. $=m i-$ it $(\mathrm{OH} / \mathrm{NS})$, nom.pl.c. $=m i-i s ̌(\mathrm{OH} / \mathrm{NS})$, acc.pl.c. $=m u-u s ̌(\mathrm{OH} / \mathrm{NS}, \mathrm{MH} / \mathrm{MS})$, nom.acc.pl.n. $=m e-e t(\mathrm{OH} / \mathrm{NS})$, $=m i-i t(\mathrm{OH} / \mathrm{NS})$, gen.pl. $=m a-a n(\mathrm{OH} / \mathrm{NS})$.

PIE * $=m i-, *=m o-, *=m e-$
See CHD L-N: 215f. for attestations. The original paradigm of this enclitic is nom.sg.c. $=m i \check{s}, \operatorname{acc} . s g . c .=m a n$, nom.-acc.sg.n. $=m e t$, gen.sg. $=m a \check{s}$, dat.-loc.sg. $=m i$, all.sg. $=m a$, abl./instr. $=m i t$, nom.pl.c. $*=m e \check{s}$, acc.pl.c. $=m u s ̌$, nom. acc.pl.n. $=m e t$, gen.pl. =man. For the original distinction between nom.acc.sg./pl.n. $=$ met vs. abl./instr. $=$ mit see Melchert (1984a: 122-6). This means that we are dealing with an ablauting stem $=m i-/=m a-/=m e-$. This vocalization can hardly reflect anything else than PIE $*_{-i-}, *_{-o}$ - and $*_{-e-}$, but an exact explanation for the distribution of these vowels is still lacking (cf. also $=t t i-/$ =tta- / =tte- 'your (sg.)', = šši- / =šša- / =šš̌e = 'his, her, its', =šummi- / =šumma/ =šumme- 'our' and =šmi- / =šma- / =šme- 'your (pl.); their'). The - $m$ - is clearly identical to the $-m$ - found in $=m u$ '(to) me' (q.v.).
miiahu(ua)nt-: see mehuuant-
mienu- ${ }^{z i}$ (Ib2) '?': 3pl.pret.act. mi-e-nu-er (KBo 14.42 obv. 11 (NH)), mi-e-nu-u-e-er (KUB 19.22, 3 (NH)), 3sg.imp.act. mi-e-nu-ud-du (KUB 17.12 ii 14 (NS)).

Derivatives: mienu- (adj.) (nom.sg.c. mi-e-nu-uš (KUB 17.12 ii 12 (NS)), nom.acc.sg.n. mi-e-nu (KUB 17.12 ii 13 (NS)), acc.pl.c. mi-e-nu-uš (KBo 3.28, 16 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 31.136 ii 1 (NS)).

Often, these words are regarded as identical to minnu- ${ }^{z i}$ 'to soften' (see at $m \bar{l} u-$ ) (cf. CHD L-N: 242, Puhvel HED 6: 171). This is a bit awkward, as all attestations of which a meaning 'to soften' is clear are spelled mi-i-nu- and mi-nu-, but not **mi-e-nu-, whereas for all forms that are spelled mi-e-nu- a translation to soften' or 'soft' is not obligatory. For the forms mienuer and mienuuer cf. CHD L-N: 291, for mienuddu, mienuš and mienu cf. CHD L-N: 242. A nominal mienuis found in gen.sg. mi-e-nu-ua-aš (KUB 33.103 iii 7), but the connection with the verb mienu- ${ }^{z i}$ and the adj. mienu- is unclear. See Weitenberg (1984: 42f.) for an extensive treatment of the stem mienu- and his rejection of the identification with minnu-. Note however that according to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-n-$ as described in $\S 1.4 .8 .1$.d, the attestations mi-e-nu-formally could be regarded as the NH outcomes of original minnu- ${ }^{z i}$.
mihu(ua)nt-: see mehuuant-
milišku-: see mališku-
militt- / malitt- (n.) 'honey' (Sum. LÀL): nom.-acc.sg. mi-li-it (MH/NS), LÀL-it (OS), gen.sg. mi-li-it-ta-aš (617/p ii 14 (NS)), mi-l[i-i]t-ta-aš ((KUB 25.32 iii 37 + KUB 27.70 iii 3 (NS)), LÀL-aš, dat.-loc.sg. ma-li-it-ti (here?, Bo 3757 ii 5)), LÀL-ti (MH/MS), erg.sg.? LÀL-an-za, instr. LÀL-it (MH/NS).

Derivatives: $\boldsymbol{m i l i t}(\boldsymbol{t}) \overline{\operatorname{šscs}}{ }^{z i}$ (Ib2) 'to be sweet, to become sweet' (3sg.pret.act. me-li-te-iš-ta (NH), 2sg.imp.act. mi-li-it-e-eš, 3sg.imp.act. mi-li-te-e-eš-t[u] ( $\mathrm{OH} / \mathrm{MS}$ ), m[i-l]i-ti-eš-du, mi-li-ti-iš-du ( $\mathrm{OH} / \mathrm{MS}$ ), mi-li-it-ti-iš-du ( $\mathrm{OH} / \mathrm{MS})$ ), miliddu- / maliddu- (adj. / n.) 'sweet, pleasant; sweetness' (nom.sg.c. [mi-l]i-id$d u-u s ̌(\mathrm{OH} / \mathrm{NS})$, nom.-acc.sg.n. mi-li-id-du (OH/MS), ma-li-id-du (OH/MS)).

Anat. cognates: Pal. malitanna- (adj.) 'having honey' (nom.sg.c.' ma-li-ta-an$n a-a \check{s}) ;$ CLuw. mallit- (n.) 'honey' (nom.-acc.sg. ma-al-li, dat.-loc.sg. LÀL-i, abl-instr. ma-al-li-i-ta-a-ti, ma-al-li-ta-a-ti), mallitalla/i- ‘honey-jar(?)' (nom.pl. ma-al-li-ta-al-li-en-zi), mallitiualla/i- 'honey-coated (or sim.)' (Hitt. nom.sg.c. ma-al-li-ti-úa-al-la-aš), malliti(ia)- (adj.) 'honeyed' (nom.pl.c. ma-al-li-ti-in-zi); HLuw. malidima/i- (adj.) 'honey-sweet' (nom.sg.c. "PANIS" ma-li-r $\underline{i}+\underline{i}-m i-i-s a ́$ (MARAŞ 1 §1i)).

IE cognates: Gr. $\mu \varepsilon ́ \lambda \lambda$, $\mu \varepsilon ́ \lambda ı \tau o c ̧ ~ ' h o n e y ’, ~ G o t h . ~ m i l i p ~ ' h o n e y ’, ~ A l b . ~ m j a l t e ̈ ~$ 'honey', Lat. mel, mellis 'honey'.

PIE *mél-it / *ml-it-ós
See CHD L-N: 250f. and Starke 1990: 192 ${ }^{627 a}$ for attestations. In Hittite, we find a neuter stem militt-, which possibly shows an ablaut variant malitt- if the form ma-li-it-ti (Bo 3757 ii 5) is indeed to be interpreted as dat.-loc.sg. of militt-. Such an ablaut is also visible in the derivative milittu- / malittu- 'sweet(ness)'. The derivative $\operatorname{milit}(t) \bar{e} \bar{s}_{s} z^{z i}$ is predominantly spelled with single $-t-$, but once with $-t t-$ as well. In CLuwian, we find a stem mallit-, with geminate -ll- and single $-t$-, which corresponds to the rhotacized / $\mathrm{d} /$ that is attested in HLuwian malirima/i(for *malidima/i-) (cf. Starke 1990: 190-3 for a treatment of the Luwian material).
Already since Sturtevant $(1933,89)$ it has been clear that Hitt. militt- and Luw. mallit- must be cognate with Gr. $\mu \varepsilon ́ \lambda \iota, ~ \mu \varepsilon ́ \lambda ı \tau o c, ~ G o t h . ~ m i l i p, ~ e t c . ~ ' h o n e y, ~ w h i c h ~$ reflect *mélit-. In Luwian, this form underwent Čop's Law, which caused the geminate $-l l-$. The fact that $*-t->$ Luw. /-d-/ can be explained by the fact that in *mélitV, the *t stood between two unaccentuated vowels. In Hittite, the fact that we find forms with lenited $-t$ - as well as unlenited $-t t$ - implies that (in pre-Hittite times) an accentual movement was still present in this word, which is supported by the traces of ablaut. If we interpret the forms that are spelled ma-li-it-t- as $/ \mathrm{mlit}-/$ (for such a zero-grade compare Gr. $\beta \lambda i ́ \tau \tau \omega$ 'to gather honey' $\left.<{ }^{*} \mu \lambda \iota \tau-\mathrm{i} \omega\right)$, we have to reconstruct a paradigm *mélit, *mlitós, *mlit-éi. In Luwian, the fullgrade-form and its accentuation have spread throughout the paradigm, yielding gen.sg. *mélitos (cf. Gr. $\mu$ ह́خıтоৎ), in which the $-t$ - was lenited. Although in Hittite the fullgrade form eventually spread through the paradigm as well (but note that malitti could still reflect *mlit-éi directly), the unlenited -t- was in many cases restored.
The development of $*$ mélit $>$ milit is remarkable regarding the outcome $* i<* e ́$ (especially in view of melteššar $<*^{*}$ meld $^{h}-e ́ h_{1} s h_{1}-r$ ). In my view, it must be the result of some kind of $i$-umlaut (cf. zinnizzi 'finishes' < *tinéh $\left.h_{l} t i\right)$ (e.g. Melchert's account (1994a: 140) to explain the $-i$ - through analogical levelling ( ${ }^{*}$ mélit- > melit- in analogy to the adj. $*$ mlitu-) is unconvincing).

A further analysis of $*$ mélit $/ *$ mlitós is difficult. If we compare this word to šeppitt-, a kind of grain, it may be likely that we should analyse both as *mél-it / *ml-it-ós and *sép-it / *sp-it-ós respectively.
mimma- ${ }^{i} / \boldsymbol{m i m m}$ - (IIal $\gamma$ ) 'to refuse, to reject': 2 sg.pres.act. mi-<im->ma-at-ti (HKM 55 rev. 28 (MH/MS)), 3sg.pres.act. mi-im-ma-i (OS), me-em-ma-i (OH or

MH/NS), me-^em-»ma-i (OH/NS), 3pl.pres.act. mi-im-ma-an-zi (OS), me-em-ma$a n-z i(\mathrm{OH} / \mathrm{NS}), 1$ sg.pret.act. me-em-ma-ah-hu-un (NS), 3sg.pret.act. mi-im-ma-aš ( $\mathrm{OH} / \mathrm{MS}$ ), me-em-ma-aš (OH/NS), 1pl.pret.act. mi-im-mi-ú-en (MS), 3pl.pret.act. me-em-mi-er (NS), 3sg.imp.act. me-em-ma-ú (NH), 3pl.imp.act. mi-im-ma-an-du (NS); part. ?nom.-acc.sg.n. me-em-ma-an (NS); verb.noun mi-im-ma-a-u-ar (NS).
IE cognates: Gr. $\mu \eta$, Skt. $m \bar{a}$, Arm. $m i$, TochAB $m \bar{a}$ ‘do not!’.
PIE *mi-móh $h_{1}$ ei, *mi-mh $h_{1}$-énti
See CHD L-N: 263 and Puhvel HED 6: 158f. for attestations. Of this verb, we find two different spellings: in older texts we find mi-im-ma-, whereas in younger texts (NH and NS) we find me-em-ma-. This is due to the NH lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-m$ - as described in § 1.4.8.1.d. The verb clearly belongs to the $\operatorname{tarn}(a)$-class (mimmai / mimmanzi) and I therefore cite the verb as mimma- ${ }^{i}$ / mimm-. The hapax mi-im-mi-ú-en is the only form that shows a stem mimmi- and is probably corrupt.
Etymologically, this verb is since Sturtevant (1933: 133) generally seen as a cognate of PIE *men- 'to stay' (e.g. Jasanoff (2003: 128ff.) regards mimma-/mimm- as a perfect equation with Gr. $\mu$ í $\mu v \omega$ 'to stand fast'). In my view, however, a semantic connection between 'to refuse' and 'to stay' is far from evident. Moreover, an equation with $\mu$ $\mu \nu \omega$ would mean that Hitt. mimma-/mimmreflects a thematicized verb *mi-mn-e/o-, which is in contradiction with the fact that no other examples of thematic verbs in Anatolian can be found. I therefore reject this etymology.
Verbs that belong to the $\operatorname{tarn}(a)$-class reflect, among other structures, reduplicated formations of roots that end in laryngeal: * $\mathrm{Ce}-\mathrm{CoH}-e i, * \mathrm{Ce}-\mathrm{CH}-$ enti (cf. Oettinger 1979a: 496ff.). In the case of mimma- / mimm-, Oettinger (1.c.) plausibly suggests an etymological tie-in with the prohibitive particle $* m e h_{1}$ as found in Gr. $\mu \eta$, Skt. máa, Arm. mi, etc. This means that mimma- / mimm- would reflect *mi-mó $h_{l}$-ei, *mi-mh $h_{l}$-énti. In the singular, the phonetic outcome would have been $* *$ mimai, but the geminate of the plural (mi-mh $h_{1}$-enti $>$ mimmanzi) was generalized throughout the paradigm (cf. e.g. zinnizzi / zinnanzi << *zinizzi / zinnanzi < *tinéh $h_{l} t i / *$ tinh $h_{l}$ énti). Prof. Melchert rightly points out to me that in order for this etymology to be acceptable a convincing scenario should be designed that can explain how the attested syntax of the prohibitive particle, which goes together with an inflected indicative finite verb, developed out of the use of a 2 sg.imp.-form.
mirmirra- (c.) 'mud-water, mire': acc.pl. mi-ir-mi-ir-ru-uš (OH or MH/NS).

See CHD L-N: 295: hapax in KBo 22.178 iii (7) šal-ú-i-nu-uš az[-zi-kán-]zi mi$i r-m i-i r-r u-u s ̌$ [ak-ku-uš-ká]n-zi 'they eat mud and drink $m$.'. It is clear that a detestable liquid is meant, probably 'mud-water' or 'mire'. CHD proposes a connection with mer- $^{z i}$ / mar- 'to vanish', and suggests 'filthy drainage water, water which drains away', but this does not seem very convincing to me. Further unclear.
mišriųant- (adj.) 'perfect, complete, full' or 'bright, splendid': nom.sg.c. mi-iš-ri-ua-an-za (NH), me-eš-ri-ua-za (NH), acc.sg.c. mi-iš-ri-ua-an-ta-an (MH/MS), $m e-i s ̌-r i-u a^{2}-a n-d a-a n(N H)$, dat.-loc.sg. mi-iš-ri-ua-an-ti (MH/MS), nom.pl.c. mi$i \check{s ̌-r i-u a-a n-t e-e s ̌ ~(M H / M S), ~ a c c . p l . c . ~ m i-i s ̌-r i-u ূ a-a n-d u-u s ̌ ~(M H / M S), ~ d a t .-l o c . p l . ~}$ mi-iš-ri-uূa-an-ta-aš (MH/MS).
Derivatives: mišriunahh ${ }^{-}{ }^{\boldsymbol{i}}$ (IIb) 'to make mišriunant-' (3pl.pret.act. mi-iš-ri-ua-ah-he[-er]), mišriúanda (adv.) 'splendidly(?)' (mi-iš-ri-ua-an-da), mišriūātar (n.) 'wholeness, brightness' (nom.-acc.sg. mi-iš-ri-ua-a-tar), mišriunēšš- ${ }^{z i}$ (Ib2) 'to become full, to become bright (said of the moon)' (3sg.pres.act. mi-iš-ri-u-e-eš$z i$ ).

See CHD L-N: 297f. for attestations and a semantical discussion. All forms are derived from a stem mišriúa-. Although it is clear that these words denote something good, perfect or beautiful, it is not exactly clear what the original meaning is. Generally, these words are translated 'splendid, bright', but an important argument against this translation may be seen in the use of the verb mišriūēšs- ${ }^{z i}$ (having the moon as subject), which functions as the opposite of tepaūěšs- ${ }^{z i}$ 'to become small (of the moon)'. This may indicate that mišriueššmust be translated 'to become big, to wax', which would imply that all words from * mišriua- have an original meaning 'big, complete, full, perfect'.
The generally accepted etymology of *mišriua- is based on a translation 'splendid, bright': Neumann (1958: 88) connected *mišriua- with the PIE root *meis-, which he translated as 'to shimmer'. This etymology has found wide acceptance. LIV', however, translates the root *meis- as 'die Augen aufschlagen' (Skt. miṣáti 'opens the eyes'), which semantically would not fit 'bright' very well. Moreover, if *mišriuna- indeed did not mean 'bright, splendid', but 'perfect', a connection with *meis- becomes impossible anyway.
$\boldsymbol{m i t}(\boldsymbol{t}) \boldsymbol{a}-$, $\boldsymbol{m i t i} \boldsymbol{-}$ (adj.) 'red; (noun) red wool’ (Sum. SA ${ }_{5}$ ): nom.sg.c. mi-i-ti-iš (NH), mi-ti-e-eš (OH or MH/NS), mi-di-iš, acc.sg.c. mi-ti-in (OH/NS), mi-i-ta-an, mi-it-ta-an (MH/MS), mi-ta-an, mi-ta-a-an (MH/NS), instr. mi-it-ti-it (MS), mi-ti-it.
Derivatives: ${ }^{(\text {SIG })}{ }^{\text {mītae }}{ }^{j}$ (Ic2) 'to tie with red wool(?)' (3sg.pres.act. mi-ta-iz-zi, 1sg.pret.act. mi-ta-a-nu-un; part. mi-i-da-an-t-; impf. mi-ti-eš-ke/a-), mīdanima'?' (abl. mi-i-da-ni-ma-az).

See CHD L-N: 301f. for attestations. In the oldest texts, only the sumerogram $\mathrm{SA}_{5}$ is used. From MH times onwards, we find phonetic spellings of this word, which show $a$-stem as well as $i$-stem forms. Besides, there are forms with geminate $-t t$ - and with single $-t$-. It is difficult to put these forms in a chronological order.
The variaty of forms could point to a foreign origin of this word. Nevertheless, Čop (1958: 28-32) connects it with Slav. *médb 'copper' (*moid-o-). Yet the absence of other IE cognates do not speak in favour of this etymology.
The verb mītae- ${ }^{z i}$ was translated by Catsanicos (1986: 156) as "fixer, attacher" and reconstructed as *h2mói-to-ie/o- (followed by Kimball 1999: 274), i.e. derived from the root $* h_{2}$ mei- that he reconstructs on the basis of an equation between Skt. sūmáya- 'well-prepared' (from the verb may- 'to fix') and Hitt. suhmili-, allegedly "bien fixe"" (q.v.). It is problematic, however, that a preform ${ }^{*} h_{2}$ mói-to- would regularly yield Hitt. **hamaita- (cf. *h $h_{2}$ meh $_{1} s h_{2} o->$ Hitt. hamešha- and *d ${ }^{h} h_{1} o ́ i t h_{2} e>$ Hitt. daitta). Moreover, according to CHD (L-N: 304) this verb rather means 'to tie with red wool', which would make it a straightforward derivative of mīta-, reflecting *mīta-ie/a-. For a possible connection with mídanima- see CHD L-N: 305.
miti-: see $m i t(t) a-$, miti-
$\boldsymbol{m} \overline{\mathbf{u}} \boldsymbol{u}-$ / mīiaul (adj.) 'soft, smooth, mild, gentle, pleasant, agreeable': nom.sg.c. $m i-i-u s ̌$ ( $\mathrm{OH} / \mathrm{MS}$ ), mi-i-ú-uš ( OH ?/NS), mi-úǔ̌̌ ( $\mathrm{OH} / \mathrm{MS}$ ), acc.sg.c. mi-i-ú-un ( $\mathrm{OH} / \mathrm{NS}$ ), nom.-acc.sg.n. $m i-i-u ́ u(\mathrm{OH} / \mathrm{MS})$, mi-úu (OH/MS), nom.pl.c. mi-įa-u-e-eš ( $\mathrm{OH} / \mathrm{MS}$ ), mi-i-ia-u-e-eš, acc.pl.c. mi-e-uš (NS), nom.-acc.pl.n. mi-i-i-ia-u-una (MH/MS), dat.-loc.pl. mi-ú-ua-aš.
Derivatives: $\boldsymbol{m} \overline{\boldsymbol{l}} \mathbf{S ̌ s ̌ r s}^{-z}$ (Ib2) 'to be mild, to be gentle, to be pleasant; to become gentle, to become kind' (3sg.pres.act. mi-i-e-eš-zi, 2sg.imp.act. mi-i-e-eš, mi-e-eš ( OH ?/MS?), mi-eš, 3sg.imp.act. mi-i-e-eš-du ( $\mathrm{OH} / \mathrm{NS}$ ), mi-i-e-eš-tu ( $\mathrm{OH} / \mathrm{MS}$ )),
 loc.sg. mi-eš-ni), mīumar (n.) 'gentleness, mildness, kindness' (nom.-acc.sg. mi-
$i-u ́-m a r$ (MH/MS), mi-ú-mar (MH/MS), mi-ú-um-mar (MH/MS), instr. mi-ú-um-ni-it (MH/MS)), mīnu $\boldsymbol{z}^{\boldsymbol{j}}$ (Ib2) 'to make mild, to make pleasant, to heal' (2sg.pres.act. mi-nu-ši (NH), 1sg.pret.act. mi-i-nu-nu-un (NS), 2sg.imp.act. mi$n u-u t(\mathrm{NS}), 3 \mathrm{pl.imp} . a c t$. mi-nu-ua-an-du $(\mathrm{OH} / \mathrm{NS})$, mi-nu-an-du; impf. mi-i-nu-uš-ke/a-), mīnumar (n.) 'flattery, gentleness, kindness' (nom.-acc.sg. mi-i-nu-mar (MH/MS), mi-nu-mar ( $\mathrm{OH} / \mathrm{NS}$ ), me-nu-mar, gen.sg. mi-nu-um-ma-aš (NH), nom.-acc.pl. $\left.m i-n u-m a r r^{\text {HI.A }}, m i-n u-m a r-r i^{\text {HI.A }}\right)$.
 $z i$ ).

IE cognates: Lat. mītis 'soft', Lith. míelas 'tender, lovely', Russ. mílyj 'sweet', etc.

PIE * mih $_{1}-(e) u-$
See CHD L-N: 306f. for attestations of $m \bar{u} u-, 243 \mathrm{f}$. for $m \bar{u} \bar{e} \check{s} \check{S}_{-}^{z i}, 309$ for mīumar, and 291 for $m \overline{i n} u_{-}{ }^{z i}$. Note that CHD regards the forms spelled as mi-e-nu- as belonging to the group of $m \bar{u} u$ - as well, but this is not obligatory (see at mienu- $z^{z i}$ ). I will therefore disregard these forms here. Note that CHD incorrectly cites nom.sg.c. "mi-u-us"" (KUB 39.41 obv. 17 (NS), KUB 33.38 iv 10 (OH/MS)), which in fact must be mi-ú-uš. It is clear that we are dealing with an ablauting $u$ stem adjective mīu- / mīilau-, with derivatives mīnu- ${ }^{z i}$ (like tepnu- ${ }^{z i}$ of tēpu- / tēpau- 'few, little'), mīēšš- ${ }^{z i}$ (fientive in - $\bar{e} \check{s} s{ }^{s}$ - of the root $m \bar{l}$-, which contrasts with
 parkēšš- ${ }^{z i}$ beside parkuēšš-zi of parku- / parkau- 'high') and mīumar (a derivative in -uar / -un- of the stem $m \bar{u} u$-, showing the development *-uu- >-um-).
Etymologically, mīu- has to be compared with Lat. mītis 'soft', Lith. mielas 'tender, lovely', etc. (thus first Knobloch 1959: 38) that point to a root *meih ${ }_{1}$ (cf. Schrijver 1991: 240). We therefore have to reconstruct * méih $h_{1}$-u- / *mih $h_{1}$-éu-, which was levelled out to $*$ míh $_{1}-u-/ *$ mih $_{1}-e u$ - and regularly yielded $\mathrm{OH} / \mathrm{mí}$ u-/,

${ }^{\text {NINDA }} \boldsymbol{m i ̄ u m i ̄ u}(t)-(\mathrm{n}$.$) a kind of bread, "soft bread": nom.-acc.sg. mi-i-ú-mi-i-ú, mi-$ $i-u ́-m i-u=s ̌-s ̌ a-a n, m i-u ́-m i-u ́ u(M H / N S), ~ l o c . s g . ~ m i-u ́ u-m i-u ́-i, ~ n o m .-a c c . p l . ~ m i-u ́-m i-~$ ú-ta, mi-ú-mi-ú-da, [mi-i-ú-m]i-i-ú-ta.

See CHD L-N: 310 for attestations. The nom.-acc.pl.-form mīumiuta shows that this word originally had a stem mīumīut-. The fact that in nom.-acc.sg. the wordfinal $-t$ was dropped points to a Luwian provenance of this word. Nevertheless, it is quite likely that this word represents a reduplication of the adj. mīu- / mïiau-
'mild, soft' (q.v.), which is attested in CLuwian as well. See there for further etymology.
$\boldsymbol{m u}$-: see mau- $^{i} /$ mu-
$=\boldsymbol{m} \boldsymbol{u}$ (encl.pers.pron. acc.-dat. 1sg.) '(to) me'
Anat. cognates: Pal. =mu'for / to me'; CLuw. =mu'for / to me', =mi'for/to me(?)'; HLuw. =mи 'for / to me'.

The enclitic particle $=m u$ denotes the acc. 'me' as well as dat. 'to me' of the first singular personal pronoun $\bar{u} k / a m m-$ 'I, me' (q.v.). It is predominantly spelled with single -m-. The few cases with geminate $-m m$ - are from NS texts only (cf. CHD L-N: 311) and may be due to the fortition of OH intervocalic $/ \mathrm{m} /$ to $\mathrm{NH} / \mathrm{M} /$ as described in $\S$ 1.4.7.1.c. Its $-u$ - is elided before enclitics starting with a vowel (e.g. $a n-d a=m=a-p a$ ). In the other Anatolian languages, we find a particle $=m u$ as well. Note that in HLuwian, too, the $-u$ - is elided before other particles starting in a vowel (cf. Plöchl 2003: 64). The function of the CLuwian particle $=m i$ is not fully clear, but Melchert (1993b: 147) states that a translation 'for / to me' is "[f]ar from certain, but strongly supported by context of some examples".
Etymologically, = $m u$ clearly must be compared to the PIE enclitic dat. *moi 'to me' (Gr. $\mu \mathrm{ot}$, Skt. $m e$, Av. $m \bar{o} i)$ and acc. *mé 'me' (Skt. mā, Av. mā, Gr. $\mu \varepsilon$ ). The aberrant vowel $-u$ - probably was taken over from the enclitic $=t t u$ '(to) you' (see $a t=t t a /=t t u)$. See chapter 2.1 for a general background.

## ${ }^{\mathbf{U Z U}} \boldsymbol{m u h}\left(\boldsymbol{h a} \boldsymbol{a}\right.$ rai-: see ${ }^{\mathrm{UZU}}$ mahrai- / muhrai-

${ }^{\text {(GIŠ) }} \boldsymbol{m} \overline{u ̄ i l}(\boldsymbol{a})-(\mathrm{n} .>\mathrm{c}$.$) an agricultural implement, 'spade'? (Sum. { }^{\text {GIŠ }} \mathrm{MAR}(?)$ ): nom.sg.n. $m u-u ́-i-i l(N S), ~ n o m . s g . c . ~ m u-u ́-i-l a-a s ̌ ~(M S), ~ m u-i-l a-a s ̌ ~(N S), ~ a c c . s g . c . ~$ mu-ú-i-la-an (MS).

PIE * méuh ${ }_{1}$-el- ?
See CHD L-N: 319 for attestations. The word occurs in lists of agricultural implements. Tischler (HEG L/M: 226) proposes to equate this word with the sumerogram ${ }^{\text {GIŠMAR }}$ 'spade', which, if correct, could determine this meaning for mūil(a)- as well.

Once we find an athematic nom.sg. $m u-u$-i-i-il, which I would interpret as neuter. The other forms show a commune thematicized stem mūila-. Although two of the thematicized forms are found in a MS text, and the one athematic form in a NS
text only, I assume that the neuter forms are more original, partly on the basis of the similar formation as found in šūil 'thread' (q.v.). This latter word is a derivative in *-il-from the root ${ }^{*} s(i) e u h_{l^{-}}$'to sow', which would make it formally possible to derive $m \bar{u} i l(a)$ - from the root $* m(i) e u h_{1-}$ 'to move'. As this root turned up in Hitt. mau- ${ }^{i} / m u$ - 'to fall' (q.v.) we could semantically think of an implement with which trees are felled ('axe' vel sim.?). The spellings with plene ú point to a phonological interpretation /múil-/, which points to *méuh $h_{1}$-el- (cf. § 1.3.9.4.f).
$\boldsymbol{m} \overline{\boldsymbol{u} g a e} \boldsymbol{-}^{z i}$ (Ic2) 'to invoke, to evoke, to entreat': 1sg.pres.act. mu-u-ga-a-mi (MH/NS), mu-u-ga-mi (MH/NS), mu-ga-a-mi (NH), mu-ga-mi (OH/NS), 2sg.pres.act. mu-ga-a-ši (MH/MS), 3sg.pres.act. mu-ga-a-ez-zi (OH/MS), mu-ga$i z-z i \quad(N H)$, 3pl.pres.act. mu-u-ga-a-an[-zi], mu-u-ga-an-zi, mu-ga-a-anzi (MH?/NS), mu-ga-an-zi (NH), 3sg.pret.act. mu-ú-ga-it (OH/NS), mu-ga-i[t] ( $\mathrm{OH} / \mathrm{NS}$ ), 2sg.imp.act. $m u-g a-a-i(\mathrm{OH}$ ?/NS), mu-ga-i (OH?/NS), 2pl.imp.act. mu$k a-e-i t-t e-e n(\mathrm{OH} / \mathrm{NS})$; part. mu-ga-a-an-t- (MH/NS); inf.I mu-ga-a-u-an-zi (MH/NS), ти-ga-u-иа-an-zi, mu-ga-u-an-zi; verb.noun. mu-ga-a-u-uа-ar ( $\mathrm{OH} / \mathrm{NS}$ ), mu-ga-a-u-ar (MH?/NS), mu-ga-u-ua-ar, mu-ka $-a-u-u a-a r$, gen.sg. $m u-g a-a-u-u a-a \check{s}$ ( $\mathrm{OH} / \mathrm{NS}$ ); impf. mu-ki-iš-ke/a- (OH/MS), mu-ki-eš-ke/a(MH/NS), mu-ga-aš-ke/a-.
Derivatives: mugāuar (n.) 'materials of an invocation / evocation ritual' (nom.acc.sg. mu-ga-a-u-ar (MH?/NS)), mukē̌̌šar / mukēšn- (n.) 'invocation, evocation; materials used in an invocation / evocation ritual; (object in a lot oracle)' (nom.-acc.sg. mu-ke-eš-šar (MH/NS), mu-keš-šar (NH), mu-ki-iš-š[ar] (NH), gen.sg. mu-keš-na-aš (MH?/NS), mu-ki-iš-na-aš, [mu-k]i-iš-ša-na-aš, mu-ge-eš-na-aš, mu-u-ki-iš-na-aš (Bo 6575 obv. 13), dat.-loc.sg. [m]u-ki-iš-ni, mu$\left.k e s ̌-n i, m u-k e-e s ̌-n i(M H / N S), ~ n o m .-a c c . p l .[m] u-k e s ̌-s ̌ a r r^{\text {HI.A }}, m u-u-k e s ̌-s ̌ a r^{\text {HI.A }}\right)$.
IE cognates: Lat. mūgīre 'to roar', Gr. $\mu \nu \gamma \mu$ óc 'sigh'.
PIE *moug-o-ie/o-
See CHD L-N: 319f. for attestations. The verb clearly belongs to the hatrae-class, and it therefore is likely derived from a noun *mūga-. The plene vowel is consistently spelled with the sign U (the one spelling with Ú, mu-ú-ga-it (KBo 3.7 i 13), must be regarded as an error, cf. § 1.3.9.4.f).

This verb is generally connected with Lat. mūgīre 'to roar', Gr. $\mu v \gamma \mu$ ós 'sigh', for which a semantic link is provided by ${ }^{\text {GIŠ }}$ mūkar, an implement that makes noise to invoke the gods, 'rattle' (q.v.). All in all, this would mean that we have to reconstruct a root *meug- 'to make noise (in order to invoke the gods)' (of which
the nouns mukēššar and ${ }^{\text {Giš }}$ mūkar could be derived directly), which formed a noun *moug-o- 'invocation of the gods through noise', of which a verbal derivative *moug-o-ie/o- yielded Hitt. mūgae- ${ }^{z i}$ 'to invoke'.

GIŠ $_{\boldsymbol{m}}^{\boldsymbol{m}} \boldsymbol{u} \boldsymbol{k} \boldsymbol{a r}$ / mukn- (n.) implement used as a noise maker, 'rattle'?: nom.-acc.sg. mu-ú-kar ( $\mathrm{OH} / \mathrm{NS}$ ), mu-kar ( $\mathrm{OH} / \mathrm{NS}$, MH/MS), dat.-loc.sg.? mu-un-ka ${ }_{4}-n i$ (OH/NS), abl. $m u-u k-n a-z a(\mathrm{NH})$, gen.pl. $m u-u k-n a-a s ̌$ (OS), $m u-k a_{4}-n a-a s ̌$ (KBo 41.129 obv. 1).

See CHD L-N: 323 for attestations. The mūkar is a thing that makes noise which is used to scare of evil spirits as well as to invoke gods. According to Rieken (1999a: 308) a translation 'rattle' may suit the meaning. The $r / n$-stem seems archaic and points to an IE origin. A connection with Lat. mūgīre 'to roar' and Gr. $\mu \nu \gamma \mu$ ó ‘sigh' is generally accepted (cf. Rieken 1999a: 309; Puhvel HED 6: 185) and therefore the word belongs with mūgae- ${ }^{z i}$ 'to invoke' (q.v.). For mūkar / mukn- this means that we have to reconstruct *méug-r, *mug-n-ós.
 $a$-x[.].

CHD (L-N: 329) cites the forms mentioned above under two separate lemmas, namely a verb mumтииāi- 'to fall (repeatedly)?' and a word (4) muтииai(function and meaning unknown). The former is attested only once in the following context:

KUB 33.68 ii
(3) $n u-u=t-t a ~ k i-i ~ m u-g a-a-u-u a-a s ̌ ~ u d-d a-a-a r ~ m u-u m-т и-u a-a-x[]$.
(4) $e-e \check{s}-t u$
 ит-ти-иа- $a-a[n$ ?!] and interprets this form as a participle of a verb титтии $\bar{a} i-$, which is analysed as a reduplication of $m a u-{ }^{i} / m u$ - 'to fall': "May these words of invocation be falling(?) upon you". The traces of the broken sign do not favour a reading AN, however. Puhvel (HED 6: 188) reads this word as $т и$-ит-ти-ua-a$i[\check{s}$ ?] and translates "to thee may these words of invitation be an inducement". The translation 'inducement' apparently is based in this context only, which in my view is nothing more than just one of the many possibilities.
The other cases of muтииai- are very unclear: it cannot be decided whether these are nominal or verbal forms. Puhvel translates these forms as 'inducement'
as well, but such a translation does not seem to make much sense. All in all, we certainly need more attestations of this word to give a meaningful interpretation.
munnae- ${ }^{z i}$ (*Ia2 > Ic2) 'to hide, to conceal': 1sg.pres.act. mu-un-na-a-mi ( $\mathrm{OH} / \mathrm{MS}$ ), mu-na-a-mi (NH), 2sg.pres.act. mu-un-na-a-ši (MH/MS), 3sg.pres.act. ти-un-na-a-iz-zi (MH/NS), ти-un-na-iz-zi (MH/NS), ти-un-na-a-zi (NH), 2pl.pres.act. mu-un-na-at-te-ni (MH/MS, OH/NS), mu-u[n-n]a-it-te-ni (NH), 3pl.pres.act. mu-un-na-a-an-zi, mu-un-na-an-zi, 3sg.pret.act. mu-u-un-na-a-it ( $\mathrm{OH} / \mathrm{NS}$ ), mu-un-na-a-et (MH/MS), mu-un-na-it, 3pl.pret.act. mu-un-na-a-er (NH), 2sg.imp.act. mu-un-na-a-i (MH/NS), 3sg.imp.act. mu-un-na-a-id-du (MH/NS), 2pl.imp.act. mu-un-na-at-tén, 3pl.imp.act. mu-un-na-an-du (OH?/NS); 3sg.pres.midd. mu-un-na-at-ta-ri (MH/NS), mu-un-na-it-ta-ri (OH or MH/NS), 3sg.pret.midd. mu-un-na-it-ta-at (NH), 3pl.pret.midd. mu-un-na-an-da-at; part. ти-un-na-an-t- (NH), mu-un-na-a-an-t-; impf. mu-un-na-eš-ke/a-.

Derivatives: munnanda (adv.) 'hidden, concealed' (mu-un-na-an-da (NH)).
IE cognates: Gr. $\mu \overline{\bar{v}} \omega$ 'to close the eyes'.
PIE *mu-né- $h_{2 / 3}-t i /$ * $m u-n-h_{2 / 3}$-énti ??
See CHD L-N: 329f. for attestations. The verb shows the hatrae-class inflection from the oldest texts ( $\mathrm{OH} / \mathrm{MS}$ ) onwards. Normally, hatrae-class verbs are denominal derivatives of $o$-stem nouns. In this case, this would mean that mипnae- is derived from a further unattested noun *mипna-. Oettinger (1979a: 161 ff .) assumes that munnae- originally was a nasal infixed verb that was taken over into the hatrae-class at a very early stage, however. According to him, Gr. $\mu \bar{v} \omega$ 'to close the eyes' should be taken as a cognate. Although this verb is usually regarded as reflecting *meus- on the basis of derivatives like $\mu v ́ \sigma \tau \eta \varsigma$ 'adept, insider', LIV ${ }^{2}$ states that the $-s$ - could be of a secondary origin and that the verb in fact reflects $*$ meuH- (s.v.). If we would follow this analysis and Oettinger's interpretation of mипnae-, we would have to reconstruct *mи-né- $h_{2 / 3}-t i$, *mи-n$h_{2 / 3}$-énti, which should regularly yield Hitt. **munāzi / munnanzi, after which the geminate of the plural spread throughout the paradigm, yielding munnāzi / munnanzi. This verb then already in $\mathrm{OH} / \mathrm{MH}$ times was reinterpretated as munnāizzi / munnānzi. A slight problem to this scenario is that the only other verb of which we are sure that it displays such a structure, harna- ${ }^{z i}$ / harn- 'to drip, to sprinkle' $<{ }^{*} h_{2} r$-né- $h_{2 / 3}-t i / * h_{2} r-n-h_{2 / 3}$-énti, does not end up in the hatrae-class, but in the -ie/a-class (harniie/a- ${ }^{z i}$ ).
Other etymological proposals have no merit. Gr. á $\mu v ́ v \omega$ 'to ward off' (cf. Petersen 1937: 208) reflects $* h_{2}$ meu-, the $* h_{2}$ of which would not disappear in

Hittite. Skt. muṣnááti 'to steal' (cf. Gusmani 1968: 59-60) reflects *meusH-, the -sof which should have shown up in Hittite.
mušgalla- (c.) ‘catterpillar?’ (Akk. NAPPILU): nom.sg. mu-uš-gal-la-aš.
See CHD L-N: 334: hapax found in a vocabulary only, glossing Akk. NAP-PÍ$L U^{\prime}$ 'caterpillar'. Since the Akk. form has been emended (from NAP-PÍ-DU), the meaning is not certain. CHD tentatively proposes a connection with the impf. of $m^{-i} / m u$ - 'to fall' (cf. e.g. taruešgala- (although with single -l-) from tarueške/a-)).
Puhvel (HED 6: 194) proposes a connection with Lat. musca, OCS muxa, Lith. musée 'fly'.
$\boldsymbol{m} \bar{u}^{\prime}$ tae- ${ }^{z i}$ (Ic2) '(without $=z$ ) to root, to dig in (the ground); (without $=z$ ) to remove (evils); (with $=z$ ) to neglect': 3sg.pres.act. $m[u-t] a-a-i z-z i(\mathrm{OH}$ or MH/NS), mu-ta-iz-zi (NH), mu-ú-ta-iz-zi, 2sg.imp.act. mu-ta-a-i (NH), 3sg.imp.act. $m u-u ́-d a-i d-d u(\mathrm{NS}), m u-d a-i d-d u$; part. $m u-t a-a-a n-t$ - (MH/NS).

See CHD L-N: 335f. for attestations and semantics. It is difficult to find a basic meaning out of which the different meanings of this verb could have developed. The meanings 'to remove (evils)' and 'to neglect' (with $=z$ ) both go back to 'to keep away from'. The meaning 'to root, to dig' is hard to connect with these two, however, and may show that two originally separate verbs have formally fallen together.
The verb belongs to the hatrae-class, which implies denominative derivation of a noun *mūta-. Such a noun might be visible in the words mūtamuti- 'pig?' and $m \bar{u} d a n-$ 'that what pigs eat'. Oettinger (1979a: 377) reconstructs this *mūta- as *muh ${ }_{l}$ to- from * meuh $_{1-}$ 'to move', but this is semantically as well as formally not totally satisfactory (cf. the lenited $-t$ - $=/ \mathrm{d} /$ in Hittite). Other etymologies (see Tischler HEG L/M: 235f.) are not very convincing either.
mūtamuti- (c.?) an animal, 'pig?': acc.sg.? mu-ú-ta-mu-t[i-in?]; broken mu-da$m u-d a[-. .$.$] (KBo 35.187$ iii 4).
Anat. cognates: CLuw. mutamuti- '?' (case? mu-ta-mu-ti-za), mūdamūdalit'?' (nom.-acc.sg. $m u-u ́-d a-m u-u ́-d a-l i-s ̌ a, ~ d a t .-l o c . s g . ~ m u-u ́-d a-m u-u ́-d a-l i-t i)$.

See CHD L-N: 336f. for discussion. The word is hapax in a list of animals (KUB 7.33 obv. 6). The context of mudamuda[-...] is that broken that a meaning cannot be determined. The Luwian words mutamuti- and mūdamūdalit- resemble the

Hittite forms a lot, but their meaning is unknown, so a connection is unproven. Starke (1990: 222f., on the Luwian words) argues that the place name URUŠAH.TUR-mu-da-i-mi-iš perhaps could be read as mutamutaimi-, which would imply that mūtamuti- means 'pig'. In that case, a connection with mūtae- ${ }^{-i}$ 'to root, to dig in the ground' (q.v.) is quite plausible. At the moment, this is all very speculative. See also mūdan-
mūdan- (n.) 'pig-food': nom.pl. mu-ú-da-na.
This word is hapax in the following context:
KBo 10.37 ii
(16) $A$-NA UR.GII ${ }^{\text {HI.A }}$ ŠA $^{\text {HI.A }}=m a m u-u$ - $d a-n a$
(17) $e$-et-ri-e= $=$ š-mi-it
'but for dogs and pigs $m$. is their food'.
CHD L-N: 337 translates 'garbage, scraps', but this meaning does not seem to be totally correct. As the word denotes pigs-food, it probably is related with $m \bar{u} t a e-{ }^{z i}$ 'to root' (said of pigs), and then denotes 'that which pigs root'. Again we see a stem $m u$ - $u$-da- (here with an $n$-suffix) that refers to pigs and how or what they eat (cf. $m \bar{u} t a e-{ }_{-}{ }^{i}$ and mūtamuti-). Further unclear.
mūua- (c.) an awe-inspiring quality (Sum. A.A): acc.sg. mu-u-ua-an, A.A-an, dat.-loc.pl.(?) mu-u-ua-aš.
Derivatives: mūuanu- (adj.), epithet of Storm-god (acc.sg. mu-u-ua-nu-un, dat.loc.sg. mu-u-ūa-nu), mūuat(t)alla/i- (adj.) 'awe-inspiring(?)' (Sum. NIR.GÁL; acc.sg.n.? [m]u-ua-ta-li, nom.pl.c.? mu-u-ua-at-ta-a[l--]i-iš, acc.pl.c.? mu-ua-at-ta-lu-ǔ̌; broken mu-ua-tal[-...]), muuat(t)allahit- (n.) 'the king's or Storm-god's ability to inspire awe(?)' (gen.sg. mu-ua-ad-dac-al--la-hi-da-aš, mu-ua-tal-la-[hi-ta-as̆]), muцatallatar (n.) 'ability to inspire awe(?)' (nom.-acc.sg. mu-ua-tal-latar).
Anat. cognates: CLuw. mūua- 'to overpower (vel sim.)' (3sg.pres.act. $m u-u$-ua$i, 3$ pl.pres.act. $m u-u-u a-a n-t i)$, mūuattalla/i- (adj.) 'overpowering, mighty' (abl.instr. mu-u-una-at-ta-al-la-ti), muйattallahit- (n.) 'ability to inspire' (see above), $\boldsymbol{m u}(\boldsymbol{u} \boldsymbol{u})$ tti(iia)- (adj.) 'having overpowering might (?)' (nom.sg.c. [m]u-ut-ti-i-iš, acc.sg.c. mu-u-ua-at-ti-in); HLuw. muwa- 'to dominate(?), to atack(?)' (3sg.pres.act. mu-wa/i-i (SULTANHAN §32), mu-wa/i-ti (?, interpretation unclear: KÖYLÜTOLU YAYLA line 2), 3sg.pret.act. mu-wali-ta
(SULTANHAN §44), mu-wa/i-tax (TOPADA §29), ${ }^{* 462} \boldsymbol{m} \boldsymbol{w} \boldsymbol{w i t a}$ - (c.) 'seed'(?) (acc.sg. ${ }^{* 462}$ mu-wa/i-i-tà-na (KARKAMIŠ A11c §28)), nimuwinza- (c.) 'child' (nom.sg. ${ }^{\text {INFANS }} n i-m u-w a / i-i-z a-s a,{ }^{\text {INFANS }} n i-m u-w a / i-z a-s a,{ }^{\text {INFANS }} n i-m u-w a / i-z a-$ sá, dat.-loc.sg. ni-mu-wa/i-zi (KARABURUN §7, §9)); Lyc. muwête'descendence?'.

See CHD L-N: 314f. for attestations. The stem mūua- is quite wide-spread in the Anatolian languages, especially in names (Hitt. ${ }^{\mathrm{m}}$ Muuatalli-, Lyc. Mutli). The precise meaning of mūua- is not fully clear but CHD's tranlation 'awe-inspiring' is probably not far from it. The connotation 'male seed' is perhaps found in HLuw. muwita- 'seed(?)', and perhaps Lyc. muwẽte-, if this really means 'descendance' < 'male seed' (thus Tischler HEG L/M: 240). Within Hittite, all derived forms show Luwian suffixes, which makes it likely that the term originally was Luwian. No clear etymology.

## N

-n (acc.sg.c.-ending)
The ending of the acc.sg.c. of stems in vowel is $-n$, whereas consonant-stems show -an. It is generally agreed that this ending reflects PIE *-m. Note however, that the expected ending of consonant stems should have been ${ }^{* *}$-un $<*_{-m}$ (cf. the verbal ending -un of the $m i$-conjugated 1 sg.pret.act. $<*-m)$. This means that the consonant stems have taken over the ending of the $o$-stem nouns, which was *-o-m $>$ Hitt. -an.
$\boldsymbol{n} \overline{\boldsymbol{a}} \boldsymbol{h}^{\boldsymbol{i}} / \boldsymbol{n a h} \boldsymbol{h}$ - (IIa2) 'to fear, to be(come) afraid, to be respectful, to be careful' (Sum. HुUŠ): 1sg.pres.act. na-ah-mi (NH), 2sg.pres.act. na-ah-ti (MH/NS), 3sg.pres.act. na-a-hi (MH/NS), HुUŠ-hi (NH), 1pl.pres.act. na-a-hu-u-e-ni (NH), 2pl.pres.act. na-ah-te-e-ni, 1sg.pret.act. na-a-hu-un (NH), na-ah-hu-un (NH), 3sg.pret.act. na-ah-ta (OH/NS), 2sg.imp.act. na-a-hi (OH/NS), na-hi (OH/NS), na-a-hi-i (OH/MS); 3pl.pret.midd. na-ah-ha-an-ta-at; part. na-ah-ha-an-t-, na$a h-h a-a-a n-t-(\mathrm{OH} / \mathrm{NS}, \mathrm{MH} / \mathrm{MS})$; verb.noun gen.sg. na-ah-hu-u-uূa-aš (NH), na-$a-h u-u$-ua-aš; impf. [n]a-ah-hi-eš-ke/a- (NH), na-a-hi-eš-ke/a-.
Derivatives: nahšaratt- (c.) 'fear, fright; respect, reverence, awe; frighfulness' (nom.sg. na-ah-ša-ra-az (MH/MS), na-ah-šar-az (MH/NS), na-ah-šar-ra-az (MH/NS), na-ah-ša-ra-za (MH/NS) acc.sg. na-ah-ša-ra-ad-da-an (OH/NS), na-ah-ša-ra-at-ta-an (MH/MS), na-ah-šar-ra-ta-an (NH), na-ah-šar-at-ta<-an», na$a h-s ̌ a r-a n-t a-a n(1 x, N H)$, dat.-loc.sg. na-ah-ša-ra-at-ti (OH/NS), na-ah-šar-ra-at-ti (NH), abl. na-ah-ša-ra-ta-za, nom.pl. na-ah-ša-ra-at-te-eš (OH/NS), acc.pl. na-ah-ša-ra-ad-du-uš, na-ah-šar-ad-du-uš, gen./dat.-loc.pl. na-ah-šar-at-ta-aš (MS)), nahšariịe/a- ${ }^{z i}$ (Ic1) 'to be(come) afraid; to show respect (for a deity)'
(3sg.pres.act. na-ah-ša-ri-i_ia-az-zi (NH), 3pl.pres.act. na-ah-šar-ía-an-zi (MS), na-ah-ša-ri-ía-an-zi (NH), 2pl.pret.act. na-ah-šar-ri-ía-at-tén; 3sg.pres.midd. na-ah-šar-ri-i̇a-an-da-ri (NH), 1sg.pret.midd. na-ah-šar-i-ia-ah-ha-at (NS), 3sg.pret.midd. na-ah-ša-ri-i $a-t a-t i(\mathrm{OH} / \mathrm{NS})$, na-ah-ša-ri-íla-at-ta-at ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pret.midd. [n]a-ah-ša-ri-an-ta-ti (OS), na-ah-ša-ri-i̇a-an-da-ti (NH), na-ah-ša-ri-ia-an-ta-at (NH); impf. na-ah-ša-ri-iš-ke/a- (NH), na-ah-šar-ri-iš-ke/a-
 (OH?/NS)), naȟšarnu- ${ }^{z i}$ (Ib2) 'to make (someone) afraid, to cause (someone) to show respect' (2sg.pres.act. [n]a-ah-šar-nu-ši, 2sg.pret.act.? na-ah-šar-nu-ut, 3sg.pret.act. na-ah-šar-nu-ut (NH)).

Anat. cognates: CLuw. nahhuиa- 'there is a concern (to someone (dat.) about something/someone (dat.-loc. + šer))' (3sg.pret.act. na-ah-hu-u-ua-i, 3sg.imp.act.
 nahhuuašša/i- 'fearful' or 'fearsome’ (nom.pl.c. na-ah-ḩu-ua-aš-ši-en<-zi>).

IE cognates: OIr. nár 'modest, noble', náire 'modesty'.

$$
\text { PIE *nóh } 2_{2} \text { ei, nh } h_{2} \text { énti, *neh } h_{2} \text {-sr }
$$

See CHD L-N: 338f. for attestations. There, a 3sg.pres.act. na-ah-zi is cited twice, but both attestations should be interpreted otherwise. KBo 23.27 iii 13 (MS) should be read [... GEŠ]TIN na-ah-zi-i[š] te-pu me-ma-al 'a nahzi of wine and a bit of meal' (see at nahši-, nahzi- for the noun nahzi- that denotes a measurement: this reading also in Tischler HEG N: 246). The line KBo 23.65, 9 (NS) reads as follows:

$$
\begin{aligned}
& \text { [ ...n]a-aš-m=a-aš=kán }{ }^{\text {GIš } k a t-t a-l u-z i ~ x-n a-a h-z i ~(o v e r ~ e r a s u r e) ~} n u[\ldots]
\end{aligned}
$$

Apparently, CHD regards the traces in front of the sign NA as the last remnants of the erased form, and interprets the sentence as '... or he fears the threshold'. Although collation is needed, I am wondering to what extent it is possible to read [ $\check{s}] a-n a-a h-z i$ and translate '... or he sweeps the threshold'. At least semantically, my interpretation would fit better. In this way both acclaimed instances of nahzi are eliminated, which means that we are left with 3 sg.pres.act. na-a-hi and HUŠhi only, which show that the verb must have been hi-conjugated originally (contra Tischler HEG N: 246). The few NH instances of 1sg.pres.act. na-ah-mi show the trivial NH replacement of the ending -hhi by -mi.
The view that this verb was hi-conjugated originally, fits the fact that this verb displays a root-final -h-, which would be hard to explain for a mi-conjugated verb
since ${ }^{*} h_{2}$ is lost preconsonantally ( ${ }^{*} n e h_{2} t i$ should have given Hitt. ${ }^{* *} n \bar{a} z i$ ). Moreover, the alternation $n \bar{a} h-/ n a h h$ - is prototypical for $h i$-verbs (e.g. $\bar{a} k{ }^{-}{ }^{i} / a k k$-, huāš- / hašš-, ūāk- / unakk-, etc.). The verb itself hardly can reflect anything else than a root *neh $2^{-}$: 3sg.pres.act. nāhi < *nóh $h_{2} e i, 3$ pl.pres.act. *nahhanzi $<{ }^{*} n h_{2^{-}}$ énti.
Most of the derivatives show a stem naȟ̌ar-, which must reflect *neh ${ }_{2} s r$. This stem has been plausibly connected with OIr. nár 'noble, modest' (which can be traced back to *neh ${ }_{2} s r-o-$ ) by Götze \& Pedersen (1934: 61) already. This latter word shows a semantic development 'to fear $>$ to be respectful $>$ to be modest / noble'.
nahhaši-: see nahši-, nahzi-
nahši-, nahzi- (c.) a measurement of capacity or weight, $=2$ tarna-: nom.sg. na$a h-h a-s ̌ i-i s ̌, n a-a h-s ̌ i-i s ̌, n a-a h-z i-i s ̌(M S)$.

See CHD L-N: 341f. for attestations. Note that KBo 23.27 iii 31 na-ah-zi-i[s] should be added to it, which in CHD is read as na-ah-zi, a 3sg.pres.act.-form of $n \bar{a} h-^{i} / n a h h$ - (q.v.). The alternation between $\check{s}$ and $z$ indicates that the word is of foreign origin.
nahzi-: see nahši-, nahzi-
nai- ${ }^{i}$ : see $n \bar{e}^{-\left({ }^{(r i)}\right.}, n a i^{i}{ }^{i} /{ }^{n i-}$
nakkī- (adj.) 'important, valuable; difficult, inaccesible; powerful’ (Sum. DUGUD): nom.sg.c. na-ak-ki-iš (OS), na-ak-ki-i-iš (MH/NS), na-ak-ki-eš (NH), acc.sg.c. na-ak-ki-in (OH/MS), nom.-acc.sg.n. na-ak-ki-i (MH/MS), na-ak-ki (MH/MS), dat.sg. na-ak-ki-ịa (MH/MS), na-ak-ki-i, abl. na-ak-ki-ia-az (MH/MS), instr. na-ak-ki-it, nom.pl.c. na-ak-ki-i-e-eš (MH/NS), acc.pl.c. na-ak-ki-uš, na$a k-[k i-] i{ }^{2} a-a s ̌, ~ n o m .-a c c . p l . n . ~ n a-a k-k i-i, ~ d a t .-l o c . p l . ~ n a-a k-k i-i-i ̨ a-a s ̌ . ~$

Derivatives: nakki- (n.) 'honour(?), importance(?), power(?), force(?)’ (nom.acc.sg. na-ak-ki (MS), instr. na-ak-ki-it (OS)), nakkiiahh-i (IIb) 'to be(come) a concerne to someone, to be difficult for someone; (part.) honoured, revered' (3sg.pret.midd. na-ak-ki-ia-ah-ta-at (NH); part. na-ak-ki-ia-ah-ha-an-t-), nakkiiatar / nakkiiann- (n.) 'dignity, importance; esteem; power; difficulty’ (Sum. DUGUD-atar: nom.-acc.sg. na-ak-ki-i-ia-tar (OH/NS), dat.-loc.sg. na-ak-ki-ia-an-ni ( $\mathrm{OH} / \mathrm{NS}$ ) ), nakk $\overline{-}^{z i}$ ( Ib 2 ) 'to be honoured, to be important; to be
difficult, to be an obstacle' (3sg.pres.act. na-ak-ke-ez-zi, na-ak-ke-e-zi (MH?/MS?), 3pl.pres.act. na-ak-ke-ia-a[n-zi], 3sg.pret.act. na-ak-ke-e-et ( $\mathrm{OH} / \mathrm{NS}$ ), 2pl.pret.act. na-ak-ke-e[-et-tén]; part.(?) na-ak-ke-ia-an-t-), nakkēšš-zi (Ib2) 'to become important; to become troublesome to' (3sg.pres.act. na-ak-ke-eš$z i(\mathrm{OH}$ ?/NS), na-ak-ke-e-eš-zi (NH), na-ak-ki-ía-aš-zi (1x, NH), 3sg.pret.act. na$a k-k e-e-e s ̌-t a(N H), n a-a k-k e-e \check{s}-t a(\mathrm{NH})$, na-ak-ki-iš-ta (NH), 2pl.pret.act. na-ak-ke-eš[-tén]; 3sg.pret.midd. na-ak-ke-e-eš-ta-at (NH); part. na-ak-ke-e-eš-ša-an-t(NH); impf. na-ak-ke-e-eš-ke/a-, na-ak-ke-eš-ke/a-, na-ak-ki-iš-ke/a-).

See CHD L-N: 364f. for attestations and semantics. It is remarkable that nakkī- is the only $i$-stem adjective that does not show ablaut in the suffix. Moreover, the $-i$ is written plene quite often, which is not the case in other $i$-stem adjcetives. These phenomena probably are connected, but the details are unclear. CHD gives a detailed description of the semantic range of this word and its derivatives and must conclude that it denotes (1) 'honoured, important, valuable', (2) 'difficult' and (3) 'powerful'. According to CHD, a meaning 'heavy' cannot be established, which is important for the etymology.
Sturtevant (1930c: 215) connected nakkī- with Hitt. nini(n) $k^{-z i}$ 'to set in motion' (q.v.), which is regarded by him as a cognate to Gr. $\dot{\varepsilon} v \varepsilon \gamma \kappa \varepsilon \tilde{\mathcal{L}}$ 'to carry' etc. from PIE *hl $h^{\prime} k^{k}$-. This view is widely followed, but semantically this etymology is difficult. The root * $h_{1} n e k^{\prime}$ - denotes 'to seize, to carry'. If this were the ancestor of Hitt. nakkī-, we would expect that this latter word received the meaning 'important' through a meaning 'heavy', which is connectible with 'to carry'. As CHD states, a meaning 'heavy' cannot be established for nakkī-, which makes this etymology semantically difficult.
The verb nakk $\overline{-}{ }^{-i}$ is regarded by Watkins (1973a: 72) as a stative in $-\bar{e}-<*-e h_{1}-$.
nakku- (c.) a remover of evils, a substitute: gen.pl. na-ak-ku-ua-aš (MH/MS), dat.-loc.pl. na-ak-ku-ua-aš (MH/MS).
Derivatives: \& UDU nakkušša/i- (c.) 'scapegoat, carrier (to remove evils)' (nom.sg. na-ak-ku-uš-ši-iš (MH/MS), na-ku-uš-ši-iš (NH), acc.sg. na-ak-ku-uš-šiin (MH/MS), na-ak-ku-uš-ša-an, nom.pl. na-ak-ku-uš-ši-e-eš (MH/MS), na-ak$k u-u s ̌-s ̌ i-i s ̌, \quad$ acc.pl. na-ak-ku-uš-ši-uš, na-ak-ku-uš-ši-i-uš), nakkuššahit- (n.) 'status of a carrier or scapegoat' (dat.-loc.sg. na-ak-ku-uš-ša-hi-ti (NS); broken na-ak-ku-ušr-ša>-a-ḩi-x[..] (MS)), nakkušatar / nakkušann- (n.) 'status of a scapegoat or carrier' (dat.-loc.sg. na-ak-ku-ša-an-ni (NS)), nakkuššiie/a- ${ }^{z i}$ (Ic1) 'to be a scapegoat' (3sg.pres.act. na-ak-ku-uš-ši-e-zi (MH?/NS?), na-ak-ku$u s ̌-[s ̌ i-] e-e z-z i(M S ?), 1$ sg.pret.act. [na-]ak-ku-uš-ši-i-ia-nu-un), nakkuššěšš- ${ }^{z i}$ (Ib2)
'to be(come) a scapegoat' (3sg.pres.midd. na-ak-ku-uš-še-eš-dạ' (OH?/NS), na$a k-k u-u s ̌-s ̌ e-e-e s ̌-d a ̣ ? ~(\mathrm{OH} ? / \mathrm{NS}))$.

See CHD L-N: 374f. for attestations and semantics. On the basis of the derivatives nakkušša/i-, which is occasionally preceded by a gloss wedge and which shows the Luwian genitival adjective-suffix -šša/i-, and nakkuššahit-, which shows the Luwian suffix -ahit-, we must conclude that this whole set of words probably is of Luwian origin.
Sometimes, the OH word nakkuš- (q.v.) is connected with these words as well, but because its meaning is not fully clear and because it occurs in OS texts already, this seems neither obligatory nor likely to me. Nevertheless, on the basis of the fact that nakkuš- occasionally is interpreted as 'damage' and has been connected by e.g. Catsanicos (1986: 167, followed by Rieken 1999a: 202f.) with Lat. noceō 'to damage', noxia 'damage', this connection is made for the group of words treated under the present lemma as well. This seems unlikely to me: I do not see how a meaning 'substitute, remover of evils, scapegoat' can be cognate to a meaning 'damage'. I therefore reject this etymology.
$\boldsymbol{n a k k} \boldsymbol{u} \check{s}$ (n.) 'loss(?), damage(?), fault(?)': nom.-acc.sg. na-ak-ku-uš (OS).
This words occurs a few times only, of which Hittite Law $\S 98$ is the only complete context:

KBo 6.2 iv (with additions from KBo 6.3 iv 52-54)
(53) ták-ku LÚ EL-LUM É-er lu-uk-ki-ez-z[(i É-er EGIR-pa ú-e-t $)] e-e z-z i$
(54) an-da-n=a É-ri ku-it ḩar-ak-zi LÚ. $\mathrm{U}_{19}\left[\left(. \mathrm{LU}=k u \mathrm{GU}_{4}=k u\right) \mathrm{UD}(\mathrm{U}=k u)\right] e$-eš-za $n a-a k-k u-u s ̌$
(55) $n=a-a t[$ šar $-n i-i k]-z a$
'If a free man sets fire to a house, he will rebuild the house. But what perishes
inside the house -- whether there is a person or a cow or a sheep -- (is) nakkuš.
He shall replace it'.
On the basis of this context, nakkuš could be translated 'damage' or '(his) fault' (cf. CHD L-N: 374-5). Catsanicos (1986: 167) compares nakkuš with Lat. noxa 'damage', especially because of the Lat. syntagm noxiam sarcire 'to repare the damage', which then would correspond to Hitt. nakkuš šarni(n) $k^{-z^{i}}$ (see at šarni(n) $k z^{z i}$ for the etymological connection with Lat. sarciō). Nevertheless, as
long as the exact meaning of nakkuš is unclear, this etymology can only be provisional.
namma (adv.) 'then, next, after that, henceforth; once more, again; in addition, furthermore': nam-ma (OS).

See CHD L-N: 378 for an extensive semantic treatment of this adverb. The word is always spelled nam-ma, although when sentence-initial particles follow, the
 criticism on this reading in CHD L-N: 391). It can stand in sentence-initial position, but can also be used sentence-internally. In the latter case, the normal clause conjunctives $(n u, t a, s \check{u} u,=(i) a$ or $=(m) a)$ are used. This is important for the etymology.

Often, it has been suggested that namma reflects the conjunctive $n u$ to which an unknown particle is attached (e.g. Tischler HEG N: 268). Because namma is just an adverb that occasionally can occupy the initial position in a sentence, this is unlikely. Others have argued that namma should contain the connector $=(m) a$, but this is unlikely in view of OS attestations nam-ma=ma.
A better inner-Hittite comparandum is the adverb imma (q.v.). This word is generally equated with Lat. immō, but that does not shed much light on the etymology of namma.
nana(n)kušš(iie/a)- ${ }^{z i}$ (Ib1 / Ic1) 'to be(come) dark, obscure, gloomy': 3sg.pres.act. [n]a-na-an-ku-uš-zi (OH/NS), na-na-ku-uš-zi (OH/NS); part. na-na$k u$-uš-ši-íla-an-t-.

Derivatives: nanankuššiial- (adj.) 'dark, obscure' (abl. [na]-na-an-ku-uš-ši-ía$a z$ ).

$$
\text { PIE } * n o-n o g^{w h}-s \text { - or } * n o-n e g^{w h}-s-
$$

See CHD L-N: 394f. for attestations. The verb clearly belongs with neku- ${ }^{z i}$ 'to become evening' (q.v.) $<*^{*} e g^{w h}$-, which means that we formally have to reconstruct *no-nog ${ }^{w h}$-s-(ie/o)- or, with Melchert (apud Oettinger 1994: 328), *no-nég ${ }^{w h}-s-$, assuming $*-e->-a$ - as in $* t e ́ k s t i>t a k k i s ̌ z i . ~ S e e ~ a t ~ l a l u k e / i \check{s ̌ s-~}{ }^{z i}$ for a parallel formation.
$=\boldsymbol{n n a s ̌}$ (encl.pers.pron. 1pl.) '(to) us, our': -C=na-aš, $-V=n-n a-a \check{~(O S), ~}-V=n a-a \check{s}$ (NH).

Derivatives: see $u \bar{e} \bar{s} / a n z$-.

Anat. cognates: HLuw. $=\boldsymbol{n z}$ 'us' (e.g. ma-wa/i-za ha-sá-tu-' /man=wa=nt ${ }^{\mathrm{s}}$ hasantu/ 'much let them beget for us' (KARATEPE 1 §56), wa/i-za $a^{-i}|n i-i|$ ARHA । "*6"" $s a-t u^{-i} / w a=n t{ }^{s} n \bar{i}$ arha santu/ 'and do not let them miss us' (ASSUR letter $e$ §13)).
IE cognates: Skt. nas (encl.), GAv. n̄̄, Lat. nōs 'us'.
PIE *-nos
See CHD L-N: 396f. for attestations and contexts. This enclitic clearly must reflect *-nos (cf. Skt. encl.pron. nas 'us'). It is unclear to me why the enclitic is usually spelled with geminate $-n n$-. See chapter 2.1 for a more elaborate treatment.
našma (conj.) 'either, or': na-aš-ma (OS)
See CHD L-N: 401f. for attestations and contexts. Besides našma, we also find the conj. naššu 'either, or'. The distribution between naššu and našma is strict: in enumerations, naššu is used for the first term and našma for the second: (naššu) A našma $B$ '(either) $A$ or $B$ '. This makes it likely that našma is to be seen as naššu followed by the adversative conjunction $=(m) a$. This is corroborated by the fact that našma itself is never attested with a following $=(m) a$. In 'normal' Hittite historical phonology, a development *naššu=ma>našma is impossible, but it is known that conjuction and particles often obide to other rules. For the etymology of naššu see there.
naššu (conj.) 'or': na-aš-šu (OS).
PIE *no-sue
See CHD L-N: 405f. for attestations and semantics. The word is consistently spelled na-aš-šu. The hapax spelling nu-ua-aš-šu (KBo 27.16 iii 6 (MH/NS)), which is cited by CHD as a full alternative form, has been explained by Otten (1979a: 275)) as a wrong copying of na-aš-šu (the sign NA (恃) resembles nuua ( The distribution between naššu and našma 'either, or' (q.v.) is that in enumeration naššu accompanies the first term with našma following (naššu $A$ našma $B$ 'either $A$ or $B$ '). This indicates that našma could be derived from naššu through *naššu=ma (note that $n a-a \check{s}-\check{s} u=m a$ itself is attested in Hittite as well, but this does not preclude our interpretation of našma as *naššu=ma).
For naššu, many etymologies have been given (cf. the references in Tischler HEG N: 281f.), none of which was able to totally convince. In my view, we are
likely to be dealing with $n a-$ 'not' (cf. natta 'not') followed by -ššu 'so', which then must be compared to ModEng. so, ModHG. so < *suo. For the semantics, compare Dutch dit, zo niet dat 'this, if not (lit. not so) that $>$ this or that'. I therefore tentatively reconstrut *no-sue (for loss of word-final *-e compare e.g. $=k k u<*_{-} k^{w} e$ ).
${ }^{(\mathbf{G I})} \boldsymbol{n} \overline{\mathbf{a} t a} / \mathbf{i}$ - (c.) 'reed, arrow, drinking straw' (Sum. $\left.{ }^{(\mathrm{GIŠ})} \mathrm{GI}\right)$ : nom.sg. GI-aš, acc.sg. $n a-a-t a-a n(N S), n a-t a-a n, n a-t i-i n(1 x, \mathrm{OH} / \mathrm{NS})$, gen.sg. GI-aš, instr. na-ti-i-da ( $\mathrm{OH} / \mathrm{NS}$ ), GI-it $(\mathrm{OH} / \mathrm{NS})$, nom.pl. $\mathrm{GI}^{\mathrm{HI} . \mathrm{A}}$, acc.pl. $\mathrm{GI}^{\mathrm{HIIA}}$.

Derivatives: natānt- (adj.) 'provided with a drinking straw' (nom.pl.c. na-ta-a$a n-t e-e \check{s}(\mathrm{NH})$ ), \& naduúant- (adj.) 'having reeds, reedy' (nom.sg.c. \& na-du-ua$a n-z a$, acc.pl.c. $\left.n a-d u-u[a-a n-d u-u s]^{\prime}\right)$.
Anat. cognates: CLuw. nātatta- 'reed' (coll.pl. na-a-ta-at-ta).
IE cognates: Skt. nadá- 'reed', naḍá- 'reed', Arm. net 'arrow'.
PIE *nód-o-
See CHD L-N: 406 for attestations. The bulk of the attestations show an $a$-stem nāta-, but once we find an $i$-stem nati-, in acc.sg. natin ( $\mathrm{OH} / \mathrm{NS}$ ). Perhaps we have to assume that this form was influenced by Luw. *nāta/i-, which we have to postulate on the basis of CLuw. nātatta- 'reed'.
Since Otten (1955: 392), this word is generally connected with Skt. nadá- 'reed' and Arm. net, -i 'arrow'. The Skt. form reflects *nedó-, whereas the Armenian form goes back to *nedi-. The Hittite form, however, must reflect *nódo-.
natta (negation) 'not' (Sum. NU, Akk. U'-UL, UL): na-at-ta (OS).
Derivatives: see nāui.
Anat. cognates: Pal. nī 'not' (ni-i), nit 'not' (ni-it=); CLuw. nāūa 'not' (na-a-ú$\left.{ }_{n} a, n a-a-u w a, n a-u ́-u a, n a-u-u a, n a-u a\right)$, n $\stackrel{\boldsymbol{s}}{ }$ (prohibitive) 'not' (ni-i-iš, ni-iš, ne$i \check{s}, n i-i-s ̌=)$; HLuw. na 'not' ( $n a$ (AKSARAY §8, ?TÜNP $1 \S 7$ ), $\mathrm{NEG}_{2}$ (often)), nis (prohibitive) 'not' (ni-sa (ISKENDERUN §6), ni-i-sá (MARAŞ 14 §8), $\mathrm{NEG}_{3}$-sa); Lyd. ni- (prefix) 'not', nid 'not', nik 'and not', nikumẽk 'never'; Lyc. $\boldsymbol{n e}$ 'not', nepe 'not', nipe 'not', ni (prohibitive) 'not'.

See CHD L-N: 409f. for attestations and treatment. The word is clearly derived from PIE *ne 'not', but it is not quite clear in what way. The words found in the other Anatolian languages all could reflect *ne+, whereas Hitt. natta seemingly reflects an $o$-grade $* n o$ followed by a particle $* t o(=* t o$ as seen in the sentencen initial conjunction ta ?). It is problematic, however, that no other example of an
$o$-grade variant besides *ne 'not' is found in the other IE languages (Skt. ná, Lat. $n \check{e}-$, OIr. ne-, Goth. ni, Lith. ne, OCS ne).
nāuartanna/i (adv.) 'for nine laps': na-a-ua-ar-ta-an-na, na-una-ar-ta-an-ni.
See CHD L-N: 421 for attestations. The word occurs in the Kikkuli-text and belongs with the other words in -uartanna (see aikauartanna, panzauartanna, šattauartanna, tierauartanna) that are clearly derived from Indic. In this case, nāuartanna must show haplology from *nauauartanna < Indic *nava-vartana 'nine rounds'.
nāui (adv.) 'not yet': na-a-ú-i (OS), na-ú-i (OH/NS), na-a-ui $i_{5}$ ( OH ?/NS, $\mathrm{MH} / \mathrm{NS})$, $n a-u i_{5}(\mathrm{NH}), n a-u-u i_{5}(\mathrm{OH} ? / \mathrm{NS})$.

PIE *no-iou-i ?
See CHD L-N: 421f. for attestations. It is clear that, just as natta 'not', this word must be derived from PIE *ne 'not'. Eichner (1971: 40 ${ }^{33}$ ) compares OCS ne ju 'not yet' and reconstructs *neieui. According to regular sound changes, such a preform would not yield Hitt. nāui, however. Moreover, OCS $j u$ corresponds to Lith. jaũ and must reflect $* i o u$, with $o$-grade. If we that assume that the negation had o-grade as well (compare at natta $<* n o-t o$ ?), we arrive at a preform *no-iou$i$, which indeed would regularly yield Hitt. nāui. See at natta for the problems regarding reconstructing an $o$-grade $* n o$, however.
$\boldsymbol{n} \overline{\boldsymbol{e}}^{\text {a(ri) }}, \boldsymbol{n a i}^{\boldsymbol{i}} /{ }^{\text {* }} \boldsymbol{n i} \boldsymbol{-}$ (IIIa $>\mathrm{IIIg}$; IIa4 $>\mathrm{Ic} 1$ ) 'to turn, to turn someone, to turn oneself, to send': 1sg.pres.midd. ne-ia-ah-ha-ri (NH), 2sg.pres.midd. ne-ia-at-ta$t i(\mathrm{NH})$, na-iš-ta-ri (NH), 3sg.pres.midd. ne-a (OS), ne-e-a (OS), ne-e-ia (MH/MS), ne-i-ia ( OH ?/NS), ne-ia ( $\mathrm{OH} / \mathrm{NS}$ ), ne-e-a-ri (MH/MS), ne-i $a-a-r i$ (MH/NS), ne-ía-ri (NH), ni-ia (late NH), ni-ia-ri (late NH), 3pl.pres.midd. ne-e$a n-d a(\mathrm{OS})$, ne-ia-an-ta (OH/NS), ne-e-an-ta-ri, ne-an-ta-ri (NH), ne-ia-an-da-ri, ni-i_ia-an-ta-ri (late NH), 1sg.pret.midd. ne-ia-ah-ha-at (NH), 3sg.pret.midd. ne-e-a-at (MH/MS), ne-ia-at, ne-i-ia-at, ne-at (NH), ni-a-ti (OH/NS), ne-at-ta-at $(\mathrm{NH})$, ne-i $a-a t-t a-a t(\mathrm{NH})$, ne-i $i a-t a-a t(\mathrm{NH})$, ni-ia-at-ta-at $(\mathrm{NH})$, 3pl.pret.midd. ne-e-an-ta-ti (MH?/NS), ne-ia-an-ta-ti (OH/NS), ne-an-ta-at (NH), ne-ia-an-ta-at (NH), 2sg.imp.midd. na-a-i-iš-hुu-ut, na-a-iš-hुu-ut (OH/NS), ni-iš-hुu-ut (MH/MS), [n]a-eš-ḩu-ut, na-i-eš-hu-ut (MH/NS), na-iš-hu-ut (NS), ne-eš-ȟu-ut (NH), 3sg.imp.midd. ne-ia-a-ru (NH), ne-ia-ru (NH), ni-ía-ru (late NH), 2pl.imp.midd. na-iš-du-ma-at (MH/MS), 3pl.imp.midd. ne-ia-an-da-ru;

1sg.pres.act. ne-eh-hi (MH/MS), ne-ia-mi (NH), 2sg.pres.act. na-it-ti (OH/NS, MH/MS), na-i-it-ti (NH), na-a-it-ti (NH), ne-i ia-ši (NH), ni-ịa-ši (late NH), ne-ịa$a t-t i(\mathrm{NH})$, ne-í $a-t i(\mathrm{NH}), 3$ sg.pres.act. $n a-a-i(\mathrm{OH} / \mathrm{NS}, \mathrm{MH} / \mathrm{MS})$, ne-i $a-a z-z i(\mathrm{OH}$ or MH/NS), 1pl.pres.act. na-i-ua-ni (MH?/MS), [n]e-ía-u-e-ni (NH), 2pl.pres.act. $n a-i s ̌-t e-n i(M H / M S), n a-i s ̌-t a-n i(M H / M S), 3 p l . p r e s . a c t . ~ n e-e-a n-z i(O H / M S)$, ne-e-a-anzi (MH/MS), ne-e-ia-an-zi (OH/NS), ne-ía-an-zi (MH/MS), ne-an-zi (NH), ni-an-zi (NH), 1sg.pret.act. ne-e-eh-[hu-un] (OS), ne-eh-hu-un (OH/NS, MH/MS), ne-hu-un (NH), ne-ia-ah-hu-un, 2sg.pret.act. na-a-it-ta (MH/NS), na-it-ta ( $\mathrm{OH} / \mathrm{MS}$ ), 3sg.pret.act. na-iš (MH/MS), na-a-i-eš (OH/NS), na-a-i-iš (NH), $n a-a-i s ̌$ (MH/NS), na-a-it (MH/MS), na-it-ta (OH/MS), na-a-iš-ta (NH), na-eš-ta ( NH ), na-iš-ta (NH), ne-i $a-a t(\mathrm{NH}), 1$ pl.pret.act. ne-ía-u-e-en, ne-ía-u-en (NH), 3pl.pret.act. na-i-er ( $\mathrm{OH} / \mathrm{NS}$ ), na-a-i-er (MH?/NS), na-i-e-er, na-a-er, ne-i-e-er, 2sg.imp.act. na-i (MH/MS), na-a-i (NH), ne-i-ia (NH), 3sg.imp.act. na-a-ú (MH/MS), 2pl.imp.act. na-iš-tén (MH/MS), na-a-iš-tén (OH or MH/NS), na-a-eš-tén ( OH or $\mathrm{MH} / \mathrm{NS}$ ), ne-ía-at-tén (MH/NS), 3pl.imp.act. ne-[i] $] a-a n-d u$; part. ne-e-an-t- (OS), ne-e-a-ant- (MH?/MS?), ne-an-t- (MH/NS), ne-ia-an-t(MH/MS), ne-e-ia-an-t- (OH/NS, MH/MS), ni-ia-an-t- (NH); verb.noun ne-ia-u-ua-ar (NH), na-i-ua-ar (OH?/early NS), gen. ne-e-u-ua-aš (MH/MS); impf. na$i s ̌-k e / a-(\mathrm{MH} / \mathrm{MS}), n a-i-i \check{s}-k e / a-, n a-a-i s ̌-k e / a-(\mathrm{NH}), n a-a-e s ̌-k e / a-(\mathrm{NH})$.
Derivatives: nanna- ${ }^{\boldsymbol{i}}$ / nanni- (IIa5 > Ic1, IIa1 $\gamma$ ) 'to drive, to ride in an animaldrawn vehicle; to draw/drive back’ (1sg.pres.act. na-an-na-ah-hi, 2sg.pres.act. na-an-na-at-ti, 3sg.pres.act. na-an-na-i (OS), na-an-na-a-i (MH/NS), 1 pl.pres.act. na-an-ni-ía-u-e-ni (early NS), 3pl.pres.act. na-an-ni-an-zi (OS), na-an-ni-i्2a-an-zi (OH/NS), na-a-an-ni-i्1a-an-zi, na-an-na-an-zi (NH), na-na-an-zi 1sg.pret.act. na-an-na-ah-hu-un (NS), 3sg.pret.act. na-an-ni-iš-ta (NH), 3pl.pret.act. na-an-ni-e-er (MS), na-an-ni-er (OH/NS), 2sg.imp.act. na-an-ni (MH/NS), 3sg.imp.act. na-an-na-úu (MH/NS), 2pl.imp.act. na-an-ni-iš-tén (MS); 3pl.pres.midd. na-an-ni-an-ta[(-), na-an-ni-an-da[(-); impf. na-an-ni-iš-ke/a-, na-an-ni-eš-ke/a-), nenna- ${ }^{i}$ /nenni- (IIa5) 'to drive (animals)' (3pl.pres.act. ne-in-ni-ía-an-zi), see ${ }^{\text {GIŠ }}$ niniilal(la)-, penna- ${ }^{i} /$ penni- and $\bar{u} n n a-{ }^{i} / \bar{u} n n i-$.

Anat. cognates: CLuw. nana- 'to lead(?)' (2sg.pres.act. na-na-a-at-ti, 3pl.pret.act. na-na-an-ta, part. na-na-am-ma-an); HLuw. ?niasha- 'procession' (acc.sg. CRUS.CRUS(-)ní-ia-sa-ha-na (KARKAMIŠ A11b §16)).

IE cognates: Skt. nay ${ }^{i}$ - 'to lead'.

$$
\text { PIE *néih } h_{1 / 3}-o \text {, *nóih }{ }_{1 / 3} \text {-ei / *nih } h_{1 / 3} \text {-énti }
$$

See CHD L-N: 347f. for attestations and an elaborate treatment of the meaning of this verb. In OS texts, we mostly find middle forms, which indicates that
originally the middle paradigm was dominant. The oldest attested forms are 3 sg.pres. nēa (OS) and 3pl.pres. nēanda (OS), which probably have to be interpreted as /né?a/ and /né?anta/ (or /né?ənta/?). These forms regularly developed into MH /néa/ and /néanta/, which were phonetically realized as [néta] and [nétianta], spelled ne-e-ía and ne-ia-an-da. In NH times, these forms were reinterpreted as belonging to a thematic stem neila-, which gave rise to the NH forms neiahhari, neiattari etc.
In the active paradigm, the singular forms are inflected according to the dāi/tiiianzi-class inflection and show the stem nai- (nehhi, naitti, nāi). In the pl.pres.-forms we therefore would have expected to find the stem ni-, but this is unattested. In 1 and 2pl.pres.act. we find the trivial MH analogical introduction of the full-grade stem (1pl.pres.act. naiuani (MH/MS) instead of expected *niuēni; 2pl.pres.act. naištani (MH/MS) and naišteni (MH/MS) instead of expected *ništēni). In 3pl.pres.act., however, we suddenly find nēanzi (OH/MS) instead of expected $* *$ niianzi (but note that $*$ niianzi is indeed attested in the derivates nanna- ${ }^{i}$ / nanni- (nannianzi (OS)), penna- ${ }^{i}$ / penni- (penniianzi ( $\mathrm{OH} / \mathrm{MS}$ )) and $\bar{u} n n a{ }^{-}{ }^{i} / \bar{u} n n i-$ (ūnnianzi (OH/MS))). In my view, this nēanzi must be an analogical rebuilding on the basis of 3pl.pres.midd. nēanda. In younger times, nēanzi develops into neianzi as well. On the basis of this latter form as well as on the basis of the NH middle stem neia-, a mi-inflected active stem neia- ${ }^{z i}$ is spreading in NH times.
Within the middle paradigm, 2sg.imp.midd. naišhut and 2pl.imp.midd. naišdumat are fully aberrant. Not only do they show an unexpected vocalism (nai- instead of $n \bar{e}-$ ), they also contain an unclear -š-. In my view, these facts can only be explained if we assume that naišhut and naišdumat are secondary formations in analogy to 2pl.imp.act. naišten. This latter form, which shows the regular active stem nai- followed by the regular 2pl.imp.-act.-ending of the hiflection -šten, was incorrectly reanalysed as naiš-ten as a result of the MH replacement of the hi-ending -šten by the mi-ending -tten (cf. Kloekhorst fthc.d). This newly analysed 'stem' naiš- then was reinterpreted as the specific imperative-stem and therefore transferred to the imperatives of the middle paradigm as well, replacing the original forms *nēhhut and *nēdumat by naišhut and naišdumat.
The etymological connection with Skt. nay ${ }^{i}$ - 'to lead' was made already by Hrozný (1917: $29^{3}$ ) and has been generally accepted since. This means that we have to reconstruct a root *neiH-. In Hittite, middles reflect either zero or $e$-grade. This means that nēa, nēanda must reflect *néiH-o, *néiH-nto (old stative, compare e.g. Skt. inj.midd. nayanta). On the basis of 3sg.pres.midd. *néiH-o >

Hitt. $n \bar{e}(\underset{\sim}{i}) a$ we can conclude that the root-final laryngeal cannot have been $* h_{2}$, because this consonant should have been retained as $-h$ - intervocalically. The active stem nai- must, like all hi-inflected verbs, reflect o-grade, which means that nehhi, naitti, nāi go back to *nóiH- $h_{2} e i$, *nóiH-th $h_{2} e i$, *nóiH-ei. Note that 3sg. *nóiH-ei regularly should have yielded Pre-Hitt. **/né?e/, cf. *h $h_{2}$ eih $h_{3} u s>$ Hitt. ḩēuš 'rain'. I therefore assume that 3 sg . *nóiH-ei was replaced by *nói-ei in analogy to the 1 sg.- and 2 sg.-forms where $*-H$ - was interconsonantal and therefore lost at an early moment, yielding *nói- $h_{2} e i$ and ${ }^{n}$ nói-t $h_{2} e i$. This new form, *nóiei, regularly yielded */náie/ >> */náiii/ >/náii/, na-a-i.
The derivative nanna- ${ }^{i}$ / nanni- inflects according to the mema/i-class. Melchert (1998b: 416) interprets this verb as an -anna/i-imperfective of nai- ${ }^{i} / * n i-$, but this is unlikely, as we would expect such a formation to have been **niidanna/i-. I therefore rather interpret nanna/i- as a reduplication of nai-. The fact that nanna/i- does not inflect according to the dāi/tiianzi-class is paralleled in the derivatives penna- ${ }^{i}$ / penni- and $\bar{u} n n a-{ }^{i} / \bar{u} n n i-$ (q.v.), and is due to the pre-Hittite influence of the $\operatorname{tarn}(a)$-class on polysyllabic dāi/tiianzi-class-verbs (cf. the treatment of the $m \bar{e} m a / i$-class in $\S 2.2 .2 .2 . \mathrm{h})$. The origin of the geminate $-n n$ - in nanna/i- (as well as in penna/i- and unna/i-) is unclear to me.
neiè $(a)-$ : see $n \bar{e}^{a(r i)}, n a i^{i}{ }^{i} /{ }^{(n i-}$
neka- (c.) 'sister’ (Sum. NIN, Akk. AHĀTU): acc.sg. ne-ga-an (OH/NS), dat.sg. $\mathrm{NIN}-i=\check{s}-s ̌ i(\mathrm{OS})$, nom.pl. $\mathrm{NIN}^{\mathrm{MEŠ}}-u s ̌$ (OH/NS), acc.pl. ni-ku-uš (OH/MS), ni-e$k u-u s ̌$ ( $\mathrm{OH} / \mathrm{MS}$ ), ni-ku-uš(?) (NS), dat.pl. ne-ga-aš (OH/NS).
Derivatives: NIN-tar 'sisterhood' (nom.-acc.sg. NIN-tar, dat.-loc.sg. NIN-ni), see annaneka- and nekna-.

PAnat. *ne ${ }^{\left(g^{\prime}\right)}$
See CHD L-N: 425f. for attestations. The forms spelled with the sign NI are transliterated in CHD with né: né-ku-uš, né-e-ku-uš.
To my knowledge, there are no cognates in the other Anatolian languages of this word itself. Of its derivative nekna- 'brother' (q.v.), we do find cognates however. Mechanically, neka- must reflect PAnat. *ne ${ }^{(\cdot)} o^{-}$, but I know of no IE cognates.
nekna- (c.) 'brother' (Sum. ŠEŠ, Akk. AHU): voc. ne-ek-na, ŠEŠ-ni, nom.sg. ŠEŠ-aš, acc.sg. ŠEŠ-an, gen.sg. ŠEŠ-aš, dat.-loc.sg. ŠEŠ-ni, abl. ŠEŠ-az, nom.pl. $\check{S}^{\text {S }}$ Š $^{\text {MEŠ }}-i s ̌$, ŠEŠ ${ }^{\text {MEŠ }}-u \check{s}$.

Derivatives: *neknatar / neknann- 'brotherhood' (nom.-acc.sg. ŠEŠ-tar, dat.loc.sg. ŠEŠ-an-ni), *neknahh- ${ }^{\text {i }}$ (IIb) 'to make someone a brother, to regard someone as a brother' (1sg.pret.act. ŠEŠ- $a h-h[u-u n])$.
Anat. cognates: CLuw. nāni(iai)- (adj.) 'of a brother' (nom.-acc.sg.n. na-a-ni-iaan, ŠEŠ-icia-an, nom.-acc.pl.n. na-a-ne-ía, abl.-instr. na-a-ni-ia-ti), nānahit'brotherhood’ (form? na-a-na-hi[(-)...]), nānašriiaa- (adj.) 'of a sister' (nom.acc.sg.n. NIN-ia-an, nom.-acc.pl.n. na-a-na-aš-ri[-ial]); HLuw. nanasri- (c.) 'sister' (dat.pl. ${ }^{\text {FEMINA }}{ }_{n a-n a-s a_{5}+r a / i-z a} /$ nanasrint ${ }^{\text {s }} /$ (MARAȘ 6 line 1)); Lyc. nẽneli- 'brother' (nom.sg. nẽni, dat.-loc.pl. nẽne, nene).

PAnat. *neğno-
See CHD L-N: 428 for attestations. In Hittite, the word is written phonetically only once, in voc.sg. nekna. On the basis of its Anatolian cognates CLuw. *nāna/i- and Lyc. nẽne/i-, we can reconstruct PAnat. *ne'gno-. This seems to be a derivative of the word for 'sister' as found in Hitt. neka- < PAnat. *ne'go-. In the Luwian languages, the word for 'sister' is derived from 'brother', however: nānašri- < *neg'ğno- + ašri-. No outer-Anatolian cognates are known.
Note that Luw. nāna- ~ Hitt. nekna- proves that in Luwian, internal $*_{g}^{(G)}$ disappears before nasal.
nekku (negative adv.) 'not?': ne-ku (OH/MS), ni-ku (OH/MS), [ne-]ek-ku ( $\mathrm{OH} / \mathrm{MS}$ ), ne-ek-ku, ni-ik-ku ( OH or MH/NS),
IE cognates: Lat. nec, neque.
PIE *ne-k"e
See CHD L-N: 432 for attestations. This adverb is used in rhetorical questions: 'did I not ...?'. Already Hahn (1936: $110^{14}$ ) analysed it as *ne-k"e (cf. Lat. nec, neque), which is generally accepted. Eichner's suggestion (1971: 31-34) to connect nekku with the question particle *-ne in Lat. -ne, Av. -nā is superfluous as these particles are identical to the negation *ne. Note that the geminate spelling $-k k$ - shows that in this case $* k^{w}$ remained fortis (contra Melchert 1994a: 61f., who claims that intervocalic * $k$ " unconditionally became "voiced" in PAnat.).
neku- ${ }^{-i}$ ( Ib 1 ) 'to become evening': 3sg.pres.act. ne-ku-uz-zi ( $\mathrm{OH} / \mathrm{NS}$ ), ne-ku-zi (MH/NS); 3sg.pres.midd. ne-ku-ut-ta (NS), 3sg.pret.midd. ne-ku-ut-ta-at (NH).
Derivatives: nekuz mehur (adv.) 'at night, in the evening' (ne-ku-uz (OH/NS, MH/MS), ne-ku-za (NH), ne-ku-uz-za (NH)), see nana(n)kušs(iie/a)- ${ }^{z i}$.

IE cognates: Gr. vúદ, vvкт- 'night', ěvvvðos 'nightly’, Lat. nox 'night', Goth. nahts 'night', Lith. naktìs 'night', OCS noštb 'night'.

PIE *neg ${ }^{w h}-; n^{*} g^{w h}-t-s, * n e g^{w h}-t-s$
See CHD L-N: 432 for attestations. The verb neku- ${ }^{z i}$ originally was active only. In NH times, middle forms were created in analogy to its opposite lukk- ${ }^{\text {tla }}$ 'to become light'.
The verb neku-zi and the expression nekuz mēhur 'at night, in the evening' are generally regarded as cognate to the PIE word for 'night' that is usually reconstructed as *nok ${ }^{w}$ ts (Lat. nox, Goth. nahts, etc.). According to Schindler (1967), the expression nekuz mēhur literally meant 'time of night' and shows the original gen.sg. *nek ${ }^{w} t s$. This then means that the word for 'night' had a static inflection: nom.sg. *nókwts, gen.sg. *nék $k^{w} t s$. The fact that in Hittite the verbal root $n e k u-{ }^{z i}$ is attested, indicates that ${ }^{*} n o k^{w} t s$ actually was a $t$-stem ${ }^{*} n o k^{w}-t-s$.
The consistent single spelling of $-k$ - in Hittite is problematic, however: it seems to point to PAnat. $* g^{w}<$ PIE $* g^{w(h)}$. According to Melchert (1994a: 61), intervocalic $* k^{w}$ yielded PAnat. $* g^{w}$ unconditionally, but this cannot be correct in view of forms like nekku < *ne- $k^{w} e$, takku $<{ }^{*} t o-k^{w} e, ~ t a k k u s ̌ s ̌-~<~ * d e k ~ w-, ~$ šakkuuani- 'mud-plaster' $<*_{\text {sok }}{ }^{w}$-on-i-. This means that the PAnat. preform *neg"- has to be taken seriously.
In Greek, we find two stems for 'night', namely $v v \kappa \tau$ - in vv́ $\xi$, vuкtós 'night',
 Although $v v \kappa \tau-$ seems to reflect ${ }^{*} n o k^{w} t$-, $v v \chi-$ must reflect ${ }^{*} n o g^{w h}$-. I therefore conclude that the Greek stem $v v \chi$ - together with Hitt. neku-shows that the root itself must have been $*^{n e} g^{w h}$-. The PIE $t$-stem originally must have been *nog ${ }^{w h}-t-s,{ }^{*} n e g^{w h}-t-s$, of which the latter form yielded Hitt. nekuz. Only in the separate IE languages, where the old fortis : lenis opposition was rephonemicized as a distinction in voice, an assimiliation of ${ }^{n} n o g^{w h} t s$ to ${ }^{*} n o k^{w} t s$ took place.
nekumant- (adj.) 'naked': nom.sg.c. ne-ku-ma-an-za (MH/MS), ni-ku-ma-an-za $(\mathrm{OH} / \mathrm{NS})$, ne-kum-ma-an-za (OH/NS), dat.-loc.sg. ne-ku-ma-an-ti ( $\mathrm{OH} / \mathrm{NS}$ ), nom.pl.c. ne-ku-ma-an-te-eš (MH?), ni-ku-um-ma-an-te-eš, [n]e-kum-ma-an-te$e s ̌, n e-k u-m a-a n-t i-s ̌=a-a t$, nom.-acc.pl.n. ne-ku-ma-an-ta.
Derivatives: nekumantae- ${ }^{z i}$ (Ic2) 'to undress oneself' (3sg.pres.act. [n]e-ku-ma$a n-t a-i z-z i)$, nekumandariie/a - $^{z i}$ (Ic1) 'to undress, to strip (someone)' (3pl.presact. ni-ku-ma-an-da-ri-an-zi (OH/MS?), ne-k[u-u]m-ma-an-ta-ri[-ia-an-
$z i]$, 3pl.pres.midd. ne-ku-ma-an-ta-r[i-an-ta-ri]), nekmuntatar (n.) 'destitution' (nom.-acc.sg. ne-ek-mu-un-ta-ta[r] (NH)).
IE cognates: Skt. nagná-, Av. mayna- 'naked'.

$$
\text { PIE *neg }{ }^{w}-n o-n t-
$$

See CHD L-N: 433f. for attestations. The word clearly belongs with the other IE words for 'naked', as already noticed by Götze (1928: 120). Nevertheless, a reconstruction is difficult as the different languages point to different suffixes: *nóg ${ }^{w}-o-\left(d^{(h)} o_{-}\right)$in Lith. núogas, Lat. nūdus, Goth. naqaps, OIr. nocht; *ne/og ${ }^{w}$ -no- in Skt. nagná-, Av. mayna- (with dissimilation); *neg ${ }^{w}$-ro- in Arm. merk (also with (tabuistic?) dissimilation). Hitt. nekumant- seems to derive from *neg ${ }^{w}$ -mo-nt-, but it is possible that it shows a dissimilation from *nekunant- < *neg ${ }^{w}$ -no-nt-. In that case, it would be equatable to Skt. nagná- and Av. majna-.

Note that a reconstruction ${ }^{n} n^{w} g^{w}$-uent- is impossible as a sequence $* K^{w} u$ - does not participate in the rules $*_{-}$-uu- > -mu- and $*_{-}$-uu- > -um- (cf. akueni < * $h_{1} g^{w h}$ uéni).

The derivative nekmuntatar 'destitution < *nakedness' shows a quite aberrant form. We would expect nekumantatar.
nēpiš- (n. (> c.)) 'sky, heaven' (Sum. AN, Akk. $\check{S} A M \bar{U}): ~ n o m .-a c c . s g . n . ~ n e-e-p i ́-i s ̌ ~$ (OS), ne-pí-iš (OS), ne-pé-eš (OH?/NS), nom.sg.c. [ne-p]í-ša-aš (NH), AN-aš (NH), acc.sg.c. ne-pí-ša-an (OH or MH/MS), gen.sg. ne-e-pí-ša-aš (OS), ne-pí-ša-aš (OS), ni-pí-ša-aš (OH/MS), all.sg. ne-e-pí-ša (OS), ne-pí-ša (OH/NS), loc.sg. ne-e-pí-ši (MS), ne-pí-ši (OS), ne-pí-iš, erg.sg. ne-pí-ša-an-za (MH/MS), abl. ne-e-pí-iš-za (OS), ne-pí-iš-za (OS), ne-e-pí-ša-az (OH/MS), ne-pí-ša-az (MH/MS), ne-pí-ša-za (OH or MH/NS), gen.pl. ne-pí-ša-an (MH/MS).
Anat. cognates: CLuw. tappaš- (n.) 'heaven' (nom.-acc.sg. ta-ap-pa-aš-ša, tap-pa-aš-ša, tap-paš-ša, dat.-loc.sg. tap-pa-ši-i, tap-pa-ši=, abl.-instr. ta-ap-pa-ša$t[i]$, erg.sg. tap-pa-ša-an-ti-iš, gen.adj.nom.pl.c. tap-pa-ša-aš-ši-in-zi); HLuw. tipas- (n.) 'heaven' (nom.-acc.sg. "CAELUM" ti-pa-sá (TÜNP 1 §4, KÖRKÜN §9), dat.-loc.sg. "CAELUM" $t i$-pa-si (KARKAMIŠ A6 §2, MARAŞ 14 §6), "CAELUM" $t i-p a-$ si-i (TELL AHMAR $3 \S 1$ ), erg.sg. "CAELUM" $t i-p a-s a-t i-s a$ (BOYBEYPINARI 2 §21), abl.-instr. "CAELUM" $t i-p a-s a+r a / i-i$ (SULTANHAN §14), gen.adj.nom.pl.c. "CAELUM" $t i-p a-s a-s i-z i(S U L T A N H A N ~ § 33 b))$.

PAnat. *nébos, *nebésos
IE cognates: Skt. nábhas- 'cloud, mist', Gr. vé $\varphi$ oç ‘cloud’, OCS nebo 'heaven', Lith. debesìs 'cloud'.

PIE *néb ${ }^{h}$-os, *neb ${ }^{h}$-és-os.

See CHD L-N: 448f. for attestations. The word is abundantly attested from OS texts onwards. Despite the fact that some commune forms are attested (nom.sg.c. nepišaš and acc.sg.c. nepišan), the manyfold attestation of nom.-acc.sg.n. nēpiš in OS texts clearly shows that the word is neuter originally.
Already Hrozný (1919: $72^{5}$ ) identified this word as the cognate of Skt. nábhas'cloud’, Gr. vépoç ‘cloud', etc. This neuter $s$-stem must originally have inflected proterodynamically: *né $b^{h}-s$, *n $b^{h}$-és-s, which possibly already in PIE was normalized to *néb ${ }^{h}$-os, *neb ${ }^{h}$-és-os (cf. Schindler 1975b). In Hittite, we find the stem nēpiš-, which must reflect *néb ${ }^{h}$-es-, throughout the paradigm, including in nom.-acc.sg. This implies that first the stem accentuation of nom.-acc.sg. *néb ${ }^{h}$ os spread throughout the paradigm, changing *neb ${ }^{h}$-és-os to pre-Hitt. *néb ${ }^{h}$ esos. Afterwards, the suffix-syllable -es- was taken over into the nom.-acc.sg. as well, changing *néb ${ }^{h}$-os to pre-Hitt. *néb ${ }^{h}$-es > nēpiš as attested. Nevertheless, there are some possible traces of the original nom.-acc.sg.-form *néb ${ }^{h}$-os to be found in Anatolia. As Kryszat (2006: 113) convincingly shows, the deity Ni-ba-aš as attested in the Old-Assyrian Kültepe-texts was the major deity besides Annā (= Hitt. anna- 'mother' and therefore 'mothergod'?), and is therefore likely to be equated with ${ }^{\mathrm{d}} \mathrm{IM}$, the Storm-god. This makes it very attractive to interpret Ni-ba$a s ̌$ as a spelling for /nébas/ (cf. Kryszat 2006: $113^{70}$ for the possibility of a reading "Nepaš"), the expected outcome of PIE *néb ${ }^{h}$-os. This implies that in pre-Hittite times the paradigm still was /nébas/, /nébesas/. Note that Melchert (1994a: 138) assumes that post-tonic $* e$ in open syllable yields /a/, whereas post-tonic $* e$ in closed syllable yields /i/. For gen.sg. nēpišaš, which seems to reflect *néb ${ }^{h}$ esos directly, he therefore must assume that the regular outcome $* * /$ nébasas/ was replaced by /nébisas/ on the basis of nom.-acc.sg. /nébis/ and abl. /nebists ${ }^{\mathrm{s}}$ / where /i/ is regular (*néb ${ }^{h}$ es, *néb ${ }^{h}$ es-ti). If this scenario is correct, and if OAss. Ni-ba$a s ̌$ indeed represents Hitt. /nébas/, we must assume that between the $19^{\text {th }}-20^{\text {th }}$ century BC (the period of the OAss. tablets) and the $16^{\text {th }}$ century (the period of OH texts), the following developments must have taken place: (1) replacement of nom.-acc.sg. /nébas/ by */nébes/ in analogy to oblique cases like */nébesas/; (2) the weaking of posttonic $*_{e}$ to $/ \mathrm{i} /$ in closed syllables and to $/ \mathrm{a} /$ in open syllables, yielding /nébis/ and */nébasas/; and (3) the spread of nom.-acc.sg. /nébis/ throughout the paradigm, replacing */nébasas/ by /nébisas/. This would show that the weakening of posttonic $* e$ is a very recent phenomenon.
The exact interpretation of the Luwian forms is less clear, however. Although CLuw. tappaš- shows a geminate $-p p$ - that can only be explained through Čop's Law and therefore must reflect *néb ${ }^{h} e / o s$-, the interpretation of HLuw. tipas- is
difficult. It is generally thought that HLuw. $-i$ - can only reflect $*-i$ - or $*-\bar{e}$-. In this case it would then mean that tipas- reflects *nēb $h^{h}$ /os-, but such a lengthened grade is not attested anywhere else in the IE languages. Hajnal (1995: 63) therefore states that here $-i$ - must be the outcome of pretonic short $* e$. This would mean that HLuw. tipas- reflects $* n e b^{h} e ́ s-$. If this is correct, the pre-Luwian paradigm should have been *néb ${ }^{h} o s,{ }^{*} n e b^{h}$ ésos, which would indeed fit the other material.

LÚ $\boldsymbol{n e s ̌ u m e n - ~ / ~ n e s ̌ u m n - ~ ( c . ) ~ ' m a n ~ f r o m ~ t h e ~ t o w n ~ o f ~ N e ̄ s ̌ a ~ ( K a n i s ̌ ) , ~ N e s ̌ i t e ' : ~ n o m . p l . ~}$ ne-šu-me-né-eš (OS).
Derivatives: nešumnili (adv.) 'in the language of the Nešites (= Hittites)' (ne$\left.e \check{s}-[u] m^{!}-n i-[l i]\right)$, kanišumnili (adv.) 'in the languages of the Kanišites (= Hittites)', ${ }^{\text {URU }} \boldsymbol{n i s ̌ i l i}($ adv.) 'in Nešite' (ni-ši-li), nā̌̌ili (adv.) 'in Nešite' (na-a-ši$l i)$.

See CHD L-N: 454. All forms are derived from the placename Nēša, Kaniš (modern-day Kültepe). As this place was the original capital of the Hittites, the Hittites refer to themselves as nešumena- 'Nešite' and to their language as nišili 'in Nešite' or kanišumnili 'in the language of the Kanišites'. The name of the town is probably proto-Hattic, showing the prefix ka- 'in' (so */ká-nes/ besides */nés-a/). For the appurtenance-suffix -umen- / -umn- see its own lemma.

пе̄иa- (adj.) 'new, fresh' (Sum. GIBIL): nom.sg.c. GIBIL-aš, acc.sg.c. GIBIL-an, nom.-acc.sg.n. ne-e-ua-an (OH/MS), ne-e-u-ua-an (OH?/NS), instr. ne-e-u-[it] (MH/NS), ni-u-i-i[t], acc.pl.c. ne-mu-uš.
Derivatives: nēuahh ${ }^{\text {i }}$ (IIb) 'to renew, to restore, to make new again' (1sg.pres.act. GIBIL-ah-mi (NH), 3pl.pres.act. ne-e-u-ua-ah-ha-an-zi (MH/MS), ne-ua-ah-ha-an-zi (MH?/MS?), 1sg.pret.act. ne-ua-ah-hu-un (MH/NS), 3sg.pret.act. ne-ua-ah-ha-aš (NS), 3pl.pret.act. ne-una-ah-he-er (OH/NS), 2sg.imp.act. ne-ua-a-ah (OH/NS), 3pl.imp.act. ne-e-u-ua-ah-ha-an-du (MH/MS), ne-ua-ah-ha-an-du (MH/NS); part. ne-u-úa-ah-ha-an-t- (MH/MS)); inf.I [GI]BIL-an-zi.
Anat. cognates: CLuw. nāūa/i- (adj.) 'new' (abl.-instr. na-a-ú-ua-ti, na-ú-ua-ti, $n a-a-i ́-u a-t e)$.

IE cognates: Skt. náva-, Gr. véoç, Lat. novus, OCS novъ 'new'.
PIE * пе́ио-

See CHD L-N: 455f. for attestations. Since long, the etymology has been clear: the word belongs with Skt. náva-, Gr. véoc, etc. 'new' and reflects *néuo-. The derivative neuahh-' is cognate to Lat. novāre 'to renew', Gr. veá $\omega$ 'to plough up' and reflects * neueh $_{2}$-.
PIE *néиo- probably is a derivative of *nu 'now' (see at $n u$ ).
$\boldsymbol{n i}(\underline{I} \boldsymbol{i})-:$ see $n \bar{e}^{-(r i)}, n a i^{i} / * n i-$
$\boldsymbol{n i k}-{ }^{z i}$ : see $n i(n) k-{ }^{z i}$
 ni-ni-ía-la-aš.

See CHD L-N: 438 for attestations. Neumann (1961a: 85) interpreted the word as a derivative of $n \bar{e}^{-\left({ }^{(r i)}\right.}, n a i^{i}{ }^{i} / * n i-$ 'to turn, to send' (q.v.), which could be possible if that verb could be used for 'rocking' as well. If so, then we are dealing with *ni-nih $h_{1 / 3}$-ol-.
${ }^{\text {NINDA }}$ niniiami- (c.) a bread or pastry: nom.sg. ni-ni-ia-mi-iš, acc.sg. ni-ni-ia-miin.

See CHD L-N: 438 for attestations. Formally, the word looks like a Luwian
 turn' (cf. CHD). Nevertheless, as long as the exact meaning of this word cannot be determined, this remains speculation.
$\boldsymbol{n i n i}(\boldsymbol{n}) \boldsymbol{k}^{\boldsymbol{z}}{ }^{\boldsymbol{i}}$ (Ib3) 'to mobilize, to set (people) in motion; to move, to transfer; to set in motion; (midd. and intr. act.) to behave in a disorderly manner; to disturb, to agitate': 1sg.pres.act. ni-ni-ik-mi, 2sg.pres.act. ni-ni-ik-ši, 3sg.pres.act. ni-i-ni-i[k$z] i(\mathrm{OS}), n i-n i-i k-z i$ (MH/NS), 1pl.pres.act. ni-ni-in!-ku-u-e-ni (NH), 2pl.pres.act. ni-ni-ik-te-ni (OH/MS), 3pl.pres.act. ni-ni-in-kán-zi (MH/MS), ni-ni-kán-zi, 1sg.pret.act. ni-ni-in-ku-un (NH), 3sg.pret.act. ni-ni-ik-ta (MH/MS), ni-ni-in-gaaš (NS), 3pl.pret.act. ni-ni-in-ke-er (MH/MS), ni-ni-in-ker, 2sg.imp.act. ni-ni-ik (NH), 2pl.imp.act. ni-ni-ik-tén, 3pl.imp.act. ni-ni-in-kán-du (MH/MS); 2sg.pres.midd. [n]e-ni-ik-ta-ti (NH), ne-ni-ik-ta-ri (NH), 3sg.pres.midd. ni-ni-ik-ta-ri (MH/NS), 3pl.pres.midd. ni-ni-in-kán-ta (MH/MS), 3sg.pret.midd. ni-ni-ik-ta-ti (OH/NS), ni-ni-ik-ta-at (NH), 3pl.pret.midd. [ni]-ni-in-kán-ta-ti, 3sg.imp.midd. ni-ni-ik-ta-ru (MH/NS), 2pl.imp.midd. [n]i-ni-ik-du-ma-at
(MH/MS), ni-ni-ik-tum-ma-at (MH/NS); part. ni-ni-in-kán-t- (MH?/MS?); inf.I [ni]-ni-in-ku-u-an-zi; verb.noun ni-ni-in-ku-ųa-aš; impf. ni-ni-in-ki-iš-ke/a- (NH), ni-ni-in-kiš-ke/a-, ni-ni-in-ki-eš-ke/a- (NH).

Derivatives: nininkeššar (n.) 'mobilization(?), movement(?), uprising(?)' (nom.-acc.sg. ni-ni-in-ke-eš-šar).
IE cognates: OCS vъz-nikg 'they raised themselves', Lith. i-nikti, i-ninkù 'to occupy oneself with', ap-nikti 'to attack', Gr. veĩкоৎ 'fight, war'.

PIE *ni-nin-k-
See CHD L-N: 438f. for attestations and semantics. The attested forms show a precise distribution between the stem ninink- and ninik-: the former is found when the ending starts in a vowel (ninink- $V$ ) whereas the latter is found when the ending starts in a consonant (ninik-C) or when no ending is found at all (ninik\#). This distribution matches the one found in the other -nin-infixed verbs (harni(n)k${ }^{z i}$, huni(n) $k_{-}^{z i}$, ištarni(n) $k_{-}^{z i}$ and šarni(n) $\left.k^{z i}\right)$, but also in e.g. li(n) $k-{ }^{z i}$, har(k)- ${ }^{-2 i}$ etc.
The other -nin-infixed verbs always show the structure $C R$-nin- $C$ - and are derived from verbal roots with the structure *CeRC- or *CReC- (e.g. harni(n)kfrom hark- ${ }^{z i}$, ištarni(n)k- from ištar(k)- ${ }^{z i}$, besides huni(n)k- from huek- ${ }^{z i}$ / huk-). A priori, we would therefore interpret nini(n)k- as ni-nin-K- from either *neiK- or *nieK-.
Despite the fact that in 1979 Oettinger still desperately states: "[ninin $\left.(k)-{ }^{z i}\right]$ bleibt trotz zahlreicher Deutungsversuche morphologisch unklar" (1979a: 143), he offers a very appealing comparison in 1992a: 219, where he connects nini(n)kwith OCS vbz-nikg 'they raised themselves', Lith. ì-nikti, i-ninkù 'to occupy oneself with', ap-nikti 'to attack' and Gr. veĩкоৎ 'fight, war', which point to a root *neik- 'to raise'. In Hittite, the nasal infix had causative function, and therefore nini( $n$ ) $k-{ }^{z i}$ denotes 'to set in motion, to mobilize'.
$\boldsymbol{n i}(\boldsymbol{n}) \boldsymbol{k}_{-}{ }^{z i}$ (Ib3) 'to quench one's thirst, to drink one's fill; to get drunk': 3sg.pres.act. ni-ik-zi (OH or MH/NS), ni-in-zi (MH/MS), 3pl.pres.act. ni-in-kán$z i$, 3pl.pret.act. ni-in-ke-e-er, ni-in-ke-er (OH/MS), [ni-i]n-ker (MH/NS), 2sg.imp.act. ni-i-ik (OS), ni-ik ( $\mathrm{OH} / \mathrm{NS}$ ), ni-in-ga ( $\mathrm{OH} / \mathrm{MS}$ ), ni-in-ki $(\mathrm{OH})$, 2pl.imp.act. ni-ik-te-en, [n]i-in-kat-tén, 3pl.imp.act. ni-in-kán-du (MH/NS); 2sg.imp.midd. ni-in-ki-ih-h[u-ut] (OH/NS); part. ni-in-kán-t- (MH/MS).

Derivatives: ${ }^{(d)}$ ninga- (c.) 'drenching, cloudburst' (Sum. ${ }^{\text {d ŠUR; nom.sg. ni-in- }}$ $g a-a \check{s}$, abl. ${ }^{\text {dŠUR-za), ninganu- }}{ }^{z i}$ (Ib2) 'to make (the ground etc.) drink to satisfaction, to drench; to make someone drunk' (3pl.pres.act. ni-in-ga-nu-ua-anzi (OH/MS), 1sg.pret.act. [n]i-in-ga-nu-nu-u[n] (MH/NS), 1pl.pret.act. ni-in-ga-
$n[u$-me-en?] (NS), 3pl.pret.act. ni-in-ga-n[u-e-er?] (NH), 2sg.imp.act. ni-in-ga$n u-u t(\mathrm{NH})$, 3sg.imp.act. ni-in-ga-nu-ud-du (OH/MS); impf. ni-in-ga-nu-uš$k e / a-$ ).

See CHD L-N: 443f. for attestations. This verb seems to inflect just as $l i(n) k-{ }^{z i}$ to swear', with $-n$ - getting lost in a cluster *-nkC-. Nevertheless, the MS attestation $n i-i n-z i$ rather resembles verbs like har $(k)_{-}^{z i}$, with loss of $-k$ - in a cluster $*-R k C$-.
Formally, the verb can hardly reflect anything else than *nenK-, but a good etymology is lacking. Oettinger (1979a: 143) assumes that ni(n)k- is a nasalinfixed form of the root *hinek'- 'to hold, to take', but this is difficult formally as well as semantically. Melchert (1994a: 165) rather analyses ni(n)k- as *nem-K"*take one's share of drink" (Goth. niman 'to take', Latv. ņe̦mu 'to take'). Apart from the fact that assuming an extension ${ }^{*}-K$ - is rather $a d h o c$, the semantic connection is difficult as well, since *nem- rather meant 'to allot' (cf. Gr. vé $\mu \omega$ 'to allot').
All in all, none of the proposed etymological connections stands out as evident.
$\boldsymbol{n и}$ (clause conjunctive particle) 'and, but'
Derivatives: see kinun, nēua- and nuиa.
Anat. cognates: Pal. $\boldsymbol{n} \boldsymbol{u}$ (clause conjunctive particle, e.g. $n=a-a n, n=e$ ), $\boldsymbol{n} \overline{\boldsymbol{u}}$ 'now' (nu-ú); CLuw. nānun 'now' (na-a-nu-un, na-nu-un, na-a-nu-um=pa, na-a$n u-u ́-u n=p a, n a-n u=p a)$; HLuw. awa- (clause conjunctive particle < *nu-o-??), ипи(n) 'now?' (clause conjunctive particle, ASSUR letters).
IE cognates: Skt. nú, n六 'now', Gr. vv, vvv (encl. particle), vṽv 'now' Lat. num 'but now', nunc 'now', Goth. $n u$, Lith. ǹ̀, n $\tilde{u}$, OCS $n ъ$ 'but', TochA $n u$, TochB no 'then, namely'.

PIE * $n u$
In NH texts, this conjunctive particle is the semantically neutral one (as opposed to $=(i) a$ 'and, also' and $=(m) a$ 'but, and'). In OH texts, we also come across the conjunctive particles $t a$ and $\check{s} u$, but it has proven difficult to establish an difference in use between $n u, t a$ and $s \check{s}$. The particles $t a$ and $\check{s} u$ are being replaced by $n u$ from the late OH period onwards, and already in MH texts $n u$ is the only conjunctive that is properly used (all MH and NH instances of $t a$ are in formulae). When $n u$ is followed by enclitic particles that start in a vowel, the $-u$ - of $n u$ drops: $n=a \check{s}<* n u+a \check{s}, n=a n<* n u+a n$, etc. This is due to the same development underlying Hitt. *Ta<*Tuo (compare e.g. tān < *duoiom), so *nu-os $>$ *nuos $>$ naš, *nu-om > nuom > nan, etc. This implies that 3pl.nom. $n=e$ goes back to *nai
$<{ }^{\text {nuıoi }}<$ nu-oi (note that this shows that the development $* C^{\text {dental uo }}>\mathrm{Ca}$ predates the monophthongization of ${ }^{*}$-oi- to $-e-$-).

Watkins (1963) convincingly shows that Hitt. nu, ta and $\check{s ̌ u}$ can functionally and formally be equated with the Old Irish preverbs $n o$, to and se and that Hitt. $n u \sim$ OIr. no must reflect $* n u$, which is further cognate with the word for 'now' in other IE languages (as already suggested by Knudtzon 1902: 50).
-nu- (causative-suffix)
PIE *CC-néu-ti, *CC-nu-énti
This suffix has causative/transitivizing function. It is always mi-inflected. Originally, it is attached to the zero-grade of the verbal root, e.g. šašnu- ${ }^{z i}$ 'to make sleep' from $\check{s} e \check{S L}_{-}^{z i} /$ šaš- 'to sleep'. Later on, it was possible to use the full-grade stem as well, e.g теrnu- (beside older marnu-) from mer- ${ }^{z i}$ / mar- 'to disappear'. The suffix clearly is derived from PIE *-neu-/-nu- (cf. the Skt. 5th present class in $-n o-/-n u-$, Gr. verbs like $\left.\delta \varepsilon \varepsilon^{\prime} \kappa v v \mu \mathrm{t}\right)$. In Hittite, it must have shown ablaut originally as well, which possibly is still visible in spellings like ua-ah-nu-ú-mi (KBo $17.1+$ 25.3 ii 18 (OS)) and h̦u-e<-ě̌ヶ-nu-úut (KBo 3.28 ii 19 (OH/NS)) <*-néu-mi and *-néu-t respectively, besides 1pl. -nu-me-e-ni < *nu-ие́ni, 2pl. -nu-ut-te-e-ni < *-nu-téni and 3pl. -nu-ua-an-zi <*-nu-énti.
$\boldsymbol{n} \bar{u}-:$ see $n \bar{u}(t)-$
nukku (adv.) 'and now': nu-uk-ku (NH).
PIE *nu-k ${ }^{w} e$
The word is attested only once, in KBo $12.128,6$. It consists of the conjunction $n u$ (q.v.) followed by $=k k u$ (q.v.).
nūman, nūuan (negative particle of optative, irrealis or potentialis) 'not want to': nu-u-ma-an (often, OH/NS), nu-u-ma-a-an (1x, OH/NS), nu-u-ua-an (1x, NH), $n u-u-u a-a-a n(1 x, N H)$.

PIE *ne-u-mon ??
See CHD L-N: 471 for attestations. This word functions as the negation of the particle of optative, irrealis or potentialis man. The plene spelling with the sign $U$ points to a phonological interpretation/nóman/. Semantically, we would expect that nüman reflects a univerbation of the negation *ne and the optative particle man (q.v.), but it is unclear why we find $-u$ - (/o/) in it. Perhaps the $-u$ - is to be
compared with the $u$ in e.g. Lat. nunquam 'never' (thus Hahn 1942: 106), although it should be noted that *Ceum should have yielded Hitt. /Cum/ (cf. ua$a h-n u-u ́-m i<*-n e ́ u-m i)$. The sporadic forms with $-u$ - hardly can be anything else than hypercorrectisms, having the development *-uu- > -um- in mind.
-(n)un (1sg.pret.act.-ending of the mi-flection)
PIE *-m

This ending denotes the 1 sg.pret.act. for $m i$-verbs. When the verb stem ends in consonant, the ending is -un, when it ends in a vowel, it is -nun. Because of occasional spellings with plene U (e-ep-pu-u-un (KBo 18.31 rev .12 , KUB 1.7 iii 77 , KUB $1.2+$ ii 15$)$ ), we must conclude that the ending in fact was $/-(\mathrm{n}) \mathrm{on} /$. It is obvious that this ending reflects the PIE secondary 1sg.-ending *-m. In Hittite, the variant -un must be the regular outcome of vocalic $-m:{ }^{*}{ }^{\circ} \mathrm{C}-m>\operatorname{Hitt} .{ }^{\circ} \mathrm{Cun}=$ $/{ }^{\circ} \mathrm{Con} /$. The variant -nun shows the regular outcome of $* V-m>$ Hitt. $V n$, to which the postconsonantal variant -un is attached.
nuntar- 'haste, swiftness': gen.sg. nu-un-tar-aš (NH), nu-un-ta-ra-aš (NH).
Derivatives: nuntaraš (adv.) 'promptly, soon' (nu-un-tar-aš (often, NH), nu-tar-aš (1x, NS)), nuntariial-, nut(t)ariial- (adj.) 'swift' (nom.sg.c. [nu-u]n-tar-íaaš, nu-un-tar-íla-š=a, nu-ut-ta-ri-íia-aš (OH/NS), nu-tar-ri-ia-aš (NS), acc.sg.c. $n u-u t-t a-r i-i a-a n(N S)$ ), nuntarriie/a- ${ }^{-2}$ (Ic1) 'to hasten, to be quick' (2pl.pres.act. nu-un-tar-ri-it-ta-ni (MH/MS), 2sg.imp.act. nu-un-tar-ri-ia, 3sg.imp.act. nu-un-tar-i-e-ed-d[u] (MH/MS), nu-un-tar-ri-e-e[d-du] (MH/MS), nu-un-tar-ri-ed-du (MH/MS)), nu(n)tariiiašha- 'haste, speed' (gen.sg. EZEN nu-un-tar-ri-ịa-aš-ȟa-
 (Ib2) 'to hurry, to hasten; to rush into something' (2sg.pres.act. nu-un-tar-nu-ši, $n u$-tar-nu-ši (1x), 3sg.pres.act. nu-un-tar-nu-zi, 2pl.pres.act. nu-un-tar-nu-ut-te-eni, nu-un-tar-nu-ut-te-ni, 1sg.pret.act. nu-un-tar-nu-nu-un, 3sg.pret.act. nu-un-tar-nu-ut, nu-un-tar-nu-ut-ta (Luw.), 1sg.imp.act. nu-un-tar-nu-uа-a[l-lu], 2pl.imp.act. nu-un-tar-nu-ut-ten, 3pl.imp.act. nu-un-tar-nu-ua-an-du; verb.noun nu-un-tar-nu-um-mar).
Anat. cognates: CLuw. nanuntarrit- (n.) 'the present' (nom.-acc.sg. [n]a-nu-un-tar-ri-š[a]), nanuntarri(ia)- (adj.) 'of the present' (nom.-acc.sg.n. [na-nu-un-tar-ri-i] $]$-an-za), nānuntarriiial(i)- (adj.) 'present' (nom.-acc.sg.n. [na-a-nu-un-ta-ri-ia-a-al, nom.-acc.pl.n. na-a-nu-un-ta-ri-i_ia-la, na-a-nu-un-tar-ri-ía-la, na-a-nu-um-ta-ri-i $\left.{ }^{2}-l a\right)$.
IE cognates: Lat. num, Gr. vṽv 'now'.

PIE *num-tr-
See CHD L-N: 472f. for attestations. The basic stem was nuntr- as we can tell from the derivative nuntariie/ $a_{-}^{z i}=/$ nuntrie/a-/ (in case of a stem $* *$ nuntra-, we would have expected ${ }^{* *}$ nuntarae- $z^{z i}$ ). Occasionally, the second $-n$ - drops, yielding nuttar ${ }^{\circ}$. There does not seem to be a distribution between nuntar ${ }^{\circ}$ vs. nuttar ${ }^{\circ}$, but one could envisage that originally there was one comparable to the distribution found in e.g. $\operatorname{li}(n) k_{-}^{z i}$, harni(n) $k-{ }^{z i}$, etc., i.e. $V n C V$ vs. $V C C V$. In this case, we would perhaps expect a distribution Vntro vs. VtrV, but this cannot be supported by the material.
The fact that in CLuwian we once find a spelling with -m- (nānumtariiala) points to original *numtar-. Etymologically, it is quite obvious that we are dealing with *num (as found in kinun 'now' < *ki + num (q.v.)), followed by a suffix *-tr-. This *num clearly belongs with Lat. num, Gr. vũv 'now', etc. See at kinun for further etymology.
$\boldsymbol{n} \overline{\boldsymbol{u}}(\boldsymbol{t})$ - (c.) 'contentment(?), satisfaction(?)': nom.sg. [nu]-ú-uš (OS or $\mathrm{OH} / \mathrm{MS})$, $n u-u ́-u s ̌$ ( $\mathrm{OH} / \mathrm{NS}$ ), acc.sg. nu-ú-un (MH/NS), dat.-sg. nu-ú-tí; bare stem (as interjection) nu-ú (MH?/NS), \& nu-ú (MH/NS).

See CHD L-N: 476 for attestations. The word either occurs in lists of good things, always followed by ištamaššuuar or tummantiiaa-, or it occurs as an interjection (then nu-ú) in nu-ú halzai- 'to call "n $\vec{u}$ ". Since tummantiia- is the Luwian correspondent to Hitt. ištamaššuúar, and because of the one attestation with a gloss wedge, some scholars regard $n \bar{u}-$ as a Luwian word, which would explain the dat.sg.-form nūuti: in Luwian, word-final $-t$ - is dropped. This would mean, however, that a Luwian $n \bar{u}(t)$ - already in OH times was reshaped to Hitt. nom.sg. $n \bar{u} \check{s}$ and acc.sg. $n \bar{u} n$. Whether or not this is probable, the exact meaning of the word cannot be determined, which makes etymologizing impossible.

$$
\begin{aligned}
& \text { nūūa (adv.) 'still, yet': nu-u-ūa (OS), nu-u-a (MH/MS?), nu-u-ua-a (NH). } \\
& \quad \text { PIE *nu- } h_{3} e
\end{aligned}
$$

See CHD L-N: 468f. for attestations and semantics. Already since Sturtevant (1933: 49) this word is seen as a derivative of the conjunction $n u$ (q.v.). The particle that is attached to $n u$ is less clear, but probably it is identical to $=(i) a$ 'and' (q.v.). For semantics compare Goth. nauh, OHG noch 'still, yet' < *nu-kwe.
nūuan: see at nūman
nuunaššu: see at naššu

```
=pa: see =apa
```

pahhaš-: see $p a h \breve{c}^{-a}{ }^{-(r i)}$
pahhi- (c.) something harmful?: acc.sg. pa-ah-hi-in (MH/MS).
Hapax in KBo 16.31, 3; see CHD P: 1 for context and the conclusion that it may denote something harmful. Therefore a connection with pahhieškeuuar, a hostile action (q.v.), could be possible. No further etymology.
pahhieškeuunar (n.) a hostile action: nom.-acc.sg. pa-ah-hi-eš-ke-u-una-ar.
See CHD P: 1: this word is hapax and occurs in a vocabulary only, preceded by huuarzakeuuar 'cursing' and followed by kurur appatar 'initiating hostilities', which seems to indicate that it refers to some hostile action itself as well. Formally, it probably is a verb.noun in -uar of an impf. pahhieške/a- of a further unattested verb. A tie-in with pahhi-, something harmful (q.v.), is likely. No further etymology.
$\boldsymbol{p a h} \check{s}_{-}^{a(r i)}$, pahšs-i (IIIa; IIa2) 'to protect, to guard, to defend; to observe (agreements), to keep (oaths), to obey (commands), to keep (a secret); (midd. with dat.) to seek protection with’ (Sum. PAP): 1sg.pres.midd. pa-ah-ha-ǎ̌-h $h a$ ( $\mathrm{OH} / \mathrm{NS}$, $\mathrm{MH} / \mathrm{MS}$ or NS ), 2sg.pres.midd. pa-ah-ha-aš-ta ( $\mathrm{OH} / \mathrm{NS}$ ), 3sg.pres.midd. pa-ah-ša (MH/MS or NS), pa-ah-ša-ri (MH/MS), 1pl.pres.midd. $p a-a h-s ̌ u-u a^{2} a-a \check{s}-t a \quad(\mathrm{MH} / \mathrm{MS}), \quad 2 \mathrm{pl} . \mathrm{pres} . m i d d . \quad p a-a h-h a^{-} a-a \check{s}-d u-m a \quad(\mathrm{OH} / \mathrm{NS}$,

MH/MS), 3pl.prs.midd. pa-a-ah-ša-an-ta (OH/MS), [pa-ah-]ha-aç-ša-an-ta-ri (NH), 1sg.pret.midd. pa-ah-ḩa-aš-ḩa-at (NH), pa-ah-ha-aš-ha-ha-at (NH), 3sg.pret.midd. pa-ah-ha-aš-ta-at (NH), 3sg.imp.midd. pa-ah-ša-ru ( $\mathrm{OH} / \mathrm{NS}$ ), 2pl.imp.midd. pa-ah-ḩa-aš-du-ma-at (OH/NS, MH/MS), 3pl.imp.midd. pa-ah-ša-an-ta-ru (MH/MS), [pa-ah-š]a-an-da-a-r[u]; 1sg.pres.act. pa-ah-ha-aš-hi (MH/NS, often), pa-ah-ḩa-aš-mi (1x, OH/NS), 2sg.pres.act. pa-ah-ha-aš-ti(NH), 1pl.pres.act. pa-ah-šu-e-ni (MH/NS), pa-ah-šu-u-e-ni (NH), 2pl.pres.act. pa-ah-ha-aš-te-ni (NH), 3pl.pres.act. pa-ah-ša-an-zi (NH), 1sg.pret.act. pa-ah-ha-[aš-ḩu-u]n (OH or MH/NS), 3sg.pret.act. pa-ah-ha-aš-ta (NH), 3pl.pret.act. pa-ah-šer (NH), 2sg.imp.act. pa-ah-ši (OH/NS, MH/MS), 3sg.imp.act. pa-ah-haa-aš-du (NH), 2pl.imp.act. pa-ah-ḩa-aš-te-en (MH/MS), pa-ah-ha-ǎ̌-tén (MH/MS), pa$a h-h a-a s ̌-t i-e n(M H / N S), ~ p a-a h-a \check{s}-t e ́[n](N H), 3 p l . i m p . a c t . ~ p a-a h-s ̌ a-a n-d u(N H)$, [p]a-ah-ha-ša-[an-du] (MH/NS); impf. pa-ah-ha-aš-ke/a-.

Derivatives: pahšnu $\mathbf{z}^{z i}$ (Ib2) 'to protect, to defend, to take care of, to be watchful' (1sg.pres.act. pa-ah-ša-nu-mi (NH), 2pl.pres.act. pa-ah-ha-aš-nu-ut-te$n i(\mathrm{OH} / \mathrm{NS}),[p] a-a h-s \check{a}-n u-u t-t e-n i(\mathrm{MH} / \mathrm{NS})$, pa-ah-ša-nu-te-n[i], 3pl.pres.act. pa-ah-ha-[aš-]ša-nu-an-zi (MH/MS), 1sg.pret.act. pa-ạh-šạ-nu-[n]u-[un] ( $\mathrm{OH} / \mathrm{NS}$ ), 2sg.pret.act. pa-ah-ša-nu-uš (OS), 3sg.pret.act. pa-ah-ḩa-aš-nu-ut (NH), 3pl.pret.act. pa-ah-ša-nu-[er] (OH/NS), pa-ah-ha-aš-ša-[nu-er] (NH), 2sg.imp.act. pa-ah-ša-nu-ut, pa-ah-ha-aš-ša-nu-ut (OH/NS), 3sg.imp.act. pa-ah-ša-nu-ud-du (MH/NS), pa-ah-hha-aš-nu-ud-du (MH/NS), 2pl.imp.act. pa-ah-ša-nu-ut-te-en (OS), pa-ah-ha-aš-nu-ut-te-en (OH/NS), pa-ah-ha-aš-ša-nu-[ut-teen], 3pl.imp.act. pa-ah-ḩa-aš-nu-an-du (OH/MS); part. pa-ah-ša-nu-ua-an-t( $\mathrm{OH} / \mathrm{NS}$ ), $\quad$ pa-ah-ha-aš-nu-ua-an-t- $\quad(\mathrm{OH} / \mathrm{MS}), \quad$ pa-ah-ha-aš-ša-nu-ua-an-t(MH/NS); verb.noun pa-ah-ša-nu-mar, gen.sg. pa-ah-hha-aš-nu-ma-aš (MH/MS)); inf.I pa-ah-ha-aš-nu-um-[m]a-an-zi (MH/NS), pa-ah-ha-aš-ša-nu-ma-an-zi (NS); impf. PAP-nu-uš-ke/a- (NH)).

Anat. cognates: CLuw. pa- 'to protect?' (3sg.imp.act. pa-ad-du, pád-du).
IE cognates: Lat. pāscō (p $\bar{a} v \bar{\imath}$, pāstum) 'to graze', pāstor 'herd', OCS pasti 'to pasture', SCr. pästi 'to pasture, to look after'.

PIE *péh ${ }_{2} s$-o, * pó $_{2} s$-ei, ${ }^{*} p h_{2} s-n e u-$
See CHD P: 2f. for attestations. The verb occurs in the middle as well as in the active, without a traceable difference in meaning. In the oldest texts, the middle forms are dominant. The active forms are treated by Oettinger (1979a: 210) as miconjugated, citing 1sg.pres.act. pahhašmi. This is misleading, as this form occurs only once, whereas pahhašhi is attested many times. I therefore assume that the active verb originally is hi-conjugated. The verb shows a quite consistent
alternation between paȟ̌s- $V$ and pahhaš-C, which reminds of e.g. takš- $V$ besides takkeš-C (see takš- ${ }^{-}$'to undertake, to unify'). Apparently, in *pahšC, the cluster received an epenthetic vowel: $/ \mathrm{paH} \partial \mathrm{SC} \%$. It is remarkable, however, that the causative pahšnu- ${ }^{z i}$ does not show this distribution (we would then expect pa-ah-ha-aš-nu- throughout the paradigm): the oldest (OS) forms are spelled pa-ah-ša$n u$-. In my view, this points to a zero-grade formation /pHSnu-/ vs. the full grade stem $/ \mathrm{paHSV}^{\circ}, \mathrm{paH}_{\partial \mathrm{SC}}{ }^{\circ} /$ as found in the basic verb.
Since Kuryłowicz (1927: 102), this verb is generally connected with Lat. pāscō 'to herd' and OCS pasti 'to pasture' and reconstructed as *peh ${ }_{2}-s$-, an $s$-extension of the root *peh $h_{2}(i)$ - 'to protect'. This means that the middle paradigm goes back to *pé $h_{2} s$ - o and the active paradigm to $* p o ́ h_{2} s$-ei.
Melchert (1993b: 162) hesitatingly suggests that CLuw. pa-might mean 'to protect' (although he states that this "meaning is a mere guess"), and that it consequently could show the unextended root ${ }^{*}$ peh $_{2}$-.
pahhur / pahhuen- (n.) 'fire, campfire, embers; fever' (Sum. IZI, Akk. IŠĀTI): nom.-acc.sg. pa-ah-hur (often, OS), pa-ah-hu-ur (OH/NS), pa-a-ah-hur (2x, $\mathrm{OH} / \mathrm{MS}$ ), pa-ah-hu-u-ur (1x, MS?), pa-ah-hu-ua-ar (1x, NS), gen.sg. pa-ah-hu-e$n a-a \check{s}$ (often, MH?/NS), pa-ah-hu-u-e-na-aš (MH/NS), pa-ah-hu-na-aš (1x, NH), loc.sg. pa-ah-hu-e-ni (often, OH/NS), pa-ah-hu-u-e-ni, pa-ah-hu-ni (2x, MH/NS), all.sg. [pa-a]h-hu-e-na (NH/early NS), erg.sg. pa-ah-hu-e-na-an-za (MH/MS), $p a-a h-h u-e-n a-z a$, abl. pa-ah-ḩu-e-na-az (MH/MS), pa-ah-hu-u-e-na-az, pa-ah-hu-na-az, pa-ah-ḩu-na-za, pa-ah-hu-u-na-za, instr. pa-ah-hu-e-ni-it (MH/MS), pa-ah-hu-u-e-ni-it (MH/NS), pa-ah-hu-ni-it (MH/MS).
Derivatives: ${ }^{\mathbf{D U G} / \mathbf{N A}_{4}}$ pahhunal(l)a/i-, ${ }^{\text {DuG }}$ pahhuinali- (n.) a container for fire, embers and other things (nom.-acc.sg. pa-ah-hu-na-al-li (OH or MH/MS), loc.sg. [pa-ah-hu-n]a-al-li-ia (OH or MH/MS), pa-ah-hu-na-li (OH?/NS), abl. pa-ah-hu$n a-l i-i a-z a$ (NS), pa-ah-hu-na-li-az (OH?/MS), pa-ah-hu-i-na-li-az (OH/NS), nom.-acc.pl. pa-ah-hu-na-al-li (OH/NS), pa-ah-hu-na-li (NH)), ${ }^{\text {LÚ }}$ pahhurula-
 implement for tending or banking a fire (nom.sg. [pa-a]h-hu-ru-la-aš (NH), abl. $p a-a h-h u-r u-l a-a z(\mathrm{MH} / \mathrm{NS})$ ).

Anat. cognates: CLuw. pāhūr (n.) 'fire(?)' (nom.-acc.sg. pa-a-hu-u-ur), pauari(ia)- 'to light a fire' (3sg.pret.act. pa-ua-ar-it-ta).

IE cognates: Gr. $\pi \tilde{v} \rho$, OHG fuir, Arm. hur, Goth. fon, OPr. panno 'fire'.
PIE *péh $h_{2}$-ur, *ph ${ }_{2}$-uen-s

See CHD P: 12f. for attestations. In my view, pahhur / pahhuenaš has to be phonologically interpreted / $\mathrm{pá}^{\mathrm{w}} \mathrm{r} / \mathrm{paH}^{\mathrm{w}}$ énas/, showing the phoneme $/ \mathrm{H}^{\mathrm{w}} /$ (for which see Kloekhorst fthc.c). This also explains the one NH attestation pahhuuar, which denotes phonetic [páHwry].
Since Hrozný (1917 (SH): 69), this word is etymologically connected with Gr. $\pi \tilde{0} \rho$, OHG fuir, Arm. hur 'fire' etc., which means that we have to reconstruct a proterodynamic paradigm *péh $2_{2}$-ur, *ph $h_{2}$-uén-s. The $-n$ - of the oblique stem is still visible in e.g. Goth. fon, OPr. panno 'fire'. In Hittite, the $e$-grade of the nom.acc. has spread throughout the paradigm: *peh 2 uén- > pahhuen-.
In CLuwian, a noun $p a-a-h u-u-u r$ is attested that is generally regarded as cognate to Hitt. pahhur (cf. Starke 1990: 570f.). The word is attested in a broken context, however, so its meaning cannot be independently determined. Formally, it is difficult to explain why $p \bar{a} h \bar{u} \bar{r}$ shows a lenited $-h-$. The meaning of the Luwian verb pauariia- 'to light a fire' (which is attested in Hittite context) is ascertained, however. It shows loss of $-h$ - in front of $-u$-, which we also observe in e.g. mal(h)u-'to break' (see at malla- ${ }^{i} /$ mall- 'to mill') and la(h)un(a) $i$ - 'to wash' (see at lāhu- ${ }^{i} / l a h u-$ 'to pour').
pai- 'to go': see paii- ${ }^{z i} /$ pai-
$\boldsymbol{p a i l}^{\boldsymbol{i}}{ }^{\boldsymbol{}} / \boldsymbol{p i} \boldsymbol{i}$ (IIa4 > Ic1) 'to give, to pay, to grant, to hand over' (Sum. SUM, Akk. $N A D \bar{A} N U$ ): 1sg.pres.act. pé-e-eh-hé (OS), pé-e-eh-hi (OS), pé-eh-ḩi (OH/MS), 2sg.pres.act. pa-it-ti (MH/MS), pa-iš-ti (NH), pé-eš-ti (MH/NS), 3sg.pres.act. pa-$a-i$ ( OS ), pa-i ( $\mathrm{OH} / \mathrm{MS}$ ), 1pl.pres.act. pí-i-ú-e-ni ( OH or MH/MS), pí-ú-e-ni ( OH ?/NS, MH/MS), pí-ia-u-e-ni (OH/NS), pí-i-i-ia-u-e-ni (NH), 2pl.pres.act. pí-iš-te-ni (OH/MS), pé-eš-te-ni (MH/NS), 3pl.pres.act. pí-an-zi (OS), pí-ia-an-zi (OS), pí-en-zi (2x), pí-i-ịa-an-zi (NH), pí-e-an-zi, 1sg.pret.act. pé-eh-ḩu-un (OH/NS), pé-e-eh-hu-un (NH), 2sg.pret.act. pa-it-ta (OH/MS), pé-eš-ta (NH), 3sg.pret.act. $p a-i \check{s}(\mathrm{OS}), b a-i-i s ̌(1 \mathrm{x}, \mathrm{OS}), p a-i-i s ̌(\mathrm{OH} / \mathrm{NS} ?), p a-a-i \check{s}(\mathrm{OH} / \mathrm{NS}), p a-a-i-i s ̌(\mathrm{NH})$, $p a-i s ̌-t a(\mathrm{OH} / \mathrm{NS})$, pé-eš-ta $(\mathrm{NH})$, pé-e-eš-ta $(\mathrm{NH})$, 1pl.pret.act. pí-ú-en $(\mathrm{MH} / \mathrm{MS})$, pí-ú-e-en (HHCTO 2 obv. 4 (MH/MS)), pí-i-ú-en (NH?), pí-ia-u-e-en (OH/NS), 3pl.pret.act. pí-i-e-er (OS), pí-i-er (OS), pí-e-er (MH/MS), pí-ía-er (NH), pí-er, 2sg.imp.act. $p a-i(\mathrm{OS}), p a-a-i(\mathrm{OH} / \mathrm{NS}), 3$ sg.imp.act. pa-a-ú (OH/NS, MH/MS), pé-eš-du (NH), 2pl.imp.act. [p]í-i-iš-te-en (OS), pí-iš-te-en (MH/MS), pa-iš-te-en (MH/MS), pé-ě̌-tén (OH/NS), 3pl.imp.act. pí-an-du (OH?/NS, MH/MS) pí-ía$a n-d u(\mathrm{OH} ? / \mathrm{NS}) ; 3$ pl.pres.midd. pí-an-da-ri; part. pí-ia-an-t- (OS); verb.noun pí-

$a n-z i$, pí-ia-ua-an-zi; inf.II pí-ía-an-na (MH/NS), pí-an-na; sup. pí-i-ia-u-u[a-an]; impf. pí-iš-ke/a-(OS), pa-iš-ke/a-, pé-e-eš-ke/a- (MH/MS), pé-eš-ke/a- (OH/NS).
Derivatives: piianna- / piianni- (IIa5) 'to give (impf.)' (sup. pi-ia-an-ni-uaan), *piiatar / piiann- (n.) 'giving' (nom.-acc.sg. SUM-tar, gen.sg. SUM-an-na$a \check{s}),{ }^{\text {NINDA }}$ piiiantalla/i- ‘donated bread’ (nom.sg. pi-ía-an-ta-al-li-iš (OS), pí-ia-an-tal-li-i[ $[\mathrm{s}](\mathrm{OH} / \mathrm{NS})$, acc.sg. pí-ia-an-ta-al-la-an (NS), nom.pl.? pí-ía-an-ta-al-li-iš (OS), acc.pl.? pí-ía-an-tal-la-aš (OH/NS)), see peppieššar and uppa- ${ }^{i}$ uppi-.
Anat. cognates: CLuw. pai- / pi(ĩa)- 'to give' (1pl.pres.act. pí-u-un-ni, 3sg.pret.act. pí-íia-at-ta, pí-i-ịa-at-ta, 3pl.pret.act. pí-un-ta, 2sg.imp.act. pí-i-ía, 3sg.imp.act. pa-a-i-ú, pa-i-ú, 3pl.imp.act. pí-ía-an-du), pipišša- 'to give' (2sg.imp.act. pí-pí-iš-ša); HLuw. pia- 'to give'(3sg.pres.act. pi-ia-i (BABYLON 1 §15, AKSARAY §7, KULULU lead strips), 1pl.pres.act. DARE-mi-na (KULULU lead strips, CEKKE §8, §9), 3pl.pres.act. pi-ia-ti (KULULU lead strip 2.18), 1sg.pret.act. pi-ia-ha (KARKAMIŠ A1 $a \S 8, \S 9$, ANCOZ $7 \S 6$, BABYLON $1 \S 3, \S 9$ ), 3sg.pret.act. pi-ia-ta (often), 3pl.pret.act. DARE-tax (TOPADA §30), 3sg.imp.act. pi-ia-tu (KARATEPE 1 §51 Hu., §52 Hu., KÖRKÜN §7), pi-ia-tu-u (ÇİFTLİK §16), pi-ià-tù (KARATEPE 1 §52 Ho., pi-iá-tù (KARATEPE 1 §51 Ho.), piaza 'gifts(?)' (pi-ia-za (KULULU lead strips), pipasa- 'to present' (1sg.pres.act. pi-pa-sa-wa/i-i (ALEPPO 2 §17), 3sg.pres.act. pi-pa-sa-i (BOHÇA §3), pi-pa-sa-ia (BOHÇA §5, 9), 3sg.pret.act. pi-pa-sa-ta (KARKAMIŠ A23 §4, MARAŞ 1 §11), 3sg.imp.act. pi-pa-sa-tu (BOR §11)); Lyc. pije- 'to give' (3sg.pres.act. pije, 3pl.pres.act. pijeti, 1sg.pret.act. pijaұa, pijaұã, 3sg.pret.act. pijete, pijetẽ, 3pl.pret.act. pijẽte, pijẽtẽ), pibi(je)- 'to give' (3sg.pres.act. pibiti, 3pl.pres.act. pibijeti).

PAnat. *poi- / pi-
IE cognates: Hitt. epp-zi / app- 'to take, seize' (q.v.), Skt. āpnóti 'to reach, to gain, to take possession of', Lat. apīscor 'to reach, to receive, to grab, to get', co$\bar{e} p \bar{l}$ 'I have started, I have undertaken'.

PIE * $h_{l} p$-ói-ei $/ * h_{l} p$-i-énti
See CHD P: 40f. for attestations. The oldest paradigm is pehhe, paitti, pāi, pīueni, pišteni, pianzi. This clearly shows an ablaut pai- / pi-, and herewith this verb belongs to the dāi/tiianzzi-class. In one point it differs from the other dāi/tiianaziclass verbs, however, namely in the fact that it shows zero-grade in the plural of the preterite as well (pehhhun, paitta, paiš, piųen, *pišten, piier, vs. e.g. daiuen, daišten, daier 'to put'). In my view, pai- ${ }^{i}$ / pi- reflects the older situation, whereas in all other verbs the full-grade stem was analogically introduced in the pret.pl. in the pre-Hittite period. In NH times, a thematic stem piie/a- ${ }^{z i}$ occasionally is
found, which was created in the basis of a false analysis of 3pl.pres.act. piiianzi (compare e.g. secondary halziie/a- ${ }^{z i}$ in the paradigm of halzai- ${ }^{i}$ / halzi- 'to shout' (q.v.)). The stem pe- as found in pehhi and pehhun is due to monophthongization of pai- in front of -h-. In NH times such a monophthongization occasionally also took place in front of -šC- (cf. Kimball 1999: 234), which yielded NH forms like pešta, pešten and peške/a- from older paišta, paišten and paiške/a-.

Regarding its etymology, consensus seems to have been reached. The verb is generally explained as a univerbation of the preverb pe- (q.v.) followed by a root *( $h_{l}$ ) ai- or $*(H) e i$-, which is connected with TochB ai-, TochA e- 'to give' and Gr. a̋̌v $\boldsymbol{\mu}$ 'to take'. For instance, Oettinger (1979a: 470) reconstructs *pói + $h_{l, 3}$ oi-, and Melchert (1989: 44) gives *pe $+a i-$. Yet, as I explain in Kloekhorst fthc.a, this etymology has to be rejected because it is impossible to explain how the weak stem pi- phonetically can be traced back to a preverb reflecting $* h_{l}$ poithat is prefixed to a verbal root. As we see in the paradigm of pai- 'to go', a preform *h poi $+{ }^{*} h_{l} i e n t i$ yields *paianzi > pānzi, and not **piíanzi. Moreover, the absence of a counterpart with the preverb $u$ - and the abundant attestation of this verb in the other Anatolian languages as well (whereas the preverb pe- is further scarcely attested outside Hittite), confirm my view that pai-/pi- cannot be a univerbated verb. As I explain in the cited article, pai-/pi- has to be regarded as all dāi//tiianzi-class verbs in the sense that they reflect a structure $* \mathrm{CC}$-oi- $/ * \mathrm{CC}$ -$i$-, i.e. the zero-grade of a verbal root followed by an ablauting -oi-/-i-suffix. For pai- ${ }^{i} / p i$ - this means that the root must be either $* \mathrm{PeH}-$ or $* H e P-$. The only root that semantically fits is *hlep- 'to seize, to grab' (for which see also at epp- ${ }^{z i}$ / app-), as can be seen by e.g. Alb. ap- 'to give' ( $<*_{1}$ op-eie-, cf. Klingenschmitt 1981: 127) and Germ. *geb- 'to give' (< *ga- + *h ep-, cf. Kortlandt 1992: 104). I therefore reconstruct * $h_{l} p-o i-/ * h_{l} p-i-$.

Note that in Luwian and in Lycian the thematicized stem *piio- has been generalized, with the exception of a few CLuw. forms found in the Ištanuwian hymns, viz. 3sg.imp.act. pāiu< *pói-.
paini- ${ }^{z i} / \boldsymbol{p a i}$ - (Ia7 > Ic2) 'to go, to pass, to go past, to go by (of time), to flow': 1sg.pres.act. pa-i-mi (OS), pa-a-i-mi (OH/MS), pa-a-mi (NH), 2sg.pres.act. pa-iši (OS), pa-a-i-ši (OH/NS), pa-a-ši (MH/NS), pa-it-ti (NH), 3sg.pres.act. pa-iz-zi (OS), pa-i-iz-zi (OS), pa-a-iz-zi (MH/MS), 1pl.pres.act. pa-i-ua-ni (OS), pa-a-i-ua-a-ni ( $\mathrm{OH} / \mathrm{NS}$ ), pa-a-i-ua-ni (OH/NS), pa-i-ú-ua-ni (OH/NS), pa-a-i-u-e-ni ( $\mathrm{OH} / \mathrm{NS}$ ), pa-i-u-e-ni (MH/NS?), pa-a-u-e-ni ( $\mathrm{OH} / \mathrm{NS}$ ), 2pl.pres.act. pa-it-te-ni (OS), pa-it-te-e-ni (MH/NS), pa-it-ta-ni (OH/NS), pa-it-ta-a-ni (MH/NS), 3pl.pres.act. pa-a-an-zi (OS), pa-an-zi(NH), 1sg.pret.act. pa-a-un (OS), pa-a-u-
un (MH/NS), 2sg.pret.act. pa-it-ta (OH/NS), 3sg.pret.act. pa-it (OS), ba-i-it ( $\mathrm{OH} / \mathrm{MS}$ ), pa-i-it ( $\mathrm{OH} / \mathrm{MS}$ ), pa-a-it $(\mathrm{MH} / \mathrm{MS}), 1$ pl.pret.act. pa-i-ú-u-en $(\mathrm{OH} / \mathrm{NS})$, pa-a-i-ú-en ( $\mathrm{OH} / \mathrm{NS}$ ), pa-a-u-en (MH/NS), pa-i-u-en (NH), pa-a-u-e-en (NH), 3pl.pret.act. pa-a-er (OS), pa-i-er (OH/NS), pa-er (NH), pa-a-e-er (NH), pa-e-er (NH), 3sg.imp.act. pa-it-tu (OS), pa-id-du (OH/NS), 2pl.imp.act. pa-it-tén (MH/NS), 3pl.imp.act. pa-a-an-du (OH or MH/MS), pa-a-an-tu (OH/NS), pa-an$d u$ (NS); part. pa-a-an-t- (MH/MS), pa-an-t- (NH); verb.noun pa-a-ua-ar (NH), pa-a-u-ar (NH), pa-a-u-ūa-ar (NH), gen.sg. pa-a-u-ua-aš (NH); inf.I pa-ú-ua-a-an-zi (OS), pa-ú-ua-an-zi (OH/NS), pa-a-u-ua-an-zi (OH/NS), pa-a-u-an-zi (NH); impf. pa-iš-ke/a-(OS).
Anat. cognates: HLuw. pa- 'to go' (3sg.imp.act. "PES" ${ }^{2} p a-t u$ (ASSUR letter $e$ $\S 24)$, impf.3sg.pres.act. ${ }^{\mathrm{PES}_{2}}{ }^{2} a-z a-t i$ (MARAŞ $14 \S 13$ ), impf.1sg.pret.act. ${ }^{\mathrm{PES}_{2}}{ }^{2} p a-$ $z a-h a$ (KARKAMIŠ A12 §11, §12, KARKAMIŠ A5b §1), ${ }^{\text {PES }_{2} p a-z a-h a_{x}}$ (SHEIZAR §2), impf.3sg.pret.act. "PES, " $p a-z a / i-t a_{x}$ (TOPADA §23)).

PIE *h $h_{l}$ ói $+* h_{l}$ éi-ti $/ * h_{l} i$-énti.
See CHD P: 19f. for attestations. The verb shows a number of different spellings, which have to be chronologically ordered in order to understand the inner-Hittite developments. In OS texts, we find the spellings pa-i-mi, pa-i-ši, pa-i-iz-zi / pa-iz$z i$, pa-i-ua-ni, pa-it-te-ni (but note that pa-it-ta-ni ( $\mathrm{OH} / \mathrm{NS}$ ) must be more archaic), pa-a-an-zi; pa-a-un, --, pa-i-it / pa-it, --, --, pa-a-er. With the knowledge that pānzi, pāun and pāer go back to *paianzi, *paiun and *paier, it is clear that all forms point to a stem pai- (with short vowel) and paii-. In MS texts, the following spellings occur for the first time: pa-a-i-mi, pa-a-iz-zi, pa-a-it, showing a stem $p \bar{a} i$ - with long vowel. In my view, this long $\bar{a}$ can only be explained as the result of a contraction of paịi- (compare e.g. dat.-loc.sg. har-ga-a-i /Hárgāi/ 'white' < */Hárgaii/ < virtual *hérǵ-ei-i). This shows that the OS stem paii- is linguistically real. Forms that first occur in NS texts are pa-a-mi, pa-a-i-ši / pa-aši, pa-a-i-ua-ni / pa-a-i-u-e-ni / pa-a-u-e-ni, pa-a-i-ú-en / pa-a-u-en. These show additional examples of the stem $p \bar{a} i$ - as well as some forms that show a stem pae${ }^{z i}$ (according to the hatrae-class).

All in all, I assume the following situation: in OH times, the paradigm was /páiimi, páiisi, páiit ${ }^{\text {si }}$, páiiuani, páiitani, pā́nt ${ }^{\mathrm{s}} \mathrm{i}<{ }^{*}$ páiant ${ }^{\mathrm{s}} \mathrm{i}$. In MH times, this changed to /pắimi, pắisi, pắit ${ }^{\text {s }}$, pắiuani, pắitani, pā́nt ${ }^{\mathrm{s}} \mathrm{i} /$. In NH times forms according to the hatrae-class are created.
It is generally accepted that this verb must be compared with ue-zi/uua- 'to come' and that these verbs form a pair showing univerbations of the PIE root *h $h_{1} e i$ - (for which see also $i z^{z i}$ and $i e / a-{ }^{\text {Ha(ri) }}$ ) with the preverbs pe 'away' and $u$
'hither', respectively. The exact interpretation of paii- ${ }^{z i} /$ pai- has been debated, however, mainly because opinions differ on the reconstruction of the preverb pe. For instance, Melchert (1994a: 133) claims that pe reflects *pĕ, assuming that in the preform *pe- $h_{l} i e ́ n t i$ a development $*-e h_{l} i->-a i$ - is responsible for the stem pai-, which then spread throughout the paradigm. All alleged examples of the development *-eh $i$ i- > -ai- (Melchert 1994a: 177) are false, however: e.g. dāi 'he takes' is reconstructed as *daie $<*^{h} e h_{1} i-e i$, whereas we should reconstruct *dāie $<* d^{h} h_{1}$-ói-ei (see at dai- ${ }^{i} / t i-$ ). I therefore reject Melchert's reconstruction *pĕ. A better proposal is Eichner's (1973: 68), who assumes that pe goes back to *poi and that the variant pai- as seen in paii- / pai- therefore must reflect the nonmonophthongized variant. Although I do not agree with the details of Eichner's reconstruction of paii- / pai-, I do think that his interpretation of the preverb pe- is basically correct. I therefore will work with a reconstruction $* h_{l} p o i$ for the preverb pe (see its own lemma for a more detailed treatment).

Univerbation is the phenomenon that two originally separate words at one point merge to become one word. It must be borne in mind that the exact moment of univerbation may differ per case. In the case of $\operatorname{pe}(-)$ har $(k)-{ }^{z i}$ (q.v.), we see univerbation happening before our eyes in OH texts. In the case of paii- ${ }^{z i}$ / pai-, however, it must have happened earlier, namely before the moment of monophthongization of $* h_{1}$ poi to pe. Nevertheless, it is not likely that univerbation took place at the PIE level. A preform *h $h_{l}$ poi- $h_{l} i e ́ n t i$ as assumed by e.g. Eichner (1973: 68), should in view of $* h_{2} u h_{1} i e ́ n t i>\mathrm{OH}$ huianzi 'they run' have given $\mathrm{OH} * *$ paianzi, with preserved intervocalic $-i-$, instead of attested pānzi. In the case of $u e^{z}{ }^{z} /$ uua- 'to come' (q.v.), we see that we must assume that univerbation has taken place at the time that $* h_{2} \mathrm{ou}$ has monophthongized to $* / \mathrm{Ru} /$ and $* h_{1}$ éiti $/ * h_{l}$ iénti have become $* /$ Rét ${ }^{\mathrm{s}} \mathrm{i} /$ and $* /$ iánt ${ }^{\mathrm{s}} \mathrm{i} /$. The case of paii- ${ }^{z i} /$ pai- is slightly different, however. First, we must assume that *hlpoi had not yet monophthongized to pe, but must have had its intermediate shape */pai/. Secondly, whereas in uezzi / unanzi it is clear that the verbal forms remained accentuated $\left(* / R u+e^{2} t^{\mathrm{s}} \mathrm{i} /\right.$ and $\left./ \mathrm{Ru}+\mathrm{iann}^{\mathrm{s}} \mathrm{i} /\right)$, the forms paiuani and paittani show that in the case of paii-/pai- the preverb attracted the accent. If we assume univerbation at the time that we are dealing with */pái/ on the one hand and */Rémi, Rési, ?ét ${ }^{\text {s }}$, Riuéni, Riténi, iánt ${ }^{\text {is }}$ / on the other, we arrive at the following scenario. At the moment of univerbation, the accent is fixed on the preverb */paii/: 3sg.pres. */pái-Ret ${ }^{\text {si}} \mathrm{i}$, 2pl.pres. /pái-2iteni/, 3pl.pres. /pái-iánti i /, 3sg.pret. /pái-Ret/. In 3pl.pres. */páiiant ${ }^{\mathrm{j}} \mathrm{i}$, the sequence /aiia/ is simplified to /aia/ because a "geminate"/-ii-/ does not exist in the phonemic system of that period. The next step is weakening of post-tonic $* e$ to $/ \mathrm{i} /$ when in closed syllable and /a/ in open
syllable (cf. § 1.4.9.1.b): 3sg.pres. */pái?at ${ }^{\text {§ }} \mathrm{i} /$, 2pl.pres. */páiPitani/, 3sg.pret. /páißit/. The stem */pái?i-/ of the sg.pret.- and the pl.-forms replaces the stem */páiPa-/ of the sg.pres.-forms, yielding */páiiit ${ }^{\text {s }} \mathrm{i} /$. The loss of intervocalic $-i-$, which causes contraction of the adjacent vowels, as well as the subsequent simplification of $* / \mathrm{Vi} \mathrm{V} /$ to $/ \mathrm{ViV} /$ yields the paradigm as attested in OH texts: /páiit ${ }^{\text {si }} \mathrm{i}$, páiitani, pānt ${ }^{\text {si }}$, páiit/. The MH development /CaiiC/ > /CāiC/ further explains the MH/NH paradigm /pāit ${ }^{\mathrm{s}} \mathrm{i}$, pāitani, pānt i i, pāit/.
HLuw. pa- does not show a reflex of $-i$ - anymore. This is possibly due to a similar contraction as in Hitt. pānzi < *paianzi, after which a stem pa- spread throughout the paradigm.
paknu- ${ }^{z i}$ (Ib2) 'to defame, to slander, to denounce': 3pl.pret.act. pa-ak-nu-er (OH/NS), pa-ak-nu-e-er (OH/NS).

See CHD P: 58 for attestations and contexts. Its meaning cannot easily be determined, but a translation 'to defame' may fit. Formally, the verb looks like a causative in -nu- of a root pak-. As causatives in -nu- in principle are derived from zero-grade roots, we could be dealing here with a root ${ }^{*} P e(H) K-$. Further unclear.
pakkušš- 'to pound, to crack, to crush, to grind': impf.3pl.pres.act. pa-ak-ku-uš-kán-zi (OH/NS), impf.3pl.imp.act. pa-ak-ku-uš-kán-du (OH/NS).

Derivatives: pak(kuš)šuuant- (adj.) modifying 'grain') 'cracked(?)' (nom.acc.sg.v. pa-ak-ku-uš-šự-ua-an (NS), pa-ak-šu-ua-an, nom.pl.c. pa-ak-ku-uš-šu-an-te-eš (MH?/MS?), nom.-acc.pl.n. pa-ak-ku-uš-šu-ưa-an-da (MH/NS), pa-ak$\check{s ̌ u-u a-d a ~(N H), ~ l o c . p l . ~ p a-a k-k u-u s ̌-s ̌ u-u a-a n-d a-a s ̌ ~(M H / N S), ~ a b l . ~ p a-a k-k u-u s ̌-~}$ $\check{s u} u-u a-a n-d a-a z),{ }^{\text {(GIŠ) }} \boldsymbol{p a k k u s ̌ s ̌ u u ́ a r ~ ( n . ) ~ a ~ w o o d e n ~ i m p l e m e n t ~ u s e d ~ t o ~ c r a c k ~ o r ~}$ crush cereals (nom.-acc.sg. pa-ak-k[u-u]š-šu-ar (MH/NS), pa-ak-ku-uš-šu-ua-ar (MH/NS)).

See CHD P: 58f. for attestations. The adjective pak(kuš)šuuant- is cited in CHD as pakkuššauant- as well, which is done on the basis of one form in KBo 21.1 i 15, which CHD reads as pa-ak-ku-uš- 「̌̌a? ${ }^{\urcorner}-u a-a n$. If we look at the handcopy of this tablet, howver, we see that the damaged sign in between -uš- and -úa-hardly
 uš-šụ-ualan.
On the basis of the adjective pak(kuš)šuuant-, we can infer that the verbal stem is pakkušš-. Oettinger (1979a: 212) suggests a connection with PIE *peh ${ }_{2} \dot{g}-$ 'to
become firm' and ${ }^{*}$ peh $_{2} k^{k}$ - 'to make firm', but this is unlikely, not only for formal reasons (where does -ušš- come from?) but also for semantic reasons: Oettinger translates the PIE root *peh ${ }_{2} k$ '- as 'feststampfen', but the notion 'stampfen' is not attested in its descendants that all denote 'to make firm'. Oettinger apparently translates the root thus only on the basis of his connection with Hitt. pakkušš-. Janda (2000: 49-51) connects pakkušš- with *pekw - 'to cook' and assumes on the basis of this connection that *pek'- originally meant 'genießbar machen'. This does not seem semantically attractive to me either. Further unclear.
palāh- ${ }^{i}$ palahh- (IIa2) 'to call(?), to summon(?)': 3sg.pret.act. pa-la-a-ah-t[a] (OH/NS), 3pl.pret.act. pa-la-ah-he-er (OH/NS).

See CHD P: 60 for attstations and contexts. Both forms occur in broken context, but on the basis of KUB 32.56 obv. 6 nu ua-ar-ri pa-la-ah-he-er 'They p.-ed for help', it is suggested in CHD that the verb might denote 'to call, to summon' (likewise Tischler HEG P: 388: 'rufen, anrufen').
Phonologically, the verb probably has to be interpreted as /plaH-/. Because of the rootfinal -hh-, the verb is likely to have been hi-conjugated (mi-conjugated roots of the structure $* C^{2} h_{2}$ - would have lost their $* h_{2}$ because it always stood in preconsonantal position). On the analogy of nāh- ${ }^{i} / n a h h-$ 'to fear' and $z a \bar{a} h{ }^{i}$ / zahh- 'to beat', I assume that this verb was plāh- ${ }^{i}$ / plahh- (note that the long vowel is attested in 3sg.pret.act. palāht $[a]$ ). Mechanically, we have to reconstruct a root $* P l e h_{2}$, of which I know no other examples.
${ }^{\text {(TÚG) palahša- (c.) a garment: nom.sg. pa-la-ah-ša-aš, acc.sg. (4) pa-la-ah-ša-an }}$ (NH), dat.-loc.sg. pa-la-ah-ši, nom.pl.(?) pa-la-ah-ši-iš.
Derivatives: palahš(iie/a)- ${ }^{z i}$, palaȟ̌ae- ${ }^{z i}$ (Ic1 / Ic2) 'to cover' (3pl.pres.act. pa-la-ah-ši-įa-an-zi (MH/MS), pa-la-ah-ša-an-zi (MH/MS), 3sg.pret.act. pa-la-ah-še-et (NS), 3pl.pret.act. pa-a-la-ah-ša-e-er).

PIE *pleh $h_{2}$-SO- or *ploh $h_{2}$-so-
See CHD P: 60f. for attestations. The noun and its derivatives are always spelled pa-la-ah-šo, indicating a phonological analysis /plaHsa-/. Kronasser (1966: 167) connects this word with Hitt. palhi- 'wide, broad' < *plh $h_{2}-i$. This means that /plaHsa-/ would reflect *pleh ${ }_{2}$ SO- or *ploh ${ }_{2}$ SO- (for the retention of $* h_{2}$ in front of $-s-$, cf. pahšs-'to protect' < *poh ${ }_{2} s-$ ). See at palhi- for further etymology.

I do not understand how Tischler (HEG P: 389) can follow Neumann (1988: $259^{13}$ ) in assuming that palaȟ̌a- shows thematicization of a verbal noun
*palhiššar (of a further unattested verb *palh- 'to protect', which is supposed to be cognate to Gr. réخaç 'skin', ON fela 'to hide' < *pelh $2_{2}$-) that first shows syncope of the second syllable and then anaptyxis in the cluster -lhš-: the supposed developments are irregular and unlikely.
palh-' '?': 3pl.pret.act. pa-a[l-] ${ }^{\text {? }}$ he-er ( $\mathrm{OH} / \mathrm{NS}$ ).
Hapax in KBo 3.1. i 34. The context is broken and there has been dispute regarding its reading. After collation, CHD P: 63 now reads [ÉR]IN ${ }^{\text {MEŠ }}$-an pa$a[l$ ?-] he-er, however. On the basis of this context alone, the meaning of the verbal form cannot be determined. Tischler (HEG P: 392) nevertheless translates 'schützen ?', but does so especially on the basis of the old reading $[\mathrm{DIN}] \mathrm{GIR}^{\mathrm{MES}}=$ an $p a[-a h-s ̌] e-e r$ 'the gods protected him', of which he states that, although the reading now has been improved, "die Bedeutung kann indes stimmen". He does not seem to notice, however, that the former reading of $[D I N] \operatorname{GIR}^{\text {MEŠ }}$ has been improved as well, namely to [ÉR]IN ${ }^{\text {MEŠ }}$. Nevertheless, on the basis of the translation 'to protect', he suggests to connect palh- with ${ }^{\text {(TÚG) }}$ palahša-, a garment (q.v.), and, on an IE level, with Gr. Té $\lambda a c$ 'skin', ON fela 'to hide' < *pelh $2^{-}$( see at his treatment of ${ }^{(\text {TúG })}$ palahša-, HEG P: 389). As I have argued at the lemma ${ }^{(\mathrm{TÚG})}$ palaȟ̌̌a-, this latter word cannot derive from a root *pelh $2^{-}$, but reflects *pleh $2^{-}$. Moreover, a translation 'to protect' of palh- is based on nothing, so Tischler's etymologization has no merit.
palhi-/palhai-(adj.) 'wide, broad': nom.sg.c. pal-hi-iš (NH), nom.pl.c. pal-ha-a-e-eš (OS), pal-ha-a-eš (MH), pal-ha-e-eš (OH?/NS), pal-hi-e-eš, nom.-acc.pl.n. pal-hi (NH).

Derivatives: palhanu- ${ }^{z i}$ (Ib2) 'to broaden(?)' (3sg.pret.act. pal-ha-nu-ut), palhašti- (c.) 'width' (Sum. DAGAL; nom.sg. pal-ha-aš-ti-iš (NH), loc.sg. pal-ha-a-aš-ti (NH), pal-ha-aš-ti (NH)), palhatar / palhann- (n.) 'width' (nom.acc.sg. pal-ha-tar, loc.sg. pal-ha-an-ni), (DUG)palha/i- (c./n.), a broad vessel (nom.sg.c.pal-hi-i[š] (OH?-MH?/NS), acc.sg.c. pal-ha-an (MS), pal-hi-in (OH?MH?/NS), gen.sg. pal-ha-aš (OS), loc.sg. pal-hi (MS?), nom.pl.c. pal-hi-iš ( $\mathrm{OH} / \mathrm{NS}$ ), [pal-h]i-e-eš ( $\mathrm{OH} / \mathrm{NS}$ ), pal-ha-eš (OH/MS?), acc.pl.c. pal-hi-uš, nom.acc.pl.n. pal-ḩa-e-a $a^{\mathrm{HI} . \mathrm{A}}(\mathrm{OS})$, pal-ḩi $(\mathrm{OH} / \mathrm{MS})$, pal-ha $(\mathrm{OH} / \mathrm{NS})$, pal-ḩi-aš (MS?), loc.pl. pal-ha-ǎ̌ (OH/NS)), palhē̌̌̌̌- ${ }^{z i}$ (Ib2) 'to become wide or broad, to expand' (impf.3sg.imp.act. pal-hi-iš-ke-et-ta-ru (OH?/NS)), palheššar / palhešn- 'width' (instr. pal-he-eš-ni-t $=\dot{a}=k$-kán (NH)).

Anat. cognates: CLuw. palhaida- (?) (adj.) 'wide, broad' (nom.-acc.pl.n. pal-ha$a n[-z a]$, interpretation uncertain, thus Starke 1990: 257), palh $\overline{\boldsymbol{a}}-$ 'to make flat, to spread out' (inf. \& pal-hुu-na (NH), part.nom.-acc.sg.n. pal-ha-a<-am>-ma-an-za), palhamman- (adj.) 'lying flat, spreading out' (nom.-acc.pl.n. pal-ha-am-ma), palhašha- 'breadth(?)' (nom.sg. pal-ha-aš-ha-aš).

IE cognates: Lat. plānus 'flat, smooth, Lith. plónas, Latv. plãns 'thin, flat', Lith. plóti, Latv. plãt 'to flatten'.

PIE *plh ${ }_{2}-(e) i-$
See CHD P: 64f. for attestations. Since Benveniste (1935: 151), these words are generally connected with Lat. plānus 'flat, smooth', etc. that reflect *pleh2-. For Hittite, a reconstruction $* p l h_{2}-i$ - is generally accepted. Melchert (1984a: 45) states that a reconstruction ${ }^{*}$ pelh $h_{2} i$ - would have yielded $* *$ palli-, and that therefore ${ }^{*} p l h_{2}-i$ - is needed. A preform ${ }^{*} p^{2} l h_{2}-i$ - is impossible anyway, however, as the
 'porridge' is semantically far): all the forms with palh- must therefore reflect ${ }^{*} p l h_{2}$ - A genuine full-grade is found in palahša-, a garment (q.v.) which is to be analysed as /plaHsa-/ < *pleh ${ }_{2}$-so- or *ploh ${ }_{2}$-so-. Note that the derivatives palhašti-, palhatar, palhešš-, palhanu- all are derived from the bare root *plh ${ }_{2}$, not from the $i$-stem.

Originally, the adjective probably inflected ${ }^{*} p l e ́ h_{2}-i-s$, ${ }^{*} p l h_{2}-e ́ i-s$, of which the oblique stem was generalized.

Note that the CLuwian words are all quite disputable regarding their interpretation.
palkuiie/a- ${ }^{\text {(t)a(ri) }}$ (IIIg) '?': 3pl.pres.midd. pal-ku-i-ía-an-ta (OH/NS).
Hapax in KUB 29.1 iii 5. CHD P: 68 translates 'to acclaim(?)', but admits that its "tentative translation is derived solely from the supposition that the verb is connected with palwai- 'to cry out'". Tischler (HEG P: 397-8), who cites the verb as palkuwai- (which is odd for a middle), follows CHD and suggests that 3sg.pret. pa-al-ku-uš-ta (KBo 25.123, 6 (OS)) belongs here as well. This form is hapax, too, and stands in such a broken context that its meaning cannot be determined. In my view, these suppositions are based on too little to base any conclusions on.
palkuš- '?': 3sg.pret.act. pa-al-ku-uš-ta (OS).

Hapax in KBo 25.123, 6, which text is that broken that a meaning of this verb cannot be determined. See at palkuiia- for unconvincing suggestions of a connection between these two verbs.
palša- (c.) 'road, path; campaign; journey; caravan; time (occassion)' (Sum. KASKAL): nom.sg. KASKAL-ša-aš (OH or MH/NS), KASKAL-aš (OH/NS, MH/MS), KASKAL-iš (MH/NS), acc.sg. KASKAL-ša-an (OH/MS), KASKALan (OS), gen.sg. KASKAL-ša-aš (NH), KASKAL-aš (OH or MH/NS), dat.loc.sg. pal-še (MH/MS), pal-ši (MH/MS), KASKAL-ši (OS), all.sg. KASKAL-ša (OS), abl. KASKAL-ša-az (MH/MS), KASKAL-za (OS), nom.pl. KASKAL-ši-iš (OH?/NS), acc.pl. KASKAL ${ }^{\text {HI.A }}-u \check{s}$ (OS), gen.pl. KASKAL ${ }^{\text {MEŠ }}$-aš (OH/NS), dat.loc.pl. KASKAL-ša-aš, KASKAL ${ }^{\text {HI.A }}-a \check{s}(\mathrm{NH})$.

Derivatives: *palšiahh ${ }^{-}$(IIb) 'to dispatch, to set on the road, to satisfy' (1sg.pres.act. KASKAL-ši-ahh-mi (NH), 3sg.pres.act. KASKAL-ah-hi (NH), KASKAL-ši-ah-zi (NH), 3pl.pres.act. KASKAL-ši-ah-ha-an-zi (NH), 1sg.pret.act. KASKAL-ši-ah-h[u-un] (NH), 2 or 3sg.pret.act. KASKAL-ah-ta (NH); part. KASKAL-ah-ḩa-an-t- (NH); verb.noun KASKAL-ši-ah-hu-u-ua-ar (NH); inf.I KASKAL-ḩu-an-zi (NH); impf. KASKAL-ši-ah-hi-iš-ke/a- (NH)),

Anat. cognates: Lyc. thiplẽ 'two times(?)', trpplé 'three times(?)'.
IE cognates: Gr. $\delta t-\pi \lambda$ ó $\varsigma$, Lat. du-plus, OHG zwi-falt 'twice'.
PIE *polso- or *pl-so-
See CHD P: 69f. for attestations. This word is usually written with the sumerogram KASKAL. Its phonetic reading is only indicated by a few dat.loc.sg. spellings pal-ši that are used in the same function as KASKAL-ši. The word can be used for either 'road' or 'time' (in the sense of 'the first time'). On the basis if the latter meaning, the Lycian words tbiplẽ and trpplẽ could be cognate if they indeed mean 'two times' and 'three times'.
It has been assumed that paľ̌a- has cognates in HLuwian as well, but in my opinion these are dubious. KARKAMIŠ A2+3 §22 wa/i-sa-'। ku-ma-na sa-ti-' Ipa-la-sa-ti-i is translated by Hawkins (2000: 112) as "when he shall be out of the way", assuming that pa-la-sa-ti-i is abl.-instr. to a noun palsa- 'way' which is cognate to Hitt. palša-. In my view, this interpretation is less likely because in HLuwian the general rule is that the verb is the last word of the sentence. This would mean that here, pa-la-sa-ti-i is to be interpreted as a verbal form. KARKAMIŠ A6 § 19 |wa/i-ná ara/i-la-" " ${ }^{\prime \prime}$ tara/i-su-u " $4 "-s u-\left.u\right|^{\text {"MANUS" }}{ }^{p a+r a / i-s i}$ "CRUS" $t a-n u-w a / i-w a / i-i$ is translated by Hawkins (2000: 125) as 'I shall cause him
to stand ... three times, four times ...’, assuming that $p a+r a / i-s i$ is the dat.-loc.sg. of a noun parsa- 'time, turn', which is cognate with Hitt. palša-. In my view, $p a+r a / i$-si cannot mean 'time': the -su-suffix in " 3 " tara/i-su-u and " 4 "-su-u indicates ' x times' already, and the "MANUS"-determinative used for $p a+r a / i-s i$ is not helpful in an interpretation as 'x times'. Moreover, HLuw. $-r$ - does not regularly correspond to Hitt. -l-. This means that within Anatolian only the Lycian forms may be cognate.

Already Hrozný (1917: 95) connected palša- with Gr. $\delta \iota-\pi \lambda o ́ \varsigma ~ a n d ~ L a t . ~ d u-p l u s, ~$ OHG zwi-falt. If this connection is justified, we deal with a root *pel-. Hitt. palšathen reflects *pol-s-o- or *pl-s-o-.
Kimball's suggestion (1999: 450) to connect palša- with Arm. pelem 'hole' and OIr. belach 'cleft, passage, way' < *bel- 'to split, cut, excavate' is semantically weak.
${ }^{(U Z U)}$ paltana- (c.) 'shoulder, shoulder blade' (Sum. $\left.{ }^{(U Z U)} \mathrm{ZAG}(. \mathrm{LU})\right)$ : nom.sg. pal-ta-na-aš (OH/NS), acc.sg. pal-ta-na-an, gen.sg. pal-ta-na-aš, loc.sg. pal-ta-ni (MS), pal-da-ni (MS), pal-ta-ni-i (OH/NS), abl. ZAG.LU-az, nom.pl. pal-ta-nu$u s ̌(\mathrm{NH})$, acc.pl. pal-ta-na-[aš], loc.pl. pal-ta-a-na-aš (NH).
IE cognates: Skt. prthú- 'flat of the hand', Gr. $\pi \lambda \alpha \tau \varepsilon \tilde{\alpha} \alpha$ 'flat of the hand', Gr. ¿ $\mu \mathrm{\mu o}-\pi \lambda \alpha ́ t \eta$ 'shoulder blade', MIr. leithe 'shoulder blade'.

PIE *plth ${ }_{2}$-eno-.
See CHD P: 79f. for attestations. This word is generally connected with Skt. prthú- 'flat of the hand', etc., which means that it must reflect *plth2-eno-.

It is unclear to me, however, what the connection is with the root $* p l e h_{2^{-}}$' wide, broad' (for which see palhi- and ${ }^{(\mathrm{TUGG})}$ palaȟ̌a-). In principle, Hitt. paltana- could also reflect a preform ${ }^{*}$ plh $_{2} t h_{2}$ eno-, but the other IE languages do not show traces of *plh $t$-.
paluae- ${ }^{-3}$ (Ic2) 'to cry out, to shout for joy, to cheer': 3sg.pres.act. pal-ua-a-ez-zi (OS), pal-ua-iz-zi (OH/NS), pal-u-ua-a-iz-zi, pal-u-ua-iz-zi, 3pl.pres.act. pal-ua$a n-z i(\mathrm{OS})$, pal-ua-a-an-zi (NH), pal-u-ua-an-zi, 3sg.pret.act. pal-ua-it; part. pal-ua-an-t- (MH/MS); impf. pal-ú-e-eš-ke/a- (OS), pal-ú-iš-ke/a- (MS), pal-ú-i-iš-ke/a- (NH), pal-ui $i_{5}$-eš-ke/a-(NH), pal-ui $i_{5}-i s ̌-k e / a$-.
Derivatives: ${ }^{(L U ́ / M U N U S)} \boldsymbol{p a l u} \overline{\boldsymbol{a} t}(\boldsymbol{t}) \boldsymbol{a l l a} \boldsymbol{a}$ - (c.) 'crier, a participant in festivals who cries out' (nom.sg. pal-una-at-tal-la-aš (OS), pal-ua-tal-la-aš (NS), pal-ua-tal-aš, pal-ua-a-at-tal-l[ $a-a \check{s}] \quad(\mathrm{OH} / \mathrm{NS})$, pal-ua-a-tal-la[-aš] (NH), pal-u-ua-tal-la-aš ( $\mathrm{OH} / \mathrm{NS}$ ), pal-lu-ua-tal-la-aš (1x), dat.sg. pal-ua-a[t-ta-al-l]i (OS), pal-ua-tal-li
(MS or early NS), pal-una-at-ta-li, nom.pl. pal-ua-at-ta-al-le-eš (OS), pal-ua-at-tal-le-eš, pal-ua-at-tal-le-e-eš, pal-ua-tal-le-e-eš (OH/NS), [pa]l-ua-tal-la-aš, acc.pl. pal-ua-tal-la-aš (OH?/NS), pal-ua-tal-lu-uš; case? pal-ua-a-tal-la, pal-ua-tal-la (NH)).

PIE * $b^{h} l h_{1}$-uo-iélóó- ?
See CHD P: 80f. for attestations. The verb clearly belongs to the hatrae-class, which means that it is a -ie/a-derivative of a noun *palua-, which is visible in paluattalla- as well. CHD suggests a connection with the verb palkuiie/a- ${ }^{\text {(tl)a(ri) }}$ whose meaning cannot be determined, referring to other alterations like tarku- / taru- 'to dance' and lalakueša- / lalaueša-. These alternations are often seen as showing a distribution between Hitt. $-k u$ - and Luw. $-u$ - from PIE $*$ - $g^{w}$ - (but see at $\operatorname{tar}(k) u_{-{ }^{-} i}$ for a different interpretation of its alteration). Because paluae- is so well attested in OS texts already, I think it is unlikely that the $-u$ - is of Luwian origin. I therefore rather separate palkuiie/a-.
The etymological interpretation is difficult. The noun *palua- can phonologically represent /palua-/ as well as $/ \mathrm{pl}(\mathrm{P})$ ua-/. In the first case we must assume a preform *Poluo-, in the second *Pluo- or *PlHuo-. Tischler (HEG P: 403f.) favours a connection with the PIE root $*(s) p e l(H)$ - visible in Goth. spill 'story', TochAB päl- 'to praise', Lat. ap-pellare 'to talk to', implying a reconstruction *pol-uo-. Schrijver 1991: 406f. derives these IE forms from a root *pelh $2^{-}$, which would have yielded Hitt. **palluua- < *polh $h_{2}$-uo- or **palhuua- < *plh 2 -uo-, however. In my view, a better possibility would be the root $* b^{h} l e h_{1}$ - 'to cry, to roar' as visible in Lat. fleō 'to cry', OHG blāen 'to blow', Latv. blêju 'to bellow', RussCS blěju 'to bellow'. We then should reconstruct a noun * $b^{h} l h_{l}$-uo'crying, roaring' of which the -ie/o-derivative *bh ${ }^{h} h_{l} u o-i e ́ / o ́-\quad$ 'to be crying' yielded Hitt. /pl?uāé-/, spelled paluae-zi.
 $z a-h a-a \check{s}(\mathrm{OH} / \mathrm{MS})$, pal-za-ah-ha-aš (OH?/NS), pal-za-ha-a-aš, pal-za-aš-ha-aš (NH), acc.sg. pal-za-ha-an, gen.sg. pal-za-ah-ḩa-aš (OH?/NS), loc.sg. pal-za-hi ( $\mathrm{OH} / \mathrm{MS}$ ), pal-za-ah-hai (NH), pal-za-aš-hi (NH), acc.pl. pal-za-hu-uš (OS); stem pal-za-ha (OH?/NS), pal-za-aš-ha.

Derivatives: palzahae- ${ }^{z i}$ (Ic2) 'to stretch (a sheep, lamb, kid) out (on a flat surface)' (3sg.pres.act. [pal-]za-ḩa-a-iz-zi, pal-za-hुa-[iz]-zi, 3pl.pres.act. pal-za-ha-an-zi).

Anat. cognates: Lyd. ?blaso 'socle'.
PIE *plth ${ }_{2}$-sh $h_{2}$ ó-

See CHD P: 86 for attestations. The different spellings point to a phonological interpretation/pltsHá-/. Formally, the noun shows the suffix -šha- attached to a root palt- which is generally equated with $*^{*}$ plth $_{2}$ - 'flat' as seen in paltana'shoulder' (q.v.) as well. We therefore have to reconstruct *plth $h_{2}-s h_{2} \delta$ ó-
The appurtenance of Lyd. bגaso 'socle' (cf. Tischler HEG P: 408) is quite uncertain.
panku- / pangau- (adj.) 'all, entire, complete; every; general': nom.sg.c. pa-an$k u-u s ̌$ (MH/MS), acc.sg.c. pa-an-ku-un (NH), pa-a-an-ku-un (1x, NH), nom.acc.sg.n. pa-an-ku (OH or MH/NS), gen. pa-an-ga-u-ua-aš (NH), dat.sg. pa-an$g a-u-i(\mathrm{OH} / \mathrm{NS})$, abl. pa-an-ka4-u-ua-az, pa-an-ga-u-ua-za (MH/MS?), instr. pa-an-ku-it (OH/MS), nom.pl.c. pa-an-ga-u-e-eš (MH/NS), acc.pl.c. pa-an-ka $a_{4}-u-e-$ $e s ̌(\mathrm{NH})$.

Derivatives: panku- / pangau- (c.) 'multitude, the people, the masses; assembly; advisory body of the king' (nom.sg. [p]a-an-gu-uš (OS), pa-an-ku-uš, $p a-a n-k u-\bar{s}=a$, $p a-a n-k u-u ́-\check{s}=a$, acc.sg. pa-an-ku-un (OH/NS), gen.sg. pa-an-ga-$u$-ua-aš (OH or MH/MS), pa-an-ga-ua-aš (MH/NS), pa-an-ka $\boldsymbol{q}^{-u a-a s ̌, ~ p a-a n-k a ~} a^{-}$ $u-u a-a \check{s}, p a-a n-g a-u-a s ̌, p a-g a-u-u a-a \check{s}, p a-g a-u a-a \check{s}$ (NH), dat.sg. pa-an-ga-u-i (OH/MS), pa-an-ga-u-e, pa-an-ga-u-ui $i_{5}$ (NH), pa-an-ka4-u-i, pa-ga-u-i), ${ }^{\text {NINDA }}$ panku (n.), a kind of bread (nom.-acc.sg. pa-an-ku), pangariie/a- ${ }^{\text {tatri) }}$ (IIIg) 'to become widespread, to become common, to become general' ( 3 sg.pret.midd. pa-an-ga-ri-ía-(at-)ta-ti (OH/NS)), pangarit (adv.) 'in large numbers, in force, en masse' (pa-an-ga-ri-it (OS), pa-an-ka4-ri-it (NH)), pankuē̌̌š- ${ }^{z i}$ (Ib2) 'to become plentiful(?)' (3sg.pres.act. pa-an-ku-e-eš-zi).
IE cognates: Skt. bahú- 'many, much, frequent, numerous', Arm. bazowm (adj.) 'much'.

$$
\operatorname{PIE} * d^{h} b^{h} n g^{h}-(e) u-
$$

See CHD P: 88f. for attestations. Note that the noun panku- 'multitude; assembly' must be regarded as a substantivized adjective because of the oblique stem pangau-, which contrasts with the fact that normally $u$-stem nouns do not show ablaut of the suffix.
There has been some debate about the etymology of these words. Polomé (1968) connected panku- with PIE *penkw 'five' (which he derives from 'a handful'), but this is formally unlikely: panku- shows a $u$-suffix (gen.sg. pangauuaš), which cannot be explained by an etymological labiovelar. The same criticism can be uttered against Hamp's connection with Lat. cunctus 'totally,
every' (1973), which word would point to a labiovelar. I therefore stick to Sturtevant's etymology (1930c: 216), who connected panku- with Skt. bahú'many, much, frequent, numerous'. This word is usually connected with GAv. dəbazah-, YAv. bqzah- 'thickness', Gr. $\pi \alpha \chi$ ús 'thick, dense', Latv. biezs 'thick' and Lat. pinguis 'fat' (the latter then must show secondary $p$ - for expected *finguis), which all show a meaning 'thick, fat'. This has caused criticism on the semantic side of the etymological connection with Hitt. panku-, but unjustified, to my mind. The semantics as found in Sanskrit (which fit the Hitt. semantics well) are not isolated, as they are comparable within IIr. to YAv. bazuuaṇt- 'numerous' and outside IIr. to Arm. bazowm (adj.) 'much'. I rather assume that the languages showing 'thick, fat' show a semantic development 'much, many' > 'complete, full' > 'thick, fat'.
Formally, Skt. bahú-, superl. báṃhiṣ̣̣ha- has to be derived from a stem * $d^{h} b^{h}(e) n g^{h}-u$ - (for initial * $d^{h}$ - cf. GAv. dəbqzah- (Beekes 1988a: 78)). This means that the original paradigm must have been $* d^{h} b^{h} e^{n} g^{h}-u-s$, $* d^{h} b^{h}$ éng ${ }^{h}-u-m$, * $d^{h} b^{h} n g^{h}$-éu-s. Since the full-grade form $* d^{h} b^{h}$ éng ${ }^{h}-u$ - should have yielded Hitt. **pinku-, I assume that in Hittite the zero-grade form was generalized (just as in Skt. bahú-).
Note that the words pangarit and pangariie/a- are derived from an unattested stem *pangara-, which reflects the Caland-variant $* d^{h} b^{h} n g^{h}-$-ro-.
pankur / pankun- (n.) animal body part ('udder'?); group of related animals or persons ('clan'?): nom.-acc.sg. pa-an-kur (OS), pa-an-gur (OH/NS), pa-a-angur, gen.sg. pa-an-ku-na-aš (MH/NS), instr. pa-an-ku-ni-it (MH).

Derivatives: pankunašša- 'one belonging to the pankur' (dat.-loc.sg. pa-an-ku$n a-a \check{s}-s ̌ i)$.

See CHD P: 92f. for attestations and contexts. The exact meaning of the word is not clear. On the one hand it seems to denote an external body part of (mostly female) mammals, which can be used in rituals as well (therefore perhaps 'udder'). On the other hand it denotes a group of related people or animals. In one text it occurs in a enumeration of relationships:

KUB 13.20 i

$$
\begin{aligned}
& \text { (32) DI-NAM }{ }^{\text {HI.A }} \mathrm{KUR}^{T I} \text { ku-e ha-an-ne-iš-kat-te-e-ni } n=a \text {-at } \mathrm{SIG}_{5} \text {-in } \\
& \text { ha-an-ni-iš-ke-et-tén } n=a \text {-at=za=kán } a \text {-pé-e-el } \\
& \text { (33) } \check{S} A \text { É= }=\check{S} U \check{S} A \text { ŠEŠ = } \\
& { }^{\text {LÚ }} k a-e-n a-a n-t i{ }^{\text {LÚ }} a-r i-e=s ̌-s ̌ i ~
\end{aligned}
$$

## (34) ŠA NINDA KAŠ ma-a-ni-ina-ah-hi-ina-at-ti le-e ku-iš-ki i-i-ia-zi

'The law-suits of the country which you will judge, judge them well. No-one shall treat those (sc. the law-suits) of his own house, of his own brother or sister, of his own family-member(s), of his own pangur-member(s), of his own in-laws (and) of his own friend(s) for the gain of bread and beer'.

We see that members of the pankur are mentioned after the haššanašša- (relatives through birth) but before kaenant- (relatives by marriage). Perhaps pankunaššadenoted people that were 'relatives' because they were raised by the same foster mother. Such an interpretation would also fit the meaning 'udder'. Note that the formal interpretation of pankunašši is difficult. I interpret this form as dat.-loc.sg. of a stem pankunašša-, which shows the (Luwian) suffix -ašša- 'belonging to' (cf. the similar analysis of haššannašši in $\mathrm{HW}^{2} \mathrm{H}: 412$ ).

Despite the fact that we are dealing with a seemingly archaic $-r / n$-inflection, I know of no good comparandum. Formally, pankur should reflect $* P o n K-u r$ or *Ph $h_{2 / 3} e n K$-ur. On the basis of the old idea that pankur denotes both 'clan' and 'milk', Melchert (1983: $9^{23}$ ) states that it easily could be derived from the PIE root ${ }^{\prime} b^{h} e^{e n g}{ }^{h}$ - 'to be thick' (which also underlies Hitt. panku- / pangau-), reconstructing $* b^{h}$ óng ${ }^{h}-u r$. Because the translation 'milk' has to be abandoned (see explicitly CHD P: 93), this etymology cannot be upheld. If pankur indeed denotes 'udder', we could perhaps think of an etymological connection with the PIE root *pen- 'to feed' (Lith. penù 'to feed', Lat. penus 'food'), although the origin of the velar consonant remains unexplained then.
pantala- 'moment, point in time': abl. pa-an-ta-la-az (MH/MS), pa-a[n-d]a-[la$a z]$ (MH/MS).

See CHD P: 94 for attestations. This word only occurs in the expressions apet pantalaz 'from that time onwards' and ket pantalaz 'from now onwards' (this last expression is attested without a word space as well, see ketpantalaz), which indicates that pantala- may denote 'moment, point in time'. An etymological interpretation of pantala- is difficult, however. Some scholars favour an etymological connection with paii- ${ }^{z i} /$ pai- 'to go' (cf. uizzapant- 'old, having grown weary' < '*having gone with regard to the year(s)'), but this seems semantically unlikely to me as pantala- seems to refer more to a fixed point in time than to long period. Puhvel (HED 4: 202-3) suggests a tie-in with Lat. pendō 'to hang (on scales), to weigh', giving as a parallel Lat. mōmentum < *movementum, derived of movere 'to move'. Nevertheless, it is likely that Lat.
pendō belongs with Goth. spinnan 'to spin', Lith. pinti 'to plaid', Arm. hanowm 'to weave' (cf. Meiser 1998: 193), implying an original meaning 'to strain the cords (by hanging something on them)'. This makes a connection with Hitt. pantala- 'point in time' rather improbable.
panzauartanna (adv.) 'for five rounds': pa-an-za-ua-ar-ta-an-na.
See CHD P: 96. The word is only attested in the Kikkuli-text on horse-training. It is generally derived from Indic *panća-uartana- 'five-rounds' < *penkwe-uert-eno-. See also aikauartanna, nauartanna, šattaũartanna and tieraũartanna.
pāp- 'to make loaves out of dough': 3pl.pres.act. pa-a-pa'-an-zi (OS), inf.I pa-a$p u-u a-a n-z i$ (NH?), pa-a-pu-u-ua-an-zi.

See CHD P: 96 for attestations and semantics. The verb denotes an action that is performed on fermented dough and that results in loaves ready for baking. CHD suggests 'to subdivide' or 'to shape'. No etymology has been suggested, but cf. GIŠ pāpu- and ${ }^{\text {GIS }}$ pāpul-.
pappa- (gender unclear) 'danger': dat.-loc.sg. pa-ap-pí.
IE cognates: ?Gr. тóтоt, ?Skt. pāpá- ‘bad, evil'.
PIE ?*popo-
See CHD P: 101 for attestations. This word only occurs in the expression $a-a-i$ pa-ap-pí na-ah-ḩa-an-te-eš e-še-er 'they were cautious about $\bar{a} i$ and about $p$.'. CHD translates 'trouble(?) and danger(?)', Tischler (HEG P: 425f.) translates 'Leid und Gefahr?'.
Formally, dat.-loc.sg. pappi could belong to a stem pappa- as well as pappi-. Regarding its etymology, H. Berman apud Puhvel (HED 1-2: 14) connects $\bar{a} i$ pappi with Gr. ${ }^{\omega}$ по́лоt (exclamation of surprise, of unbelieve). Another cognate could be Skt. pāpá- 'bad, evil' < *popó-.
pappan(n)ikna- (c.) 'brother sharing the same father, paternal brother' (Sum. pa-ap-pa-ŠEŠ): nom.pl. pa-ap-pa-ni-ik-ni-eš (OH/NS), [pa-ap-pa-a]n-ni-ik-ni-eš ( $\mathrm{OH} / \mathrm{NS}$ ).

Anat. cognates: Pal. pāpa- 'father' (nom.sg. pa-a-pa-aš, pa-a-pa-az=, voc.(?) $=p a-p a=m i$ ).

See CHD P: 97 for attestations. The word clearly is a compound of *pappa'father' and nekna- 'brother' (q.v.). The word *pappa- does not occur in Hittite as such, but is related to Pal. pāpa- 'father'. It likely is a Lallwort (just as anna'mother', atta- 'father'). See annaneka- 'sister of the same mother' for a similar construction.
papparš-i (IIa2) 'to sprinkle': 3sg.pres.act. pa-ap-pár-ši (MH/MS), pa-ap-pa-ar$\check{s i}$ (NS), pa-ap-pa-ar-aš-zi (MH/MS), pa-ap-pár-aš-zi (MH/MS), 3pl.pres.act. pa-ap-pa-ar-aš-ša-an-zi (OH/NS), pa-ap-pár-aš-ša-an-zi, pa-ap-pár-ša-an-zi (NH), pa-pár-ša-an-zi (NH), 1sg.pret.act. pa-pa-ar-aš-hu-un (OH/MS), 3pl.imp.act. $p a[-a p-p a ́ r-(a s ̌-s ̌ a-a n-d u)](\mathrm{NS}) ;$ part. pa-ap-pár-aš-ša-an-t-(OH/NS), pa-ap-pár-ša-an-t- (MS?), pa-ap-pa-ar-aš-š[a-an?] (OH?/MS); inf.I pa-ap-pa-ar-šu-u-ua-an-zi, pa-ap-pár-šu-u-ūa-an-zi; impf. pa-ap-pár-aš-ke/a- (OS), pa-ap-par-iš-ke/a(MH/NS), pa-ap-pár-še-eš-ke/a-, pa-ap-pár-ši-iš-ke/a-.

Derivatives: see paršana- 'leopard'.
IE cognates: TochAB pärs- 'to sprinkle', Skt. p'́s ṣant- 'dappled’, Cz. pršeti 'to sprinkle', Lith. pur̃slai 'spray', OCS praxъ 'dust' (< *porso-), prъstb 'heaped up soil' (< *prsti-), ON fors/foss 'waterfall'.

PIE *pórs-ei, *prs-énti
See CHD P: 98f. for attestations. We find $m i$ - as well as $h i$-inflected forms (papparši besides papparašzi). Although papparšzi is attested 10x vs. papparši 2 x , I think that the verb originally was hi-inflected because the $m i$-inflection is the productive one and because the oldest attested form, 1sg.pret.act. paparašhun ( $\mathrm{OH} / \mathrm{MS}$ ), shows hi-inflection.
Etymologically, this verb is generally connected with TochAB pärs- 'to sprinkle', Skt. pŕṣant- 'dappled’, Cz. pršeti 'to sprinkle', etc. and reconstructed as *pers-
Note that intervocalic *-rs- regularly should yield -rr- (cf. arra- 'arse' < *Horso-), but in *porsei > parši it has been restored on the basis of the plural where the $*_{s-s}$ - remained after syllabic $*_{r}$. In this latter position, $*_{s}$ fortited to $/ \mathrm{S} /$, however, which is expressed by spellings like pa-ap-pa-ar-aš-ša-an-zi /paprSánt ${ }^{\text {si}} \mathrm{i}$ /.
The CLuw. 3sg.pres.act. [pa-]ap-pa-ša-at-ti often is regarded as a cognate to Hitt. papparš- and subsequently translated 'sprinkles' (cf. e.g. Melchert 1993b: 165), but such an interpretation is not evident from the context.
< pappaš- (Luw. verb) 'to swallow': Luw. 3sg.pres.act. \& pa-ap-pa-ša-i.

Derivatives: ${ }^{(\mathbf{U Z U})} \boldsymbol{p a p}(\boldsymbol{p}) \boldsymbol{a} 5$ šala/i- 'throat, esophagus(?)' (acc.sg. pa-ap-pa-aš-ša-la-an (NH), pa-pa-aš-ša-la-an, pa-ap-pa-aš-ša-li-in (NH)).

Anat. cognates: CLuw. papašāl- (n.) 'esophagus(?)’ (nom.-acc.pl. [pa-]pa-ša-ala).

PIE *-peh ${ }_{3}$-s-
See CHD P: 100 for attestation and context. Because of the use of gloss wedges, this verb is generally regarded as the Luwian reduplicated variant of Hitt. pā̄s- / paš- 'to swallow'. It probably is the source of CLuw. papašāl- 'esophagus(?)', which in its turn is borrowed into Hitt. pappaššalla/i- 'throat, esophagus(?)'. See at $p \bar{a} \check{s}_{-}{ }^{i} / p a \check{s}$ - for further etymology.
pappi-: see pappa-
paprant- (adj.) 'impure, unclean; proven guilty by ordeal': nom.sg.c. pa-ap-ra$a n-z a$ (NH), acc.sg.c. [pa-ap-r]a-an-da-an (MH/MS), abl. pa-ap-ra-an-da-za (MH/NS), instr. pa-ap-ra-an-ti-it (NH), nom.pl.c. pa-ap-ra-an-te-eš (MH/MS).

Derivatives: paprahh- ${ }^{i}$ (IIb) 'to defile, to make impure' (2sg.pres.act. [pa-a]p-ra-ah-ti (NH), 3sg.pres.act. pa-ap-ra-ah-hi (NS), 1sg.pret.act. pa-ap-ra-ah-hu-un ( $\mathrm{OH} / \mathrm{MS}$ ), 3sg.pret.act. pa-ap-ra-ah-ta (NH), 3pl.pret.act. pa-ap-ra-ah<-he〉-er (NH); part. pa-ap-ra-ah-ha-an-t- (MH/MS); impf. pa-ap-ra-ah-hi-iš-ke/a- (NH)), paprātar / paprann- (n.) 'impurity, defilement, impropriety' (nom.-acc.sg. pa-ap-ra-a-tar (OS), pa-ap-ra-tar (MH/MS), gen.sg. pa-ap-ra-an-na-aš (MH/NS), pa-ap-ra-na-aš (NH), loc.sg. pa-ap-ra-an-ni (MH/NS), erg.sg. pa-ap-ra-an-na-a[n$z] a-s ̌=a(\mathrm{MH} / \mathrm{MS})$, abl. pa-ap-ra-an-na-za (MH/NS), pa-ap-ra-an-na-az (NH), pa-ap-ra-an-na-an-za (NH)), papre- ${ }^{z i}$ (Ib2) 'to be proven guilty by ordeal; to do something impure' (3sg.pres.act. pa-ap-re-ez-zi (OS), 3sg.pret.act. pa-ap-re-et (MH?/NS); 3sg.pret.midd. pa-ap-re-et-ta (OH/NS); impf. pa-ap-re-eš-ke/a-), paprēšs $z^{z i}$, paprǎ̌š- ${ }^{z i}$ (Ib2) 'to be found guilty (by ordeal' (3sg.pres.act. pa-ap-re$e \check{s ̌-z i}(\mathrm{MH} ? / \mathrm{NS}), p a-a p-r i-i s ̌-z i(\mathrm{MH} ? / \mathrm{NS}), p a-a p-r a-a \check{s ̌-z i}(\mathrm{MH} ? / \mathrm{NS}), 2$ 2pl.pres.act. pa-ap-ri-i[š-te-ni]; part. pa-ap-re-eš-ša-an-t- (OH?/NS)), paprēššar / paprešn(n.) 'impurity, uncleanness’ (loc.sg. pa-ap-re-eš-ni (NH)).

Anat. cognates: CLuw. paratta- (n.) 'impurity(?)’ (nom.-acc.sg. pa-ra-at-ta-an$z a$, gen.adj.nom.sg.c. pa-ra-at-ta-aš-ši-iš, gen.adj.acc.sg. pa-ra-at-ta-aš-ši-in), parattašatta- (a bad quality) (acc.sg. pa-ra-at-ta-ša-at-ta-[a]n).

IE cognates: ON fár 'danger', OHG firina 'crime' Goth. fairina 'guilt', etc. PIE *po-pr-

See CHD P: 103f. for attestations. All words are derived from a stem papr-.
If CLuw. paratta- indeed means 'impurity' (it denotes a bad quality) and is cognate with Hitt. papr-, it would show that we are dealing with a root *parwhich is reduplicated in Hittite.
It is difficult to give an IE etymology, as there are many roots that show a form *Per-, but none has a striking semantic similarity. The only one that possibly could fit is the root "*per- ${ }^{2}$ E." 'to try, to dare, to risk; danger' (as it is cited in Pokorny 1959: 818), which he reconstructs on the basis of ON fár 'danger' and OHG firina 'crime'.
The verb papre $_{-}{ }^{z i}$ is interpreted as a stative in -eh ${ }_{l^{-}}$by Watkins (1973: 79f.).
${ }^{\text {GIŠ }} \boldsymbol{p} \overline{\boldsymbol{a}} \boldsymbol{p} \boldsymbol{u}$ - (c.) a wooden implement used in a bakery: acc.sg. pa-pu-u-un (NS), $[p] a^{?}-a-p[u]-u-u n^{?}-n=a$.

See CHD P: 108. The only sure attestation of this word occurs in KUB 16.34 i (14) ŠÀ É $\left.\left.{ }^{\text {LÚ }} \mathrm{NINDA.DÙ.DÙ=ua=kán} \mathrm{UR.[GI}\right]_{7}-a s ̌\right] ~ p a-i t ~ n u=u a{ }^{\text {GIŠ }} p a-p u-u-u n$ ar-ha hu-ru-ta-it 'A dog came into the bakery and knocked over(?) the $p$. '. On the basis of this context alone, an exact meaning cannot be determined. Other attestations might be KBo 29.70 i (28) [... p $] a^{?}-a-p[u]-u-u n^{?}-n a \times[\ldots]$ and KUB 46.48 rev. (22) [...]x $u$ ú-e-te-na-az ${ }^{\text {GIšs }} p a-a-p u^{?}[-\ldots]$, which could indicate that the word actually was pāpu-. Perhaps the word is cognate with Giš pāpul- 'bread tray(?)' and perhaps both words belong with $p \bar{a} p-$, an action performed on fermented dough resulting in loaves ready for baking (q.v.).
${ }^{\text {GIŠ̌ }}$ pāpul- (gender unclear) a wooden implement for carrying or arranging loaves of freshly baked breads, 'bread tray(?)': dat.-loc.sg. pa-a-pu-li.

See CHD P: 108 for attestation and context. The word occurs only once, in KUB 55.43 iii 33. It possibly denotes a bread tray or similar. On the basis of the dat.loc.sg. alone, we cannot decide whether the stem was pāpul-, pāpula- or pāpuli-. On the basis of other words in -ul- (aššul-, uštul-) I cite this word as pāpul- here. Possibly, the word belongs with GIŠ $p \bar{a} p u-$, a wooden implement used in a bakery, and $p \bar{a} p-$, an action performed on fermented dough resulting in loaves ready for baking. No further etymology.
$\boldsymbol{p a r a} \overline{\boldsymbol{a}}$ (prev. with dat.-loc. or all., $+=k a n$ ) 'out (to), forth, toward'; (prev. with dat.loc. or all. without locatival particles) 'forward, further, along'; (postpos. with
abl. or instr.) 'out of, from'; (adv.) 'furthermore, moreover, additionally, still; then, after that': pa-ra-a (OS).
Derivatives: see para- ${ }^{i}$ / par- 'to appear'.
Anat. cognates: CLuw. parī 'forth, away' (pa-ri-i); HLuw. pari (adv.) 'forth, away’ $(p a+r a / i, p a+r a / i-i-$ ' (KARKAMIŠ A1 $a$ §16), PRAE-i)); Lyc. pri 'forth, in front'.
IE cognates: Gr. $\pi \rho$ ó, Skt. prá-, Lat. prŏ-, Goth. fra-.
PIE *pró
See CHD P: 109f. for attestations and semantic treatment. This word is abundantly attested from OS onwards and consistently spelled pa-ra-a. Within Hittite, it clearly belongs with peran 'in front of'. Both are to be regarded as petrified cases of a further unattested noun *per-: acc.sg. peran (although see at peran for the difficulties regarding the exact interpretation of this form) besides all.sg. parā (cf. šer besides šarā) and a possible abl. parza (q.v.). In my view, it therefore is evident that parā must reflect a zero grade formation /prá/. Formally as well as semantically, we must equate parā with Gr. $\pi \rho o ́$, Skt. prá-, Lat. prŏ-, Goth. fra-, etc. < *pró. Note that the equation of parā with Gr. $\pi \rho$, Lat. prŏ- and Skt. prá- is a major argument in reconstructing the all.sg.-ending $-a /-\bar{a}$ as $*_{-o}$. The Luwian forms, CLuw. parī, HLuw. pa+ra/i=/pri/ and Lyc. pri seem to reflect PLuw. *prī, which possibly reflects an old dative *pr-ei.
See at para- ${ }^{i} /$ par- 'to appear' for the verbal derivative of para.
parā- (c.) 'air, breath(?)': nom.sg. pa-ra-a-aš (MH/NS), acc.sg. pa-ra-a-an.
IE cognates: Gr. $\pi \mu \pi \rho \eta \mu_{\mathrm{t}}$ 'to blow', Skt. prāna- 'breath'.

$$
\text { PIE *proh } l^{-}
$$

See CHD P: 130 for attestations and semantics. The word clearly belongs with parai- / pari- 'to blow' (q.v.), which reflects *prh ${ }_{l}-(o) i-(c f . ~ G r . ~ \pi \mu \mu \rho \eta ́ \mu \mathrm{t}$ 'to blow'). The noun par $\bar{a}$ - therefore probably reflects ${ }^{*}$ proh $_{1}-s$, ${ }^{*}$ proh $_{1}-m,{ }^{*}$ preh $_{1}-s$ (cf. Rieken 1999a: 23).
$\boldsymbol{p a r a}^{-}{ }^{\boldsymbol{i}} / \boldsymbol{p a r}$ - (IIa1 $\beta$ ?) 'to appear, to emerge': 3sg.pres.act. pa-ra-a-i (KUB 8.1 ii 17, iii 10, KUB 43.19, 2), verb.noun gen.sg. pa-ra-an-na-aš (MH/MS).
Anat. cognates: Pal. parai- 'to appear(?)' (3sg.pret.act. pa-ra-i-it).
See CHD P: 134 for attestations. There, the verb is cited as parai-, as if it belongs to the dāi/tiiianzi-class. As Melchert (fthc.b) showed, this is not the case, however, as can be inferred from the verb.noun gen.sg. parannaš instead of expected
*pariiiannaš. This means that para- must belong either to the $\operatorname{tarn}(a)$-class, or, perhaps better, to class IIa1 $\beta$ (like $d \bar{a}^{-}{ }^{i} / d$-). It is generally accepted that it is a derivative of parā, q.v. for further etymology.
parahh-: see parh- ${ }^{z i}$
parai- ${ }^{i}$ / pari- (IIa4) 'to blow (a horn); to blow on (a fire); to blow up, to inflate': 1sg.pres.act. pa-re-eh-hi (NH), 3sg.pres.act. pa-ra-a-i, 1pl.pres.act. pa-ri-i-ua-ni (OS), 2pl.pres.act. pa-ra-iš-te-ni (OH/NS), 3pl.pres.act. pa-ri-ia-an-zi (OH/NS), pa-ri-an-zi (MH/NS), pa-ra-an-zi (1x, OH?/MS), 3sg.pret.act. pa-ra-iš (OH/NS), [p]a-ra-a-iš, 3pl.pret.act. pa-ri-er (OH/NS); part. pa-ri-ia-an-t- (MH/MS).
Derivatives: parip(p)ara- ${ }^{i} / \boldsymbol{\operatorname { p a r i p }}(\boldsymbol{p})$ ari- (IIa5) 'to blow (a horn); to be flatulent (midd.)' (3sg.pres.act. pa-ri-pa-ra-a-i (OH?/NS), pa-ri-ip-pa-ra-a<-i> (NS), 3pl.pres.act. pa-ri-ip-pa-ri-ia-an-zi (NH?), pa-ri-pa-ra-an-zi (MH?/NS); 3sg.pres.midd. pa-ri-pa-ri-et-ta-ri (NH); verb.noun pa-ri-pa-ri-ia-u-ua-ar; impf. pa-ri-ip-ri-iš-ke/a- (NS), pa-ri-pa-ri-eš-ke/a-), papra- ${ }^{i}$ /papri- (IIa5) 'to blow (an instrument)' (3pl.pres.act. pa-ap-ri-ía-an-zi (NH)).

Anat. cognates: Pal. pariparai- 'to blow(?)' (3sg.pres.act. pa-ri-pa-ra-a-i, part.nom.-acc.sg.n. $\left.\left[p a^{?}\right]-r i-p a-r a-a-a n\right)$.
IE cognates: Gr. $\pi \mu \pi \rho \eta \dot{\eta} \mu$ 'to blow'. PIE *prh $-(o) i-$

See CHD P: 133f. for attestations. The verb clearly belongs to the dail/tiianziclass. The only aberrant form is 3pl.pres.act. pa-ra-an-zi (KBo 21.57 ii 4), which is difficult to explain as a secondary form, because of the fact that it is attested in a MS text. Perhaps it is the archaic remnant of an $i$-less verb *prā$-/ p r-<{ }^{*} p r o h_{1}-$ / prh $h_{1}$.

In my article on pai- ${ }^{i}$ /pi- 'to give' (Kloekhorst fthc.a) I have argued that verbs of the dāi/ttiianzi-class reflect a structure ${ }^{*} C C$-oi-, ${ }^{*} C C-i$-, i.e. the zero-grade of the root followed by an ablauting suffix $*$-oi-/-i-. In the case of parai- ${ }^{i} /$ pari-, the root etymology is generally accepted: *preh $l^{-}$as found in Gr. $\pi \mu \mu \pi \rho \eta \mu \mathrm{t}$ 'to blow' (note that the appurtenance of Russ. pret' 'to sweat, to rot' (thus e.g. LIV ${ }^{2}$ ) does not seem likely on semantic grounds). This means that parai-/pari- reflects *prh ${ }_{1-}$ ói-ei, *prh $h_{1}-i$-énti.

The reduplicated derivative $\operatorname{parip}(p) \operatorname{ara}^{i}{ }^{i} / \operatorname{parip}(p)$ ari- shows the méma/iflection, as can be seen by NH pariparanzi (which we would not expect in a dāi/tiianzzi-class verb). This coincides with our observation that polysyllabic verbs that used to belong to the dāi/tiianzi-class were influenced by $\operatorname{tarn}(a)$-class verbs
from pre-Hittite times onwards, yielding the hybrid synchronic mema/i-class (see at my treatment of the $m \bar{e} m a / i$-class in $\S 2.2 .2 .2$.h). It is interesting that it is predominantly spelled pa-ri-pa-ra/i-, whereas a spelling $* * p a-r i-i p-r a / i$ - would have been possible as well. This means that the second - $a$ - was phonetically real: [pripəra/i-]. Phonologically, we should interpret this then as /-pəra/i-/, or, more consistently, /pr?a/i-/. This shows that, just as $* C R h_{2 / 3} V$ yields Hitt. /CRHV-/, spelled $C a R(a h) h V-$, the cluster $* C R h_{l} V$ yields Hitt. /CR?V-/, spelled CaRV-. This means that a word spelled with initial \#CaRV-could in principle stand for phonological /CRV-/ $<* C R V-$, or for /CRRV-/ $<* C R h_{1} V$-. On the basis of this discovery, we must phonologically interpret the simplex verb parai- ${ }^{i}$ / pari- as /pr2ai- / pr?i-/ < *prh ${ }_{l}$-oi- / *prh $h_{1}-i$.

The imperfective paripriške/a-, which reflects *pri-prh $h_{1}$-ské/ó- (cf. zikke/a- < * $d^{h} h_{l} s k k^{\prime} / o$ - from dai- ${ }^{i} / t i$ - for the absence of $-i$ - in the imperfective), shows that the regular outcome of $* \mathrm{CRHsC}$ is /CRisC/, however, and not $* * / \mathrm{C} ə \mathrm{RisC} /$ or /CRiasC/.
*para(-)nekna- (c.) 'half-brother(?), step-brother(?)': acc.pl. pa-ra-a ŠEŠ ${ }^{\text {MEŠ }}$-uš
See CHD P: 129: hapax in KUB 26.1 iii 59, where it is mentioned next to ŠEŠ ${ }^{\text {MEŠ }}$ 'brothers'. For the formation, cf. pappan(n)ikna-, annanega-.
parānda (postpos., adv., prev.) 'across (to), over (to)': pa-ra-a-an-ta (OS), pa-ra-a-an-da (MH/MS), pa-ra-an-da (NH), pár-ra-an-ta (MH/MS), pár-ra-an-da (MH/NS), pár-ra-a-an-da (1x, NH).

See CHD P: 135f. for attestations and semantics. In the oldest texts (OS and MS), this word is spelled with the sign PA and plene second vowel, pointing to $/ \mathrm{p}(\mathrm{a})$ rắnTa/. In younger texts (one MS and many NS texts) the bulk of the attestations show a spelling with the sign PÁR which possibly is due to the fortition of $\mathrm{OH} / \mathrm{r} /$ to $\mathrm{NH} / \mathrm{R} /$ as described in § 1.4.6.2.b. Sturtevant (1938b) compares parānda with Gr. $\pi \varepsilon ́ \rho a v+\delta \varepsilon$. Tischler (HEG P: 441-2) just states that it is a "Univerbierung von para 'weiter' + anda 'hinein'".
pararahh- ${ }^{i}$ (IIb) 'to chase(?)': 2pl.pres.act.? pa-ra-ra-ah-t $\left[a-n i^{?}\right](\mathrm{OH} / \mathrm{NS})$, 3sg.pret.act. pa-ra-ra-ah-hi-iš (OH/NS).

PIE *pro-r-eh $2^{-}$
See CHD P: 138 for attestations and contexts. Although the meaning of this verb is not totally clear, a translation 'to chase' seems to fit both attestations well.

Formally, the verb looks like a factitive in -ahh- of a stem parara-. Soysal (1988: $118,125 \mathrm{f}$.) convincingly compared it with the verb katterahh- ${ }^{-}$'to lower', which is a factitive in -ahh- of a stem kattera- which itself is derived from katta 'down' (q.v.). This would mean that in the case of pararahh- ${ }^{i}$ the stem parara- is derived from par $\bar{a}$ 'in front, forth'. Semantically, we then can assume that just as katta 'down' corresponds to katterahh- ${ }^{i}$ 'to lower (*to make go down)', parā 'forth' corresponds to pararahh- 'to make go forth $>$ to chase'. See at parā for further etymology. Soysal's suggestion that a contracted form of pararahh ${ }^{-}$yielded parh- ${ }^{z i}$ 'to chase' (q.v.) does not make much sense as such a contraction is phonetically irregular and ad hoc. Besides, parh- has a good IE etymology of its own.
parašant- (adj.) modifies troops: nom.sg.c. pa-ra-ša-an-za (NH), acc.sg. pa-ra$s ̌ a-a[n-t a-a n ?](N H)$.

See CHD P: 138-9 for attestations. The adjective is used to describe ERIN ${ }^{\text {MEŠ }}$ 'troops', but its meaning cannot be determined. Possibly, it is cognate with parāšešš-zi 'to disperse' (q.v.).
parāšě̌š- ${ }^{z i}$ (Ib2) 'to disperse(?)': 3sg.pres.act. pa-ra-še-eš-zi (NH), 3pl.pret.act. pa-ra-še-eš-še-er (NH), pa-ra-a-še-eš-ši-er (NH).

See CHD P: 140-1 for attestations. As is argued there, a translation 'to disperse' would fit some of the contexts well. Formally, the verb looks like a fientive in - $\bar{e} \check{s} \check{s}-$ from a stem parāš-. It may be possible that this stem is to be identified with the one underlying the adj. parašant- that is used to describe ERIN ${ }^{\text {MEŠ }}$. Especially the fact that the verb parāšeš̌̌s- can have ERIN ${ }^{\text {MEŠ }}$ as its subject (e.g. KBo 5.8 i 22) points to an etymological connection between the two words. Some scholars (e.g. Kronasser 1966: 404) interprets parāšeššs- as a derivative of parš- 'to flee'. Although this is semantically possible, I do not see how this could work formally. I have no alternative etymology to offer, however.

Note that 3pl.pres.act. šeššir 'they slept' as cited in HW: 191 without an attestation place (see also at $\check{s} e \check{c}^{z} z^{z i} / \tilde{s} a \check{s}-$ ), probably goes back to a misinterpretation of one of the 3pl.pret.-forms of this verb.
${ }^{\mathrm{NA}_{4}}$ parašha- (c.), ${ }^{\mathbf{N A}_{4}}{ }^{\text {pparušha- (c.), }}{ }^{\mathbf{N A}_{4}}$ parašhi- (n.) a semiprecious stone: nom.sg.c. pa-ra-aš-ha-aš (MH/MS), ba-ra-aš-ha-aš (MH/NS), [p]a-r[u]-uš-ha-
$a \check{s}, ~ a c c . s g . c . ~ p a-r a-a s ̌-h a-a n(M H / / M S ?)$, nom.-acc.sg.n. $b a-r a-a s ̌-h i(M H / N S)$, $p a-r a-a \check{s}-h i(\mathrm{NS})$.

See CHD P: 139 for attestations. The word is clearly of foreign origin because of the alterations. According to Albright (1945: 24), the word is the Hurrian rendering of Akk. marhašītu-glass, which originates in Marhaši (also written Barašȟi and Paraši).
Note that the alteration parašha- : parušha- shows that we must analyse these forms as /prasha-/ and /prusha-/. This is important as it shows that a spelling pa-ra-aš-C stands for /prasC-/, which contrasts with the spelling pár-aš-C that stands for /parsC-/ or /prsC-/ (see e.g. at paršdu-).
parašdu-: see paršdu-
paraštuhha-: see parštuhha-
parašza : see parza
${ }^{\text {(LÚ) }}$ parāuца pa-ra-a-ú-ua-an-da-an (NH).
Derivatives: ${ }^{(\text {LÚ) } \boldsymbol{p a r a ̄ u u ́ a t a l l a - ' l o o k o u t ' ~ ( a c c . p l . ~ p a - r a - a - u ́ - u a - t a l - l u - u s ̌ ~ ( N H ) ) . ~}}$
See CHD P: 142 and 110f. for attestations. These words clearly exist of the preverb parā followed by forms of $a u{ }^{-}{ }^{i} / u$ - 'to see'. The fact that sometimes no word space is written, indicates that synchronically they function as univerbations.
$\boldsymbol{p a r h}_{-}{ }^{\text {zi }}$ (Ia4 > IIa1 $\gamma$ ) 'to chase, to pursue, to hunt; to expel; to attack; to make gallop (horses); to hasten (intr.)': 1sg.pres.act. pá[r-a]h-mi (NS), 2sg.pres.act. pár-ah-ši (MH/MS), 3sg.pres.act. pár-ah-zi (OS), pár-ha-zi (MH/NS), pár-ḩa-i (MH/MS), pár-ah-ḩa-i (MH/MS), pár-haa-a-i (MH/MS), pár-ah-ha-a-i (MH/MS), 3pl.pres.act. pár-ha-an-zi (MH/MS), pár-ah-ḩa-an-zi (MH?/NS), 1sg.pret.act. pár-ḩu-un (NH), 3sg.pret.act. pár-ah-ta (MH/MS, OH/NS), pár-ha-aš (NH), [p]ár-hi-įa-at (NH), 1pl.pret.act. pár-ḩu-en (OH/NS), 3pl.pret.act. pár-he-er $(\mathrm{OH} / \mathrm{NS})$, pár-ah-[he-er] (NH), 3sg.imp.act. pár-ah-du (OH/MS), 2pl.imp.act. pár-ah-tén $(\mathrm{OH} / \mathrm{NS}), 3 \mathrm{pl} . \mathrm{imp} . \mathrm{act}$. pár-ah-ḩa-an-du (NS); 3sg.pres.midd. pár-ḩa-at-ta-ri (MH/MS), 3pl.pres.midd. pár-ḩa-an-ta (OH), 3pl.imp.midd. pár-hha-an-ta-ru (MH/MS); part. pár-ha-an-t- (MH/MS, OH/NS); verb.noun pár-hu-ua-ar
(MH/MS), pár-hu-u-ua-ar (MH/MS); inf.I pár-hu-ua-an-zi (MH/MS), pár-ah-ȟu-ua-a[n-zi] (MH/MS); sup. pár-hu-u_a-an (OH/MS); impf. pár-hi-iš-ke/a(MH/MS), pár-ah-hi-iš-ke/a- (MH/MS), pár-hli-eš-ke/a- (MH/NS), pár-ah-hi-eš-ke/a-

Derivatives: parhanna- ${ }^{\boldsymbol{i}}$ / parhanni- (IIa5) 'to chase (impf.)' (3sg.pres.act. pár-ha-an-na-i (MH/MS)), parhanu- ${ }^{\text {zi }}$ (Ib2) 'to make gallop' (3sg.pres.act. pár-ha-nu-zi (MH/MS); impf. pár-ḩa-nu-uš-ke/a- (MH/MS), pár-ah-ḩa-nu-uš-ke/a (MH/MS)), parheššar / parhešn- (n.) 'haste, urgency; forced march' (nom.acc.sg. pár-he-eš-šar ( $\mathrm{OH} / \mathrm{NS}$ ), dat.-loc.sg. pár-he-eš-ni $(\mathrm{NH})$, pár-hi-iš-ni $(\mathrm{NH})$, abl. pár-hé-eš-n[a-za] (OH/NS), pár-he-eš-na-az (NH), pár-he-eš-na-za (NH), pár-hi-iš-na-az (NH), pár-ḩi-iš-na-za (NH)), parhuuar (n.) a token 'chasing across' (nom.-acc.sg. pár-hu-ūa-ar).

Anat. cognates: CLuw. par(a)-'to drive, to chase' (3sg.pres.act.(?) pa-ra-at-ti, 2sg.imp.act. pa-ra, 3sg.imp.act. pár-du, pa-ra-ad-du, 3pl.imp.act. pa-ra-an-du), parh- 'to drive, to chase' (3sg.imp.act. pár-h $a-a d-d u$ ).

IE cognates: Skt. bhar ${ }^{i}$ - 'to move rapidly to and fro, to hurry', YAv. baranti (loc.abs.) 'when it storms'.

PIE * $b^{h}$ ér $h_{2 / 3}-t i, * b^{h} r h_{2 / \beta}$-énti
See CHD P: 143f. for attestations. The bulk of the attestations (including an OS one) show $m i$-inflection, whereas all forms that show a $\operatorname{tarn}(a)$-class inflection (parha- ${ }^{-}$) are found in one text only, KBo 3.5 (MH/MS). I therefore conclude that this verb is $m i$-inflected originally. The alternation between the spelling pár-ah-zi and pár-ha-zi shows that we have to phonologically interpret this form as
 * $\operatorname{Prh}_{2 / 3}$ énti. Since in the singular form the laryngeal disappears regularly between consonants, the regular PAnat. outcome of this paradigm is */párti / prHánti/. We see that this paradigm was levelled out differently in the Anatolian languages. In Hittite, the /-H-/ of the plural form is generalized, which yields /párHt ${ }^{\text {s }}$ / prHánt ${ }^{\text {8 }} \mathrm{i}$, spelled parhzi, parhanzi, whereas in Luwian the h-less singular form is generalized, yielding parti, *paranzi (if indeed 3sg.pres. paratti belongs to this verb). The CLuwian form with -h- (3sg.imp.act. parhaddu) is seen by Melchert (1993b: 167) as a possible Ištanuwian dialect-form.
Regarding the outer-Anatolian etymology, different views have been put forth. Hrozný (1919: $110^{1}$ ) compared parh- to Gr. $\pi \varepsilon \rho \alpha{ }^{\prime} \omega$ 'to penetrate', which is semantically not satisfactory. Oettinger (1979a: 213f.) plausibly connects parhwith Skt. bhar ${ }^{i}$ - 'to move rapidly, to hurry', which is semantically as well as formally more compelling. This means that we have to reconstruct $* b^{h} e r h_{2 / 3}$.

Often, Lat. ferv $\bar{o}$ 'to boil' is seen as a cognate as well, but this verb probably reflects * $b^{h}$ erh $h_{1}$-u- (see Schrijver 1990: 252ff.) and therefore cannot be cognate (because ${ }^{*}-h_{l}$ - does not yield Hitt. - $h$-).

The word occurs only once: KBo $10.33+$ KBo 10.28 v (2) UZU[.HÁD].DU.A pár-hu-u-ua-ia-aš'dried meat of the p.'. Tischler (HEG P: 458) connects this word with the broken form pár-hu[-..], found in an enumeration in KBo 10.36 iii (4) $\left[{ }^{\mathrm{UZ}}\right]^{\mathrm{U}} A R-N A-B I$ MUŠEN ${ }^{\mathrm{HIIA}} p a ́ r-h u[-\ldots]$, which has a seeming parallel in KBo 10.52, (10) $\left[{ }^{\mathrm{UZU}} A\right] R-N A-B I$ MUŠEN ${ }^{\text {HI.A }} \mathrm{KU}_{6}{ }^{\text {HI.A }} i z-[\ldots]$. This would mean that parhu [-...] has to be read as $\mathrm{KU}_{6}{ }^{\text {HI.A }}$ 'fish' (thus Otten in the preface of KBo 10). CHD (P: 148) speaks against this equation, however, because $\mathrm{KU}_{6}$ is always phonetically completed as an $u$-stem, which would not fit the form parhuuuaiaš. Tischler argues that parhūuaiaš may be a derivative of the $u$-stem parhu- and does not have to be the reading of $\mathrm{KU}_{6}$ itself. If the word for 'fish' was parhu-, Weeks (1985: 48) connects it with parh- 'to chase' (q.v.), because of the swiftness of fishes $\left(* b^{h} r h_{2 \beta}-u-\right)$. Both the word parhūuaiaš as well as the broken parhu $[-\ldots]$ are spelled with the sign pár, which in principle can be read maš as well. Then the words (mašhu[-...] and mašhūuaia-) would resemble the word mašhuil(a)- 'mouse' (q.v.).
pariian (postpos., prev., adv.) 'across, over, beyond; over to, across to; in opposition to; in front': pa-ri-ia-an (MH/MS), pa-ri-e-an = pa-ri-i $a_{x}-a n$ ? (MH/MS), pa-a-ri-ia-an (NH).
Derivatives: pariianalla- (adj.) 'future' (abl. [p]a-ri-ia-na-al-la-az), par(r)ianta (adv.) 'beyond' (pa-ri-i_ia-an-t[a], pa-ri-i_ia-an-da, pár-ri-an-ta), pariïaúan (adv.) 'on the other side(?)' (pa-ri-ia-una-an).
Anat. cognates: CLuw. pariiian (adv., prepos.) 'beyond, exceedingly, especially (?)' (pa-ri-i_ia-an, pa-ri-i_ia-am=ša), pāriiianalla/i- (adj.) 'future' (nom.-acc.sg.n. pa-a-ri-ía-na-a-al, pa-ri-ia-na-al-la-an); HLuw. pari (adv.) 'forth, away' ( $p a+r a / i, p a+r a / i-i-$ ' (KARKAMIŠ A1 $a \S 16$ ), PRAE-i); Lyc. pri 'forth, in front'.

PIE *pri-om
This word clearly belongs with parā and peran. Its oldest attestation is pa-ri-ia$a n$, which seems to point to /prian/. The few NS spellings with plene $-a-$, pa-a-ri$i a-a n$, may be non-probative. The word likely is a derivative in *-om (note that $-m$ is still visible in CLuw. pa-ri-ia-am=ša), attached to a stem *pri- that is also
visible in CLuw. parī, HLuw. $p a+r a / i=/ p r i /$ and Lyc. pri. See at parā for further etymology.
parkī (adj.) '?’: case? pár-ki-i.
PIE $* b^{h} r g^{\prime}-i-? ?$
This word occurs only once in KUB 8.2 rev. (11) [..]x ú-e-te-[na-a]n-da-an pár$k i-i$ KUR-i[ ..]. CHD P: 160 suggests to connect it to the group of words having park- 'high' as stem (see parkiie/a- ${ }^{z i}$ ). Although a translation 'high land' in principle is acceptable, there is no further indication for it. If the connection is justified, however, we would find here an $i$-stem which would match CLuw. parraia- 'high'.
parkiie/a- ${ }^{z i}, \operatorname{park}^{\text {tal(ri) }}$ (Ic1; IIIb > IIIg) 'to raise, to lift, to elevate, to grow (trans.); to rise, to go up, to grow (intr.); to take away, to remove': 3sg.pres.act. pár-ki-ía-az-zi (MS), 3pl.pres.act. pár-ki-ía-an-zi (MH/MS), pár-kán-zi (NS), 1sg.pret.act. [páar-ki-ia-nu-un (NH), 3sg.pret.act. pár-ki-ia-at (OH/MS), 2sg.imp.act. pár-ki-ía; 1sg.pres.midd.(?) pár-ak-ki-ịa-ah-ha[-ha-ri?] (NH), pár-ga-ah[-ha-ri?], 3sg.pres.midd. pár-ki-ia-ta-ri (OH??/NS?), 3pl.pres.midd. pár-ki-ia-an-ta-ri (OH/NS), 1sg.pret.midd.(?) pár-ki-ịa-ah[-ha-ha-at?] (NH), 3sg.pret.midd. pár-ki-ía-at-ta-at (MH/MS), pár-ki-ía-at, 3pl.pret.midd. pár-ki-ía-an-ta-at (MH?/NS), 3sg.imp.midd. pár-ak-ta-ru (OH/MS); part. pár-ki-ia-an-t-; inf.I pár-ki-ìa-u-ua-an-zi (NH).

Derivatives: parknu- ${ }^{z i}$ (Ib2) 'to make high, to raise, to elevate' (1sg.pres.act. pár-ga-nu-mi, 2sg.pres.act. pár-ga-nu-ši (NH), 3sg.pres.act. pár-ga-nu-zi, 3sg.pret.act. pár-ka $4_{4}-n u-u t(\mathrm{NS})$, pár-ak-nu-ut (MH/MS), 2sg.imp.act. [p]ár-ga-nu-ut; impf. pár-ga-nu-uš-ke/a-), parganul- (n.) 'elevation’ (all.sg. pár-ga-nu-la (KBo 12.63+ obv. 31 ( $\mathrm{OH} / \mathrm{MS}$ )), pargatar (n.) 'height' (nom.-acc.sg. pár-ga-tar (MH/MS)), pargašti- 'height' (dat.-loc.sg. pár-ga-aš-ti (NH), pár-ka $-a s ̌-t i)$, parkēšs z- $z^{i i}$ (Ib2) 'to become high or tall' (3sg.pret.act. pár-ki-iš-ta (NH); impf. pár-ki-iš-ke/a- (NH)), parkēššar / parkešn- (n.) 'height' (dat.-loc.sg. pár-ke-eš$n i=t=a$-at=kán or instr. pár-ke-eš-ni-t=a-at=kán (NH)), parkiianu- ${ }^{z i}$ (Ib2) 'to raise, to make rise' (3pl.pres.act. pár-ki-i_ia-nu-ua-an-zi (NH), pár-ki-i $[a]-n u-a n-z i$ (NH)), parku- / pargaul- (adj.) ‘high, tall, lofty, elevated’ (nom.sg.c. pár-ku-uš $(\mathrm{NH})$, nom.-acc.sg.n. pár-ku (OH/NS), pár-ku-u, dat.-loc.sg. pár-ga-u-e-i (NH), [pár-ga-u-]e (NH), pár-ga-u-i (NS), abl. pár-ga-u-az (NH), pár-ga-ua-az, pár-ga-u-ua-az (NH), nom.pl.c. pár-ga-u-e-eš (NH), acc.pl.c. pár-ga-mu-uš $(\mathrm{OH} / \mathrm{MS})$, pár-ga-u-uš $(\mathrm{NH})$, pár-ga-u-e-eš $(\mathrm{NH})$, nom.-acc.pl.n. pár-ga-u-ua,
dat.-loc.pl. pár-ga-u-ua-aš (MH/MS), pár-ga-a-u-ua-aš (MH/NS)), parkuuatar (n.) 'height' (nom.-acc.sg. pár-ku-ưa-tar (MH/NS)), parkuēš̌s- ${ }^{i}$ (Ib2) 'to become tall' (3sg.pret.act. pár-ku-iš'-ta (NS), 3sg.imp.act. pár-ku-e-eš-du (OH/NS)), pargaûēške/a- ${ }^{z i}$ (Ic6) 'to become high or tall' (3sg.imp.midd. pár-ga-u-e-eš-kad-[d]a-ru).
Anat. cognates: CLuw. parraiá- (adj.) 'high' (dat.-loc.pl. pár-ra-ía-an-za, abl.instr. pár-ra-i-ía-[ti], [p]á[r-r]a-íla-ti).
IE cognates: Arm. bā̄nam, aor. ebarj 'to raise', barjr 'high', Skt. barh- 'to make strong', brhánt- 'high', TochB pärk- 'to arise', ON bjarg, berg 'mountain'.

PIE midd. $* b^{h} e^{r} g^{h}-t o$; act. $* b^{h} r g^{h}-i \dot{\sim} e ́ / o ́-; ~ a d j . ~ * b^{h} r g^{h}-(e) u-$
See CHD P: 155f. for attestations. One of the verbal forms is spelled pár-ak-ki-inaand therefore seems to point to an etymological $* k$. This form is found in a broken context, however, and therefore cannot be ascertained as belonging to this verb. Altough the bulk of the attestations inflect according to the -ie/a-class, there are a few unextended forms. In the oldest texts ( $\mathrm{OH} / \mathrm{MS}$ ), we find 3 sg.pret.act. parkiiat vs. 3sg.imp.midd. parktaru. These forms point to an original situation in which the stem parkiie/a- is used in the active only and the unextended stem park- in the middle (compare e.g. huett- ${ }^{(t) a(r i)}$ besides huttiie/a- ${ }^{z i}$ 'to draw, to pull' or uešš- ${ }^{\text {-la(ri) }}$ besides uasse/a- $a^{z i}<$ * $_{\text {us-ié/ó- 'to wear'). }}$
Sturtevant (1930c: 216) etymologically connected this verb and its derivatives with the PIE root $* b^{h} e r g^{h}$-, which is generally accepted. On the one hand, the verbal stem park- corresponds to the verbs Arm. barj- 'to raise' and TochB pärk'to arise; to rise'. On the other hand, the $u$-stem adjective parku- / pargau- 'high' beautifully corresponds with Arm. barjr 'high' $<* b^{h} r g^{h}-u$-. So we cannot say that in Hittite either the verb or the adjective is primary in the sense that one is derived of the other as both are of PIE origin (see the discussion in e.g. Weitenberg 1984a: 84).
CLuw. parraia- must reflect $* b^{h} r g^{h}-e i-o-$ vel sim., in which $* g^{h}$ regularly is lost. For the interpretation of pár-ga-nu-la as all.sg. of a noun parganul- see Rieken 1999a: 465f. (pace the reading 3pl.pret.act. pár-ga-nu-úr! by CHD P: 158).
Note that some of the derivatives of parku- are formally identical to derivatives of the adjective parkui- 'clean' (q.v.) (e.g. parkuēšš-).
parkui- / parkuuai- (adj.) 'pure; clean, clear; free of; proven innocent': nom.sg.c. pár-ku-iš (MH/MS), pár-ku-i-iš (OH/NS), pár-ku-eš (MH/MS), pár-ku-u-iš, pár$k u-u ́-i s^{\prime}$, acc.sg.c. pár-ku-in (OS), pár-ku-i-in, pár-ku-un (1x, NS), nom.-acc.n. pár-ku-i (OH/MS), pár-ku-ú-i, pár-ku-u-i (NH), gen. pár-ku-ua-ía-aš (NS), pár-
 $\underset{\sim}{a} a-z a(\mathrm{NH})$, pár-ku-ua-i-ía-z[a] (NH), instr. pár-ku-ua-a-it (MH/MS), nom.pl.c. pár-ku-ua-e-eš (MH/MS), pár-ku-ua-a-eš (NH), pár-ku-ua-a-iš (NS), pár-ku-uaiš (MH/NS), pár-ku-i-e-e-š (NH), pár-ku-e-eš (MH/MS), pár-ku-u-e-eš (NH), nom.-acc.pl.n. pár-ku-e (MH/MS), pár-ku-i (MH/MS), pár-ku-ua-e (MH/MS), pár-ku-ua-įa (OH/NS), pár-ku-ưa (NH), loc.pl. pár-ku-ua-ịa-aš (MH/MS), pár$k u-i a_{-} a s ̌$ (NH), pár-ku-i-ía-aš (NH).

Derivatives: parku(i)e/a- ${ }^{z i}$ (act.) to make clean, to clear (up); (midd.) to be(come) pure’ (3pl.pres.act. pár-ku-ųa-an-zi (MH/NS); 3sg.pres.midd. pár-ku-i-ia-ta-at (OH or MH/NS), pár-ku-i-ed-d[a-at] (OH?/NS), pár-ku-ua-at-ta (NH)),
 (OH/NS), abl.pl. pár-ku-ua-i-i्1a-z[a]), parkuualli- (adj.) 'pure(?)' (nom.-acc.pl.n. pár-ku-ua-al-la), parkuunantariiela- ${ }^{z i}$ (Ic1) 'to be(come) pure(?)' 1sg.pres.act.(?) pár-ku-ưa-an-ta-ri-i[a-mi?] (NS)), parkuīātar / parkuiann- (n.) 'purification' (nom.-acc.sg. pár-ku-įa-a-tar (OH/NS), gen.sg. pár-ku-ia-an-na-aš (MH/MS), pár-ku-e-an-na-aš (MH?/NS?)), ${ }^{(\mathbf{U Z U})}$ parku(i) haštāi (n.) a body part or cut of meat, 'pure-bone' (nom.-acc.sg. ${ }^{\text {UZU }}$ pár-ku-i háa-aš-ta-i (NH), pár-ku ha-aš-ta-a-i (NH)), parkuemar (n.) 'purification(?)' (nom.-acc.sg. pár-ku-e-m[ar?]), parkue- ${ }^{-3}$ (Ib2) 'to be pure, to be clear' or 'to be high' (3sg.pres.act. pár-ku-ez-zi (OH/NS), pár-k[u-e-e]z-zi (OH/NS)), parku $\overline{e ̌ s ̌ s ~}_{-z^{i}}$ (Ib2) 'to be(come) pure, to be found innocent' (3sg.pres.act. pár-ku-e-eš-zi (MH?/NS), pár-ku-eš-zi (OH/NS), pár-ku$i \check{s ̌-z i, ~ 2 p l . p r e s . a c t . ~ p a ́ r-k u-e s ̌-t e-n i ~(M H / N S), ~ 1 s g . p r e t . a c t . ~ p a ́ r-k u-e-e s ̌-s ̌ u-u n ~(N H), ~}$ pár-ku-u-e-eš-šu-un (NH), 3sg.pret.act. pár-ku-e-eš-ta (OS), pár-ku-iš-ta, 3sg.imp.act. pár-ku-e-eš-tu (OH/MS), pár-ku-eš-du (MH/NS)), parkunu- ${ }^{z i}$ (Ib2) 'to cleanse, to purify; to declare innocent, to justifiy; to castrate; to clarify' (1sg.pres.act. pár-ku-nu-mi (MH/MS), pár-ku-nu-um-mi (OH/NS), pár-ku-nu-uhȟi, 2sg.pres.act. pár-ku-nu-ši (OH/NS), 3sg.pres.act. pár-ku-nu-uz-zi (OS), pár-ku-nu-zi (OH/NS), 1pl.pres.act. pár-ku-nu-um-me-ni (NH), 3pl.pres.act. pár-ku-nu-uá-an-zi (MH/MS), pár-ku-nu-an-zi (NH), 1sg.pret.act. pár-ku-nu-nu-un ( $\mathrm{OH} / \mathrm{MS}$ ), 3sg.pret.act. pár-ku-nu-ut ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pret.act. pár-ku-nu-e-er (MH/NS), pár-ku-nu-er (NH), 2sg.imp.act. pár-ku-nu-ut (OH/MS), 3sg.imp.act. pár-ku-nu-ud-du (MH/MS), 2pl.imp.act. pár-ku-nu-ut-tén (MH/NS), 3pl.imp.act. pár-ku-nu-ua-an-du (MH/NS), pár-ku-nu-an-du; 3sg.pret.midd. pár-ku-nu-ut-ta-ti ( $\mathrm{OH} / \mathrm{NS}$ ), pár-ku-nu-ta-ti ( OH or $\mathrm{MH} / \mathrm{NS}$ ); verb.noun pár-ku-nu-mar $(\mathrm{OH} / \mathrm{MS})$, gen.sg. pár-ku-nu-um-ma-aš (OH/NS), pár-ku-nu-ma-ǎ̌ (MH/NS); part. pár-ku-nu-uáan-t- (MH/MS); impf. pár-ku-nu-uš-ke/a-(OH/MS)).

Anat. cognates: Pal. parkui- 'to purify' (3sg.pres.act. pa-ar-ku-i-ti); CLuw. parkuй(i)- 'to cleanse, to purify' (part.nom.pl. pár-ku-ua-i-mi-in-zi), papparkuua- 'to cleanse, to purify' (3sg.pres.act. pa-ap-pár-ku-ua-at-ti).

PAnat. *prk ${ }^{w}-i$ -
IE cognates: OHG furben, MHG vürben 'to clean'.
PIE adj. *prk ${ }^{w}$-(e) i-; pres. *prk ${ }^{w}$-ie/o-
See CHD P: 163f. for attestations. All the words cited here have the element parku- in common. On the basis of the one attestation acc.sg.c. pár-ku-un (KUB 24.7 ii 10 (NS)), Sturtevant (1934: 268) assumed that a $u$-stem parku- was primary, and that the stem parkui- was an extension in -i- of it. He compared this situation to Latin adjectives in -vi-, like suavis, which are recent $i$-stems on the basis of PIE $u$-stems ( ${ }^{*}$ sueh $_{2} d$ - $u$-). With the identification of the Latin $-i$ - in these adjectives (also e.g. tenuis, brevis, etc.) as the feminine suffix $*$ - ih $h_{2^{-}}$, it was suggested that Hitt. parkui- shows $*-i h_{2^{-}}$as well, a view that has often been repeated (most recently Rieken 1999a: 258). Apart from the fact that the status of the form on the basis of which this whole theory was launched is quite dubious (the " $u$-stem form" pár-ku-un is attested only once in a NS text; note that CHD P: 358 cites the form as "parkuin(!)"), there is not a single piece of evidence that the element parku- originally was a $u$-stem: we never find forms that show ${ }^{* *}$ parkauor an $u$-less stem **park- (as e.g. in the case of the $u$-stem parku- / pargau- 'high' (see at parkiie/a- ${ }^{z i}$ 'to raise')). I therefore conclude that the element parku- 'clean' is not a $u$-stem but must be regarded as a root that shows a rootfinal labiovelar. In this way, I do not see any objection against assuming that the adjective parkui- is a normal $i$-stem derived from a root $/ \mathrm{p}(\mathrm{a}) \mathrm{rk}^{\mathrm{w}}-/$.
If we compare the CLuwian words, we have to reconstruct PAnat. *P(a)rk ${ }^{w}$-, because PAnat. *- $g^{w}$ - would have disappeared in Luwian. The geminate spelling -pp- in CLuw. papparkuua- seems to point to an initial fortis stop as well (PAnat. * $p(a) r k^{w}-$ ), although evidence from reduplicated syllables has to be used with caution in these matters.
To my knowledge, no convincing IE etymology has been offered, yet. I would like to propose a connection with OHG furben 'to clean', MHG vürben 'to clean'. These verbs go back to PGerm. *furbjan < pre-PGerm. *prpié/ó-, which can go back to ${ }^{*} p r k^{w}-i e ́ / o ́-$, showing the development $*^{w}>{ }^{w} p$ after resonant (as is visible in e.g. *ulk ${ }^{w}->$ PGerm. *wulf-, cf. Kortlandt 1997). This would show that we have to reconstruct a PIE root ${ }^{*} p r k^{w}$ - (it cannot be determined whether the full grade was *perk ${ }^{w}$ - or *prek ${ }^{w}$-). I therefore reconstruct Hitt. parkui- / parkuıai- as *prk ${ }^{w}$-(e) i-.

Note that the verbal -ie/o-formation as visible in Germanic is possibly comparable to Hitt. parku(i)e/a- ${ }^{z i}$ 'to make clean' that could reflect *prk ${ }^{w}$-ie/o-.
parn-: see per / parn-

TÚG/GADA parna- (c.) article of textile, a tapestry: nom.sg. pár-na-aš (NH), acc.sg. pár-na-an (NH), abl. pár-na-az (OH?/NS), acc.pl. pár-nu-uš (NH).

See CHD P: 176 for attestations. The exact meaning of this word is not clear, but according to CHD it may denote something like a Turkish kilim, i.e. a lightweight carpet. Some scholars (e.g. Werner 1967: 17) suggest a connection with per / parn- 'house', assuming that ${ }^{\text {TÚG/GADA }}$ parna- was used within the household. As Tischler (HEG P: 485) states, such a semantic connection is not contextually supported, however. No further etymology.

## parnili (adv.) '?’: pár-ni-li.

The word is hapax in KBo $29.82+$ KBo 14.95 iv (5) nu=za pár-ni-li $a-d a<-a n>-z i$ 'and they eat $p$.'. The -ili-suffix suggests that the word is an adverb, but a meaning cannot be determined. CHD P: 178 suggests that the word could be a scribal error for pár-aš-ni-li ‘in a squatting position' (see at paršna- ‘leopard’).
parš- ${ }^{z i}$ (Ia4) 'to flee, to escape': 3sg.pres.act. pár-aš-zi (NH), 3pl.pres.act. pár[-aš-š]a-an-zi (NH), 3sg.pret.act. pár-aš-ta (MH/MS), 3pl.pret.act. pár-še-er ( $\mathrm{OH} / \mathrm{NS}$ ), pár[-aš-š]e-er (MH/NS), 3sg.imp.act. pár-aš-du (NH), 2pl.imp.act. pár-ša[-at-tén?] (NH); 3sg.pret.midd. pár-aš-ta-at; part. pár-aš-ša-an-t- ( OH or MH/NS).

Derivatives: paršnu ${ }^{-\quad}{ }^{i}$ (Ib2) 'to make flee, to chase away' (3sg.pret.act. pár-aš$\check{s} a-n u-u t, 3$ pl.pret.act. pár-ša-nu-er (NH)).

IE cognates: Lat. festīnāre 'to hurry', We. brys 'haste', ?OCS brzzъ 'fast'. PIE * $b^{h}$ érs-ti $/ * b^{h} r s$-énti

See CHD P: 179f. for attestations. On the basis of 3pl.pret.act. pár-še-er we can see that the stem is parš- and not ${ }^{* *}$ paraš-. The occasional geminate spelling of -šš- shows that phonologically we have to interpret /parS-/.

There has been some debate on the etymology of this verb. It has been argued that parš- is a $s$-derivative of the verb parh- 'to chase' (q.v.) (e.g. Sturtevant 1933: 72, 229). This is unlikely, however. First, a preform *prh $h_{2}-s$ - or *perh $h_{2}$-s- in my view regularly should have yielded ${ }^{* *}$ pris- or ${ }^{* *}$ parris- (cf. gane/iššanzi
 scenario is unlikely on semantic grounds: parh- means 'to chase, to hunt' (i.e. 'to make flee'), whereas parš- means 'to flee, to escape'. This would mean that the $s$ suffix would have de-causativized the verb parh-. To my knowledge, the $s$ suffixed verbs in Hittite never show such a semantical development (e.g. gane/išš- ${ }^{-2 i}$ 'to recognize' is derived from *ǵneh $3^{-}$'to know'; kallišš-zi / kališš- 'to call' from *kelh $h^{-}$'to call'; pahšs- ${ }^{\text {a(ri) }}$ 'to protect' from *peh $2^{-}$'to protect'; pāš- / paš- 'to swallow down' from *peh $3^{-}$'to drink').
Other scholars (e.g. Knobloch 1959: 34, followed by Oettinger 1979a: 214) connect parš-zi to Lat. festīnāre 'to hurry'. According to Schrijver (1990), this latter verb reflects $* b^{h} r s-t i-+$, which must also be the preform of We. brys 'haste'. A further connection with OIr. bras 'quickly' (thus in e.g. Pokorny 1959: 143) is rejected by Schrijver, however. He also denies the connection with OCS brbzъ 'fast', etc. because he thinks that $-z$ - cannot reflect $*_{s}$. In BSl. we find a variant *brzd- (RussCS borzdo 'fast', Lith. burzdùs 'agile, active') as well, however, which could regularly reflect $* b^{(h)} r s$ - $d^{h}$-. In my view, it is possible that $* b^{(h)} r s$ - $d^{h}$-, which regularly yielded $* b r z d$-, has influenced $* b^{(h)} r s-o$ - that then was altered to *brzo-. Whether or not the BSl. forms are cognate, we find a root $* b^{h} r s$ - 'hurry, haste' in Latin and Welsh, which would formally as well as semantically fit Hitt. parš-. I therefore reconstruct Hitt. parš- ${ }^{z i}$ as $* b^{h}$ érs-ti $/ * b^{h} r s$-énti. In the zerograde forms, the $-s$ - is adjacent to $-r-$, which causes fortition, yielding /prSánt ${ }^{\mathrm{s}} \mathrm{i}$ /, spelled pár-aš-ša-an-zi.
paršahannaš : see parzaḩannaš
paršēna- (c.) ‘cheek; genitals’: dat.-loc.sg. pár-ši-ni (MH?/NS), nom.pl. pár-še-e$n u-u s ̌$, acc.pl. pár-še-e-n[u-uš] (MH?/NS), pár-še-nu-š=u-uš (MH?/NS), pár-ši$n u-u s ̌$ (NS), dat.-loc.pl. pár-še-na-aš (NH).

See CHD P: 187f. for attestations. Although all attestations of this word refer to body parts, it is difficult to determine exactly what body part is meant. In the case of the following context, it seems clear that paršinuš refers to 'genitals':

KUB 33.120 i
(24) $n=a$-an=kán ne-pí-ša-az kat-ta hu-it-ti-et
(25) pár-ší-nu-uš=šu-uš ua-ak-ki-iš LÚ-na-tar=še-et=kán $A$-NA ${ }^{\mathrm{d}} K u$-mar-bi ŠÀ $\overline{\mathrm{A}}=\check{S} U$
an-da ZABAR
(26) ma-a-an ú-li-iš-ta
'He (= Kumarbi) pulled him (= Anu) down from heaven. He bit off his p.-s and his masculanity fused with Kumarbi's inside like copper' (cf. CHD P: 187 for translation).

Such an interpretation does not fit for the following contexts, however:
KBo 13.34 iv
(14) ták-ku MUNUS-za ha- $a$-ši nu-u=š-ši [ZA]G-an
(15) GEŠTU=ŠU pár-še-nu-(š)=šu-uš
(16) $[m] a-n i-i n-k u-u a-a n ~ k i-[i] t-t[a-r] i$
'If a woman gives birth and (of the child) his right ear lies near his $p$.-s'
ibid. iv
(6) ták-ku MUNUS-za ḩa-a-ši nu-u=š-š[i GEŠTU $\left.{ }^{\mathrm{HI} \cdot \mathrm{A}}=\check{S} U\right]$
(7) pár-ši-ni=ši ki-it-ta-r[i]
'If a woman gives birth and (of the child) [his ears] lie near his $p$. .'
Riemschneider (1970: 36) states that the Akkadian parallels of these sentences show lētu 'cheek' corresponding to Hitt. paršēna-, which indicates that here paršēna-, too, denotes 'cheek'. Often, the word pár-aš-na-aš (KUB 35.148 iii 27) is regarded as belonging here as well. Because of its aberrant form and because it clearly refers to a body part that is situated near the feet, I have treated it separately, however: see at paršna-.
According to CHD, it is best to assume for paršēna- an original meaning 'cheek', which developed into 'buttocks' (parallel in ModHG Backe 'cheek' > Hinterbacke 'buttocks'), which could euphemistically be used for 'sexual parts' (via 'loins'?) as well. To my mind, these steps are quite uncertain, and therefore I have chosen to translate 'cheek(?); genitals' here.
Often it is assumed that the verb paršnae- ${ }^{z i}$ 'to squat(?), to crouch(?)' is connected with paršēna- (already Pedersen 1938: 157f.), on the basis of which a connection between paršēna- and Skt. párrṣni- 'heel', Gr. $\pi \tau \varepsilon ́ \rho v \eta ~ ' h e e l ', ~ G o t h . ~$ fairzna 'heel' etc. has been assumed. In my view, this is improbable formally as well as semantically. As we saw, paršēna- does not denote 'heel' or any other part of the leg, and a derived verb of paršēna- would have had the form **paršenae-. If the verb paršnae- is derived from a body part, it could be of paršna- (q.v.).
parši- ${ }^{\text {a(ri) }}$, parš- ${ }^{\text {a(ri) }}$ (IIIc > IIIg) 'to break': 1sg.pres.midd. pár-aš-ḩa (OS), pá[r-
 (MS), pár-ši-et-ta-ri (MH/NS), 3pl.pres.midd. pár-ša-an-da (OS), pár-ši-an-ta (OS), pár-ši-i_ia-an-da (OS), 3sg.imp.midd. pár-ši-et-ta-ru (MH/NS), pár-ši-ía-ad-da-ru (MH/NS), 3pl.imp.act. pár-ši-an-da-ru; 1sg.pres.act. pár-ši-ịa-mi (MH/NS), pár-ši-i_ia-am-mi (NS), pár-ši-i_ia-ah-ḩi (MH/NS), 3sg.pres.act. pár-aš-zi ( OH or $\mathrm{MH} / \mathrm{NS}$ ), pár-ši-az-zi (MH/MS), pár-ši-i_̨ $a-a z-z i ~(M S ?), ~ p a ́ r-s ̌ i-i-e-e z-z i$ (NS), pár-ši-i ia-iz-zi, pár-ši-zi (NH), pa-ar-ši (MH/NS), pár-ši (NS), 1pl.pres.act. pár-šu-ưa-ni (OS), 3pl.pres.act. pár-ši-ía-an-zi (OH/MS), pár-ši-an-zi (MH/NS), 1sg.pret.act. pár-ši-ịa-nu-un (MH/MS), 3sg.pret.act. pár-ši-ía-at (MH/NS), pár-ši-at (MH/MS), 3pl.imp.act. pár-ši-an-du (NS); part. pár-ši-i̇la-an-t- (OS), pár-ša-an-t- (MH/MS); verb.noun pár-š[i-ịi]a-u-ûa-ar (NS), gen.sg. pár-ši-i-ia-u-ûa-aš; inf.I pár-šu-u-ūa-an-zi, pár-ši-ịa-u-ua-an-zi (MH/NS), pár-ši-ịa-u-an-zi (MH/NS), pár-ši-u-ųa-an-zi (NH); impf. pár-aš-ke/a- (MH/NS).
Derivatives: paršiianna- ${ }^{i}$ / paršiianni- (IIa5) 'to break (impf.)' (1sg.pres.act. pár-ši-ía-an-na-ah-ḩi (MH/NS), 3sg.pres.act. pár-ši-į्a-an-na-i (OS), pár-ši-ịia-an-na-a-i ( $\mathrm{OH} / \mathrm{NS}$ ), pár-ši-an-na-i (MH/MS), pár-ši-i-įa-an-na-i (NH), 3pl.pres.act. pár-ši-į̇a-an-ni-an-zi (OH/NS), pár-ši-ịa-an-na-an-zi (OH/NS), 3sg.pret.act. pár-ši-i_ia-an-ni-et (NS), 3pl.pret.act. pár-ši-ía-an-ni-er (NS); impf. pár-ši-ila-an-ni-iš-ke/a- (OH?/NS), pár-ši-ila-an-ni-eš-ke/a- (MS)), NiNDA parša(c.) 'a morsel or fragment; a kind of bread’ (nom.sg. pár-ša-aš (NH), acc.sg. pár-ša-an (MH?/NS), pár-ša-a-an (NH), acc.pl. pár-šu-uš (OS), dat.-loc.pl. pár-ša-aš (NH), pár-ša-a-aš (NH)), paršae- ${ }^{z i}$ (Ic2) 'to break up into small pieces, to crumble' (3sg.pres.act. pár-ša-i-ez-zi (MH/MS), pár-ša-a-ez-zi (MH/MS), pár-ša$i z-z i(N H ?),(L u w . ?)$ pár-ša-a-ti (KUB 54.49 obv. 2), 3pl.pres.act. pár-ša-a-an-zi ( OH ?/NS), pár-ša-an-zi (NH); part. pár-ša-a-an-t- (MH/MS)), paršnu- ${ }^{z i}$ (Ib2) 'to break up; to break open (with arha)' (3sg.pret.act. pár-ša-nu-ut (NS); impf. pár$a \check{s ̌-s ̌ a-n u-u s ̌-k e / a-~(N S)), ~ p a r s ̌ e s ̌ s ̌ a r ~(n .) ~ ' c r a c k ’ ~(n o m .-a c c . s g . n . ~ p a ́ r-s ̌ e-e s ̌-s ̌ a r), ~}$ paršil(a)- (c.) 'a fragment (of bread?)' (acc.pl. pár-ši-la-aš (OH/NS)), ${ }^{\text {(NINDA) }}$ paršul-, (NINDA) parš(i)ulli- (n./c.) 'morsel, fragment, crumb; a type of bread’ (nom.-acc.sg.n. pár-šu-ul-li (OS), pár-aš-šu-ul-li (OH/NS), pár-šu-ul ( $\mathrm{OH} / \mathrm{NS}$ ), acc.sg.c. pár-šu-ul-li-in (MH/NS), nom.-acc.pl.n. pár-šu-ul-li (OS), pár-ši-ú-ul-li (MH/MS?), acc.pl.c. pár-šu-ul-li-e-eš (MH/NS), dat.-loc.pl. pár-šu$u l-l i(\mathrm{OH} / \mathrm{NS}))$, paršul(l)ae- ${ }^{z i}$ (Ic2) 'to break into pieces, to crumble' (3sg.pres.act. pár-šu-ul-la-a-iz-zi (OH?/NS), 3pl.pres.act. pár-šu-la-a-an-zi (MH/NS); part. pár-šu-u-la-a-an-t- (MS)).
Anat. cognates: CLuw. paršul- 'crumb, morsel' (nom.-acc.sg. pár-šu-ul-za).
IE cognates: Gr. $\varphi$ ápoos 'part', OE berstan, OHG brestan, ON bresta 'to burst'.

PIE * $b^{h} r s($ ie/o) $-?$
See CHD P: 180ff. for attestations. In the oldest texts this verb shows middle forms only; the active forms are found from MH times onwards. The verb shows two stems, namely parš- and paršiie/a-. Note that the verb paršae- ${ }^{z i}$, which inflects according to the hatrae-class, is a derivative of the noun ${ }^{\text {NINDA }}$ parša-, itself a nominal derivative of parš(iiie/a)- ${ }^{a(r i)}$.
The etymological interpretation of this verb is not quite clear. Sturtevant (1930d: 127) gives two suggestions. The first one, a connection with Lat. pars 'part', is unlikely as this word is an inner-Latin *-ti-derivation of the verb parere < *perh $3^{-}$'to provide'. The second one, a connection with Gr. 甲á $\rho \sigma o \varsigma$ 'part', may have more merit if this word reflects $* b^{h} r s-o-$. Kimball (1999: 239) further adduces OE berstan, OHG brestan, ON bresta 'to burst' $<{ }^{*} b^{h} r e s-$, which means that parš(iie/a)- may reflect $* b^{h} r s($ ie/o)-.
paršina-: see paršēna-
paršna- (gender unclear) a body part in the vicinity of the feet, 'heel?': gen.sg. or pl. pár-aš-na-aš.
IE cognates: Skt. párrṣni- 'heel', Gr. $\pi \tau \varepsilon ́ \rho \vee \eta ~ ' h e e l ', ~ G o t h . ~ f a i r z n a ~ ' h e e l ' ~ e t c . ~$ PIE *p(e)rsn-o-?

This word is hapax in the following context:
KUB 35.148 iii
(20) $n=a-a n=\check{s} i$ EGIR-pa iš-ki-ša-az ḩu-i-nu-mi [ ]
(21) $n u$ UR.TUR SAG.DU- $i=\check{s}$-ši an-da e-ep-mi U[R.TUR SAG.DU-aš]
(22) i-na-an li-ip-du me-li-íia-[aš=ša-aš]
(23) $i$-na-an KI.MIN ${ }^{\text {UZU }}$ ZAG.UDU-aš iš-ki-ša-a[š? $\left.=s ̌ a-a \check{s}(?)\right]$
(24) i-na-an KI.MIN $a$-na-aš-ša-aš=ša-aš i-n[a-an KI.MIN]
(25) $a r$-ra-aš=ša-aš i-na-an KI.MIN ${ }^{\text {UZU }} \mathrm{X}[\ldots$-..na-an KI.MIN]
(26) ge-e-nu-ua-aš=ša-aš i-na-an KI.MIN ${ }^{\mathrm{U}}$ [ ${ }^{\mathrm{ZU} ?} \mathrm{x}$ i-na-an KI.MIN]
(27) pár-aš-na-aš=ša-aš i-na-an li-i[p-du]
'I make it run from his back. I take in a puppy for his head and the puppy must lick away the disease of the head, the disease [of his] meli- likewise, the disease of the shoulders (and) [his] back likewise, the dis[ease] of his anašša[likewise], the disease of his arse likewise, [the disease of his] x[.. likewise],
the disease of his knees likewise, [the disease of his] x [. likewise] and let it li[ck away] the disease of his paršna-'.

In this list the body parts seem to be ordered top-down, which indicates that paršna- denotes a body part located in the vicinity of the feet. Usually, this word is equated with paršēna- 'cheek; genitals' (e.g. in CHD P: 187), but to my mind the formal as well as semantic differences are too large: we should rather regard paršēna- and paršna- as separate words.
Since Pedersen (1938: 157f.) this word is generally connected with Skt. párrṣ̣i'heel', Gr. $\pi \tau \varepsilon \varepsilon^{\prime} v \eta$ 'heel', Goth. fairzna 'heel' etc., on the basis of which paršnais often glossed as 'heel' (note that Pedersen and the scholars that follow him take paršna- and paršēna- as one word). Formally this connection is possible (paršnawould then reflect *prsn-o- or *persn-o- besides *perrsn-i- as reflected in Skt. pārṣni- and *persn-eh $2^{-}$as visible in Gr. $\pi \tau \varepsilon \rho^{\rho} v \eta$ and Goth. fairzna), but it should be noted that semantically it cannot be assured yet. For the question whether the verb paršnae-_z 'to squat(?)' is derived from this paršna-, see at its own lemma.
paršna- (c.) ‘leopard’ (Sum. PÌRIG.TUR): nom.sg. pár-š[a-na-ás] (NS), PÌRIG.TUR-aš (OH/NS), gen.sg. pár-ša-na-aš (OH/NS), dat.-loc.sg. ANA PÌRIG.TUR (OS), nom.pl. pár-ša-ni-eš (OH/MS).
Derivatives: ${ }^{\text {LÚ }}$ paršna- (c.) 'leopard-man’ (Sum. ${ }^{\text {LÚPÌRIG.TUR; nom.sg. pár- }}$ $a s ̌-n a-a s ̌$ (OS), acc.sg. pár-aš-na-an (OH/NS), gen.sg. pár-aš-ša-na-aš (NS)), *paršanatar (n.), quality of a leopard (nom.-acc.sg. PÌRIG.TUR-tar), paršnili (adv.) 'in the manner of a leopard' (pár-ša-ni-li (OH/NS), pár-aš-ni-li (NS)).

IE cognates: see at papparš- ${ }^{i}$
PIE *prs-no-
See CHD P: 184f. for attestations. The different spellings pár-ša- $n^{\circ}$, pár-aš- $n^{\circ}$ and pár-aš-ša- $n^{\circ}$ indicate that we have to phonologically interpret these words as $/ \mathrm{prSn} \%$ 。

Often, paršna- is seen as a Wanderwort (compared with e.g. Hatt. hapraš'leopard’, OTurk. bars), but Oettinger (1986: 22) proposes to derive it from PIE *prs-no- 'dappled, having spots', which is followed by Melchert (1994a: 175). Because the verbal root *pers- is attested in Hittite (see at papparš- ${ }^{i}$ ), I do not see severe objections against this etymology. See at paršnae- ${ }^{z i}$ 'to squat(?), to crouch(?)' for the possibility that this verb is derived from paršna- 'leopard'.
paršnae- ${ }^{z i}$ (Ic2) 'to squat(?), to crouch(?)': 3sg.pres.act. pár-aš-na-a-ez-zi ( $\mathrm{OH} / \mathrm{MS}$ ?), pár-aš-na-iz-zi ( OH ?/NS), pár-ša-na-a-iz-zi (NS), pár-ša-na-iz-zi, 3pl.pres.act. pár-ša-na-a-a[n-zi], pár-ša-na-an-zi (OH?/NS), pár-aš-na-a-an-zi ( $\mathrm{OH} / \mathrm{NS}$ ), pár-aš-na-an-zi $(\mathrm{OH} / \mathrm{NS})$, pár-aš-ša-na-an-zi $(\mathrm{OH} / \mathrm{NS})$; part. pár-ša-na-a-an-t- (OH/MS?), pár-ša-na-an-t-, pár-aš-na-a-an-t- (OH/NS), pár-aš-na$a n-t-\quad(\mathrm{OH} / \mathrm{NS})$, pár-aš-ša-na-an-t-; verb.noun gen.sg. pár-ša-na-a-u-ua-aš ( $\mathrm{OH} / \mathrm{NS}$ ), pár-ša-na-a-u-aš (MS), pár-ša-na-u-ua-aš, pár-aš-ša-na-a-u-ua-aš ( OH or $\mathrm{MH} / \mathrm{NS}$ ), pár-aš-na-a-u-ua-aš (OH/NS), pár-aš-na-a-u-aš (OH/MS?), pár-aš-na-a-ua-aš (NS), pár-aš-na-u-ua-aš (OH/NS), pár-aš-na-ua-aš (OH/NS), pár-aš-na-u-aš (OH/NS).

PIE *prsno-ie/o-
See CHD P: 189 for attestations. The different spellings pár-ša-na-, pár-aš-naand pár-aš-ša-na- point to a phonological interpretation /prSnae-/. The exact semantics of the verb are not clear: it describes some act that is performed by functionaries in festivals. CHD states "that it denotes some lowering of the body is shown by KUB 25.1 vi 11-15, where a cupbearer stands up after having performed $p$. .", and suggests a translation 'to squat, to crouch'. They admit, however, that this translation is especially prompted by the etymological connection with paršna-, a body part in the vicinity of the feet (q.v.), which is generally connected with the words for 'heel' in the other IE languages (although CHD cites this latter word as belonging to paršēna- 'buttocks; cheek').
Formally, it is indeed quite clear that paršnae- (which belongs to the hatraeclass) has to be interpreted as a derivative in -ie/a- of a noun paršna-. In this way, a connection with paršna- that could mean 'heel' would certainly be a possibility. Another candidate is paršna- 'leopard', however: squatting is a typical movement of big cats. I must admit, however, that I have not been able to find a context in which paršnae- is associated with any cat-like animal. Regardless of which connection one chooses to favour, it is quite probable that paršnae- formally goes back to *prsno-ie/o-.
${ }^{\text {(GIŠ) }}$ paršdu- (c. and n.?) 'leaf, foliage’: nom.sg.c. pár-aš-du-uš (OH/MS), acc.sg.c. pár-aš-du-un (OH?/NS), nom.-acc.sg.n.? pár-aš-tu (OH/MS), dat.loc.sg. pár-aš-du-i, nom.pl.c. pár-aš-tu-e-eš (MH/MS), acc.pl.c. pár-aš-du-uš.

See CHD P: 190f. for attestations. This word is consistently spelled pár-aš(which contrasts with the spelling pa-ra-aš- as e.g. in ${ }^{\mathrm{NA}_{4}}$ parašha- and $p a-r a-s^{\circ}$ as in parašě̌̌s $s^{z i}$ ), which is the reason for me to follow CHD in citing this word as
paršdu-. Usually, it is translated 'shoot, sprig', but CHD convincingly translates 'leaf'. This is of importance for the etymological interpretation (note that older etymologies, like Weitenberg's (1975), who connected paršdu- with Arm. ort' 'vine' and Gr. $\pi \tau$ ó $\rho$ Өos 'shoot, twig', are all based on the translation 'shoot, sprig' and therefore have become impossible). Basing oneself on the translation 'leaf', one could possibly think of a connection with OE brord, -es m. 'prick, point, lance, javelin, the first blade or spire of grass/corn, etc.', from $* b^{h} r s d^{h}-$, although a meaning 'leaf' of this latter word could be secondary.
parštuhha- (c.) an earthenware cup(?) (Sum. ${ }^{(\mathrm{DUG})}$ GAL.GIR 4 ): acc.sg. pár-aš-du-uhh-ha-an (MS), instr. pár-aš-tu-uh-hi-it (NS), acc.pl. pár-aš-tu-uh-ha-aš (NS), broken: pár-aš-tu-u-uh-h[a(-) (MS).

See CHD P: 191 for attestations. This word is consistently spelled pár-aš-, which is the reason for me to follow CHD in citing this word as parštuhha- (cf. paršdu-). On the basis of alternations with ${ }^{(\mathrm{DUG})} \mathrm{GAL} \mathrm{GIR}_{4}$, we have to conclude that parštuhha- denotes an earthenware cup. The etymological interpretation of this word is unclear, but a formal connection with paršdu- 'leaf' (q.v.) seems likely. If so, we have to assume that this word shows a suffix -hha-. Such a suffix is further only attested in annanuhha- 'trained(?)' (see at annanu- ${ }^{z i}$ ).
paršur (n.) cooked dish (Sum. $\mathrm{TU}_{7}$ ): nom.-acc.sg. pár-šu-u-ur (OS), pár-šu-ur ( OH ?/NS), gen.sg. pár-šu-u-ra-aš (MS), abl. pár-šu-u-ra-az (MS), instr. pár-šu-$u$-ri-it (OH?/NS).
Derivatives: paršūraš EN 'cooking chef', paršūraš peda- 'cooking area’. PIE $* b^{h} r s-u r$

See CHD P: 193f. for attestations. The word denotes all kinds of cooked dishes: soups, broths, stews, meat varieties. Already Sturtevant (1933: 148) connected this word to parš(iie/a)- 'to break' (q.v.): ‘Brockengericht'. See there for further etymology.
paršza: see parza
${ }^{(U Z U)}$ partāuar / partāun- (n.) 'wing, feather': nom.-acc.sg. pár-ta-u-ua-ar ( $\mathrm{OH} / \mathrm{MS}$ ), pár-ta-a-u-ua-ar (OH or MH/MS?), pár-ta-a-u-ar (MS?), pár-ta-a-uaar (NS), pár-ta-úa-ar, dat.-loc.sg. pár-t[a-u-ni] (OH or MH/MS?), abl. pár-ta-u$n a-a z(\mathrm{KBo} 8.155$ ii 9 (NS)), pár-da-u-na-az (KBo 27.163, 7 (MH/NS)) pár-da-
$a-u-n a-z a(K B o 33.188$ iii? 14 (MH/NS)), instr. pár-ta-ú-ni-t=u-uš (KBo 17.1 i 6 (OS)), pár-ta-ú-ni-it (KUB 32.122, 6, 7 (MS?), KUB 33.8 ii 16 (fr.), 17 (fr.) $(\mathrm{OH} / \mathrm{NS})$ ), pár-ta-a-u-ni-it (KBo 4.2 i $4(\mathrm{OH} / \mathrm{NS})$, KUB 15.31 i 35, ii 40 (MH/NS)), pár-ta-u-ni-it (KUB 15.32 i 37 (MH/NS), KBo 15.48 ii 6, 27 (MH/NS)), nom.-acc.pl. [pár-t]a-a-u-ua (OH/MS), [pá]r-ta-u-ua (OH/MS), pár-ta-a-u-ua-ar (MH/MS), pár-ta-u-ua-ar (MH/NS), dat.-loc.pl. [pá]r-ta-ú-na-aš (KUB 36.49 i 8 (OS?)), pár-ta-u-na-aš (VBoT 125, 3 (NS)).
Derivatives: see partūni-.
IE cognates: OCS perotъ 'they fly', Skt. parnáa- 'wing', Lith. spar̃nas 'wing'.
PIE *prT-ó-ur / *prT-ó-un-
See CHD P: 198f. for attestations. The meaning 'wing' is securely attested, but some contexts are better understandable if we translate 'feather', which seems to indicate that partāuar could denote both. This word belongs to the small class of words in -āuar / -aun- (further ašāuar / ašaun-, haršāuar / haršaun-, karāuar / karaun- and šarāuar / šaraun-), which on the basis of ašāuar and haršāuar have to be analysed as *CC-āuar. As I have argued under the lemma karāuar / karaun-, the suffix - $\bar{c} u a r /-a u n-$ may have to be compared with -ātar / -ānn- < *-ó-tr / -ó-tn-, which means that we should assume that we are dealing with *-óur / -ó-un-. For partāuar this means that we are dealing with a root part-. Within Hittite, such a root is only attested in the verb partipartiške/a- ${ }^{z i}$, the meaning of which is unclear, however. Nevertheless, it is quite obvious that this part-belongs with Skt. parṇá- 'wing, feather', Lith. spar̃nas 'wing', etc. which point to *per-. This indicates that part- reflects a dental extension and that partāuar can be reconstructed *prT-ó-ur.
The oblique case, partaun- is spelled with the sign Ú as well as with U. These spellings show a chronological distribution, namely Ú in older texts and $U$ in younger texts. This indicates that $\mathrm{OH} /$ /aun-/ phonetically develops into /-aon-/ from MH times onwards (compare § 1.3.9.4.e).
partipartiške/a- ${ }^{z i}$ (Ic6) '?’: 3sg.pres.act. pár-ti-pár-ti-iš-ke-ez-zi (NS).
The word is hapax in the following context:
KUB 17.3 iii
(7) GIM-an=ma lu-uk-kat-ta $n u{ }^{\text {d.GIŠGIM.MAŠ-uš } i-u a-a[r \ldots]}$
(8) pár-ti-pár-ti-iš-ke-ez-zi
'But at day-break, Gilgameš p.-s like a [...]'.

On the basis of this context, it cannot be determined what the verb denotes. Some scholars translate 'flies, hurries' (e.g. Kronasser 1966: 587) on the basis of a formal similarity with partāuar / partaun- 'wing', but this is nothing more than a guess. No further etymology.
partūni- (c.) a bird: acc.pl. pár-tu-u-ni-uš (OS).
See CHD P: 200 for attestations. It is clear that the word refers to a certain kind of bird, but its exact meaning cannot be determined. Nevertheless it seems obvious that the word should be cognate with partāurar / partāun- 'wing, feather' (q.v.).
${ }^{\mathrm{NA}_{4}}$ parušha-: see ${ }^{\mathrm{NA}_{4}}$ parašh $a$ -
parza (adv. indicating direction) '...-wards'; āppa parza 'backwards, in reverse'; kattan parza 'downwards'; parā parza 'forwards(?)': pár-za (often, OS), pár-aš$z a(2 \mathrm{x}, \mathrm{MH} / \mathrm{NS})$.
IE cognates: Gr. $\pi \rho o ́ \tau \iota, \pi \rho o \tau i ́, ~ \pi o \rho \tau i ́(C r e t) ~ ' t o ',. ~ S k t . ~ p r a ́ t i ~ ' i n ~ t h e ~ d i r e c t i o n ~ o f ' . ~$ PIE *pr-ti (?)

See CHD P: 196 for attestations. The spelling pár-za is the most common and attested in OS texts already. A spelling pár-aš-za is found twice only, in NS texts. Melchert (1994a: 166) attributes the alternation between pár-za and pár-aš-za to "loss of /s/ in front of /ts/", so paršz > parz. He does not explain however, how it is possible that parza is found in OS texts already, whereas parašza is attested in NS texts only. And if we are dealing with an analogical restoration of $-\check{s}$-, on the basis of what? I therefore assume that parza is the original form and regard the attestations of parašza more in the line of Joseph (1984: 6f.), who suggests that parašza is a secondary formation in analogy to tapušza 'sideward'. The one attestation pé-ẹ-za (633/v, l.col. 4, see StBoT 15: 46) is uncertain regarding its reading and found on such a broken piece that its context cannot be reconstructed. I therefore disregard this form in this discussion.

The exact formation of parza is unclear. A connection with per / parn- 'house' is probably unjustified, as the abl. of this word is perza. Laroche (1970: 40) saw parza as the abl.-form that belongs to the paradigm of peran and par $\bar{a}$ (old acc. and all. respectively), which would mean that it reflects *pr-ti. If so, it would be comparable to Gr. $\pi \rho o ́ \tau \iota, \pi \rho o \tau i ́, \pi o \rho \tau i ́(C r e t) ~ ' t o ',. ~ S k t . ~ p r a ́ t i ~ ' i n ~ t h e ~ d i r e c t i o n ~ o f ' . ~$. Whereas Gr. $\pi \rho o ́ t ı ~ s e e m s ~ t o ~ r e f l e c t ~ * p r o ́ t i ~ a n d ~ S k t . ~ p r a ́ t i ~ m u s t ~ r e f l e c t ~ * p r e ́ t i, ~ C r e t . ~$
$\pi o \rho \tau i ́ ~ s h o w s ~ a ~ z e r o ~ g r a d e ~ f o r m a t i o n ~ * p r t i, ~ w h i c h ~ w e ~ h a v e ~ t o ~ r e c o n s t r u c t ~ f o r ~$ Hittite as well.

If these connections are justified, they would form a major additional argument in favour of reconstructing the abl.-ending $-z$ as *-ti (q.v.).
parzaḩannaš, paršahannaš, perzahannaš, perešhannaš, peršahhannaš (gen.sg.) modifying livestock: gen.sg. pár-za-ḩa-an-na-aš (MH/MS), pé-er-ša-ah-ḩa-an$n a-a s ̌$ (Arn.I/MS), É-er-ša-ah-ḩa-na-aš (Arn.I/MS), pé-er-za-ha[-an-na-aš] (MH/NS), pé-re-eš-hூa-an-na-aš (MH/NS), pár-ša-ḩa-an-na<-aš).

Derivatives: \& parzahanašši- (adj.), defining cattle (nom.sg.c. \& pár-za-$h[a]-n a-a s ̌-s ̌ i-i s ̌(N H))$.

See CHD P: 201 for attestations. This word only occurs as a gen.sg. describing cattle (mostly $\mathrm{GU}_{4}$ 'ox'). Its exact meaning cannot be determined on the basis of the contexts in which these forms are found. Laroche (1957b: 128) suggests to analyze the word as a compound of per 'house' and šahhan 'tax, feudal duty'. Apart from the fact that there is no semantic evidence to support this idea, it is formally problematic as well since the gen.sg. of šahhan is šahhanaš with geminate $-h h$-, which contradicts the fact that parzahannaš usually shows single spelling. Nevertheless, the spellings peršahhannaš and É-eršahhanaš seem to fit Laroche's analysis well, but perhaps these forms are influenced by folketymology. To my mind, the many different spellings of this word clearly point to a foreign origin.
pāši- ${ }^{i}$ paš- (IIa2) 'to swallow, to gulp down': 3sg.pres.act. pa-a-ši (MH/NS), pa$a \check{s}-z i \quad(\mathrm{OH}$ or $\mathrm{MH} / \mathrm{NS})$, 3pl.pres.act. pa-ša? ${ }^{?}-a[n-z i]$, 2sg.pret.act. pa-aš-ta (MH/NS), 3sg.pret.act. pa-aš-ta (MH/MS), pa-a-aš-ta (NH), \& pa-aš-ta (NH), 3sg.imp.act. pa-aš-du (MH/MS), pa-a-šu (MH/NS); inf.I pa-a-aš-šu-an-zi; impf. pa-aš-ke/a- (NH), pa-a-ši-iš-ke/a- (MH/MS).

Anat. cognates: CLuw. pǎ̌š- 'to swallow' (3sg.pret.act. pa-aš-ta, inf. pa-aš-šu-$u$-na), see 4 pappaša-.
IE cognates: Skt. píbati 'drinks', Gr. $\pi^{i} v \omega$ 'to drink', OCS piti 'to drink', OIr. ebait 'they drink', Lat. bibere 'to drink', Arm. дmpe- 'to drink'.

PIE *poh ${ }_{3}$-s-ei / *ph $h_{3}$ senti
See CHD P: 203f. for attestations. The verb is Hittite as well as Luwian, which explains the occasional use of gloss wedges. We find forms with mi- as well as with hai-endings (3sg.pres.act. pašzi besides pā̌̌i and 3sg.imp.act. pašdu besides
$p \bar{a} s{ }_{s} u$ ). Since the $m i$-inflection is the productive one, I assume that the hi-inflection is original here: $p \bar{a} \check{s}^{-} / p a \check{s}-$.
For 3pl.pres.act., CHD cites two attestations. The form pa-s $a^{q}-a[n-z i]$ (KBo $34.2,40$ ) indeed likely means 'they swallow', but "paš?(or piš)-ša-an-zi" (KUB $51.33,4$ ) is found in such a broken context that its meaning cannot be determined. CHD even cites this latter form twice, namely as 3pl.pres. of $p \bar{a} \check{s}_{-}^{i}$ 'to swallow', and as 3 pl.pres. of peš- ${ }^{z i}$ 'to rub'. I therefore would leave that form out of consideration here, which means that $p a-s a^{9} ?-a[n-z i]$ is the only form that we can use for our historical interpretation.
Since Sturtevant (1932b: 120) this verb is generally connected with PIE *peh ${ }_{3^{-}}$ 'to drink' and regarded as an $s$-extension: *peh ${ }_{3}-s$-. So pāši / pašanzi reflects *pó ${ }_{3}$-s-ei $/{ }^{*} p h_{3}$-s-énti.
In CLuwian, a reduplicated derivative is found as well, see under pappaša-.
 (MH/NS).

See CHD P: 204. The two attestations are duplicates of each other. In a third duplicate we find ${ }^{\text {NINDA }} p \dot{p} r-s \check{s} u$ - $[u s ̌]$ on this spot, which could mean that pa-aš-šu$u s \check{s}$ and $p a-s \check{s} u-[u \check{s}]$ have to be read as pár ${ }^{!}-a \check{s}-s ̌ u-u \check{s}$ and pár ${ }^{!}-s \check{s} u-[u s ̌]$ and belong to ${ }^{\text {NINDA }}$ parša- (see at parš(iie/a)- 'to break').
${ }^{\text {LÚ }} \boldsymbol{p a s ̌}(\mathbf{s}) \boldsymbol{a}$ ndala- (c.) a servant in the palace kitchen, 'taster(?)': nom.sg. pa-ša-an-da-la-aš (MH?/NS), nom.pl. pa-aš-ša-an-da-li-eš (OS), gen.pl. pa-aš-ša-an-ta-$l\left[a-a s{ }^{\prime}\right](\mathrm{OH}$ or $\mathrm{MH} / \mathrm{NS})$.

See CHD P: 204 for attestations. Although the function of the ${ }^{\text {LÚ }}$ paššandala- is unclear, it is formally possible that the word is derived from pāss- / paš- 'to swallow'. Therefore, a translation 'taster' is often found. See $p \bar{a} s s_{-}^{i} / p a s ̌-~ f o r ~$ further etymology.
pašiȟae- ${ }^{-i}$ (Ic2) 'to rub, to squeeze, to crush': 3sg.pres.act. pa-ši-ha-iz-zi (NH), $p a-s ̌ i-h a-a-[i z-z i ?] \quad(\mathrm{NH})$, Luw.3sg.pres.act. \& pa-ši-ḩa-a-ti (NH), Luw.1sg.pret.act. pa-a-ši-ḩa-aḩ-ha (NH), Luw.3sg.pret.act. pa-ši-ha $a-a-i d-d[a]$ (NH), 3sg.imp.act. pa-ši-hูa-id-du (NS); 3sg.pres.midd. pa-ši-ha-ta-[r]i(MH/NS); impf. pa-ši-ḩa-iš-ke/a- (MH/NS).

See CHD P: 205 for attestations. The normal meaning of this verb is 'to rub, to squeeze, to crush', but the syntagm ${ }^{(\mathrm{UZU})} \mathrm{GAB}-(\check{s}) i$ pašihae- ${ }^{z i}$ seems to denote 'to
betray'. Because of the many Luwian inflected forms and the late attestation in the Hittite corpus, pašihae- probably is a Luwian verb originally. Formally, it looks as if pašihae- is derived from a further unattested noun *pašiha-. According to Starke (1990: 484), it is cognate with Hitt. peš- 'to rub, to scrub' (q.v.). Although semantically this would make sense, the formal consequence, namely that we have to analyse *pašiha- as *ps-iha-, is awkward since a suffix -iha- is further unknown.
${ }^{\left(\mathbf{N A}_{4}\right)} \boldsymbol{p a s ̌ s ̌ i l a - ~ ( c . ) ~ ' s t o n e , ~ p e b b l e ; ~ g e m , ~ p r e c i o u s ~ s t o n e ' : ~ n o m . s g . ~ p a - a \check { s ̌ - s ̌ i - l a - a s ̌ ~ }}$ (MS), acc.sg. pa-aš-ši-la-an (OH/NS, MH/MS), pa-aš-ši-lu-un (MH/NS), gen.sg.
 (MH/MS), pa-ši-lu-uš (OH/NS), [p]a-aš-še-lu'-uš (NS), acc.pl. pa-aš-ši-lu-uš ( OH or $\mathrm{MH} / \mathrm{MS}$ ), $p a-s ̌ e-l u-u s ̌ ~(N S), ~ p a-a s ̌-s ̌ i-l a-a s ̌ ~(N S), ~ d a t .-l o c . p l . ~ p a-a \check{s ̌-s ̌ i-l a-a s ̌ ~}$ ( OH or $\mathrm{MH} / \mathrm{NS}$ ), pa-aš-ši-li-ía-aš ( OH or MH/NS).
Derivatives: ${ }^{\mathbf{N A}}{ }_{4}$ paššilant- 'stone, pebble' (acc.pl. pa-aš-ši-la-an-du-us̆).
See CHD P: 206f. for attestations. Most forms show a stem paššila-, but paššilu(acc.sg. paššilun) and paššili- (dat.-loc.pl. paššiliíaš) occasionally occur as well. Already since Sturtevant (1930d: 126) the word has generally been connected with Skt. bhásman- 'ash' and Gr. $\psi \tilde{\eta} \varphi \circ$ 'pebble' from ${ }^{\prime} b^{h} e s$ - 'to rub (in pieces)'. Although semantically this connection could be possible, formally it is difficult. What kind of suffix is -ila-? Why do we find geminate -šs-? Traditionally, paššila- is seen as belonging with paššu- (q.v.), but this has become improbable as paššu- does not mean 'rock'. Cf. also ${ }^{\mathrm{NA}_{4}}$ paššuela-.
$\boldsymbol{p} \overline{\mathbf{a}} \boldsymbol{s}_{\boldsymbol{k}} \boldsymbol{-}^{i} / \boldsymbol{p a s ̌} \boldsymbol{k}-$ - (IIa2 > Ic1, Ic2) 'to stick in, to fasten, to plant; to set up; to impale': 1sg.pres.act. pa-aš-ka-ah-ḩi (NS), pa-aš-ga-mi (NS), 3sg.pres.act. pa-aš-ki (MH/MS), pa-aš-ki-ez-zi (MS), 3pl.pres.act. pa-aš-kán-zi (MS?), [p]a? ${ }^{\text {- }}-a-a s ̌-k a ́ n-~$ $z i$ (KBo 29.92 ii 14 (MH/NS)), 1sg.pret.act. pa-aš-ga-ah[-hu-un?] (NH), 3sg.pret.act. pa-aš-ki-et (OH/MS?), 1pl.pret.act. pa-aš-ki-ịa-u-en, 3pl.pret.act. pa$a \check{s ̌-k e-e r ~(~} \mathrm{OH}$ or $\mathrm{MH} / \mathrm{NS}$ ), 3sg.imp.act. pa-aš-ki-e[d-du?]; part. pa-aš-kán-t(MH/MS); verb.noun pa-aš-ga-u-una-ar; impf. pa-aš-ke-eš-ke/a- (MH/NS).
PIE *PósK-ei, *PsK-énti

See CHD P: 207 for attestations. This verb shows a variaty of stems, of which it is not always immediately clear how to interpret them, also because of the ambiguity of the signs KI, IZ and IT that can be read ki or $k e, i z$ or $e z$ and it or et, respectively. Usually, this verb is regarded as an original imperfective in -ške/a-
(e.g. Oettinger 1979a: 326-7). This could indeed ey a meaningful interpretation of the forms 1sg.pres.act. pa-aš-ga-mi, 3sg.pres.act. pa-aš-KI-IZ-zi when read as $p a-$ $a \check{s ̌}-k e-e z-z i, 3$ pl.pres.act. pa-aš-kán-zi, 3sg.pres.act. pa-ǎ̌-KI-IT when read as pa$a \check{s}$-ke-et, 3pl.pret.act. pa-aš-ke-er, 3sg.imp.act. pa-ǎ̌-KI-ID-du when read as pa$a \check{s}$-ke-ed-du and verb.noun pa-aš-ga-u-ua-ar. Although this seems to be an impressive list, I am doubting its correctness. In my view, the 3sg.pres.act.-form $p a-a \check{s}-k i$, which is multiple times attested in MS texts already, it would be unexplicable when we start from an original paradigm in -ške/a-. In my view, it is so aberrant that it must reflect the oldest type. I therefore assume that this form shows that we are dealing with an original hi-inflecting verb pašk- ${ }^{i}$. If the one attestation $[p] a^{?}-a-a \check{s}$-kán-zi indeed belongs here (but note the doubts expressed in CHD), it would even show that we are dealing with an original ablauting stem pāšk- ${ }^{i}$ / pašk-. This inflection would fit the following forms: 1sg.pres.act. pa-aš$k a-a h-h i=/ p a ̆ ́ s k H i /, 3 p l . p r e s . a c t . p a-a \check{s}-k a ́ n-z i=/$ pskánt ${ }^{\text {si }} \mathrm{i}$, 1sg.pres.act. pa-aš-ga$a h[-h u-u n]=/$ páskHon/, 3pl.pret.act. pa-aš-ke-er $=/$ pskér/ and part. pa-aš-kán-t-=/pskánt-/. In my view, the forms pa-aš-KI-IZ-zi, etc. must be read as pa-aš-ki$e z-z i$, showing a stem paškiie/a- ${ }^{z i}$ (also in pa-aš-ki-et, pa-aš-ki-ia-u-en and pa-aš$k i-e[d-d u]$ ), which can easily be explained as a secondary formation on the basis of 3 sg.pres.act. paški. The forms pa-aš-ga-mi and pa-aš-ga-u-ua-ar show a stem paškae- ${ }^{z i}$, inflecting according to the hatrae-class that is highly productive in NH times.
This formal analysis is important for the etymological interpretation of this verb: all etymologies that are based on the assumption that pāšk- ${ }^{i}$ / pašk- is a -ške/a-imperfective originally cannot be correct. This goes for Oettinger (1.c.), who reconstructs *pas-ske-, which he connects with the verb peš- 'to rub' (q.v.) as well as Rikov (1982: 24) and Melchert (1994a: 167) who assume that this verb reflects *pakske/a- from the PIE root *peh ${ }_{2} g_{-}$'fest werden' or *peh ${ }_{2} k$ ' 'festmachen'. Formally, we can only start from a root $* P e s K$ - (for the root structure, cf. the root *mosg- 'marrow'), showing an inflection *PósK-ei, *PsKénti. I must admit that I know of no convincing IE cognates, however.
$\boldsymbol{p a s ̌ k u}$ - $^{z i}$ (Ib1 > Ic2) 'to reject, to ignore; to neglect; to remove': Luw.3sg.pres.act. [pa-aš]-ku-ti (NS), 3pl.pres.act. pa-ǎ̌-ku-u्-u-an-zi (OH or MH/MS), 1sg.pret.act. pa-aš-ku-ua-nu-un (NH), pa[-aš-ku-u]a-a-nu-un (NH), \& pa-aš-ku-uূa-nu-un (NH), 3sg.pret.act. pa-aš-ku-ut-ta (MH/MS), pa-aš-ku-ua-it (NH), 3sg.imp.act. $p a-a \check{s}-k u-t u(\mathrm{NS}) ; 2 \mathrm{sg} . p r e s . m i d d . p a-a \check{s}-k u-i-i t-t a(\mathrm{OH} / \mathrm{NS})$.
Anat. cognates: HLuw. paskw- 'to neglect' (3sg.pres.act. /pask ${ }^{\mathrm{w}} \mathrm{i} / p a-s a ̀-R E L-i$ (SULTANHAN §20)).

PAnat. *Pask ${ }^{w}$ -
See CHD P: 208-9 for attestations. The original stem is pašku-, which is visible in the MS forms paškutta and paškuuanzi. Especially the form 3sg.pret.act. paškutta (and not **paškut) shows that we have to phonologically interpret this stem as /pask ${ }^{\mathrm{w}}-/$. In NH times, the trivial transition into the hatrae-class yielded forms like paškuūānun and paškuuait. In HLuwian, we find a verbal form pa-sà-REL-i 'neglects' which likely is to be interpreted as /pask ${ }^{\mathrm{w}} \mathrm{i}$ / (note the hi-inflection), which would indicate that the PAnat. form was *Pask ${ }^{w}$ - (since $* g^{w}$ would have disappeared in Luwian). This is supported by the PN ${ }^{\mathrm{f}} \mathrm{Pa}$-aš-ku-ua-am-mi-iš (KUB 31.59 ii 4), which formally is to be interpreted as a Luwian participle of a stem pašku(ua)-. I know of no IE cognates however.
paššu- (c.) elevated structure ('step, podium, pedestal or terrace'): nom.sg. ba-aš-$\check{s}[u]$-uš (NH), acc.sg. pa-aš-šu-un, dat.-loc.sg. pa-aš-šu-i (MH/MS), pa-aš-šu-ú-i ((NH), pa-aš-šu-uni $i_{5}(\mathrm{NH}), p a-a \check{s}-s ̌ u-u-i, p a s ̌-s ̌ u-u-i$, dat.-loc.pl. pa-aš-šu-ua-aš (NH).

See CHD P: 211f. for attestations. The exact meaning of this word is not clear, but CHD states that ' $p$. is a raised structure or area [...] on which dignitaries step or stand, and where statues can be erected'. Often we find paššu- translated as 'stone pedestal, rock', based on the formal similarity with paššila- 'stone, pebble', but CHD argues that the word hardly can denote a rock: 'if it were a rock one would expect at least once the det. $\mathrm{NA}_{4}$ '. This means that all traditional etymologies of this word, which presuppose a connection with paššila- 'stone, pebble', are likely to be incorrect (e.g. the equation with Skt. pām̆mu- 'dust'). I do not have a good alternative, however.
${ }^{\mathbf{N A}_{4}}{ }^{\mathbf{p a s}}$ ǎ̌̌uela- (gender unclear) a stone object: dat.-loc.pl. pa-aš-šu-e-la-aš.
This word is hapax in a broken and unclear context. Only the use of the determinative $\mathrm{NA}_{4}$ is indicative that the word must denote a stone object. Often, the word is connected with paššu- (q.v.), but as this latter word probably did not mean 'rock', the connection is quite random. A connection with ${ }^{\left(\mathrm{NA}_{4}\right)}$ paššila'stone, pebble' (q.v.) may seem more likely, but is hard to interpret formally. No further etymology.
$=\boldsymbol{p a t}$ (enclitic particle of specification, limitation and identity) 'the same, the aforementioned (anaphoric); likewise, as before; self; only, exclusively; in addition; rather; even; certainly': = pát (OS).
IE cognates: Av. bā, bāt, bē, bōit (particles of emphasis), Arm. ba, bay (emphasizing particle), Goth. $b a$ (cond. particle), Lith. bà 'really, indeed', OCS bo 'then'.

PIE * $=b^{h} o d$
See CHD P: 213f. for a semantic discussion. This particle is written with the sign BAD only, which in principle can be read pát as well as pít. Although in the older literature the reading = pít sometimes can be found, nowadays this clitic is usually cited as =pát. This is not a fully arbitrary choice: we know that the most common reading of the sign BAD is pát and that words where it should be read pit often are spelled with pí-it as well. Because this clitic is never spelled ${ }^{* *}=p i$ íit, it is likely that we should read = pát here. Moreover, this reading may be supported by the form $a$-ki-pa-a[t-š]a-an (KBo 5.3 iii 31) if this indeed denotes $a k i=p a t=\check{s} a n$. Puhvel (1979a: 217) argued that the particle should be read =pè, however, which he concluded on the basis of his etymological connection with Av. bā 'truly' and Lith. bà 'surely'. Note that although the reading pè for the sign BAD is common in Akkadian texts, it is as far as I know never used in Hittite texts. I therefore reject Puhvel's view.

CHD observes that spellings like a-pí-ía-pát show that the phonological form of this particle is $/=\mathrm{bat} /$ (or $/=\mathrm{bad} /$ ), with lenis $-b$-. This would mean that the quite common etymological connection with Lith. pàt (indecl. particle) 'self, just' that would point to a reconstruction *pot, is impossible (Pedersen 1935: 80-88 and followers).
Within Hittite, I think we can compare =pat to the second part of ap $\bar{a}$ - 'that (near you)'. The first part, $a$-, is likely to be equated with the demonstrative $a$ (aši/uni/ini) which means that $-p \bar{a}$ - is some kind of suffix, reflecting *- $b^{(h)} o$-. If $=p a t$ indeed is cognate to that suffix, then we can equate it with nom.-acc.sg.n. $a p a \bar{t}<* h_{l} o-b^{h}$ ód. The clitic $=p a t$ then reflects unaccentuated $*-b^{h} o d$. The suffix perhaps belongs with "* $b^{h} \breve{\bar{e} / \bar{o} " \text { " (Pokorny 1959: 113) as reconstructed on the basis }}$ of the emphasizin particles Av. bā, bāt, bē, bōiț, Arm. ba, bay, etc.
pāt- / pat-, pata- (c.) ‘foot, leg’ (Sum. GÌR, Akk. ŠE $\bar{E} P U$ (GÌR-PÍ)): nom.sg. GÌR$a s ̌$ (MH/NS), GÌR-iš (MH/NS), acc.sg. GÌR-an (OH/NS), gen.sg. GÌR-aš (NH), GÌR-an (MH/NS), dat.-loc.sg. GÌR-i (MH/NS), abl. GÌR-az (MH/MS), GÌR-za ( OH or $\mathrm{MH} / \mathrm{NS}$ ?), instr. pa-te-et (NS), GÌR-it (MH/NS), acc.pl. pa-a-tu-u[ $\check{s}]$
(MS), gen.pl. pa-ta-a-n=a(OS), pa-ta-a-an (OH/MS), [p]a-a-ta-an(OH/NS), dat.-loc.pl. pa-ta-a-aš (OS),

Derivatives: \& padumma- 'foot(?) (of a bed)' (abl. \& pa-du-um-ma-az-z=i-ia (MH/NS)), ${ }^{\text {GIš }} \boldsymbol{p} \overline{\text { ätiialli- }}$ 'leg, foot (of furniture)' (acc.sg. pa-ti-i_a-al-li-en, dat.loc.sg. pa-ti-i_ia-al-li (NS), dat.-loc.pl. pa-a-ti-ia-al-li-ia-aš (NS), pa-ti-ia-al-li-i्1a$a \check{s}(\mathrm{NS})$ ).

Anat. cognates: CLuw. pāta/i- 'foot' (abl.-instr. pa-ta-ti, coll.pl. GÌR ${ }^{\text {MEŠ }}$-ta, dat.-loc.pl. $p a-a-t a-a n-z a$, gen.adj.nom.-acc.sg.n. pa-a-ta-aš-ša-an-za); HLuw. pada/i- (c.) 'foot' (loc.sg. "PES" pa-ta $5^{-}$' (KARKAMIŠ A15b §12), "PES" pa-tà (SULTANHAN §6), instr. "PES" $p a+r a / i-r i+i$ (ASSUR letters $f+g \S 24$ ), acc.pl. "PES"pa-ti-zi (MARAŞ 4 §13), dat.-loc.pl. "PES"pa-tà-za (KARATEPE 1 §22), "PES" $p a+r a / i-z a$ (SULTANHAN §9)); Lyc. pede/i- 'foot' (abl.-instr. pededi).
IE cognates: Skt. pád- 'foot', páda- 'foot', Arm. ot 'foot', Gr. (Dor.) $\pi \omega$, пo $\delta$ ós 'foot', Lat. pess, ped-is 'foot'.

PIE *pód- / pd-
An etymological interpretation of this word was first given by Friedrich (HW: 165), who convincingly connected it with PIE *pod- 'foot'. Although this connection is generally accepted, it is not easy to interpret the Hittite forms coherently.
An overview of forms can be found in CHD P: 231f.. Note however that there is stated that in IBoT 2.109 ii 25 a nom.sg. GÌR-iš can be found, but this is incorrect: the form in fact is GÌR-aš. This makes nom.sg. GÌR-iš as indeed attested twice on the tablet KUB 9.4 (i 14 and 33) a hapax form. According to CHD this GÌR-iš is to be regarded as a Luwian form, which is possible but not obligatory: KUB 9.4 contains many scribal errors and grammatical singularities, which makes it possible that GİR-iš is just a mistaken form.
On the basis of nom.sg. GÌR-aš and acc.sg. GÌR-an, it is often assumed that we are dealing with an o-stem noun pata-. These forms are found in NS texts only, however. When we look at the oldest attested forms (OS and MS) of this word, we only find plural forms. If we compare acc.pl. pātuš with gen.pl. patān and dat.-loc.pl. patāš, it is hard not to interpret these forms as showing accentual mobility, and subsequently even ablaut: /pắdus/ vs. /pdắn/ and /pdā́s/. Since ablaut is not to be expected in an $o$-stem noun, it is in my view likely that in the oldest stage of Hittite, this word still was a root noun, which was secondarily thematicized in NH times only (compare the development of tuekk- / tukk- to tuekka-). I therefore reconstruct acc.pl. *pód-ms, gen.pl. *pd-óm and dat.-loc.pl.
*pd-ós. Note that in Hittite there is no evidence for an $e$-grade form *ped- as is usually assumed on the basis of Lat. pēs.
The CLuwian attestations of 'foot' need some commentary. Melchert (1993b: 173) cites nom.sg. pa-ta-a[š] (KBo 29.25 iii 5-7) and pa-ta-a-aš (KUB 25.37 ii 28), but the interpretation of these forms are far from ascertained (note that of the first form Melchert himself does not exclude a reading pa-ta-t $[i]$ ). An erg.pl. [pa-$a-t a-a] n-t a$ is cited by Starke 1985: 226 (KUB 35.88 ii 8 ), but to my mind, there is no positive evidence for this addition. This leaves us only with abl.-instr. patati, coll. ${ }^{\text {pl. GİR }}{ }^{\text {MEŠ }}$-ta (interpreted by Schindler apud Watkins 1986: 60 as a dual-form), dat.-loc.pl. pātanza and gen.adj. pātašša/i-. Especially the fact that the alleged nom.sg.-forms are unascertained, leaves the way open for assuming that in CLuwian this word showed $i$-motion, just as we find in HLuwian (acc.pl. patinzi).
padda- ${ }^{i} / \boldsymbol{p a d d}$ - (IIa1 $\gamma$ ) 'to dig (the ground); to bury(?)': 1sg.pres.act. pád-da-ahhi (OS), 3sg.pres.act. pád-da-a-i (OH/NS), pád-da-i (MH/NS), 3pl.pres.act. pád-da-an-zi (MH/NS), pád-da-a-an-zi (MH?/MS), 1sg.pret.act. pád-da-ah-hu-un (NS), 3sg.pret.act. pád-d[a-aš?] (MH?/NS), 3pl.pret.act. pát-te-er (MH/MS); 3sg.pres.midd. pád-da-a-ri; part. pád-da-an-t- (NS); inf.I pát-tu-an-zi (NS), pát-tu-u-ma-an-zi.
Derivatives: patteššar / pattešn- (n.) 'excavation, pit, hole in the ground, breach (in wall)' (nom.-acc.sg. pát-te-eš-šar (MH/MS?), dat.-loc.sg. pát-te-eš-ni ( $\mathrm{OH} / \mathrm{NS}$ ), pát-te-iš-ni (MH?/NS)).
IE cognates: Lat. fodio 'to dig', OCS bodQ 'to stab', Lith. bedù 'to stick, to dig', etc.

PIE $* b^{h} o^{h} d^{h} h_{2}-e i, * b^{h} d^{h} h_{2}$-énti
See CHD P: 235f. for attestations. The verb and its derivative is consistently spelled with the initial sign BAD, which can be read pát as well as pit. CHD therefore cites this verb as "padda- (or: pidda-)" and states that its usual transcription $\operatorname{padd}(a)$ - is an "arbitrary" choice. This is not fully the case, however: if the verb were pidd(a)- (with a reading pit), we would expect that at least a few times it was spelled with initial pí-it- (cf. e.g. the verb piddae- ${ }^{z i}$ to bring, to render' that is spelled pid-da- as well as pi-id-da-). I therefore stick to the usual practice and assume that this verbs has to be read with a vowel $-a$ -
Since Sturtevant (1938a: 107) padd(a)- is generally connected with Lat. fodio 'to dig', OCS bodo 'to stab', Lith. bedù 'to stick, to dig', etc. These latter forms all seem to go back to a root $* b^{h} e d^{h}-$, which is problematic because PIE $* d^{h}$ does
not correspond to Hitt. -tt-. Melchert (1984a: $26^{55}$ ) therefore reconstructs the root as ${ }^{*} b^{h} e d^{h} h_{2}$-, referring to mekki- 'much, many' $<{ }^{*} m e g ' h_{2}-i$ - that shows that $* D h_{2}$ $>$ Hitt. $-T$ - (followed in e.g. LIV $^{2}$ ). Another problem is the fact that padd(a)inflects according to the $\operatorname{tarn}(a)$-class: paddahhi, paddāi, paddanzi. The tarn(a)class mainly consists of verbs that go back to a structure *( Ce ) $\mathrm{CoH}-e i, *(\mathrm{Ce}) \mathrm{CH}$ enti, which yielded Hitt. (Ce)Cāi, (Ce)Canzi. Such a reconstruction is impossible for padd(a)-however. We would rather expect that this verb would have behaved like other verbs with a root structure $* C e C$-, namely $* C o C$-ei, $* C C$-enti $>$ Hitt.
 structure ${ }^{*} \mathrm{CeCh}_{2 / 3^{-}}$end up in the $\operatorname{tarn}(a)$-class: the 3 sg .pres.-form of roots of this structure, *CóCh ${ }_{2 / 3}$ ei, regularly yielded ${ }^{*} \mathrm{CaCai}$ (and not ${ }^{* *} \mathrm{CaCi}$ ), on the basis of which these verbs were taken over into the $\operatorname{tarn}(a)$-class (see harra- ${ }^{i}$ / harr- 'to grind', iškalla- ${ }^{i}$ / iškall- 'to slit, to tear', išparra- ${ }^{i}$ / išparr- 'to trample', malla- ${ }^{i}$ / mall- 'to mill' and šarta- ${ }^{i}$ / šart- 'to wipe, to rub' for the same phenomenon). This would be an additional argument in favour of reconstructing a root $* b^{h} e d^{h} h_{2}$ - and not $* b^{h} e d^{h}$-.
pattai- ${ }^{i}$ /patti- (IIa4 > Ic1, Ic2, IIa1 $\gamma$ ) 'to run, to race; to flee; to fly': 1sg.pres.act. pát-ti-i_a-mi (NH), 3sg.pres.act. pád-da-a-i (OS), pád-da-i, pád-da-a-iz-zi ( $\mathrm{OH} / \mathrm{NS}$ ), 1pl.pres.act. pád-da-a-u-e-ni (NS?), 3pl.pres.act. pát-ti-ịa-an-zi (MH/MS), pát-ti-an-zi (OH/NS), pát-t[e]-an-zi (MH/MS), pád-da-a-an-zi (NH), pád-da-an-zi (NH), 2sg.pret.act. pád-da-it-ta (NH), 3sg.pret.act. [p]ád-da-iš (MH/MS), pád-da-a-iš (NH), pád-da-a-it (MH?/MS?), pá[d-d]a-it (NS), 3pl.pret.act. pát-ta-a-er (NH), 2sg.imp.act. pád-da-i ( OH or $\mathrm{MH} / \mathrm{NS}$ ), pád-da-a-i ( $\mathrm{OH} / \mathrm{MS}$ ?), 2pl.imp.act. pád-da-at-tén $(\mathrm{OH} / \mathrm{NS})$, pád-da-a-at-tén; verb.noun pát-te-i_ia-u-ua-ar (OH/MS), pát -tị-i [a-u-ua-ar] (MS), gen.sg. [pá]d-du-ma-aš (NS), pát-ti-i̇a-u-una-aš (NS); inf.I pád-du-ma-an-zi; impf. pát-te-eš-ke/a- (NS), pád-da-$a-e s ̌-k e / a-(N H)$, pád-da-a-iš-ke/a-(NH), pád-da-iš-ke/a-(NH).
Derivatives: ${ }^{\text {LÚ }}$ patteíant- (c.) 'fugitive' (Akk. MUNNABTUM; nom.sg. pát-teia a-an-za (MH/MS), pát-te-an-za (MH/MS), pát-ti-an-za (MH/MS), pát-ti-ia-an$z a(\mathrm{MH} / \mathrm{NS})$, acc.sg. pát-te-ía-an-da-an (MH/MS), pát-te-an-ta-an (MH/MS), pát-ti-ía-an-da-an (MH/NS), gen. p[át-t]e-ía-an-ta-a[̌̌] (MH/MS), nom.pl. pát$t e-i a-a n-t e-e \check{s}$ (MH/MS), pát-te-an-te-e[š] (NS), dat.-loc.pl. pát-ti-ía-an-da-aš (MH/NS), case? pát-te-íia-an-ta-aš (MH/MS)), ${ }^{(L U ́)}$ patteiantili, ${ }^{(L U ́)}$ pattiiantili (adv.) 'in the manner of a fugitive' (pát-te-an-ti-li (OS), pát-te-ía-an-ti-l[i] (NH), pát-ti-ía-an-ti-li (OH/NS), pát-ti-an-ti-li (NH)), pattiiiali-, paddalli- (adj.) 'swift' (nom.sg.c. pát-ti-i-ia-li-iš (MH/MS), pád-da-al-li-iš (MH/NS), acc.sg.c. pát-ti-ịa-li-in, pát-t[e-ía-li-in] ( OH ?/NS), nom.pl.c. pát-ti-íla-li-e-eš ( OH or MH/MS?),
[pát-t]i-ia-a-li-eš (OH/NS)), pattinu - $^{-2 i}$ (Ib2) 'to run off with, to elope with (a woman), to carry off quickly, to whisk (something) away' (3sg.pres.act. pát-ti-nu$u z-z i$ (OS), pát-ti-nu-zi (OH or MH/NS), pát-te-nu-uz-zi (OH/NS), pát-te-nu-zi ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pres.act. pát-ti-nu-an-zi (OS), 3sg.pret.act. pát-te-nu-ut (MH/MS), 3pl.pret.act. pát-te-nu-er (NS), 3sg.imp.act. pát-te-nu-ud-du (OH or MH/NS); impf. pát-te-nu-uš-ke/a-).

IE cognates: Skt. pátati 'to fly', Gr. गéto ${ }^{\prime}$ aı 'to fly' etc.
PIE *pth ${ }_{l}$-ói-ei, *pth $h_{l}-i$-énti
See CHD P: 352f. for attestations (under the lemma "piddai-, pittiya/e-, pitte-"). Almost all forms of this verb and its derivatives are spelled with an initial sign BAD, which can be read pát or pit. Traditionally, the verb is transliterated with pit-, which is done on the basis of two instances where we (allegedly) find pí-it(cf. Tischler HEG P: 624). The first instance is KUB 56.46 vi 3, which is transliterated in its edition StBoT 25: 102 as (line 10) $t=a-a s ̌ ~ p i ́-i t-t a-i[\ldots]$, whereas CHD cites the line as $t=a-a \check{s} p i-i t-t[a-i]$. The meaning of this sentence is ascertained by the fact that it is the NS duplicate of the OS text KBo 17.43 where we find: i (6) $t=a-a \check{s} \mathrm{BAD}-d a-a-i$ 'he runs off'. When we look at the handcopy of KUB 56.46, however, we see that this line is rather damaged: ". The word ta-aš indeed is clearly visible, but right afther this word the tablet breaks off, leaving us only with traces of the lower parts of the following three signs. The traces of the first sign (vertical wedge and a winkelhaken) could indeed be the lower part of the sign BI (= pí), but could just as well be interpreted as the sign BAD (=pát/pit). The traces of the second sign (vertical wedge, winkelhaken and the lower part of a horizontal wedge) could indeed be read as the lower part of the sign IT, but in my view could be the lower part of the sign TA as well. The only trace of the third sign is the head of a vertical wedge, after which the tablet breaks off . This indeed could fit a sign TA, but a sign I is possible as well. So, instead of reading this passage as | reading this passage as =ta-aš pit-tac-i[..].

A second instance of a spelling pí-it- is found in KBo 3.34 ii (35) ni-ku-ma-anza ú-ua-a-tar pí-it-ta-iz-zi, which, according to CHD (P:354) can be translated either 'naked he runs a review' or 'naked he carries water'. The form pi-it-ta-iz-zi is inflected according to the hatrae-class and not according to the dail/tiianziclass, and therefore I assume that it rather belongs with pittae ${ }_{-}^{z i}$ 'to bring, to render' than with pattai- ${ }^{i}$ / patti- (although we do find hatrae-class inflected
forms in the paradigm of pattai- / patti- in NH texts due to the enormous productivity of this class in that period).

In the OS text KBo $7.14+$ KUB 36.100 we find obv. 27 [...]x pi-ti-nu-an har-k[án-zi], which by some is interpreted as belonging to the verb that normally is spelled BAD-ti-nu- and therefore would indicate a reading pit. Nevertheless, the context is that broken that its meaning cannot be independently determined, and therefore I will leave this form out of consideration (thus also CHD P: 365). Puhvel (1979a: 212) cites a form ${ }^{\text {Lú }}$ píte-an[ (KUB 40.5 ii 10), which he interprets as showing that BAD-te-an-t- has to be read as pit-te-an-t-. Although the handcopy of this text indeed seems to show the sign $\mathrm{BI}=$ pí, $\mathrm{CHD}(\mathrm{P}: 363)$ cites this form as "'LÚ pit-te-a[n]- ${ }^{\ulcorner } t i-l l^{\lceil }[i] "$, with the sign BAD.
All in all I conclude that there are no secure examples of this verb that are spelled with initial pí-it-. This means that we only have spellings with the sign BAD. In the majority of cases in Hittite, this sign has to be read as pát, which I therefore propose to do for this verb as well: pattai- ${ }^{i}$ / patti- (but note that in all the other literature this verb is cited as pittai-, pitti- or pittiiia-).
The oldest forms of this verb clearly point to the dāi/tiiianzi-inflection: pattāi / pattiianzi. In younger texts we find forms that show a stem pattiie/az ${ }^{-2 i}$ (which is common in dail/tiianzi-verbs) and pattae- ${ }^{z i}$ (according to the hatrae-class which is highly productive in NH times).

Already since Sturtevant (1927c: 221) this verb is connected with Skt. pátati 'to fly', Gr. тéто $\mu a$ 'to fly', etc. The exact root-shape of these forms is unclear, however: $\mathrm{LIV}^{2}$ cites three different roots, *peth $1^{-}$'fallen', *peth $2^{-}$'ausbreiten' and *peth $2^{-}$'(auf)fliegen' (although the latter two probably have to be equated, see under pattar / pattan- 'wing; feather'). As I have explained in Kloekhorst.fthc.a, the dāi/tiiianzi-class verbs have to be analysed as reflecting *CC-oi- / *CC-i-, i.e. the zero-grade of a root followed by an ablauting suffix *-oi-/-i-. In the case of pattai-/patti-, this would mean that we have to reconstruct *ptH-ói-ei, *ptH-i-énti. Note that on the basis of this reconstruction as well, I phonologically interpret pát-ta-a-i, pát-ti-ía a-an-zi as /ptái/, /ptiánt ${ }^{\text {si}} \mathrm{i}$ (so with an initial cluster /pt-/, which may explain the fact that no spellings with **pa-at- are attested).
The derivative ${ }^{\text {LÚ }}$ patteiant- 'fugitive' is interesting. Semantically, we would expect that the notion 'fugitive' < '*the one who has fled' would be expressed by a participle, which in the case of pattai-/patti- should have been $* p t H-i$-ent- > pattiiant-. This form indeed is attested, but in the younger texts only. In the oldest texts (OS) we only find pát-te-ia-an-t-, which implies a reconstruction *ptH-ei-ent- (cf. ${ }^{\text {Lú }}$ maiant- 'adult man' $<*_{m}$ 2-ei-ent- besides part. miiant- 'grown' <
*mh $h_{2}$-i-ent-). If this analysis is correct, it would imply that reconstructing a root *peth $2^{-}$now has become impossible, as ${ }^{*}$ pth $h_{2}$-ei-ent- would have given **pattaiant-. I therefore reconstruct *pth ${ }_{1}$-ei-ent-.
The causative pattinu- is spelled pát-ti-nu- in the oldest texts (OS), but sometimes pát-te-nu- from MH times onwards. Either this is due to influence of the derivative patteiant-, or to the confusion of the signs TE and TI in younger times (cf. Melchert 1984a: 137).
${ }^{\text {(TÚG) }}$ patalla- (gender unclear) 'puttee(?), leg wrapping(?)': instr. pa-tal-li-it (MH/NS), broken pa-ta-al-la[-..] (NH).
Derivatives: patalliie/a- ${ }^{z i}$ (Ic1) 'to tie feet, to fetter' (3pl.imp.act. pa-tal-li-ia-an$d u(\mathrm{MH} / \mathrm{NS})$ ).

See CHD P: 238 and 240 for attestations. The word is probably derived from $p \bar{a} t-$ / pat- 'foot' (q.v.). The connection with ${ }^{\text {(GIŠ) }}$ patalha- 'sole of foot; fetter' is unclear. If they belong together, patalha- should reflect $* p(o) d-l h_{2} o-$, whereas patalla- $<* p(o) d$-olh ${ }_{2} O$ -
(GIŠ) patalha- (c.) 'sole of the foot; way of acting, behaviour; wooden fetter': nom.sg. pa-tal-ha-aš (OH/NS), ba-tal-ha-aš (NH), acc.sg. pa-ta-al-ha-an (MS?), pa-tal-ḩa-an (NS), abl. pa-tal-ḩa-z=a-at=kán (MH/NS), instr. pa-tal-hi-it (MH/NS), acc.pl. pa-tal-hu-uš (NH).
Derivatives: patalhae- ${ }^{z i}$ (Ic2) 'to fetter(?)' (1sg.pres.act. [pa-]tal-ha-e-mi (OS), part. 4 pa'-tal-ha-an-t-(NH)).

Anat. cognates: CLuw. patalha(i)- 'to fetter(?)' (inf. pa-tal-ha-ú-na, part. [pa-tal]-ha-a-im-ma), patalhiiamman- 'fettering(?)' (nom.-acc.pl. pa-tal-hi-ia-ma).

See CHD P: 238f. for attestations. Semantically, a connection with pāt- / pat'foot' (q.v.) seems likely, but the formation nevertheless remains opaque. A cluster - lh- can only have survived if it reflects $* \mathrm{Clh}_{2 / 3} V$ (whereas $\left.* V l H V>V l l V\right)$. Combining these arguments would lead to a reconstruction ${ }^{*} p(o) d l h_{2} O-$. The connection between patalha- and patalla- 'fetter(?)' (q.v., with derivative patalliiee $a^{z i}$ 'to tie feet, to fetter') is unclear. If patalha- reflects *p(o)d-lh2o-, does patalla- then reflect $* p(o) d-$ olh $_{2} O-$ ?
${ }^{(\mathrm{UZU})}$ pattar / pattan- or ${ }^{\text {UZU }}$ pettar / pettan- (n.) 'wing, feather' (Akk. KAPPU): nom.-acc.sg. pát-tar (MS), dat.-loc.pl. pád-da-na-aš (OH/NS), pát-ta-na-aš (NH).

Derivatives: pattarpalhi- (c.) an oracle bird, lit. 'broad-winged' (nom.sg. pát-tar-pal-hi-iš (NH), pát-tar-pal-hi-eš (NH), acc.sg. pát-tar-pal-hi-in $(\mathrm{NH})$, pát-tar-pal-hi-en $(\mathrm{NH})$, gen.sg. pát-tar-pal-hi-ịa-aš $(\mathrm{NH})$, nom.pl. pát-tar-pal-hi-iš $(\mathrm{NH})$, acc.pl.? pát-tar-pal-hu-[uš?] (NH)).
IE cognates: OHG fedara, ON fjøðr 'feather', fiðri 'feathers’, Gr. $\pi \tau \varepsilon \rho o ́ v$, Lat. penna, Skt. pátra- 'wing'.

PIE *póth $h_{2}-r / *$ pth $_{2}$-én- or *péth $h_{2}(\bar{o}) r / *$ peth $h_{2}$-én-
See CHD P: 240f. for attestations. The word is always spelled with the sign BAD, which in Hittite usually is to be read pát, but in principle could be read pít/pét as well. This is the reason for CHD to cite this word as "(UZU) pattar or ${ }^{(U Z U)}$ pittar", but consensus has it to read this word as pattar. Note that with a reading pattar, this word would become homophonic to ${ }^{\text {(GI, GIŠ) }}$ pattar, pattan- 'basket' (of which a reading pat- is ascertained because of occasional spellings with pa-at-). Some scholars have argued that pattar 'basket' is named after pattar 'wing, feather' because it was feather-shaped. If this is correct (but there is not a shred of evidence for such a form of the basket), it would prove that 'wing, feather' is to be read as pattar and not as pittar.

The word clearly belongs with the PIE root *pet $(H)$ - 'to fly, to fall', the exact form of which is dubious. $\mathrm{LIV}^{2}$ distinguishes three roots: *peth $1^{-}$'to fall' (Gr.
 'to spread out' (Gr. $\pi i ́ \tau v \eta \mu \mathrm{t}$ 'to spread out'). In my view, it is likely that *peth $2^{-}$ 'to fly' and *peth $2^{2}$ ' 'to spread out' are identical, especially if 'to spread out' is used for 'wings'.
The word belongs to the $r / n$-class, but its precise formation is unclear. If we read the sign BAD with $-a$-, the nom.-acc.sg. pattar seems best explained by assuming a proterodynamic *pót $(H)$-r. The oblique stem pattan- (in dat.-loc.pl. pattanaš) could be phonologically interpreted either as /p(a)tn-/ or as /p(a)tan-/. The first interpretation would fit a hysterodynamic preform *pt(H)-n-ós best, whereas the second interpretation could reflect proterodynamic ${ }^{*} p t(H)-V n-(o) s$. Normally, such proterodynamic oblique cases have a suffix-syllable -en-, which in principle should yield Hitt. -en- (e.g. pahhuenaš << *ph2-uén-s, uidenaš << *ud-én-s). If the root was *peth $2^{2}$, however, then $* h_{2}$ could be held responsible for colouring *-en- to -an-: *pth2-én-s >> pattanaš (with trivial introduction of the full grade in the root and the replacement of the gen.-ending by ${ }^{*}$-os, so virtually *poth ${ }_{2}$-en-os). Note that this would exclude reconstructing a root *pet- or *peth ${ }_{1}$. If we read the sign BAD with the vowel -e-, so pettar / pettan-, we would have to adept our reconstruction to *péth ${ }_{2}-(\bar{o}) r, p^{2}$ peth $_{2}$-én-os.

The other IE words for 'feather' or 'wing' show traces of an $-r / n$-stem, too: OHG fedara, ON fjoðr 'feather', fiðri 'feathers’ reflect *pétrō-; Gr. $\pi \tau \varepsilon \rho o ́ v<$ *pt-er-; Lat. penna < *pet-n-; Skt. pátra- 'wing' < pe/ot-ro-. Note that almost all these forms show e-grade in the root, which could perhaps be an argument for interpreting the Hittite word as pettar / pettan-.
(GI, GIŠ) pattar / pattan- (n.) 'basket (made of wicker or reed)': nom.-acc.sg. pa-attar (OS), pát-tar (OS), pád-da-r=a-a=š-ša-an (OS), dat.-loc.sg. pa-at-ta-ni (OS), pád-da-ni (OS), [p]át-ta-ni-i (OS), pád-da-ni-i (OS), pád-da-a-ni (OS), pát-ta-ani (OS), abl.? pád-da-n[a-az] (NS), instr. pát-ta-ni-it (OH/NS), pa-at-ta-ni[-it?] (OS), case? pád-da-na-aš (OH/NS).

See CHD P: 241f. for attestations. Although the usual spelling of this word is with the sign BAD (which, besides pát can be read pit/pét as well), the occasional spellings with initial pa-at- (in OS texts only) clearly indicate that we have to interpret this word as pattar / pattan-. The word demotes some kind of basket (made of wicker or reed) in which all kinds of things are carried. Formally, the word seems to be homophonic with ${ }^{(\mathrm{UZU})}$ pattar / pattan- 'feather, wing' (if this word should not be read pettar / pettan-), which made some scholars think that the basket was feather-shaped vel sim. If this indeed is the case, this could be an argument for reading pattar 'feather' as pattar definitively (it is attested with the sign BAD only).
The fact that this word is (well) attested from OS times onwards, and the fact that it is an $-r / n$-stem makes it probable that it is an inherited word. The nom.acc.sg. pattar seems to point to *Pót-r. The oblique cases show two different forms, both occurring in OS texts already: dat.-loc.sg. pattan̄̄ besides pattāni. The first one seems to be hysterodynamic (*Pt-n-éi), whereas the second one proterodynamic (*Pt-ón-i). Perhaps this situation is to be compared to ēšhar / išhan- and uttar / uddan- where originally proterodynamically inflected nouns show hysterodynamic accentuation in synchronic Hittite.
The root etymology is difficult. Rieken (297ff.) connects this word with the IE root * peth $_{2}$ - 'to spread out', but I do not understand the semantic connection. See at the lemma ${ }^{(\mathrm{UZU})}$ pattar / pattan- 'wing, feather' for the possibility that this word is identical to 'basket'. Other etymologies include connections with Skt. pátra'bowl, vessel' (but this reflects *peh $3_{3}$ tro- from *peh $3^{-}$'to drink') and Gr. $\pi \alpha \tau \alpha ́ v \eta$ 'dish' (difficult to judge formally). All in all, the etymology of this word is not fully clear.

GIŠ paddur / paddun- (n.) 'mortar(?)': nom.-acc.sg. pád-du-ur (OH?/NS), dat.loc.sg. pát-tu-ni-i ( OH ?/NS), pád-du-ni-i ( OH ?/NS).

Anat. cognates: CLuw. *battur / battun- (n.) 'mortar' (abl.-instr. ba-at-tu-na-a$t i)$.

See CHD P: 247f. for attestations and discussion. On the basis of the Hittite contexts, the exact meaning of ${ }^{\text {GIŠ }}$ paddur / pattun- cannot be determined: it is clear that it refers to some object, and the consistent use of the determinative GIŠ indicates that that object is made of wood. In a CLuwian context, we find an abl.instr. battunāti that glosses the sumerogram ${ }^{\text {GIŠ}} \mathrm{NÀGA}$ 'mortar', however. If this CLuw. battun- is to be equated with the oblique stem of Hitt. GIŠ paddur / paddun-, then a meaning 'mortar' for the latter word is likely as well. Moreover, it would show that the sign BAD, which can be read pát as well as pit and with which all the Hittite forms are spelled, should be read as pát in this word.
Rieken (1999a: 357f.) remarks that the oxytone accentuation/patuní/ is unparalleled in Hittite -uer-/-uen-stems, and therefore assumes a Luwianism. She proposes to connect this word with peran pattunaš, a utensil for carrying (see under peran ped(d)unas̆). See there for a discussion.
$\boldsymbol{p e}(-)$ (prev.) 'away, thither': see pe har(k)- ${ }^{z i}$ 'to have, to hold', pehute ${ }^{z i} /$ pehut'to lead, to bring', peie- ${ }^{z i}$ / pei- 'to send', penna- ${ }^{i} /$ penn- 'to drive (there)', peššiie/a- ${ }^{z i}$ 'to throw away', peda- $/$ ped-'to take, to carry', paii- ${ }^{z i} /$ pai- 'to go'.

PIE * $h_{1} p-o i$
The preverb pe- 'away, thither' functions on a par with the preverb $u$ - 'hither' in the sense that both can be prefixed to a verb to give it an extra semantic element of direction. The two preverbs function as opposites: peda- / ped- 'to bring (away)' vs. $u d a-^{i} / u d-$ 'to bring (here)' (besides the simplex $d \bar{a}^{-}{ }^{i} / d$ - 'to take'): penna- ${ }^{i} /$ penni- 'to drive away' vs. ūnna- ${ }^{i} / \bar{u} n n i-$ 'to lead here' (besides the simplex nai- ${ }^{i}$ / *ni- 'to lead').
The exact interpretation of $p e$ - is in debate, especially because in the verb paii- ${ }^{z i}$ / pai- 'to go' (antonym of ue- ${ }^{z i} /$ una- 'to come' from the simplex $i_{-}{ }^{z i}$, ie/a- ${ }^{\text {tua(ri) }}$ 'to go’) no vowel -e-can be found. According to Melchert (1994a: 133), pe-must reflect *pĕ, which he concludes on the basis of an equation of Hitt. peššiie/az- ${ }^{z i}$ with "HLuv. pa-si-ya-". It is unclear to me, however, to which form he refers: I have not been able to find any verb pasiia- (or noun, for that matter) in the HLuwian corpus (see also at peššiie/a- ${ }^{z i}$ ). In order to explain the verb paini- ${ }^{z i}$ / pai-, Melchert (1994a: 177) states that the preform *pe- $h_{1} i$-enti regularly yields
*paianzi due to the sound law *eh $i \underset{l}{i}>$ Hitt. ai. He then assumes that the stem paihas spread throughout the paradigm, replacing the full-grade stem *pe- $h_{1} e i-$ which regularly should have given Hitt. ${ }^{* *} p \bar{e}-$. In my view, the development $* e h_{1} i>a i$ cannot be substantiated: all alleged examples of it (e.g. dāi<*daie $<$ * $\left.d^{h} e h_{1} i-e i\right)$ have to be explained differently (I reconstruct $d \bar{a} i<* d \bar{a} i e ~ a s ~ * d^{h} h_{1}$-ói$e i)$. All in all, Melchert's reconstruction of pe- as *pĕ must be incorrect.
Eichner (1973a: 78) reconstructs pe- as *poi. The idea is that in isolation *poi monophthongizes to pe, but before vowels yield pai- as visible in paii- ${ }^{z i}$ / pai-. Although I do not think that Eichner's interpretation of the latter verb is fully correct (he assumes that *poi-hilénti regularly yields *paianzi > pānzi, whereas e.g. *h $h_{2} u h_{1}$ iénti $>\mathrm{OH}$ huianzi 'they run' shows that such a preform should have yielded OH **paianzi with a preserved intervocalic $-\underline{i}-$ ), I do accept his idea that the $-e$ - of pe- goes back to *-oi-. According to Eichner, *po- $i$ is the old " $i$ Lokativ" corresponding to BSl. *po ("endungsloser Lok.") and Iran.-Gr. *po-ti ("Adverbialkasus"). Another possibility would be to connect pe- 'away, thither'
 that reflect *hep-i. I therefore reconstruct pe- as *hip-oi.
pe har(k) ${ }^{z i}$ (Ia4) 'to have, to hold, to keep possession of; to hold ready; to present, to bring': 3sg.pres.act. pé-e har-zi (MH/MS, OH/NS), 1pl.pres.act. pé-e har-ú-e-ni ( OH or $\mathrm{MH} / \mathrm{NS}$ ), 2pl.pres.act. pé-e har-te-ni ( OH or MH/NS), 3pl.pres.act. pé-e har-kán-zi (MH/MS, OH/NS), 1sg.pret.act. pé-e har-ku-un (NH), 3sg.pret.act. pé-e har-ta, pé-e har-da, 3pl.pret.act. pé-e har-ke-er (NH), pée har-ker (NS), 3sg.imp.act. pé-e har-d[u] (NH), 2pl.imp.act. pé-e har-tén ( OH or $\mathrm{MH} / \mathrm{NS})$; part. pé-har-kán (NH).

PIE *h $h_{1}$ poi $+{ }^{*} h_{2}$ erk-
See CHD P: 253 for attestations (note that there 3sg.pret.act. pé-e har-ta (often) and pé-e har-da (KBo 18.54 obv. 9) are omitted). The preverb is almost consistently spelled pé-e, except in the one really univerbated form pé-har-kán. Although this latter form shows that eventually the verb and preverb were univerbated, MH forms like KUB 26.17 ii (12) pé-e=pát har-kán-zi show that this was not the case in older Hittite.
See at $\operatorname{har}(k))^{z i}$ and $p e(-)$ for further etymology. According to Watkins (1970: 73) a similar formation can be found in Lat. porceō 'to prevent, to restrain' < *po + arceō.
pehute- ${ }^{z i} /$ pehut- (Ia1) 'to lead, to bring, to conduct (there)': 1sg.pres.act. pé-e-ḩu-te-mi (MH/MS), 2sg.pres.act. pé-e-hu-te-ši (OH?/NS?), 3sg.pres.act. pé-hu-te$z i$ (OS), pé-hu-te-ez-zi (OS), pé-e-hu-te-ez-zi (OH/MS), pé-e-hu-te-zi (NH), [pé-]e-hu-ut-te-zi (1x, NS?), 1pl.pres.act. pé-e-hu-tu-um-me-e-ni (NH), 2pl.pres.act. pé-e-hu-«te->et-ta-ni (OH/MS), pé-e-hu-te-et-te-ni (MH/MS, $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pres.act. pé-e-hu-da-an-zi (OS), pé-hu-da-an-zi (OS? or MS?), [pé]-e-hu-te-en-zi (1x), 1sg.pret.act. pé-e-hu-te-nu-un (OH/NS), pé-hu-te-nu-un ( $\mathrm{OH} / \mathrm{NS}$ ), 2sg.pret.act. pé-e-hu-te-eš (NS), pé-e-hu-te-et (NH), 3sg.pret.act. pé-hu-te-et (MH/MS, OH/NS), pé-e-hu-te-et (MH?/MS?, OH/NS), 2pl.pret.act. pé-e-hu-te-et-te-en (OH/NS), 3pl.pret.act. pé-hu-te-er (MH/MS), pé-e-hu-te-er (MH/MS), 2sg.imp.act. pé-hu-te (MH/MS), pé-e-hu-te (NH), [pé-e-h]u-ti, 3sg.imp.act. pé-hu-te-ed-du (MH/MS), 2pl.imp.act. pé-e-hu-te-et-tén (OH/MS), pé-e-hu-te-et-te[-en] (OH/NS), 3pl.imp.act. pé-e-hu-da-an-du (NH); part. pé-e-hu-da-an-t- (NH), pé-hu-da-an-t- (MH/MS); impf. pé-hu-te-eš-ke/a- (NH), [pé]-e-hu-te-eš-ke/a-(NH), [pé-e-h]u-te-iš-ke/a-(NH).

PIE *h $h_{1}$ poi- $h_{2}$ ou- $d^{h} e h_{1} t i / * h_{1}$ poi- $h_{2}$ ou- $d^{h} h_{1}$ enti
See CHD P: 257f. for attestations. Because of the spelling BI-e-hu-, which clearly must be read pé-e-hu-, the spelling BI-hu-must be read pé-hu- as well. The verb denotes 'to lead, to bring (there)' and functions as the opposite of uuate- ${ }^{z i}$ / uuat'to bring here'.
Oettinger (1979a: 125, following Watkins 1969a: 69) analyses this verb as *p $\bar{e}$ $+h_{2} a u+d \bar{e}-$, which seems basically correct to me. The element $* h_{2} a u$ is equated by Oettinger with $h u$ as found in ehu 'come!'. I agree with him, but would further equate this element with the prefix $u$ - 'hither', which I reconstruct as $* h_{2} o u$. The verbal stem *te- ${ }^{z i} / t$ - evidently goes back to PIE $* d^{h} e h_{l^{-}}$'to put, to place' (see at $\left.t \bar{e}-{ }^{z i}\right)$. All in all, I reconstruct * $h_{l}$ poi- $h_{2}$ ou- $d^{h} e h_{1}-t i / * h_{l}$ poi- $h_{2}$ ou- $d^{h} h_{l}$-enti.
peíianae- ${ }^{z i}$ (Ic2) 'to reward (someone)': 1sg.pres.act. pé-íia-na-a-mi (MH/MS), pé-îa-na-mi (NH), 3sg.pres.act. pé-ía-na-a-iz-zi (MH?/MS?), pé-ía-na-iz-zi (MH?/MS?, OH/NS), pé-i-ina-na-iz-zi (NH), 3pl.pres.act. pé-íia-na-an-zi, 3sg.pret.act. pé-ía-na-it ( $\mathrm{OH} / \mathrm{NS}$ ), pé-ia-na-a-it (NH), 2pl.imp.act. [pé-i]a-na-at-te-en (NS); inf.I pé-ía-na-u-an-zi (OH?/NS), pé-ía-na-u-uূa-an-zi, pé-e-íia-na-u-ua-an-zi; impf. pé-ia-ni-iš-ke/a- (NH).

Derivatives: peianazziie/a- ${ }^{(t) a(r i)}$ (IIIg) 'to be rewarded' (2sg.pres.midd. pé-ia$n a-a z-z i-a t-t a, 3$ pl.pres.midd. [pé?-i] $\left.a^{?}-n a-a z-z i-a n-d a\right)$.

See CHD P: 249f. for attestations. It is not fully clear whether we are dealing with a verb piianae- or peianae-. The latter interpretation is obligatory in one form, viz. BI-e-ìa-na-u-ua-an-zi, which must be read pé-e-íla- =/peia-/. Most other forms are spelled with BI-ia-, which normally would stand for pi-ia-, but in principle can be read pé-ia- as well. Two forms are spelled BI-i-i ia-, which seem to point to pí-i-i_ia-, but if necessary, could be read pé-i-ia- =/peia-/ as well. I therefore cite this verb as peianae- ${ }^{z i}$ here.

The verb clearly belongs to the hatrae-class, which means that it is denominative. At first sight we would assume that it is derived from a noun *peiana-, but since I know of no other examples of hatrae-verbs that end in -anae-, I am wondering to what extent it is possible to assume that the basic noun was *peian- (an $n$-stem). This latter noun would structurally be comparable to e.g. me(i)an- 'range (of a year), extent'.

At first sight, this *peian-, which probably meant 'reward' or sim., seems to be connectable with $p a i^{-}{ }^{i} / p i$ - 'to give' (q.v.). If the $e$-vowel of peianae- is real, this is difficult to coincile with pai-/pi-, however. Therefore, one could perhaps better assume a connection with peie-zil pei- 'to send' (q.v.). This would mean that peianae- goes back to virtual $* h_{1}$ poi+h $h_{1 / 3} i h_{1}$-on-oie/o-. See at peie- ${ }^{z i} /$ pei- for further etymology.

Note that Tischler (HEG P: 611f.) cites this verb under "piyannai-/piyanniya-", with which he means the imperfective piinanna- ${ }^{i}$ / piinanni- (see under pai- ${ }^{i} /$ pi- ' $^{\text {'to }}$ give'). This is incorrect: not only do the forms of the verb peianae- (or piianae- if one chooses to read it thus) specifically not fit the paradigm of piianna/i- (for which we would expect *piizannahhi, *piiannatti, *piiannai, *piįanniueni, *piianništeni, *piianniianzi), also the single spelling of $-n$ - makes peianaeclearly distinct from the imperfective piianna/i- (imperfectives in -anna/i- are consistently spelled with geminate $-n n-$ ).
peie. $e^{z i} /$ pei- $(\mathrm{Ia} 1>\mathrm{Ic} 1>\mathrm{Ic} 2)$ 'to send’: 1sg.pres.act. pé-i-i-ia-mi $(\mathrm{MH} / \mathrm{MS})$, pé-i-e$m i \quad(\mathrm{MH} / \mathrm{NS})$, pé-e-i-mi ( $\mathrm{OH} / \mathrm{NS}$ ), pé-ia-mi ( NH ), 2sg.pres.act. pé-i-e-ši (MH/MS), 3sg.pres.act. pé-i-e-ez-zi (OS), pé-i-e-zi (OH/NS), pé-e-ez-zi (MH/MS), pé-e-ía-zi (MH/NS), pé-e-i-i-ia-i[z-zi] (NS), 3pl.pres.act. pé-e-i-ia-an-zi (MH/MS?), pé-i-i̇a-an-zi, pé-i-e-an-zi (NS), 1sg.pret.act. pé-i-e-nu-un (MH/MS), 3sg.pret.act. pé-i-e-et (OS), 3pl.pret.act. pé-i-e-er (OS? or OH/MS?), pé-i-er ( $\mathrm{OH} / \mathrm{NS}$ ), 2sg.imp.act. pé-i-e-ía (MH/MS), pé-i-ía (NS); 3pl.pres.midd. pé-an-da$r i$ (or pí-an-da-ri and then belonging to pai- ${ }^{i} / p i-$ ?); part. pé-e-ía-an-t- (MH/MS),
 (NH); impf. pé-e-i-iš-ke/a- (MH/MS), pé-e-eš-ke/a- (MH/MS).

Derivatives: peškattalla-, pe(ía)škattalla- (c.) 'deliverer' (nom.sg. pé-e-iš-kat-tal-la-aš (NS), [p]é? -ida-aš-kat-tal-la-aš (NS), [p]é-iš-kat-tal-la-ǎ̌ (NS), pé-iš-ga-ta[l-la-aś]), see peianae- ${ }^{z i}$.
IE cognates: Gr. $\bar{\imath} \eta \mu \mathrm{I}$ 'to release, to make go, to let go', Lat. iaciō, iēci 'to throw'.

PIE $h_{l}$ poi $+* h_{l / 3} i e h_{l}-t i / h_{l}$ poi $+* h_{1 / 3} i h_{l}$-enti
See CHD P: 261f. for attestations. It is difficult to decide how to read the stem. The verb is consistently spelled with an initial sign BI, which can be read pi as well as pé. On the basis of spellings like BI-e-i-ía-an-zi and BI-e-ía-an-za, CHD choses to interpret the stem as peiie/a-, and to read all attestations as written with pé-, which I have followed. The verb means 'to send (there)' and contrasts with $u i e^{-z i} / u i-$ 'to send (here)'. Therefore, it is likely that it shows the preverb pe- (see there for its etymology), which contrasts with $u$-. Since Pedersen (1938: 198) this verb is generally connected with Gr. Ì $\eta \mu$ 'to release, to make go, to let go', Lat. iaciō, iēci 'to throw', which probably reflects *Hieh $l_{1}$ (for the first laryngeal, cf. Peters 1976: Gr. İ $\eta \mathrm{L}$ < * Hi-Hieh ${ }_{1}$-mi).
The exact interpretation of the Hittite formation is difficult. At first sight, we seem to be dealing with a -ie/a-verb (pé-i-ia-mi/peiami/ vs. pé-i-e-ez-zi /peiet ${ }^{\mathrm{s}} \mathrm{i} /$ ), which seems to point to $p e+* H_{1} h_{1-i} e / o$. If we assume a root-present, however (which is the usual formation in univerbated verbs with pe-), we have to reconstruct $p e+* H i e h_{1}-t i, p e+* H_{1}$-enti. These latter forms should regularly yield Hitt. /peiet ${ }^{\mathrm{s}} \mathrm{i}$ /, /peiant ${ }^{\mathrm{s}} \mathrm{i}$ /, as is attested in the oldest texts: pé-i-e-ez-zi (OS) and pé-$e-i-i$ -ie/a-class is trivial (cf. uez-zi /uua- 'to come' on the basis of ue-zzi/uu-anzi).
Note that the difference in development between pānzi 'they go' < *paianzi < *h $h_{l}$ poi- $h_{l}$ ienti vs. peianzi $<$ pe-*Hihlenti shows that the univerbation between peand *Hieh $h_{l}$ occurred later than the univerbation between $* h_{l}$ poi- and $* h_{1} e i$-. Within the relative chronology of Hittite, the sound law *-oi\# > -e\# must be placed between these two univerbations. The initial laryngeal of $*$ Hieh $_{l^{-}}$must have been $* h_{1}$ or $* h_{3}$, since $* h_{2}$ should have left a trace ( $p e+* h_{2}$ ieh $_{l^{-}}>* *$ pehiie-).
penna- ${ }^{i}$ / penni- (IIa5 > Ic1, IIal $\gamma$ ) 'to drive (there); to accept(?), to acknowledge(?)': 1sg.pres.act. pé-en-na-ah-hi (MH/NS, pé-na-ah-hi (MH/NS), 2sg.pres.act. pé-en-na-at-ti (NH), 3sg.pres.act. pé-en-na-i (OS), pé-en-na-a-i ( $\mathrm{OH} / \mathrm{NS}$ ), pé-e-en<-na>-i (NS), 1pl.pres.act. pé-en-ni-ú-e-ni (OS), 3pl.pres.act. pé-en-ni-ịa-an-zi ( $\mathrm{OH} / \mathrm{MS}$ ), pé-en-na-an-zi (MH/MS?), pé-in-na-an-zi ( $\mathrm{OH} ? / \mathrm{NS})$, pé-e-en-ni-i्1a-an-zi (NS), 1sg.pret.act. pé-en-na-ah-hu-un (NS), 3sg.pret.act. pé-
en-ni-iš-ta (OH/OS? or MS), pé-en-ni-eš-ta (OH/MS), pé-en-ni-iš (MH/MS), pé-en-ni-eš (MH/MS), pé-en-ni-it (MH/NS), pé-en-na-aš (NS), 3pl.pret.act. pé-en-ni-er (MH/MS?), pé-en-ner (MH/MS?), 2sg.imp.act. pé-en-ni (MH/MS), 2pl.imp.act. pé-en-ni-iš-tén (MH/NS); part. pé-en-ni-įa-an-t-(NH), pé-en-na-an$t$ - (NS); verb.noun gen.sg. pé-en-nu-та-aš (NH); inf.I pé-en-nu-ma-an-zi (MH/NS), pé-en-nu-um-ma-an-zi (NH), pé-en-nu-an-zi (MH/NS), pé-en-ni-ia-u-an-zi (MH/NS); impf. pé-en-ni-eš-ke/a- (MH/NS).

PIE pe+*noiH-ei, pe+*niH-enti
See CHD P: 264f. for attestations. The oldest attestations (3sg.pres.act. pennai (OS) and 1pl.pres.act. penniueni (OS)) together with 1sg.pres.act. pennahhi, 2sg.pres.act. pennatti and 1 sg.pret.act. pennahhun clearly point to the mema/iinflection. From MH times onwards, forms are occurring that show the $\operatorname{tarn}(a)$ class inflection (pennanzi and penner). In NH times, we occasionally find a form according to the -ie/a-class (penniiauanzi). This situation is typical for mema/iclass verbs, of which I have argued under its treatment in § 2.2.2.2.h that they originally were polysyllabic dāi/tiianzi-class verbs that are taken over into the $\operatorname{tarn}(a)$-class via the intermediate $m \bar{e} m a / i$-class. The occasional occurrence of -ie/a-class forms is trivial (very common in dāi/tiiianzi-class verbs). This means that penna-/penni- originally goes back to a dāi/tiianzi-class verb as well.
Within Hittite, penna- ${ }^{i}$ / penni- functions as the opposite of $\bar{u} n n a-{ }^{i} / \bar{u} n n i-$ 'to send (here), to drive (here)', and already Sturtevant (1933: 74) regarded these verbs as the $p e$ - and $u$-prefixed forms of the verb nai- ${ }^{i} /{ }^{*} n i$ - 'to turn, to send' (see under $n \bar{e}^{-\left({ }^{a(r i)}\right)}$, which belongs to the dāi/tiiianzi-class. See for further etymology the lemmas of these elements themselves.
Although this etymology is generally accepted, the fact that penna- ${ }^{i}$ / pennishows a geminate -nn- (just as in $\bar{u} n n a-^{i} / \bar{u} n n i-$ and nanna- ${ }^{i}$ / nanni-) is remarkable. Perhaps these univerbations and reduplication took place at a period that the initial consonants were fortis automatically.
penniie/a- ${ }^{-i}$ : see penna- $^{i} /$ penni-
peppieššar (n.) 'shipment, consignment': nom.-acc.sg. pé-ep-pí-eš-šar (MH/MS).
The word is hapax in one of the Amarna letters (VBoT 1, 28). It is spelled with BI-IB-, which can be read pí-ip- as well as pé-ep-. If we read the word as peppieššar, it seems to be the opposite of the noun uppieššar 'sending, gift' (see under uppa- ${ }^{i}$ / uppi-) in the sense that we are dealing with a pe- / u-pair of a
further unattested noun *pieššar. This *pieššar clearly is a derivative of pai- ${ }^{i} / p i-$ 'to give' (q.v.), which would mean that peppieššar must reflect virtual *h ${ }_{l}$ poi + * $h_{l} p-i$-é $h_{l} s h_{l}-r$. Because of the fact that this word occurs in an Amarna letter only, and because we know that these letters were written by a non-Hittite scribe, it has been suggested that the form is nicht-sprachwirklich. If so, then we still have to assume that it is formed as a back-formation to uppieššar (which is clearly genuinely Hittite), which means that our etymological analysis remains the same.
per / parn- (n.) 'house, household’ (Sum. É): nom.-acc.sg. É-er (OS), nom.sg.c. pár-na-aš (MH/NS), gen.sg. pár-na-aš (OS), dat.-loc.sg. pár-ni (OS), É-er (OS), pé-e-ri (OH/NS), all.sg. pár-na (OS), erg.sg. pár-na-an-za (OH/MS), abl. É-er-za (OS), pár-na-az (OH/NS), pár-na-za (NH), nom.-acc.pl. É-er (OH/NS), gen.pl. É $^{\mathrm{MES}}$-na-aš (NH), dat.-loc.pl. pár-na-aš (MH/MS?).

Anat. cognates: CLuw. parna- (n.) 'house' (nom.-acc.sg. pár-na-an-za, pár-naan, dat.-loc.sg. pár-ni, nom.-acc.pl. pár«<-ar»>-na, dat.-loc.pl. pár-na-an-za, pạ́r$n a-a n-z a-a \check{s}=t a$ (HT 1 ii 7), erg.pl. pár-na-an-ti-in-zi, gen.adj.nom.-acc.sg.n. pár$n a-a \check{s}-s ̌ a-a n-z a$, gen.adj.nom.-acc.pl.n. pár-na-a-aš-ši-in-zi, gen.adj.dat.-loc.pl. pár-na-aš-ša-an-za-an-za); HLuw. parna- 'house’ (nom.-acc.sg. /parnan=t'a/ DOMUS-na-za, gen.sg. /parnas/ DOMUS-na-sa (KAYSERİ §21, BOR §2), dat.loc.sg. /parni/ ${ }^{\text {DOMUS }} p a+r a / i-n i ́(K A R A T E P E ~ 1 § 58 ~ H o),. ~ D O M U S-n i, ~ D O M U S-~$ ní, DOMUS-ni-i, DOMUS-ní-i, nom.-acc.pl. /parna/ DOMUS-na, DOMUS-na-', dat.-loc.pl. /parnants/ DOMUS-na-zá (KULULU 5 §4); unclear DOMUS-ni-za (KARKAMIŠ A2+3 §15, cf. Hawkins 2000: 111)), parnawa- 'to serve a house' (3pl.imp.act. CRUX $p a+r a / i-n a-w a / i-t u-u \quad$ (KARATEPE $\$ 58 \quad$ Hu.), "DOMUS.CRUX" $p a+r a / i-n a-w a / i-t u_{+}$(KARATEPE 1 §58 Ho.)); Lyd. bira- 'house' (dat.-loc.sg. $\operatorname{bira\lambda }(=k)$, acc.c. $\operatorname{bira}(v)(=k)$ ); Lyc. prñnawa- 'mausoleum, (grave-)house' (acc.sg. prñnawã, prñnawu, loc.sg. prñnawi), prñnawa- 'to build' (3sg.pres.act. prñnawati, 1sg.pret.act. prñnawaұã, 3sg.pret.act. prñnawate, prñnawatẽ, prñnawetẽ, 3pl.pret.act. prñnawãte, prñnawãtẽ), prñneze/i'household' (nom.sg. prñnezi, dat.-sg. prñnezi), prñnezi(je)- 'household member' (dat.-sg. prñnezi, gen.adj.nom.sg.c. prñnezijehi, gen.adj.acc.sg.c. prñnezijehi, gen.adj.nom.pl.c. prñnezijehi).

PAnat. *Pér-r, *Pr-n-ós
See CHD P: 273f. for attestations. Although the nom.-acc.sg. is never spelled completely phonetically (always É-er), there is little doubt that the form was /per/, as is also indicated by the secondary dat.-loc.sg. pé-e-ri. The occasional
commune nom.sg. parnaš is found in NS texts only and clearly is a secondary formation. Besides gen.sg. parnaš, CHD also cites a gen.sg. per[iaš] (KUB 51.56, 4), but this reading is too uncertain (note that the handcopy of the text shows
 $r[i-a \check{s}]$, whereas e.g. Rieken (1999a: $306^{1471}$ ) suggests to read pé-e-ri pé-e-r[a$a n]$ ). The abl. É-er-za $/$ pert $^{5} /$ is attested in OS texts already and therefore must be archaic. The attested alteration per / parn- can hardly go back to anything else than an original -r/n-stem $* \operatorname{Per}$ - $/ / * P r-n$-.
The root-etymology is difficult. In the older literature, a borrowing from Egyptian pr 'house' has often been assumed, but this is unlikely because a borrowing does not explain the seemingly archaic inflection per / parn-. For a listing of other etymological proposals, see Tischler HEG P: 569f., none of which stands out regarding semantical probability.
peran (adv., prev., postpos.) '(local postpos.) before, in front of, in presence of; (local prev.) in front; (temporal adv.) previously, in advance; (temporal prev.) in front, first; (temporal postpos.) facing a person in future, ahead of someone; (postpos.) during the reign of (a king); (postpos.) under the supervision of; (causal postpos.) because of, from, out of' (Akk. PANI): pé-e-ra-an (OS), pé-i-ra-an (1x, OS ), pé-ra-an (OS), pé-ra-a-an (4x, MH/MS), pé.-an (abbr., MH/NS).

Anat. cognates: CLuw. parran (prev., postpos.) 'before, in front of' (pár-ra-an, pár-ra-a-an); HLuw. paran (adv.) 'before, in front of' (pa+ra/i-na, pa+ra/i-na-', PRAE-na). *parani (adv.) 'id.' (PRAE-ni).

PAnat. *pérom
IE cognates: Gr. $\pi \dot{\varepsilon} \rho \bar{\alpha}(v)$ 'moreover, on the other side', Skt. pára- 'farther, highest, utmost'.

PIE *pér-om
See CHD P: 291f. for attestations and semantic treatment. This word clearly belongs with para 'forward' and parza '...-wards' in the sense that these three adverbs probably are petrified cases of an original noun *per- (cf. the situation of $\check{s ̌ r}$ and šara $\bar{a}$. The exact interpretation of peran is intricate, however. In the oldest texts we find forms of peran with a poss.pron.suffix attached to it: pé-e-ra-$a(n)=m-m i-i t$ 'in front of me' (OS), pé-ra-an=te-et 'in front of you' (OH/NS), pé-$e-r a-a(n)=\check{s}$-še-et 'in front of him' (OS), pé-e-ra-a(n)=š-mi-it 'in front of them' (OS). The possessive consistently shows its neuter form, which indicates that, at least synchronically, peran, too, was interpreted as a neuter form. At first sight, this seems to indicate that peran belonged to an originally neuter thematic stem
*pera- (if the stem were athematic, we would expect a nom.-acc.sg. **per), but such a stem cannot be reconciled with an all.sg. parā and an abl. parza, because of the ablaut in the root (thematic stems are generally thought not to show ablaut). Nevertheless, the form peran has Anatolian cognates, CLuw. parran and HLuw. paran, which indicate the existence of a PAnat. form *pérom already.
All in all, although the connection between peran, parā, parza and forms in other IE languages that reflect *per- is clear, it is difficult to reconstruct an original nominal paradigm for all the forms.
peran ped(d)unaš (n.) '?’: pé-ra-an pée-du-na-aš (MH/MS), [pé-ra-an ]pé-du-na- $a-a \check{s}$ (NS), pé-ra-an pét-tu-na-a-a[s] (NS), [pé-r]a-an péd-du-na-aš (NS), pé-ra-an pé-e-du-ma-aš (NH), pé-ra-an pé-e-tum-ma-aš (NH), pé-ra-an pé-du-maaš (NH), pé-an pé-tum-ma-aš (NH).

See CHD P: 311f. for attestations. This word occurs in inventories and lists only, on the basis of which its exact meaning cannot be determined. It can be made of stone, iron, gold, ivory and other materials. Although the texts do not point to a specific meaning, CHD translates this word as "a utensil for carrying forward (lit. 'that of bringing forth')". This interpretation is fully based on the fact that the form peran pedumǎ̌ synchronically seems to be identical to the adverb peran 'forward' and pedumaš, the verb.noun gen.sg. of peda- ${ }^{i}$ / ped- 'to take (away)'. Nevertheless, this spelling is not the only one: we also find peran pedună̈̆s and peran peddunaš, which do not fit such an interpretation. Melchert (1994a: 34) ingenuously proposes that the forms with $-n$ - show the Luwian verbal noun-suffix -un- and that the spelling BAD-du-na-aš (which I have read as péd-du-na-ǎ̌) should be read pád-du-na-aš, asuming that paddunaš would be the Luwian equivalent of Hitt. pedumǎ̌. Apart from the fact that the Hittite preverb pe- to my knowledge does not have a CLuwian counterpart, the regular correspondant of Hitt. $d \bar{a}-{ }^{i} / d$ - 'to take' is CLuw. la-. Moreover, the spelling pé-du-na-aš then would show the Hitt. stem ped- attached to the Luwian suffix -un-, which seems quite improbable to me.
If we look at the chronological distribution, we see that the forms with $-n$ - are the older ones. In my view, we therefore are dealing with an original word peran ped(d)unaš that folk-etymologically was altered to peran pedumaš, indeed as if the verb.noun gen.sg. of the verb peran peda ${ }^{-}$/ ped-. Since the exact meaning of this word cannot be determined, we cannot etymologize it. Nevertheless, because of the alteration between single $-d$ - and geminate- $d d$-, I would not be surprised if this word would turn out to be of a foreign origin.
peri- (c.) '?’, formally 'bird': nom.sg. pé-e-ri-iš (OS), pé-e-ri-eš (OS), acc.sg. pé-e-ri-in (OS).

See CHD P: 312f. for attestations. This word occurs several times in OS rituals. On the basis of the contexts in which it occurs, its meaning cannot be determined. In the older literature, the word often was translated 'bird', but cf. CHD for the fact that this was based on arguments that have turned out to be incorrect. It therefore is impossible to etymologize this word.
pernu- ${ }^{z i}$ : see pirnu- ${ }^{z i}$
${ }^{\mathrm{NA}_{4}}$ peru / perun- (n.) 'rock, cliff, boulder': nom.-acc.sg.n. pé-e-ru (MH/MS), nom.sg.c. pé-e-ru-na-aš, pé-ru-na-aš (NH), acc.sg.c. pé-ru-na-an (NH), gen.sg. pé-ru-na-aš (NH), dat.-loc.sg. pé-e-ru-ni (OS), pé-ru-ni (NS), abl. pé-ru-na-az (NS), acc.pl.c. pé-ru-nu-uš (NH), pé-e-ru-nu-uš (NH), pé-ru-ni[-iš], dat.-loc.pl. pé-e-ru-na-aš (OS).

Derivatives: ${ }^{\mathbf{N A}_{4}}$ perunant- (adj.) 'rocky, craggy' (nom.sg.c. pé-e-ru-na-an-z[a] (NH), pé-ru-na-an-za (NH)), ${ }^{{ }^{N}{ }_{4} p e r u l \bar{u}(u a)-~ ' ? ' ~(3 s g . p r e s . m i d d . ~ p e ́-r u-l u-u-u n a-r i ~}$ ( $\mathrm{OH} / \mathrm{NS}$ )).
IE cognates: Skt. párvata- 'rocky, rugged; mountain'.
PIE *pér-ur / *pér-un-
See CHD P: 314f. for attestations. The oldest forms of this word show a neuter paradigm nom.-acc.sg. peru, obl. perun-. In NH times, a secondary commune stem peruna- is formed (nom.sg.c. perunaš, acc.pl.c. perunuš), which is a trivial development (cf. nom.sg.c. parnaš 'house' besides older neuter per / parn-). A paradigm peru / perun- can hardly go back to anything else than to an original $-r / n$-stem, which is the reason for me to assume that nom.-acc.sg. peru is the dissimilated variant of older *perur (compare per 'house' < *per-r). In this way, *perur / perun- would be a normal static -uer-/-uen-stem, just as mēhur / mēhun'period, time' and šēhur / šēhun- 'urine'.
Sommer apud Friedrich HW: 168 connected peru / perun- with Skt. párvata'rocky, mountain', which could reflect *pérun-to-. Semantically as well as formally (párvata- is derived from a static -uer-/-uen-stem as well) this etymology is impeccable. Often, Skt. párvata- is further connected with Skt. párvan- 'joint, knot' and Gr. лعĩpa ${ }^{(* p e ́ r u r)}$ 'end, boundary, gowl', which taken together reflect a paradigm *pérur, *péru(e)n-. Yet, a semantic connection
between these words and 'rock' is not particularly evident. Nevertheless, on the basis of the connection with Skt. párvata- alone, it is already clear that Hitt. peru / perun- reflects *pér-ur, *pér-un-.
The possible derivative ${ }^{\mathrm{NA}_{4}}$ perulū(ua)- (which in principle can be read pirul $\bar{u}(u a)$ - as well) is obscure. It is hapax in VBoT 58 i (30) 'He harrows, ploughs, and irrigates the field' hal-ki-in-n=a (31) [ar-ha?] $=p a ́ t{ }^{\mathrm{NA}_{4}}$ pé-ru-lu-u-ua$r i$ 'and he even $p$.-s the grain'. CHD translates 'to free from (small) stones(?)' (implying peru- $+l \bar{a}-/ l-$ 'to free' with some $u$-suffix). Oettinger (1994: 312) translates '(mit Stein) mahlen'. Whatever the case, the $\mathrm{NA}_{4}$-determinative makes it quite likely the first element, peru-, has to be equated with ${ }^{\mathrm{NA}_{4}}$ peru / perun-. The second element, -luupari, and therewith the verb's interpretation, remains obscure.
peš(̌̌)- ${ }^{z i}$ (Ia3?) 'to rub, to scrub (with soap)': 3sg.pres.act. pé-eš-zi (OH or MH/NS), 3pl.pret.act. pí-iš-ši-er (NH).

See CHD P: 315 for attestations. There, a 3pl.pres.act. piš-ša-an-zi (KUB 51.33 i 4 ) is cited as well, but this form is found in a totally broken context without any clue for its meaning. Moreover, CHD cites the same form as a 3pl.pres.act. of pāš- 'to swallow' as well (reading it as a possible pač-ša-an-zi). We therefore should leave this form out of consideration. The form pí-iš-ši-er is difficult to judge formally: its spelling may have been influenced by the form ki-iš-ši-er 'they combed' that occurs in the same line.

Oettinger (1979a: 327) proposes to connect peš(š)- with Lat. pēnis, OHG fasal, MHG visel 'penis' from *pes- (cf. also Hitt. *pešan- / pešn- / pišen- 'man'), but regarding the semantics this etymology does not seem self-evident to me. Tischler (HEG P: 581) mentions another possibility, namely a connection with PIE * $b^{h} e s$ 'to chew'. This connection would only work if we assume that $* b^{h} e s$ - originally meant 'zerreiben' which on the one hand yielded 'to chew' and on the other 'to rub'. Tischler himself judges this etymology as "weniger wahrscheinlich".

Melchert (1984a: 110) connects pešš- with "iške/a-" 'to smear, to anoint' (q.v.) under the assumption that the latter is its imperfective and reflects *ps-ske/o-. See at iškiie/a- ${ }^{z i}$, however, for the estalishment that this verb rather belongs to the -ie/a-class originally, and therefore cannot reflect *ps-skée/o-.

See under pašiḩae- ${ }^{z i}$ 'to rub' for the fact that it has been proposed that this verb is connected with peš $(\check{s})-z^{z i}$.
*pešan- / pešn- / pišen- (c.) 'man, male person’ (Sum. LÚ): nom.sg. LÚ-aš (OS), LÚ-iš (OH/MS), LÚ-eš (OH/NS), acc.sg. LÚ-na-an-n=a=ta (NS), LÚ-an-n=a$k u(\mathrm{OH} / \mathrm{NS})$, LÚ-n=a-ku (OS), gen.sg. pé-eš-na-aš, LÚ-na-aš (OH/NS), dat.loc.sg. LÚ-ni (OH/NS), instr. LÚ ${ }^{\text {MEŠ }}-i t(\mathrm{MH} / \mathrm{NS})$, nom.pl. pí-še-ni-eš (OS), pí-še$n e-i s ̌ ~(O H / N S), ~ p i ́-s ̌ e-n i-i s ̌, ~[p] e ́-e s ̌-n e-i s ̌, ~ L U ́ ~ N E S ̌-e s ̌, ~ L U ́ ~ M E S ̌ ~-a s ̌, ~ a c c . p l . ~ p i ́-s ̌ e-e-n u-~$ $u s ̌(O H / N S), ~ L U^{\mathrm{MES}}-u s ̌$, gen.pl. LÚ-an (OH/NS), LÚ ${ }^{\mathrm{MES}}-a \check{s}$ (MH/MS), dat.-loc.pl. $\mathrm{LÚ}^{\mathrm{MES}}$-aš (MH/MS?), ${ }^{\mathrm{d}} \mathrm{LÚ}^{\mathrm{MES}}{ }_{-}$na-aš.

Derivatives: pišnātar / pišnann- (n.) 'manhood, virility; male parts' (nom.acc.sg. pí-iš-na-tar ( OH ?/NS), LÚ-na-a-t[ar], gen.sg. LÚ-na-an-na-aš ( $\mathrm{OH} / \mathrm{NS}$ ), dat.-loc.sg. pí-iš-na-an-ni-e=š-ši) (MH?/NS), LÚ-an-ni (NS), nom.acc.pl. LÚ-na-tar ${ }^{\text {HI.A }}$ ), *pešnili (adv.) 'in manly way' (LÚ-ni-li (OS)).

IE cognates: Skt. pásas- 'penis', Gr. गéoc 'penis', Lat. pēnis 'penis', OHG fasel 'seed, descendant'.

PIE *pés-ōn+s, *pes-én-om, *pes-n-ós.
See CHD P: 324f. for attestations. The phonetically spelled forms of this word show suffix-ablaut: gen.sg. pé-eš-na-aš = /pesnás/ or, less likely, /pésnas/, nom.pl. pí-še-ne-iš = /pisénes/, acc.pl. pí-še-e-nu-uš = /pisénus/. They must go back to hysterodynamic $n$-stem forms with generalized $e$-grade in the stem: *pes-$n$-ós, *pes-én-es, *pes-én-mıs. Unfortunately, the nom.sg. has not been attested written phonetically, but on the basis of the OS attestation LÚ-aš, one could assume /pésas/ < *pés-ōn+s (compare ḩāraš < *hér $-\bar{o} n+s$ ). So all in all, we probably are dealing with an original paradigm nom.sg. *pés-ōn, acc.sg. *ps-én$m$, gen.sg. *ps-n-ós, in which already in pre-Hittite times the $-e$ - of the nominative has spread throughout the paradigm: *pesōn, *pesénom, *pesnós, etc.
Etymologically, the word has been connected with Skt. pásas- 'penis', Gr. $\pi \varepsilon$ ó 'penis', Lat. pēnis 'penis', OHG fasel 'seed, descendant'. Especially the formation of Lat. pēnis (i-derivative of an $n$-stem) may be closely connected. A further connection with Hitt. pešs $z^{-i}$ 'to rub' (q.v.) does not seem self-evident to me semantically.
peššiie/a- ${ }^{z i}$ (Ic1 > Ic2) 'to throw away, to cast, to shove; to abandon; to cast off; to ignore': 1sg.pres.act. pé-eš-ši-íia-mi (OS), pé-eš-ši-e-mi (OS), pé-eš-še-ilia-mi
 ( NH ), pé-iš-ša-at-ti ( $\mathrm{OH} / \mathrm{NS}$ ), 3sg.pres.act. pé-eš-ši-i-e-ez-zi (OS), pé-eš-ši-ez-zi ( OS ), pé-eš-ši-i $a-a z-z i \quad(\mathrm{MH} / \mathrm{MS})$, pé-eš-še-ia $a z-z i \quad(\mathrm{OH} / \mathrm{NS})$, pé-iš-ši-īa-az-zi (MH/MS), pé-iš-ši-i-e-ez-zi (MH/MS), pé-eš-še-ez-zi (MS), pé-eš-ši-e-ez-zi (MH/MS), pé-iš-ši-az-zi (OH/NS?), pé-eš-ši-e-zi (MS?), pé-eš-ši-į ia-zi (MS?), pé-
 (MH/NS), pé-ši-az-zi (NS), pé-ši-ị1a-az-zi (MH/NS), peš-ši-íi $a-z i(N H)$, peš-ši-ez-zi (NH), pé-eš-ši-i ia-i (MH/NS), 1pl.pres.act. pé-eš-ši-ía-u-e-ni (OS), 2pl.pres.act. pé-eš-ši-i्टिa-at-te-ni (NH), 3pl.pres.act. pé-eš-ši-íia-an-zi (MH/MS), pé-eš-ši-an-zi (MH/MS), pé-iš-ši-ía-an-zi (OH/NS), peš-ši-an-zi (IBoT 3.148 iii 48 (NS)), pé$e s ̌-s ̌ e-i ̇ i a-a n-z i(M S), ~ 1 s g . p r e t . a c t . ~ p e ́-e s ̌-s ̌ i-i ́ i a-n u-u n ~(O H / M S), ~ 3 s g . p r e t . a c t . ~ p e ́-i s ̌-~$ ši-ía-at (MH/MS), pé-eš-ši-icia-at (MH/NS), pé-eš-ši-at (OH/NS), pé-iš-ši-at (NH), pé-eš-ši-i-e-et ( $\mathrm{OH} / \mathrm{NS})$, pé-e-eš-ši-i-e-et $(\mathrm{OH} / \mathrm{NS})$, pé-eš-ši-et $(\mathrm{OH} / \mathrm{NS})$, pé-iš-še!-ila-at (MH/NS), peš-še-et (NH), peš-ši-i_ia-at $(\mathrm{NH})$, pé-še-et $(\mathrm{NH}), 1$ pl.pret.act. pé-eš-ši-lia-u-en, 3pl.pret.act. pé-eš-ši-er (OS), pé-eš-še-er (OH/NS), pé-eš-šer ( NH ), pé-iš-ši-er (MH?/NS), 2sg.imp.act. pé-eš-ši-i̇la (MH/MS), pé-e-eš-ši-i ia ( $\mathrm{OH} / \mathrm{NS}$ ), 3sg.imp.act. pé-eš-še-ad-du (OS), pé-eš-ši-ĭia-ad-du (NH), 2pl.imp.act. pé-eš-ši-į्a-at-te-en (MH/MS), pé-eš-ši-įa-te-en (MH/MS), pé-eš-ši-icia-tén (MH/MS), pé-eš-ši-i̇ia-at-tén (NH), 3pl.imp.act. pé-e-eš-š[i-ia-an-du] (MH/MS), pé-eš-ši-i_1a-an-du( $\mathrm{OH} / \mathrm{NS})$, pé-eš-ši-an-du $(\mathrm{NH})$, pé-eš-še-ía $a-a n-d u(\mathrm{OH} / \mathrm{NS})$, pé$e s ̌-s ̌ e-a n-d u(\mathrm{NH})$; part. pé-eš-ši-íla-an-t- (NS), pé-eš-še-an-t-; verb.noun pé-eš-ši-ia-u-ua-ar (NH), gen.sg. pé-eš-ši-ía-u-una-[aš] (NS), pé-iš-ši-ia-u-ua-aš; impf. pé$i \check{s ̌-s ̌ i-i s ̌-k e / a-~(O S), ~ p e ́-e s ̌-s ̌ i-i s ̌-k e / a-~(M H / N S), ~ p e ́-e s ̌-s ̌ i-e s ̌-k e / a-~(N H), ~ p e ́-e s ̌-s ̌ e-i s ̌-~}$ ke/a- (NS).

Derivatives: peššiianna- ${ }^{i} /$ peššiianni- (IIa5) 'id. (impf.)' (impf.3sg.pres.act. pé-

IE cognates: Skt. asyati 'to throw'.
PIE * $h_{1}$ poi $+{ }^{*} h_{1}$ s-ielo-
See CHD P: 316f. for attestations. Almost all forms can be reconciled with a stem /peSie/a-/. In NS texts we occasionally find a stem peššiiae- ${ }^{z i}$, according to the very productive hatrae-class. Together with $\bar{u} s$ šilie/a- ${ }^{z i}$ 'to draw open (of curtains)' it clearly forms a pair, showing the preverbs pe- and $u$-. There has been some debate whether the original verb stem should be equated with šiie/az- 'to shoot' or with šai- ${ }^{i} /$ ši- 'to press' (which, because of their formal similarity have $^{\text {en }}$ merged early and therefore are treated here under one lemma: šai- ${ }^{i} /$ ši-, šiie/a $z^{z i}$ ), but Kimball (1987b) has convincingly argued that we should assume an original connection with ssiie/a- ${ }^{z i}$, which she connects with Skt. asyati 'to throw' $<* h_{l} s$ -ie/o-. This means that peššiie/a- ${ }^{z i}$ goes back to $* h_{1} p o i+* h_{l} s-i e / o-$.
Melchert (1994a: 133) and Kimball (1999: 215, 391) cite a HLuwian verb "pa-si-ya-" (glossed by Kimball as "reject"), without attestation places, which they regard as the exact correspondant to Hitt. peššiie/a-. To my knowledge, such a
verb does not exist anywhere in the HLuwian corpus, however (perhaps they have misread the hapax form 3sg.imp.act. pa-sa-iá-tu-u-' '?' in KAYSERİ §18).
pešn-: see *pešan- / pešn- / pišen-
peda- (n.) 'place, location, position, locality' (Akk. $A S ̌ R U$ ): nom.-acc.sg. pé-e-daan (MH/MS), pé-e-da-a(n)=š-me-et (OS), pé-e-da(n)=mi-it ( $\mathrm{OH} / \mathrm{MS})$, pé-da-an ( OH or $\mathrm{MH} / \mathrm{NS}$ ), gen.sg. pé-e-da-aš (OH/MS), dat.-loc.sg. pé-e-di (OS), pé-e-te ( $\mathrm{OH} / \mathrm{NS}$ ), pé-di ( $\mathrm{OH} / \mathrm{NS}$ ), pé-te ( $\mathrm{MH} / \mathrm{NS}$ ), abl. pé-e-da-az (OH/NS?), pé-da-az ( OH or $\mathrm{MH} / \mathrm{NS}$ ), pé-e-da-za (NS), nom.-acc.pl. $A S \check{S}-R I^{\mathrm{HIIA}}(\mathrm{NH})$, gen.pl. pé-e-da$a s ̌$, dat.-loc.pl. pé-e-da-aš (OH?/NS), pé-da-aš (NH).
Derivatives: pedant- (c.) 'place’ (voc.sg. pé-e-ta-an-ti (MH/NS), dat.-loc.sg. pé-$e-d a-a n-t i(\mathrm{NH}))$ pedaššahh ${ }^{i}$ (IIb) 'to place, to install, to deposit' (3pl.pres.act. pé-e-da-aš-ša-ah̆-ha-an-zi (MS? or NS?), 3pl.pret.act. pé-e-da-aš-ša-ah-he-er (MH/MS)).

Anat. cognates: HLuw. LOCUS-ta- (n.) 'place' (nom.-acc.sg. LOCUS-ta $a_{4}-z a$ (KARKAMIŠ A11b+c §23, KARKAMIŠ A31 §7, ADIYAMAN 1 §5, ANCOZ 7 $\S 12$, TELL AHMAR 2 §23, HAMA 5 §3), LOCUS-t $a_{5}-z a$ (SULTANHAN §43), LOCUS-ta $4_{4}-z a ́ ~(K A R K A M I S ̌ ~ A 18 e ~ § 5), ~ " L O C U S "-t a ~ j-z a-" ~(B A B Y L O N ~ 1 § 13), ~$ LOCUS-za-' (KARKAMIŠ A11a §23, §24)), LOCUS-tant- (c.) 'place' (dat.loc.sg. LOCUS-ta $a_{4}-t i$ (KARKAMIŠ A6 §23, KARKAMIŠ A15b §29), LOCUS$t a_{4}-t i-i$ (KARKAMIŠ A6 §9), LOCUS-ta ${ }_{4}-t i-i{ }^{\prime}$ (TELL TAYINAT 2 fr.1a §i), LOCUS-ta $a_{5}-t i-i$ (BOHÇA §13), "LOCUS"-ta ${ }_{5}-t i$ (MARAŞ 7 side A), nom.acc.pl.n. [LOCUS]-ta ${ }_{4}-t a_{5}$ (KARKAMIŠ A31 §6), dat.-loc.pl. LOCUS-ta $a_{4}-t a-z a{ }^{-}$ (KARATEPE 1 §23 Hu.), "LOCUS<">-ta $a_{4} t a-z a$ (KARATEPE 1 § 23 Ho.)), LOCUS-tantal(i)- (c.) 'precinct' (acc.sg. LOCUS-ta ${ }_{4}$-ta-li-i-na (MARAŞ 14 §2), abl.-instr. LOCUS-ta $A_{4}$-ta-la-ti-i (MARAŞ 14 §12)), LOCUS-tá LOCUS-tá (adv.) 'everywhere’ (KARAHÖYÜK §2), ${ }^{\text {Locus }}$ pitahaliiia- 'to exile(?)' (1sg.pret.act. ${ }^{\text {Locus }}{ }^{p i-t a-h a-l i-i a-h a ~(K A R K A M I S ̌ ~ A 11 b+c ~ § 31)) ; ~ L y c . ~ p d d a ̃ t-' ~ ' p l a c e ’ ~(l o c . s g . ~}$ pddãti, pddati(?), pddẽti(?), gen.adj.dat.sg. pddãtahi), pddãti(je)- (adj.) 'local(??)' (nom.-acc.pl.n. pddãt $[i j a]$, abl.-instr. pd[dãtij]edi), pdde (adv.?) 'in place of, on behalf of(?)' (pdde=ñne), pddẽn- 'place, precinct' (nom.-acc.sg. pddẽ, gen.sg. pddẽneh(?), dat.-loc.pl. pddẽne), pdẽ $\boldsymbol{b} \boldsymbol{a}$ - 'local Hepat' (nom.sg. pdẽ $\quad$ ba).

IE cognates: Gr. Téסov 'ground, floor', Skt. padá- 'footstep', Arm. het 'footprint, track', ON fet 'footstep'.

PIE *pédo-

See CHD P: 330f. for attestations. Already Sturtevant (1933: 79) connected pedawith Gr. $\pi$ ह́סov 'ground, floor', which means that we must reconstruct *pédom. The HLuwian word for 'place' is always written with the logogram LOCUS, phonetically complemented with the sign $t a_{4}$ or $t a_{5}$. It is quite possible that these signs in fact have to be read /la/ (cf. Hawkins 1995: $114^{9}$ ), but this does not invalidate the connection (cf. Luw. la- 'to take' $<* d e h_{3^{-}}$). The exact interpretation of the verb ${ }^{\text {LOCUS }}$ pitahaliia- is unclear. The use of the determinative LOCUS would point to a connection with 'place', which could indicate that pitais the pretonic outcome of *pedo-. Nevertheless, the fact that pitahaliia- is spelled with the sign $t a$, which contrasts with $t a_{4 / 5}$ of LOCUS- $t a_{4 / 5}$, should make us cautious.
peda- ${ }^{i} / \boldsymbol{p e d}$ - (IIal $\gamma$ ) 'to take (somewhere), to carry, to transport; to spend (time)': 1sg.pres.act. pé-e-ta-ah-hé (OS), pé-e-tah-hé (OS), pé-tah-hé (OS), pé-e-tah-hi (OS), pé-da-ah-hi (MH/MS), pé-tah-hi (OH?/NS?), pé-e-da-ah-hi (OH/NS), 2sg.pres.act. pé-e-da-at-ti (OS), pé-e-da-ad-d[i] (OH/MS), 3sg.pres.act. pé-e-ta-i (OS), pé-ta-i (OS), pé-e-da-i (OS), pé-da-a-i (OH/NS), pé-da-i (MH/MS), pé-e$d a-a-i(\mathrm{MS}), p e ́-i-e-d a-i(2 \mathrm{x}, \mathrm{NS}), 1 \mathrm{pl} . \mathrm{pres} . \mathrm{act}$ pé-e-tu-me-ni (OS), pé-e-tu-me-eni (OS), pé-du-me-ni (OS), pé-e-tu-mé-ni (OS), pé-e-du-mé-ni (MH/NS), pé-$e-[d] u-u m-m e-e-n i(\mathrm{NH})$, pé-e-du-um[-me]-ni (NH), pé-e-tum-me-e-ni $(\mathrm{OH} / \mathrm{NS})$, pé-e-tum-me-ni (NS), 2pl.pres.act. pé-ta-at-te-ni (OH/NS), pé-e-ta-at-te-ni (NS), pé-e-da-at-te-ni (MH/NS), 3pl.pres.act. pé-e-ta-an-zi (OS), pé-e-da-an-zi (OS), pé-ta-an-zi (OS), pé-da-an-zi (OS), pé-e-dan $-z i(\mathrm{NH})$, pé-dan $-z i(\mathrm{NH})$, 1sg.pret.act. pé-e-da-ah-hu-un (OH/NS), pé-da-ah-ḩu-un (OH/NS), 2sg.pret.act. pé-e-da-aš (MS), 3sg.pret.act. pé-e-ta-aš (OS), pé-e-da-aš (OS), pé-ta-aš (OS), pé-ta-a-aš (OS), pé-da-aš (NS), 1pl.pret.act. pé-e-tu-mé-en (OS), pé-e-du-me-en (MH/MS), pé-e-tu ${ }_{4}$-um-me-en (NS), [p]é-tu ${ }_{4}$-um-me-e[n] (NH), 3pl.pret.act. pé-e-te-er (OS? or MS?), pé-te-er (NH), pé-i-te-er (NH), pé-e-ti-er (NS), 2sg.imp.act. pé-e-da (MH?/MS?), pé-da (MH?/NS), 3sg.imp.act. pé-e-da-ú (OH/NS), pé-e-da-$a-u ́(\mathrm{OH}$ or $\mathrm{MH} / \mathrm{NS})$, pé-da- $a-\dot{u}(\mathrm{OH} / \mathrm{NS})$, pé-e-ta<-ú> ( 2 x , OS), pé-e-da-ad-du (NH), 2pl.imp.act. pé-ti-iš-te-en (OS), pé-e-da-at-te-en (MH/NS), pé-e-da-at-tén ( $\mathrm{OH} / \mathrm{NS}$ ), pé-e-ta-at[-tén] (NS), pé-e-da-at-te-in, pé-e-da-tén (MH/MS?), pé-da$a t-t[e ́ n]$ (NS), 3pl.imp.act. pé-e-ta-an-tu (OS), pé-e-da-an-du (NS), pé-da-an-du (MH/MS); part. pé-e-da-an-t- (NH); verb.noun pé-e-tum-mar (NH), gen.sg. pé-[e-]du-um-ma-aš (NH); inf.I pé-e-tum-ma-an-zi (MH/MS?), pé-tum-ma-an-zi (NS), pé-e-du-ma-an-zi (NH).

Derivatives: pipeda- 'to carry out(?)' (3pl.pres.midd. pí-pé-e-da-an-ta ( OH or MH?)).

PIE $* h_{l}$ poi $+* d o h_{3}-e i / * h_{l} p o i+* d h_{3}$-enti
See CHD P: 345f. for attestations. This verb acts as the opposite of $u d a-{ }^{i} / u d-$ 'to bring (here), to bring (over)', which makes it clear that both verbs are derived from the verb $d \bar{a}^{-} / d$ - with the prefixes $p e$ - and $u$-. See at the lemmas of $p e$ - and $d \bar{a}^{-}{ }^{i} / d$ - for their respective etymologies. Note that the oldest texts almost consistently spell peda-/ped- with a short -a-in the strong stem forms, whereas the simplex $d \bar{a}-/ d$ - shows long $-\bar{a}$ - (petahhe vs. dāhhe, pedatti vs. dātti, pedai vs. $d \bar{a} i)$. This probably shows that the wordaccent was retracted unto the prefix pe-. In later texts, the spelling of $d \bar{a}-/ d$ - becomes more influential on the spelling of peda-/ped-, yielding the spelling pé-e-da-a-i (from MS texts onwards). Note that in the plural, peda-/ped- preserves more archaic forms than $d \bar{a}-/ d$ - (1pl.pret. pedumen vs. dāuen, 3pl.pret. peter vs. dāer, 2pl.imp. petišten vs. dātten), but also in e.g. inf.I pedumanzi vs. dāuanzi.
Melchert (1993b: 175) cites a CLuwian verb *padd-/patz(a)- 'to carry(?)', of which only 3 sg.imp.act. pát-za-du is attested, apparently assuming that this form reflects *pe-dhi-tu. Apart from the fact that an interpretation 'to carry' seems to be indicated on the basis of an expected etymological connection with Hitt. peda-/ped- only, the regular Luwian correspondence to Hitt. pe-, which I reconstruct as *hipoi-, would not be pa-, but rather pai- or pi-. I therefore reject the claimed connection between CLuw. pát-za-du and Hitt. peda-/ped-.
The expression peran ped(d)unaš has been claimed to be cognate to peda-/ped-, but see for a discussion at its own lemma.
The status of the verb pipeda- is unclear. Is it really a reduplicated form (which would be unique for a pe-prefixed verb), and why does it show middle inflection? Again it must be noted that a translation 'to carry' is largely based on the formal similarity with peda-/ped-.
${ }^{(\text {UZU })}$ pettar / pettan- 'wing, feather': see ${ }^{\text {UZU }}$ pattar / pattan-
piianae- ${ }^{z i}$ : see peianae- ${ }^{z i}$
piietta-: see pitta-, piietta-
piha-, onomastic element, 'strong(?)': ${ }^{\mathrm{m}} P i ́-h a-a \check{s}-d u-,{ }^{\mathrm{m}} P i ́-h a-A . A-,{ }^{\mathrm{m}} P i ́-h a-{ }^{\mathrm{d}} \mathrm{U}-$, ${ }^{\mathrm{m}} P i ́-h a$-LÚ-, ${ }^{\mathrm{m}} P i ́-h a-$ ŠEŠ-, ${ }^{\mathrm{m}} P i ́-h a-\mathrm{UR} . \mathrm{MAH}-$.
Derivatives: pihaim(m)i- (adj.), epithet of the Storm-god, 'powerful, strong' (nom.sg.c. pí-ha-i-mi-iš, pí-ha-i-mi-i-iš, pí-ha-im-mi-iš, pí-ha-im-me-iš, stem pí-
ha-i-mi), piham(m)i- (adj.), epithet of the Storm-god, 'powerful, strong' (nom.sg.c. pí-ha-mi-iš, pí-ha-am-mi[-iš], acc.sg.c. pí-ha-am-mi-in), piḩaššašši(adj.), epithet of the Storm-god, 'of power, of strength' (nom.sg.c. pí-ha-aš-ša-aš-ši-iš, pí-ha-aš-[š]a-aš-ši-eš, acc.sg.c. pí-ha-aš-ša-aš-ši-in, pí-ḩa-aš-ša-ši-in, pí$h a-s ̌ a-s ̌ i-i[n]$, dat.-loc.sg. pí-ḩa-aš-ša-aš-ši, stem pí-ha-aš-ša-aš-ši), pihaddašši(adj.), modifies bread and deities (nom.sg.c. pí-ha-ad-da-aš-ši-iš).

Anat. cognates: HLuw. ${ }^{\text {FULGUR }}$ pihama/i- (adj.) 'powerful, strong' (nom.sg.c. FULGUR $p i-h a-m i-s a$ (KARKAMIŠ A11b §14), pi-ha-mi-sá (KÖRKÜN §6), acc.sg. pi-i-ha-mi-na (KARKAMIŠ A27o)), Pihama/i-, PN (dat.-loc.sg. Pi-ha-mi (ASSUR letter e §1)), pihas- (n.) 'power, strength' (nom.-acc.sg. /pihas=sa/ "FULGUR"-há-sá (KARATEPE 1 §52), broken "FULGUR"-ha[-...] (KARKAMIŠ A12 §14)); Lyc. Pixm̃ma, PN (gen.sg. Pixm̃mah).

PAnat. *piha-
The element piha- is found as the first element in a few personal names and functions as the base of some adjectives. These adjectives are all clearly of Luwian origin, which indicates that piha- is Luwian originally (it is further absent in Hittite). Nevertheless, the element is not found in CLuwian texts, but does occur in HLuwian texts and a Lycian name. The adj. pihaimmi- and pihammi- are to be equated with HLuw. pihama/i- and Lyc. Pixmma, and reflect a Luw. part. of an unattested verb *piḩa(i)-. The adj. pihaššašši- is to be regarded as a Luw. gen.adj. of a stem *pihašš-, which is attested in HLuw. pihas-. The adj. pihaddašši- represents a Luw. gen.adj. of a further unattested noun *pihatt-.
The semantics of all these words are difficult to determine. The Hittite adjectives function as epithets of the Storm-god, and could therefore have a wide range of meanings. It has been argued that pihaššašši- is to be equated with the epithet HI.HI-ašši- 'of lightning', but KUB 38.12 iii (18) ... ${ }^{\mathrm{d}} \mathrm{U}$ pí-ha-aš-[̌̌] $a-a s ̌-$ ši-eš (19) ${ }^{\mathrm{d}} \mathrm{U}$ HII.HI ${ }^{\mathrm{d}} \mathrm{U}$ pí-ha-i-mi ... shows that ${ }^{\mathrm{d}} \mathrm{U}$ piḩaššašši- and ${ }^{\mathrm{d}} \mathrm{U}$ HI.HI are not identical (cf. CHD P: 257: "The last ex. [= KUB 38.12 iii 18-19] shows that ${ }^{\mathrm{d}} \mathrm{U} p$. is not identical w. ${ }^{\mathrm{d}} \mathrm{U} \mathrm{HI} . \mathrm{HI}\left(-a \check{s ̌ s ̌ i-) ~ d e s p i t e ~ t h e ~ a p p e a r a n c e ~ o f ~}{ }^{\mathrm{d}} \mathrm{U} p\right.$. in one text (Bronzetafel ii 16) and ${ }^{\mathrm{d}} \mathrm{U}$ HI.HI in the par. KBo 4.10 obv. 36 , and ${ }^{\mathrm{d}} \mathrm{U}^{\mathrm{URU}} p$. in two copies of the Alakšandu treaty w. ${ }^{\mathrm{d}} \mathrm{U} \mathrm{HI} . \mathrm{HI}$ in the third") and that therefore the translation 'of lightning' for pihaššašši- cannot be ascertained. Nevertheless, Hawkins (2000: 106) sticks to the basic translation 'lightning' for the HLuwian words as well. This is even more pitiful, since the form "FULGUR"-há-sá (KARATEPE $1 \S 52$ ), which is likely to be read /pihas-sa/ on the basis of the fact that the determinative FULGUR is used for pihama/i- as well ( ${ }^{\text {FULGUR }}$ pi-ha-mi-sa (KARKAMIŠ A11b §14)), is the only word that can be securely translated since
it occurs in a bilingual: it corresponds to Phoen. ' $z$ 'power, strength'. I therefore translate HLuw. pihas- with 'power, strength', which means that its gen.adj. *pihassassa/i-, which was borrowed into Hitt. piḩaššašši- denotes 'of power, of strength'. Since the neuter $s$-stem pihas- probably functions as the abstract building of the Luw. verb *piha(i)-, the latter can either mean 'to be powerful, to be strong' or 'to become powerful, to become strong'. I choose for the latter option on the basis of the following context:

## KARKAMIŠ A11b

§12: a-wa/i pa-ia-' REGIO-ni-ia "VACUUS" ta-na-tá-ha
§13: wa/i-ta-' ${ }^{\text {SCALPRUM.CAPERE }}$ 2u-pa-ní-zi a-tá "CAPERE" u-pa-ha
§14: $a$-wa/i pi-i-na-' REGIO-ni-ia-ti ${ }^{\text {FULGUR }}$ pi-ha-mi-sa SUPER+ra/i-' PES-wa/i-i-ha
'I destroyed these countries and brought in the trophies. And p.-ed by these countries I came up'.

In my view, 'strengthened' is the better translation here (note that Hawkins (2000: 103) translates 'glorified', which is quite strange for countries to do after they have been destroyed and looted).
The old translation 'lightning' has had its influence on the etymological interpretation as well. The generally accepted etymology seems to be the one of Starke (1990: 103f.) who connects piha- with $* b^{h} e h_{2^{-}}$'to shine' and reconstructs * $b^{h} \bar{e} h_{2}-o-$. Apart from the unappealing formation, the connection does not make sense anymore semantically. If one wants to assume IE origin, one should rather think of the roots * $b^{h} e i H$ - 'to hit, to beat' or *peiH- 'to swell up' (cf. LIV ${ }^{2}$ ).
< pinta- (n. or c.) 'oar’: Luw.nom.-acc.sg.n. or Luw.acc.pl.c. $\downarrow$ pí-in-ta-an-za.
Hapax in KUB 8.50 iii 20. CHD P: 268 translates 'oars', which indeed is possible. The word is clearly Luwian, as can be seen by the Luwian inflection as well as the use of the gloss wedge. Weeks (1985: 161) connected the word with *bend- 'vorspringende Spitze' (cf. Pokorny 1959: 96-7), but this is formally impossible, as *bend- should have given Luw. **pant-. Moreover. semantically the connecton is not very satisfying. No further etymology.
pippa- ${ }^{\text {i }}$ / pipp- (IIa1 $\gamma$ ) 'to knock down/apart/off, to tear down, to overturn, to destroy; to turn up, to throw up': 3sg.pres.act. pí-ip-pa-i (OH/MS), 3pl.pres.act. pí-ip-pa-an-zi (OS), 1sg.pret.act. pí-ip-pa-ah-hu-un (MH?/NS), 3sg.pret.act. pí-ip-pa-aš ( $\mathrm{OH} / \mathrm{MS}$ ), pí-ip-pa-a-aš ( OH or $\mathrm{MH} / \mathrm{NS}$ ), 3pl.pret.act. pí-ip-pé-er
(MH/MS?), 3pl.imp.act. pí-ip-pa-an-du (OH/NS); 3sg.pres.midd. pí-ip-pa-at-ta-ri (NS); part. pí-ip-pa-an-t- (NH); verb.noun pí-ip-pu-u-ua-ar (NH), pí-ip-pu-ua-ar (NH); inf.I pí-ip-pa-ua-an-zi (late MH/MS); impf. pí-ip-pí-iš-ke/a- (MH/MS), pí-ip-pí-eš-ke/a-(NH), pí-ip-pa-aš-ke/a-, [pí-ip-p]a-a-aš-ke/a-.

IE cognates: ?Skt. ut pipīte 'he rises'.
PIE *pi-poh ${ }_{1 / 3}$-ei, *pi-ph $h_{1 / 3}$-enti ?
See CHD P: 269f. for attestations. The verb is consistently spelled BI-IB-, which can be read pí-ip- as well as pé-ep- (or even pí-ep-). The traditional transliteration is pippa- ${ }^{i}$ / pipp-, however. All forms show a spelling with geminate $-p p-$. The only exception seems to be a 2sg.pres.act.-form $\prec$ pí-pa-at-ti (HKM 17 l.edge 6), which is cited thus by Alp (1991: 146) and CHD. When we look into the handcopy of the tablet, we see that the sign that is read as PA actually resembles GAD more, however, which would yield a reading u-pí-kat-at-ti or \& pí-kat-at-ti (which does not yield a better understandable word, I must admit). The combination of the facts that this form would be the only one to show single $-p-$, that it would be the only one to be preceded by a gloss wedge, that the reading PA is uncertain and that a translation 'to overturn' is not obligatory in the context, makes me leave this form out of consideration here.
The verb clearly belongs to the $\operatorname{tarn}(a)$-class. The verbs that belong to this class go back to (reduplicated) roots that end in a laryngeal (cf. e.g. mimma- ${ }^{i}$ / mimm'to refuse'). In this case, it means that we are dealing with a structure $* \mathrm{Pi}-\mathrm{PoH}-$, *Pi-PH- (or *Pe-PoH-, *Pe-PH-, if we decide to read the verb as peppa- ${ }^{i}$ / рерр-). Often this verb is etmologically connected with Skt. ut pipīte 'he rises', but this is semantically not self-evident. For the time being, it is the best proposal, however, because Skt. pipīte seems to reflect a root *peH-, which would explain pippa-/pipp- as well: *pi-pó $h_{1 / 3}$-ei, *pi-ph $h_{1 / 3}$-énti (or *pe-poh $h_{1 / 3}$-ei, *pe-ph $h_{1 / 3}$-enti).
pippeššar: see peppieššar
pirešḩannaš: see parzaḩannaš
pirnu- $^{z i}$ (Ib2) 'to embezzle(?)': 1sg.pret.act. pí-ịr-nu-nu-un (NH).
Hapax in KUB 13.35 i 14: see CHD P: 313 for a treatment of its context and possible translation. CHD suggests that it could be a hearing mistake for mernu- $z^{z i}$ 'to make disappear' (note that BI-IR-nu- can be read pé-er-nu- as well). Luraghi (1992: 159, 174) takes the verb as a denominative of per / parn- 'house' (q.v.),
however, suggesting that it originally means something like 'to take to one's own house'. Such a derivation proces would be unique, however. Further unclear.
piršahannaš, pirzahannaš: see parzahannaš
pišen-: see *pešan- / pešn- / pišen-
pitta-, piietta- (n., pl. tantum?) 'allotment': nom.-acc.pl. pí-it-ta (MH/NS), pí-id$d a(\mathrm{NH})$, pí-i-e-et-ta (NH), pí-e-et-ta (MH/NS), gen.sg. pí-it-ta-a-aš (NH), abl. pí-e-ed-da-za.

Derivatives: pittauriiala- '(man of the) great-allotment' (gen.sg. pí-it-ta-ú-ri-ia-aš (NH), pí-it-ta-ú-rília-aš (NH)), see pittae- ${ }^{z i}$.

Anat. cognates: Lyc. pijata- 'gift' (nom.sg. pijata, acc.sg. pijatu).
PIE *h $h_{l} p-i-t e h_{2^{-}}>" * h_{l} p-i_{2} e-t e h_{2}-"$
See CHD P: 262f. for attestations. This word is spelled in a few different ways, BI-IT-ta, BI-e-IT-ta- and BI-i-e-IT-ta-. Since all spellings are from NS texts, it is not possible to order these spellings chronologically. The one spelling BI-i-e-IT$t a$ - clearly has to be read pí-i-e-et-ta- =/pieta-/. This makes it possible that the forms that are spelled BI-IT-ta- have to be read pí-et-ta- =/pietta-/ as well (but see below for the possibility that these are to be read as pí-it-ta- = /pita-/ anyway). In Lycian, we find a noun pijata- 'gift' which is likely to be the exact correspondent to Hitt. piietta-. The fact that in Lycian we find an $a$-stem is important as it shows that we have to reconstruct an *-eh $h_{2}$-stem.
The stem of the words clearly has to do with the verbs Hitt. pai- ${ }^{i}$ / pi- and Lyc. pije- 'to give', but details are uncertain: it depends on ones reconstruction of pai-/pi-. For instance, Rieken (1999a: 251-4) reconstructs pai-/pi- as *pe-h $h_{2} e i-$ and has many problems in explaining why the intervocalic $* h_{2}$ does not show up in the verb nor in piietta-, which she regards as a derivative in $*$-teh $h_{2}$ of $*$ pe$h_{2} \mathrm{ei}$-.

As I have argued in Kloekhorst fthc.a (see also under the lemma pai- ${ }^{i}$ / pi-), I assume that pai- ${ }^{i} /$ pi- 'to give' reflects $* h_{l} p-o i-/ * h_{l} p-i-$, and that Lyc. pijeshows a secondary thematization of it, *hlp-ie/o-. Such a thematicized stem occurs in Hittite as well, namely in the NH period, where we find forms that show a stem piie/a- ${ }^{z i}$. I would therefore reconstruct piietta- and Lyc. pijata- as *h $h_{1} p$-ie$t^{t e} h_{2}$ - (note that in Lycian we have to assume $a$-umlaut from older *pijeta-).

This analysis opens up the way to assume that piietta-, derived from the stem piie/a- ${ }^{z i}$, is a NH innovation and that the original word was derived from the stem
pi-, and that this word therefore was pitta- $<*_{1} h_{l}$-i-teh $2_{2^{-}}$(compare OH šittariie/a> NH šiizattariie/a- for a similar replacement of the stem ši- by the NH stem šiie/a-).
All in all, I think that the attestations BI-IT-ta-must be read pi-it-ta- that stands for /pita-/ which reflects $* h_{l} p-i-t e h_{2^{-}}$, whereas the attestations BI-e-IT-ta- $=$pi-e-et-ta- and BI-i-e-IT-ta- = pí-i-e-et-ta- stand for /pieta-/ that reflect virtual *hip-ie$t^{t e} h_{2^{-}}$, with the introduction of the NH stem piie/a- instead of the old stem pi- < * $h_{1} p-i$-.

The derivative pittauriia- is possibly made up of pitta- and the onomastic element $u r a / i-$ 'great', cf. Tischler HEG P: 601.

Note that acc.pl.c.(!) pí-e-te-eš=ua (KUB 5.24 ii 9) as cited by Rieken (1999a: 251) is explained by CHD P: 365 as a scribal error for pé-e-te-e $=\check{s}-s ̌ c^{!}$'to his place'.
pittae- ${ }^{z i}$ (Ic2) 'to bring, to carry; to render, to pay': 2sg.pres.act. pid-da-a-ši, 3sg.pres.act. pí-it-ta-iz-zi (OH/NS), píd-da-a-iz-zi (OH/NS), píd-da-iz-zi ( $\mathrm{OH} / \mathrm{NS}$ ), 1pl.pres.act. [pi]d-da-u-e-ni (NS?), 2pl.pres.act. pí-it-ta-at-te-ni ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pres.act. píd-da-a-an-zi (MH/NS), píd-da-an-zi (MH/MS), 1sg,pret.act. píd-da-a-nu-un (MH/MS), 3pl.pret.act. pid-da-a-er (MH/MS), 2sg.imp.act. píd-da-a-i $(\mathrm{NH}), 2 \mathrm{pl} . i m p . a c t . ~ p i ́ d-d a-a-a t-t e-e n(\mathrm{MH} / \mathrm{MS})$, $[p] i ́-i t-t a-$ at-tén ( $\mathrm{OH} / \mathrm{NS}$ ), píd-da-at-te-n=a (NS), 3pl.imp.act. píd-da-a-an-du (NS), píd$d a-a n-d u$; part. píd-da-a-an-t- (OH/NS); impf. píd-da-a-iš-ke/a- $(\mathrm{NH})$, píd-da-iš$k e / a-(\mathrm{NH})$.
Derivatives: piddanna- ${ }^{i}$ / piddanni- (IIa5) 'id. (impf.)' (3sg.pret.act. pid-da-an$n i-i s ̌(\mathrm{OH} / \mathrm{NS})$, sup. píd-da-a-an-ni-ua-an (MH/MS)).

PAnat. *pita-ie/a-
See CHD P: 355f. for attestations. The verb is often spelled with an initial sign BAD , which can be read pát as well as pít. In Akkadian, this sign often has the value pè as well, but to my knowledge, such a value is never used in Hittite. Nevertheless, in the older literature, it has been argued that in this verb we should read BAD as $p \grave{e}$, and the verb consequently as $p \grave{e}-d a$-, because of the formally and semantically similar verb peda- ${ }^{\text {i }}$ / ped- 'to bring, to carry' (q.v.). This has been falsified, however, by the few attestations of this verb that are spelled with initial pi-it-. On the basis of the spellings with pi-it-, the attestations with BAD have to be read pit-. Beacuse of the unambiguous reading pittae- ${ }^{z i}$, the supposed connection with peda- ${ }^{i}$ /ped- cannot be upheld anymore either.

This verb follows the hatrae-inflection, which means that it is likely derived from a noun *pitta-. An indication for the identification of this noun is the fact that pittae- not only means 'to carry, to bring; to render, to pay' (as given in CHD P: 355, lemma piddai- B), but also 'to make a pitta-allotment' (this meaning is treated in CHD P: 358 as a separate entry, piddai- C), which seems to point to a connection with pitta-, pietta- 'allotment' (q.v. for etymology). Although this indeed is attractive, it must be noted that pitta-, piietta- is reconstructed with *-teh $h_{2}$ on the basis of Lyc. pijata-, whereas pittae- seems to be built on an o-stem noun (virtual *pito-ié/ó-). This means that the derivative was formed after the merger of word-final unaccentuated $*-e h_{2^{-}}$and ${ }^{*}-o$ - into Hitt. $-a-\left(* h_{l} p-i-t e h_{2^{-}}>\right.$ *pita-, of which *pita-iélá- > pittae-).
pittai- ${ }^{i}$ / pitti- 'to run; to flee', see pattai- ${ }^{i} /$ patti-
pittalae- ${ }^{z i}$ (Ic2) 'to abandon, to discard': 2sg.pres.act. píd-da-la-ši (NS), 3pl.pres.act. píd-da-la-an-z[i] (NH), pí-it-ta-la-an-zi (NH), pit-ta-la-an-zi (NH), 3sg.pret.act. píd-da-la-it (NS), 3pl.pret.act. pí-it-ta-la-a-er (NH); impf. pí-it-ta-li$e s ̌-k e / a-(N H)$.

See CHD P: 358 for attestations. Although many forms of this verb are written with the sign BAD , which can be read pát as well as pit, spellings with initial pí-it- show that we have to read pit- here. The verb denotes 'to abandon, to leave behind; to disregard'. It is inflected according to the hatrae-class, which means that it is a derivative of a further unattested noun *pittala-. Within Hittite, it is likely that the adj. pittalua- 'plain (said of food products)' (q.v.) is cognate, if we assume an original meaning 'untouched, left alone'. This would mean that the basic stem is *pittal-, for which I know no convincing etymology.
Puhvel (1979a: 214), followed by Rieken 1999a: 254) analyses *pittala- as a denominative agent noun *pitt-ala- of which the first part is identical with pitta-, piietta- 'allotment' (q.v.), assuming an unlikely semantic development *pittala'grantor, consigner' > pittalae- 'to act as a consigner, to despatch, to let go'.
Kronasser (1966: 482) suggested a connection with pattai- ${ }^{i}$ / patti- 'to run; to flee' (which he read as pittai-), but this assumption is primarily based on his false assumption that pittalae- originally meant 'laufen lassen'.
pittalual- (adj.) 'plain, simple, unadultered': nom.sg.c. pit-tal-ųa-ǎ̌ (MH/NS), acc.sg.c. pit-tal-ua-an (MH/NS), nom.-acc.sg.n. pit-tal-ua-an (OH?/MS), pít-tal$u ́$-an (MH), acc.pl.c. pit-tal-ú-ịč?

Derivatives: pittaluant- (adj.) 'id.' (nom.sg.c. pit-tal-ua-an-za (NH), acc.sg.c. pit-tal-ua-an-da-a[n] (NH), dat.-loc.sg. pit-tal-ua-ti (NS), nom.pl.c. pit-tal-ua-an-te-eš (NS); case? pit-tal-una-an-da-aš (MH/NS), pittaluan- (adj.) 'id.' (instr. pit-tal-u_a-ni-it (MH/MS)).

See CHD P: 358f. for attestations. We find three stems that semantically seem to be identical: pittalua-, pittaluant- and pittaluan- (although the last one is based on instr. pittaluanit only). All attestations are spelled with the sign BAD, which can be read pát as well as pít. On the basis of a likely etymological connection with pittalae ${ }^{z i}$ 'to abandon, to disregard' (which sometimes is spelled pi-it-), I cite this word with pit- as well. The adjective is used with bread, oil, stew, meat and other materials and indicates that these food products are plain in the sense that they have not been further processed. The connection between pittalae- and pittalua(nt)-, which was made by Laroche (1960: 126) is semantically likely if we assume that pittalua( $n t$ )- originally meant that the food products it modifies were 'untouched', i.e. 'left alone'. This means that we are dealing with a stem pittal-, of which I know no compelling etymology.
Puhvel (1979a: 210f.) unconvincingly connects pittalua- with the root *peth ${ }_{2}$ 'to spread out' and assumes *peth ${ }_{2} l(u) o$ - 'spread thin', which he connects with Lat. petilus 'thin, slender, meager'.
${ }^{\text {(UZU) }}$ pittar / pittan- 'wing, feather': see ${ }^{(\mathrm{UZU})}$ pattar / pattan-
${ }^{(\text {SíG })}$ pittula- (c.) 'loop, knot': nom.sg. pít-tu-la-aš (OH/MS), pit-tu-u-la-aš (MH/MS), píd-du-la-aš (NH), píd-du-u-la-a[š], acc.sg. pít-tu-la-an (MS? or NS?), píd-du-la-a[n], gen.sg. pít-tu-la-aš (NH), instr. pít-tu-u-li-it (NS), píd-du-liit (NS), acc.pl. pit-tu-u-lu-uš, pit-tu-lu-uš.
Derivatives: pit(t)uliia- (c.) 'anguish, worry, constriction, tightness, tension' (nom.sg. pít-tu-li-ila-aš (OH/MS), [píd-]du-li-íia-aš (NH), acc.sg. pí-tu-li-i̇ia-an ( $\mathrm{OH} / \mathrm{MS}$ ), pít-tu-li-íia-an ( $\mathrm{OH} / \mathrm{NS}$ ), píd-du-li-an $(\mathrm{NH})$, gen.sg. pít-tu-li-i-ia-aš ( OH or MH/MS), dat.-loc.sg. pidd-du-li-ía-i ( OH or $\mathrm{MH} / \mathrm{MS}$ ), abl. pid-du-li-ia-az, acc.pl. pit-tu-li-uš (OS)), pittuliie/a- ${ }^{z i}$ (Ic1) 'to be anxious, to worry' (3pl.pres.act. [pít-]tu-li-ina-an-zi, 3pl.pret.act. pit'tu-li-e-er (MH/NS); verb.noun pit-tu-li-ida-u-ua-ar; impf. pít-tu-li-iš-ke/a- (OH or MH/MS), [píd-d]u-li-iš-ke/a- (NH)), pittuliiiant- (adj.) 'worried, fearful, intimidated' (nom.sg.c. p[ít-]tu-li-ia-an-za (NH), acc.sg.c. pit-tu-li-ia-an-da-an (OH/MS)), pittuliiauuant- (adj.) 'restrained, reluctant' (nom.sg.c. píd-du-li-ia-u-ua-an-za (NH)).

See CHD P: 365f. for attestations. The bulk of the attestations of the words treated here are spelled with the sign BAD , which can be read pát as well as pit. In the KIN oracle KBo $18.151(\mathrm{OH} / \mathrm{MS})$ we twice find a lot pí-tu-li-ia-an (rev. 10,11 ), on the basis of which the words that have BAD-tu-l ${ }^{\circ}$ are read pit-tu-l ${ }^{\circ}$. Note that it cannot be excluded, however, that these lots, which are concrete objects that represent abstract notions of which it often is not easy to determine their meaning, have nothing to do with pit-tu-li-ia- 'anguish'. If that is the case, we have no other positive evidence in favour of reading the sign BAD as pit.
The meanings 'loop, knot' (for ${ }^{(\text {SíG })}$ pittula-) and 'anguish, worry' (for pittuliiiaand derivatives) seem to be connected by the notion 'choking, strangling', but I have not been able to find a formally fitting cognate with such a meaning.
According to Rieken (1999a: 471-2) we have to start from a stem pittul- which she analyses as an -ul-derivative of the root *peth $2^{-}$'to spread out', assuming a semantic development '*ausbreiten’ > '*Arme ausbreiten’ > '*umfassen' > 'umschlingen'. This development does not seem very appealing to me, however.
pukk- ${ }^{(t t) a(r i)}$ (IIIc/d) 'to be hateful, to be repulsive, to be unpleasant': 3sg.imp.midd. pu-ug-ga-ru (NH), pu-ug-ga-ta-ru (NH), pu-uk-ta-r $[u]$ (NH).
Derivatives: pukkant- 'hated, hateful, repulsive’ (nom.sg.c. pu-uk-kán-za (NH), nom.-acc.sg.n. pu-uk-kán (NH)), pukkanu- ${ }^{z i}$, pukkunu- ${ }^{z i}$ (Ib2) 'to cause (someone) to be hated, to create dissension' (3sg.prs.act. pu-uk-ka $-n u-z i(\mathrm{NH})$, 2pl.pres.act. [p]u-ug-ga-nu-ut-te-ni (MH?/NS); part. pu-uk-ka $4_{4}-n u-u a-a n-t-(\mathrm{NH})$; verb.noun $p u-u k-k u-n u-m a r ~(N S), ~ g e n . s g . ~ p u-u k-k a_{4}-n u-m a-a s ̌$ (NS); impf. [pu-]uk-ka $a_{4}$-nu-uš-ke/a-(MH/NS)).

See CHD P: 372f. for attestations. The verbal forms puggaru, puggataru and puktaru are all duplicates of each other. The situation is similar to the case of šupp- ${ }^{(t)}{ }^{(1) a r i}$ 'to sleep', which has the middle forms šuppari, šuptari and šuppatta. On the basis of the form puktaru I cite this verb as pukk- ${ }^{(t)}$ ari . The spelling pukkanu- probably is just used to indicate the fact that $-k k$ - is geminate.

See Tischler (HEG P: 641f.) for the different etymological proposals, which I all find improbable: connections with $* b^{h} e u g^{h}$ - 'to bend, to flee', with Skt. pūyati 'to stink', with Lith. piktas 'bad, evil' and with Goth. fauho 'fox' either have to wrong semantics or the wrong form ( $-k k$ - must reflect $*_{-k}$ ).
puntariie/a- ${ }^{z i}$ (Ic1) 'to be obstinate(?), to be stubborn(?)': 3sg.pres.act. pu-un-tar-


Derivatives: puntarriiali- (adj.) 'stubborn(?)' (nom.sg.c. pu-un-tar-ri-i_ia-li-iš (NS)).

See CHD P: 377. The translation is based on KUB 24.7 ii (18) ANŠE- $a \check{s}=m a=z a$ GIM-an pu-un-tar-ri-ia-li-iš zi[-ik] (19) MUNUS.LUGAL-aš ${ }^{\mathrm{d}} I S ̌ T A R-i \check{s}$ 'You are $p$. as an ass, queen Ištar', which is supported by KUB 3.99 ii (12) ANŠE-aš pu-un-ta-ri-ia $a[-u-u a-a r]$ 'the $p$. of an ass'. The meaning 'stubborn(ness)' seems to fit these contexts. Formally, the verb resembles gimmantariie/a- ${ }^{z i}$ e.a. No further etymology.
punušš- ${ }^{z i}$ (Ib1) 'to ask, to question, to consult; to investigate' (Sum. ÈN.TAR): 1sg.pres.act. pu-nu-uš-mi (MH/NS), 2sg.pres.act. pu-nu-uš-ši (OS), 3sg.pres.act. pu-nu-uš-zi (MH/MS), OH/NS), 1pl.pres.act. pu-nu-uš-šu-u-e-ni (NS), 2pl.pres.act. pu-nu-uš-te-ni (OS), 3pl.pres.act. pu-ú-nu-uš-ša-an-zi (OS), pu-nu$u s ̌-s ̌ a-a n-z i \quad(\mathrm{MH} / \mathrm{MS}), \quad 1$ sg.pret.act. pu-nu-uš-šu-un (MH/MS, OH/NS), 2sg.pret.act. pu-nu-uš-ta (NH), 3sg.pret.act. pu-u-nu-uš-ta (MH?/MS?), pu-nu-ušta (MH?/MS?), 1pl.pret.act. pu-nu-uš-šu-u-en (NH), pu-u-nu-uš-šu-u-en (NH), pu-nu-uš-šu-u-e-en (NH), 3pl.pres.act. pu-nu-uš-šer ( $\mathrm{OH} / \mathrm{NS}$ ), pu-nu-uš-še-er (NH), 2sg.imp.act. pu-nu-uš (NH), 3sg.imp.act. pu-nu-uš-du (MH/MS), 2pl.imp.act. [pu-]ụ́-nu-uš-tén (OH/NS), pu-nu-uš-tén (MH/MS), 3pl.imp.act. pu$n u-u s ̌-s ̌ a-a n-d u(\mathrm{NH}) ; 3$ sg.pres.midd. pu-nu-uš-ta-ri (MH/MS); verb.noun pu-nu-uš-šu-u-ua-ar (NH); inf.I pu-nu-uš-šu-ua-an-zi (NS), pu-nu-uš-šu-u-an-zi (NH); impf. pu-nu-uš-ke/a-(OS).
IE cognates: ??Gr. $\pi \varepsilon ́ \pi v v \bar{u} \mu a l$ 'to be smart'.
PIE *pneuH-s- ??
See CHD P: 377f. for attestations. All attestations show a stem punušš-, the first $u$ of which sometimes is spelled plene. In the oldest texts we find plene spelling with the sign Ú, whereas in younger texts we find the sign $U$. This points to an inner-Hittite development of OH /punuS-/ to NH /ponuS-/ (see also § 1.3.9.4.f). Because of the disyllabic stem, it is not easy to explain punušš- as of IE origin. Usually, however, scholars interpret the verb as /pnuss-/, regarding the first /u/ or $/ \mathrm{o} /$ as a silent vowel. If that were the case, we would expect a spelling **pa-nu$u \check{s}$ - (like e.g. $p a-r a-a=/$ prā $)$. It must be noted, however, that there are no exemples of PIE *PnV-> Hitt. /PnV-/, spelled pa-nV-. So perhaps an initial sequence $* P n u$ - regularly received an anaptyctic vowel between $P$ and $n$, yielding /punu-/ >/ponu-/ (compare e.g. *Tri- that yielded Hitt. Teri-, whereas e.g. *trenti


Two etymologies have been proposed. Sturtevant (1933: 229) connected punušš- with Gr. $\pi v \varepsilon ́ \omega$ 'to breathe' (*рneu-), but this seems semantically quite far
 merit if we assume that Hitt. punušš- reflects some sort of desiderative 'to want to be smart $>$ to ask'. It must be noted, however, that other Hittite $s$-extensions
 Moreover, the IE origin of the Greek word is in doubt because of forms like $\pi \iota v v ́ \sigma \kappa \omega$ 'to make prudent' and $\pi \imath v v t o ́ s ~ ' s m a r t ' ~(a n ~ a l t e r n a t i o n ~ \pi \nu v-, ~ \pi ı v v-$ can only be explained if we assume substratum origin). If we do chose to equate Gr. $\pi \varepsilon ́ \pi \nu \bar{v} \mu a \iota$ with Hitt. punušš-, however, we would have to reconstruct *pneuH-s-.
purutt- (n.) 'soil, mud, earth; mud plaster': nom.-acc.sg. pu-ru-ut (MH/NS), pu-u$r u-u t(\mathrm{MH} / \mathrm{MS}$ or NS), dat.-loc.sg. pu-ru-ut-ti (MH/NS), abl. pu-ru-ut-ta-az (NH), pu-ru-ud-da-za, instr. pu-ru-ut-ti-it (MH/NS).

Derivatives: puruttae- ${ }^{z i}$ (Ic2) 'to cover with mud' (3pl.pres.act. pu-ru-ud-da-an$z i$ (NS), pu-u-ru-u[d-da-an-zi] (NS), inf.I pu-ru-ut-ti-i̇ia-u-ua-an-zi or pu-ru-ut ti-ia-u-ua-an-zi (thus Rieken 1991: 161) (MH/NS)), purutteššar / puruttešn- (n.) 'mudbrick' (nom.-acc.sg. [p]u-ru-ut-te-e[š-šar?], dat.-loc.sg. pu-ru-ut-ti-eš-ni (MH/NS)).
IE cognates: ?Gr. $\varphi \bar{v} \rho \omega$ 'to mix'.
PIE * $b^{h} u r-u-t-$ ?
See CHD P: 395f. for attestations. Puhvel (1994: 255) connected this word with Gr. $\varphi \bar{v} \rho \omega$ 'to mix' (< * $\varphi$ ŭ $\rho-\mathrm{i} \omega$ ?) because 'mud' is a mixture of water and clay. Rieken (1999a: 160f.) follows Puhvel and reconstructs * $b^{h} u r-u-t-$. Although in principle this is possible, the reconstruction does not seem self-evident to me.
$p \bar{u} \breve{s}_{-}^{z i}$ (Ib1) 'to be eclipsed(?)': 3sg.pres.act. pu-u-uš-zi (OH/MS?), pu-uš-za (OH/MS?), pu-uš-zi (OH/NS).

PIE *ph $u-s-$ ?
See CHD P: 398 for attestations. The verb has the moon or the sun as its subject. Oettinger (1979a: 215) translates 'klein werden(?), sich verfinsteren(?)' on the basis of an etymological connection with PIE *ph 2 eu- 'little' (Lat. paucus, Gr. $\pi \alpha \tilde{p} \rho o \varsigma$ 'small, little'), which is followed by CHD ('to be eclipsed'). Another verb that is used for eclipsing is $\bar{a} k-{ }^{i} / a k k$ - 'to die'. Perhaps the latter is used when a total eclipse occurs, whereas $p \bar{u} \bar{s}$ - denotes a partial eclipse. The manyfold plene spellings with the sign $U$ point to a phonological form /pos-/.

The etymological connection with $* p h_{2} e u$ - is formally not totally satisfying. We would expect that a preform ${ }^{*} p h_{2} e u-s-t i$ would yield $* *$ paušzi. Perhaps, the zerograde of the plural was generalized. We then have to assume that $* h_{2}$, despite the fact that it was regularly lost at one point, had a lowering effect on $* u$ (for which see § 1.3.9.4.f), so *ph ${ }_{2} u$-s-énti > /posánt ${ }^{\text {§ }} \mathrm{i}$ /.
${ }^{\text {(SíG) }}$ püttar (n.) a hairy part of an animal's body: nom.-acc.sg.n. pu-u-ut-tar (NH), broken $p u-u ́-u[t-\ldots]$ (NH).

See CHD P: 402 for attestations. The context in which this word is found indicates that it denotes a body part of an animal. The use of the determinative SÍG 'wool' probably indicates that this body part is hairy. Rieken (1999a: 377) proposes to connect the word with Skt. pula- 'erection or bristling of the hair of the body', Gr. (Hes.) tú $\lambda \lambda ı \not \varepsilon \varsigma$ 'hair at the back, locks' and MIr. ul 'beard' and reconstructs *péu-tr, *pu-tén- under the assumption that unlenited $-t$ - generalized throughout the paradigm. In my view, this etymologizing is a bit too speculative.
putkiie/a- ${ }^{\text {tta(ri) }}$ (IIIg) 'to swell (said of fermented dough and of a tumor or boil on the head)': 3sg.pres.midd. pu-ut-ki-i-e-et-ta (MH/NS); impf. pu-ut-ki-iš-ke/a(NH).

See CHD P: 402-3 for attestations. This verb is likely to be analysed as putk-ie/a-, in which the cluster -tk- is remarkable (but cf. hatk- 'to shut' and uatku- 'to jump'). Tischler (HEG P: 677) therefore states that one should keep in mind that a Hittite cluster -tk- reflects PIE *-Kp-, for which he gives hartagga- 'bear' < * $h_{2} r k p o-$ as an example. To my mind, the PIE mother language did not have a phoneme $* p$, however (hartagga- $<* h_{2} r$ tho $^{\prime}$-). Therefore, Carruba's reconstruction $* p(e) u g-t$ - (1974: 152) cannot convince me. Other proposed cognates (e.g. Lith. pùsti 'to swell') are unconvincing either. No further etymology.
$p \bar{u} u a e^{z i}$ (Ic2) 'to pound, to grind': 3sg.pres.act. pu-u-ua-iz-zi (NS), pu-u-ua-a-iz$z i(\mathrm{NH})$, Luw.3sg.pres.act. pu-u-ua-ti.
Derivatives: pupulli- 'ruin(?)' (nom.-acc.sg. pu-p $[u-u] l-l i(\mathrm{OH} / \mathrm{NS})$ ), puppušša${ }^{\text {taf(ri) (IIIh) 'to be pounded, to be ground(?)' (3sg.pres.midd. pu-up-pu-uš-ša-ta-ri }}$ (NH)), (ム) puššae- ${ }^{z i}$ (Ic2) 'to chop up, to crush' (1sg.pres.act. pu-uš-şa-ạ-m[i] (NS), 3sg.pres.act. (4) pu-uš-ša-ez-zi (MH/MS), 3sg.pret.act. pu-uš-ša-a-et (MH/MS), 3sg.imp.act. pu-uš-ša-ed-du (MH/MS), part.? pu-uš-ša-a-a[n]).

Anat. cognates: CLuw. pūüa- 'to pound, to crush' (3sg.pres.act. pu-ua-a-ti, pu-$u$-ua-ti, 3pl.imp.act. pu-u-ua-an-du, pu-ua-an-du).
IE cognates: Lat. pavīre 'to beat', Gr. $\pi \alpha^{\prime} \omega$ 'to strike, to smite'.
PIE *ph $h_{2} u$ -
See CHD P: 368f. for attestations. The verb occurs in CLuwian as well as in Hittite, but one of the forms in Hittite context has a Luwian ending, which may indicate that the verb originally was Luwian (puı $\bar{a}-$ ), and that it was borrowed in NH times into Hittite, where it was brought into the hatrae-class. The derivatives puppušša- ${ }^{\text {turi }}$ and puššae- ${ }^{z i}$ (occasionally attested with gloss wedges) show the Luwian imperfective-suffix -šša-.

Since Neumann (1967: 32) this verb is generally connected with Lat. pavīre 'to beat' and Gr. $\pi \alpha i ́ \omega$ 'to strike, to smite'. These latter verbs are often reconstructed as *ph $h_{2}$ - (e.g. Schrijver 1991: 256; Van de Laar 2000: 238; note that LIV $^{2}$ regards them as $-u$-presents of a root *pieh $2^{-}$'schlagen', but the evidence of a root *pieh $2^{-}$is rather limited: Gr. $\pi \tau \alpha i ́ \omega$ 'to stumble' is semantically far and TochB pyāk- 'to strike' is connected with * $b^{h} e i H$ - 'to beat' by Adams 1999: 408). I therefore assume that *ph $u$-ie/o- > CLuw. p $\bar{u} u a-$, which was borrowed into Hitt. as pūuae-. For possible derivatives, see ${ }^{\text {TÚG }}$ puualia-, ${ }^{\text {TÚG }}$ puššaimi- and puššali-.
It has been proposed that HLuw. pupula/i- 'to inscribe' is cognate, but Hawkins (2000: 542) now suggests that pupula/i- may rather mean 'to answer (vel sim.)' because of the use of the determinative LOQUI. For Lyc. (p)puwe- a translation 'to inscribe' has been proposed on the basis of which an etymological connection with $p \bar{u} u a$ - is assumed. This translation seems especially based on the supposed connection, however, and therefore does not have much merit.
${ }^{\text {TÜG }}$ puualiiia- (n.) a garment for the leg or foot?: Luw.nom.-acc.sg.n. pu-ua-li-an$z a$, Hitt.nom.-acc.sg.n. pu-una-li-ía (NH).

See CHD P: 369 for attestations and a semantic discussion. The fact that we find a Luwian inflected form as well may indicate that this word originally is Luwian. Semantically, it seems to resemble ${ }^{\text {TÚG }}$ puššaimi- (a kind or garment or cloth) and puššali- (a leg or foot garment). The alteration between puua ${ }^{\circ}$ and pušša(i) is reminiscent of the CLuw. verb pūųa- 'to pound' and its impf. pušša- (see at $\left.p \bar{u} u a e-{ }^{z i}\right)$. This may indicate that these words are derived from this verb. See there for etymology.
puuatti- (c.) 'madder(?)', '(dying) powder(?)': nom.sg. pu-ưa-at-ti-ị̌̌ (NH).

The word is hapax in the vocabulary KBo 1.42 iv 46, where Hitt. puuattiš glosses Sum. ŠE.BE.DA and Akk. $\dot{S} I-I N-D U$. As CHD P: 369f. states, the Akk. word may denote šindu 'mark, paint', but the Sum. word is further unknown. A translation 'dyer's madder', as given in CHD, is prompted on the basis of a resemblance with Ugar. pwt and Arab. fuwwatu 'madder', but this could be coincidental, of course. Tischler (HEG P: 679) suggests a tie-in with the verb pūuae- ${ }^{\text {i }}$ 'to pound, to crush' (q.v.), assuming that the word means '(dying) powder'.

## š

-š (nom.sg.c.-ending)
PIE *-s
The Hittite nom.sg.c.-ending -š of course directly reflects the PIE ending *-s. For the pre-Hittite process of sigmatization of originally asigmatic nom.sg.c.-words, see Weitenberg 1995.
$-\check{s}$ (gen.sg.-ending): see $-a \check{s}$
$-\check{s}$ (2sg.pret.act.-ending of the mi-flection)
This ending is attested in verbs that end in a vowel only: te-e-eš 'you stated' (MH/MS), pé-e-hu-te-eš 'you brought', verbs in -nu- (e.g. pa-ah-ša-nu-uš (OS), ša-al-la-nu-uš (OS)), hatrae-class verbs (e.g. ha-at-ra-a-eš, hha-at-ra-a-iš), -ie/averbs (i-e-eš, ú-ua-ă̌), -ške/a-verbs (da-aš-ke-eš). In verbs that end in a consonant all the evidence shows that the mi-ending - $\check{s}$ has been replaced by the corresponding hi-ending -tta in the oldest texts already: e-ep-ta (MH/MS), har-ap-ta (MS), me-er-ta (OH/MS). Unfortunately no 2sg.pres.act.-forms of verbs in consonants are attested in OS texts. An occasional form like pa-it-ta 'you went' $(\mathrm{OH} / \mathrm{NS})$ shows that in NH times the replacement of $-\check{s}$ by $-t t a$ is starting to take place in verbs that end in a vowel as well. Moreover, there is evidence that in NH times the function of the 2 sg .-forms are taken over by the 3 sg .-form (e.g. i-ia-at 'you made', pé-e-hu-te-et 'you brought', šu-ul-le-e-et 'you bragged', ú-ua-te-et 'you brought', zi-in-ni-it 'you finished'). Occasionally, we find hi-verbs in which the 2 sg.pret.act.-ending is $-\check{s}$ instead of expected -tta (e.g. pé-e-da-ǎ̌ 'you
carried', ša-ak-ki-iš 'you knew', ša-an-na-aš 'you concealed', u-un-ni-eš 'you carried (here)', $u$ - $d a-a \check{s}$ 'you brought (here)'). Since these are all of NS texts, they must in my view not be regarded as cases in which the original hi-ending -tta is replaced by the $m i$-ending $-\check{s}$, but rather as formal 3 sg.pret.act.-forms with the hiending -s that are used in the function of 2 sg .pret.act.

The etymology of the 2 sg .pret.act.-ending $-\check{s}$ of the $m i$-conjugation is clear: it must reflect *-s that goes back to the PIE secondary 2 sg.-ending *-s.
$-\check{s}$ (3sg.pret.act.-ending of the hi-flection)
This ending belongs to the hi-conjugation and contrasts with the functionally equal $m i$-conjugation ending $-t /-t t a$ (q.v.). This ending is quite remarkable because whereas almost all other endings of the preterite are etymologically connected with their corresponding present ending in the sense that the present ending is identical to the preterite ending with an element $-i$ attached to it ( $-m i \sim$ $-u n(<*-m),-s ̌ i \sim-s ̌, ~-z i(<*-t i) \sim-t ;-h h e \sim-h h h u n(\ll *-h h h a),-t t i(<*-t t e) \sim-t t a ;$ -ueni ~-uen, -tteni $\sim-t t e n)$, the ending $-s{ }^{-s}$ is formally totally different from its corresponding 3 sg.pres.act.-ending $-e<*_{-}-e-i$. On the basis of the parallelitiy mentioned, we would a priori expect an ending $*_{-e}$ in this form (which would then correspond to the PIE 3sg.perf.-ending *-e). Yet in a preform *CóC-e, this ending would regularly disappear (loss of word-final $*$-e as e.g. in $*_{t o k^{w} e>t a k k u}$ $/ \operatorname{tak}^{\mathrm{w}} /$, ${ }^{*} n e k^{w} e>n e k k u / \operatorname{nek}^{\mathrm{w}} /$ ). I therefore assume that this ending was replaced by a 3sg.pret.-ending from another paradigm, namely the PIE $s$-aorist, which further has been totally lost in Anatolian (unless the several verbs that show an $s$ suffix are to be regarded as the formal descendants of the $s$-aorist). This ending must have been $*_{-s-t}$, of which $*_{-t}$ was dropped (loss of word-final $*_{-} t$ after another consonant, cf. nom.-acc.sg.n. kunan 'killed' < * $g^{w h} n$-ent). Note that only the aorist-ending was taken over, not the whole form, which is visible in the fact that the root vocalism in these forms still is *CóC-.
Throughout the Hittite period, we see that the ending -š is being replaced by the $m i$-ending $-t /-t t a$. In verbs ending in $-\check{s}$-, this already happened in OH times (e.g. ha-a-ǎ̌-ta (OS) 'she bore' instead of expected **hāš or pa-aš-ta 'he drank' instead of expected $\left.{ }^{* *} p \bar{a} \check{s}\right)$. In verb ending in $-t-$, this happened from MH times onwards (e.g. ha-a-az-ta (MS) 'he dried' vs. ${ }^{* * / H a ̄ d s /) . ~ I n ~ v e r b s ~ e n d i n g ~ i n ~ o t h e r ~}$ consonants, we see replacement in NS texts especially (e.g. ak-ta vs. $a-a k-k i-i s$, hu-uূa-ap-ta vs. hu-u-ua-ap-pí-iš, ǐ̌-tap-ta vs. ǐ̌-tap-pa-aš, ma-ni-ia-ah-ta vs. $m a-n i-i a-a h-h i-i s ̌)$. Occasionally we encounter an ending -šta, which seems to be a conflation between -š and -tta (e.g. $a-a r-a \check{s}-t a$ 'he washed': note that the origin
of -šta in $\operatorname{tarn}(a)$-class and $m \bar{e} m a / i$-class verbs, where it seems to be the original ending instead of $-\check{s}$, may have been different).
$=$ =̌̌̌̌a-: see $=\check{s ̌ s ̌ i}-/=$ šša $-/=$ šše -
-̌̌̌̌(a)- (imperfective-suffix): 1sg.pres.act. hal-zi-iš-ša-ah-h $h i \quad$ (MH/MS), 2sg.pres.act. ȟal-zi-iš-ša-at-ti (MH/MS), 3sg.pres.act. h hal-zi-iš-ša-i (OS), 1pl.pres.act. iš-šu-ú-e-ni (MH/NS), 2pl.pres.act. i-iš-te-e-ni (OS), 3pl.pres.act. hal-zi-iš-ša-an-zi (OS), 1sg.pret.act. iš-ša-ah-ḩu-un (MH/MS), 2sg.pret.act. hal$z e$-eš-še-eš-ta (NH), 3sg.pret.act. iš-ši-iš-ta (OH/MS), 1pl.pret.act. e-eš-ša-at-te-in (NH), 3pl.pret.act. $i$-iš-še-er (OS), 2sg.imp.act. h hal-zi-iš-ša (OS), 3sg.imp.act. e$e s ̌-s ̌ a-u ́(N H), 2 p l . i m p . a c t . ~ i-i s ̌-t e-e n(\mathrm{OS}), 3 p 1 . i m p . a c t . ~ s ̌ i-i s ̌-s ̌ a-a n-d u(\mathrm{MS}$ ?); sup. $i-i s ̌-s ̌ u-u a^{2} a-a n(O S)$.
Anat. cognates: CLuw. -(̌̌)ša- (impf.-suffix: 3sg.pres.act. ar-pa-ša-a-i, kar-ma$l a-a \check{s ̌-s ̌ a-i, ~ 3 s g . p r e t . a c t . ~ a r-p a-s ̌ a-a t-t a, ~ u ̛ a-a r-p a-s ̌ a-a-a t-t a, ~ 2 s g . i m p . a c t . ~ p i ́-p i ́-i s ̌-~}$ $\check{s} a$; 3sg.pres.midd. $p u-u p-p u-u \check{s}-5 ̌ a<-a t\rangle-t a-r i, 2$ pl.pres.midd. ma-az-za-al-la-ša-du-ua-ri); HLuw. -sa- (impf.-suffix: e.g. 1sg.pres.act. pi-pa-sa-wa/i-i (ALEPPO 2 §17), 3sg.pres.act. pi-pa-sa-i (BOHÇA §3), pi-pa-sa-ia (BOHÇA §5, §9), 3sg.pret.act. pi-pa-sa-ta (KARKAMIŠ A23 §4, MARAŞ $1 \S 11$ ), 3sg.imp.act. pi$p a-s a-t u(\mathrm{BOR} \S 11), 3 \mathrm{pl.imp} . \mathrm{act} . p i-p a-s a-t u(S ̧ I R Z I ~ § 4))$.

$$
\text { PIE *-soh } l_{l^{-}}, *_{-s h_{1}}
$$

In the older literature, this suffix is usually called "iterative", but this should be abandoned. According to Melchert (1998b), stems in $-{ }_{-s} \check{s}(a)-{ }^{i}$ are used to express progressive, iterative, durative, distributive and ingressive meaning, "all of which share the feature imperfectivity" (o.c.: 414), and therefore I cite this suffix as an "imperfective-suffix". Melchert has also shown that the stems in $-\check{s} \check{s}(a)$ - are functionally equivalent to stems in $-s ̌ k e / a-{ }^{z i}$ and -anna/i- ${ }^{i}$, and even that "synchronically they function effectively as suppletive allomorphs of a single morphem" (1998b: 414). This is correct: of the four verbs that show an imperfective in -šš(a)-, $\bar{L} \check{s} \check{s} a^{-}{ }^{i} / \bar{l} \check{s} s \check{s}-\quad$ 'to do, to make', halzišša- ${ }^{i}$ h halzišš- 'to call',
 imperfective-suffixes, e.g. iške/a- 'to do, to make (impf.)', halziške/a- 'to scream (impf.)' are clearly of secondary origin. For the scope of this book it would go too far to elaborate on the question why a certain verb chose a particular one of these three suffixes to express an imperfective meaning, but I can imagine that the answer to it would give us much more insight into the prehistory of the Hittite aspectual system.

As already mentioned, the suffix $-\check{s} \check{s}(a)$ - is found with four verbs only and one should see their respective lemmas for full attestations (uarrišš(a)- under the lemma uarri- / uarrai-); I have cited under this lemma only a compilation of the oldest attested forms. Of these four verbs, uarrišš(a)-stands quite apart, as it is attested in NH compositions only, whereas $\bar{s} \check{s} \check{s}(a)-$, halzišš(a)- and $\check{s} i s ̌ s ̌(a)-$ are attested from OH times onwards (with $\bar{l} \check{s} \check{s}(a)$ - and halzi$\check{s} \check{s}(a)$ - having numerous OS attestations). This may explain why $\ddot{s} \check{s} \check{S}(a)-$, halzišš(a)- and šišš(a)- are clear deverbal derivatives (of ịe/a- ${ }^{z i}$, halzai- ${ }^{i}$ / halzi- and šai- ${ }^{i}$ / ši- respectively), whereas uarrišš(a)- does not have a clear origin. On the one hand one could think that it is derived from the verb uarrae ${ }^{z i}$, but this verb is itself attested three times only in NH compositions. On the other hand, one could think of the adjective uarri- / uarrai- as its origin, but a denominal derivation with an imperfectivesuffix seems unlikely to me. Therefore Starke's suggestion (1990: 155-6) that uarrišš(a)- is a borrowing from Luwian (where *uarrišša- itself is unattested, but where a verb uarriiia- is found in HLuwian), may not be that unattractive. It therefore might be better to further leave uarrišš (a)- out of consideration here.
The question is what the exact form of this suffix is. On the one hand, one could analyse the suffix as -išš(a)- (which becomes -eš̌̌(a)- in NH times due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-s ̌$-, cf. § 1.4.8.1.d), so /2-iS(a)-/, halz-ǐ̌š(a)and $\check{s}-i \check{s} s \check{s}(a)-$. On the other hand, one could assume that the $-i$ - is part of the verbal stem and that the suffix itself is only $-\check{s} \check{s}(a)-$, so $\bar{l}-\check{s} \check{s}(a)-$, halzi-šš $(a)$ - and $\check{s} i-\bar{s} \check{s}(a)-$. This option has the benefit that the suffix $-\check{s} \check{s}(a)$ - then can be directly compared to the Luwian imperfective-suffix $-(s) s a-$ (CLuw. -(̌s)ša-, HLuw. -sa-). I therefore will treat the suffix as $-\check{s} \check{s}(a)$ - here.
The original inflection of the suffix is -ššahhi, -ššatti, -ššai, -ššueni, -šteni, -š̌sanzi, and it therefore inflects according to the $\operatorname{tarn}(a)$-class. As this class consists of roots that ended in laryngeal, this must be valid for the suffix -šs $(a)$ - as well. We therefore must assume a preform $*$-so $H$ - besides $*$-s $H$-. Since $* h_{2}$ would have yielded Hitt. - $h$-, the laryngeal should be either $* h_{l}$ or $* h_{3}$ (although the latter one is less likely as I know no other suffix or ending where $* h_{3}$ is found). The fact that we find a geminate $-\check{s} \check{s}-$ can be explained by the weak stem $*-s h_{1^{-}}$, which would regularly yield geminate -š̌s-, after which this -šš- spread through the paradigm (cf. zinni- ${ }^{z i} /$ zinn- 'to finish' for a similar scenario). In this way, $\ddot{l} \check{s} \check{s}(a)$ - reflects $* H H-i-s(o) h_{l^{-}}$, halzǐ̌šs(a)- < * $h_{2} l t-i-s(o) h_{l^{-}}$and $\check{s} i \check{s} \check{s}(a)-<* s h_{1-i-}$ $s(o) h_{1}$ -
The IE origin of this suffix is quite unclear. E.g. Oettinger (1992a: 233) suggests a connection with the IE unreduplicated desiderative, whereas Melchert (1987a: 200) assumes a connection with the Tocharian 'causative' in -s-.

Personally, I would not be surprised if in the future it would turn out that this suffix, ${ }^{-}$-soh $h_{1^{-}} / *_{-s} h_{1^{-}}$, from a pre-PIE point of view has to be regarded as identical to the other imperfective-suffix, *-ske/o- (which probably is a PIE thematicization of original $*_{-s k}=$-). Compare e.g. the similarity in form and meaning between $=(i) a$ 'and' $<*-h_{3} e$ and $*-k^{w} e$ 'and'.
šae ${ }^{z i}$ : see $\check{s} a \bar{a} i^{z i}$
šāh- ${ }^{i}$ (IIb) 'to clog, to stuff, to fill in, to stop, to block, to plug up': 3sg.pres.act. $\check{s} a-a-h i(\mathrm{NH}), 3 \mathrm{pl} . \mathrm{pres} . \mathrm{act}$. ša-h[a-a-an-]zi(MH/NS), ša-a-ha-an-zi, 3sg.pret.act. $\check{s} a-a h-t a(N H) ; 3$ sg.pres.midd. ša-ḩa-a-ri (MH/NS); part. ša-ha-an-t-, ša-a-h2a-an$t$ - (MH/NS), ša-hூa-a-an-t- (MH/NS); impf. ša-hi-iš-ke/a- (NS), ša-a-hi-iš-ke/a(MH/NS), ša-a-ḩi-eš-ke/a- (MH/NS).

Derivatives: see šaheššar / šahešn-.
IE cognates: Gr. ä́ $\mu \varepsilon v a \iota$ 'to satiate oneself', Skt. ásinvant- 'unsatiable', TochB soy- 'to be satisfied'.

PIE * sóh $_{2}-e i$
See CHD Š: 1f. for attestations. Note that Kimball (1999: 398) cites this verb as $\check{s} a ̄ h-/ s a h h-$ in the basis of part.nom.-acc.sg.n. "sa-a-ah-ha-an" (KUB 9.28 i 14), which would be the only form that shows geminate $-h h-$. This form does not exist,
 of this verb are spelled with single -h-. Mechanically, šāh- can hardly reflect
 single -h̆- due to lenition after *ó (cf. āki / akkanzi, ištāpi / ištappanzi etc.). In 3pl.pres.act., we would expect that $*_{s h}$-énti $>*_{i s h h a n z i . ~ I t ~ i s ~ l i k e l y ~ t h a t ~ t h i s ~}^{\text {a }}$ paradigm, šāhi / *išhanzi, was not retained thus and was levelled out to šāhi / šāhanzi, with introduction of the singular stem in the plural.
Eichner (1973a: 69-70) translates $\check{s} \bar{a} h h^{-}{ }^{i}$ as "verunreinigen, besudeln" (similarly Oettinger 1979a: 512: "verstopfen, beschmieren" and Rieken 1999a: 340: "verunreinigen, verstopfen, beschmieren, auffüllen"). These translations are incorrect: CHD clearly shows that $\check{s} a \bar{h}-{ }^{i}$ does not mean 'to pollute, to defile' but only 'to clog, to plug up, to stuff'. Eichner further states that $\check{s} a \bar{h} h^{i}$ 'is the basis from which Hitt. šēhur / šēhun- 'urine' and CLuw. šahha- "Schmutz" are derived, through the meaning 'dirty, polluted'. First it should be noted that Starke (1990: 228-9) has shown that CLuw. šahha- "Schmutz" does not exist: the form that Eichner translates thus is rather to be interpreted as šahhan- 'feudal service' (see at šahhan-). Secondly, the fact that $\check{s} \bar{a} h-{ }^{-}$actually means 'to clog, to plug up, to
stuff' makes an etymological connection with šēhur 'urine' semantically impossible: I do not see how these meanings can be connected (see at šēhur / šēhun- for an alternative etymology).

In my view, we rather connect $\check{s} a \bar{a} h^{-}$' 'to stuff up, to fill' with the PIE root
 oneself', Skt. ásinvant- 'unsatiable' and TochB soy- 'to be satisfied' (note that LIV $^{2}$ translates the root as 'satt werden' (intr.), whereas Harđarson (1993: 207) pleas for transitive 'sättigen'). In my view, however, the root $* s^{s e h} h^{2}$ originally had the meaning 'to stuff up, to fill' that is still visible in Hittite. This meaning was altered to 'to satiate' (which is a trivial semantic development) after the splitting off of Anatolian and yielded the forms meaning 'to satiate, to satisfy' as found in the other IE languages (cf. Adams 1999: 703 for a similar scenario).

```
šahh \(\boldsymbol{z}^{z i}:\) see \(\check{s} a(n) h_{-}^{z i}\)
```

šahhan- (n.) a kind of obligation, service or payment due from land tennants to the real owners of the land (palace, temple, community or individuals): nom.acc.sg. ša-ah-ha-an (OS), gen.sg. ša-ah-ha-na-ǎ̌ (OH/NS), dat.-loc.sg. ša-ah-hुa$n i(\mathrm{MH} / \mathrm{MS})$, ša-ah-ha-a-ni (NH), abl. ša-ah-ha-an-za (MH/MS), $\check{s} a-a h-h ̧ a-n a-z a$ (MH/NS), $\check{s} a-a h-h a-n a-a z(N H)$, instr. $\check{s} a-a h-h C a-n i-i t(\mathrm{OH} / \mathrm{NS}, \mathrm{MH} / \mathrm{MS}), ~ s ̌ a-a-a h-$ ha-ni-it, nom.-acc.pl.(?) ša-ah-ha-na (NH), ša-ah-ha-ni (OH/NS), dat.-loc.pl.(?) $\check{s} a-a h-h a-n a-a \check{s}(\mathrm{NH})$.

Anat. cognates: CLuw. šahhhan- (n.) 'id.' (nom.-acc.sg. ša-ah-ha-an-za), šahhaniial- 'to impose feudal service upon' (impf.3sg.prets.act. ša-ah-hna-ni-iš-ša$a t-t a, \stackrel{s}{ } a<-a h>-h a-n i-e s ̌-s ̌ a<-a t\rangle-t a)$.

PIE *séh ${ }_{2} n, *_{s}(e) h_{2} e ́ n(o) s$
See CHD Š: 7f. for attestations and semantic discussion. Rieken (1999a: 287) convincingly reconstructs this word as *séh $h_{2}-n$, assuming that, together with išhanitar 'relative by marriage' (q.v.), it derives from *seh $h_{2}$ 'to bind' (for which see at $\left.i s ̌ h a i-{ }^{i} / i s ̌ h i-\right)$. This means that we are dealing with a proterodynamic paradigm $*_{s e ́ h}^{2}-n, *_{s} h_{2}$-én-s >> pre-Hitt. séh ${ }_{2}-n$, *seh ${ }_{2}$-én-os > Hitt. šahhan, šahhanaš (compare *péh ${ }_{2}$-ur, *ph ${ }_{2}$-uén-s >> *péh $h_{2} u r$, peh $h_{2} u e ́ n o s>$ Hitt. pahhur, pahhuenaš 'fire’). Kimball (1999: 396) reconstructs *seh ${ }_{2}$-om, but this does not explain the $n$-stem forms in the oblique cases.
šaheššar / šaḩešn- (n.) 'fortification, stronghold' (Sum. BÀD-eššar): nom.acc.sg. ša-ḩé-eš-šar (OS).

Derivatives: šahešnae- ${ }^{z}$ (Ic2) 'to fortify(?)' (1sg.pret.act. BÀD-eš-na-nu-un (NH), BÀD-eš ${ }_{17}-n a-n u-u n, 3 s g . p r e t . a c t . ~ B A ̀ D-e s ̌-n a-i-i t ; ~ i m p f . ~ s ̌ a-h n e-e s ̌-n i-e s ̌-~$ $k e / a$-, ša-he-eš-na-eš-ke/a-).

See CHD Š: 9f. for attestations. The phonetically spelled forms of these words (šaheššar and šahešnae-) are not totally clear regarding thier interpretation, but the meanings 'fortification' and 'to fortify' certainly would fit the contexts they occur in. The meaning of the logographically written words, BÀD-eššar and BÀD-ešnae-, is ascertained as 'fortification' and 'to fortify', however. Nevertheless, there has been some debate whether or not šaheššar is to be equated with BÀD-eššar (a reading *kutteššar has been proposed on the basis of HLuw. ${ }^{\text {SCALPRUM }}$ kutasara/i- and CLuw. ${ }^{\left.\mathrm{NA}_{4} k u t t a s ̌ s ̌ a r a / i-~ ' o r t h o s t a t ' ~(s e e ~ a t ~ k u ̄ t t-)\right), ~}$ but CHD (Š: 10) and Rieken (1999a: $136^{630}$ ) now state that the equation of BÀD with šaheššar / šahešn- is the only likely one.
Formally, šaheššar must be derived from šāh ${ }_{-}{ }^{i}$ 'to clog, to plug up, to stuff'. CHD states that "if the word is derived from the verb šah-, whose meaning is "to stuff, fill, stop up, block", an area of earthen fill (a rampart) may be meant". It is also possible, however, that we must assume a similar semantic development as visible in ištappeššar 'dam, enclosure' that is derived from the verb ištāp- ${ }^{i}$ / ištapp- 'to plug up, to block, to dam, to enclose, to shut; to besiege'. See for further etymology at $\check{s} a \bar{a} h-{ }^{i}$.
$\check{s} \bar{a} i^{-z^{i}}$ (Ib1 > Ic2) 'to become sullen, to become sulking, to be(come) angry; (midd. $+=z$ ) to quarrel with each other': 3sg.pres.act. ša-a-iz-zi, 3pl.pres.act. ša-a-an-zi ( $\mathrm{OH} / \mathrm{MS}$ ), $\check{s} a-a n-z i(\mathrm{OH} / \mathrm{NS}), 1$ sg.pret.act. $\check{s} a-a-n u-u n(\mathrm{OH} / \mathrm{NS}), 3$ sg.pret.act. $\check{s} a-$ a-i-it ( $\mathrm{OH} / \mathrm{MS} ?), \quad \check{s} a-i t \quad(\mathrm{OH} / \mathrm{MS}), \quad \check{s} a-i-i t \quad(\mathrm{OH} / \mathrm{NS}), \quad \check{s} a-a-i s ̌ \quad(\mathrm{MH} / \mathrm{NS})$; 3pl.pres.midd. ša-a-an-ta-ti (NH); part. ša-a-an-t- (MS?); verb.noun $\check{s} a-a-u-u a-a r$
 (NH).
Derivatives: šātar (n.) 'irriation(?)' (nom.-acc.sg. ša-a-tar (OH/MS), ša-a-atar), see šanu-.
IE cognates: Lat. saevus 'wild, furious, ferocious', Gr. aì- $\bar{\alpha} \eta \eta \varsigma^{\prime}$ 'cruel', Goth. sair, OHG sēr 'pain'.

PIE *seh $i-t i$
See CHD Š: 13f. for attestations. This verb inflects according to the hatrae-class, so seemingly we are dealing with a stem šae- ${ }^{z i}$. This class predominantly consists of verbs of denominative origin, showing a $*$-ie/o-derivation of $o$-stem nouns. In
this case, a nominal origin is not very likely, however, as we would be dealing with a noun *so-. Since Juret (1942: 40), this verb is generally connected with $^{\text {s }}$ Lat. saevus 'wild', which reflects *seh $i$ i-uo- (cf. Schrijver 1990: 270, who connects it with Gr. aì-āvq́c 'cruel', Goth. sair, OHG sēr 'pain'). Oettinger (1979a: 363) reconstructs $*_{s^{2}} h_{2}$-ie/o-, but this is in conflict with his own discovery that verbs in *-eh $h_{2}$-ie/o- end up in the Hittite $t \bar{a} i e / a$-class (named after tāie/a-zi 'to steal' < *teh $h_{2}$-ie/o-) whereas hatrae-class verbs reflect *-o-ie/o-. Oettinger tries to disguise this discrepancy by citing the verb as "šae- (oder šāiie-)", but from the attested forms it is clear that it does not inflect according to the tāie/a-class. Melchert (1994a: 176f.) recognizes this problem and assumes that complex contractions have taken place: *šaiéie/o-> šā(i)-. His reconstruction with $* a$ is solely based on the knowledge that $*-e h_{2} i e / o$ - would have yielded -āie/a-. Apart from the methodological problem of reconstructing a phoneme *a, it is quite problematic, in my view, that a preform *šaieie/o- would yield a shorter outcome than *teh ${ }_{2}$ ie-.
In my opinion, the etymological interpretation of this verb largely depends on the behaviour of the cluster $*-h_{2} i-$. It is generally accepted that in a sequence $*_{-} V h_{2} i V$ - the laryngeal disappears $\left({ }^{*} t e h_{2}\right.$ ie/o- $>$ tāie/a-: the seeming exceptions, lahhiiela- ${ }^{z i}$ (derived from lāhh(a)- 'military campaign'), zahhiie/a- ${ }^{z i}$ (derived from zahhai- 'battle') and tuhhiiatt- (restored on the basis of tuhhae- ${ }^{z i}$ 'to produce smoke') are clearly of secondary origin). The outcome of a sequence ${ }^{*}-V h_{2} i C$ - is less clear, however. Although one at first sight would expect Hitt. -VhhiC-, I have not been able to find any word that unambiguously reflects $-V h h i C-<*_{-} V h_{2} i C$ -(hahhima- 'drought' and tuhhima- are derivatives in -ima- of the verbs hahh- and tuhhae-, ${ }^{\text {NINDA }}$ muhhila- (a kind of pastry) and ${ }^{\text {NINDA }} n a h(h) i t i-$ (a bread) are of foreign origin and zahhin (acc.sg.) 'battle' is a NH secondary form in the paradigm of the diphthong-stem zahhai-: note that nouns in -āhit- are all of Luwian origin). This opens up the possibility that $*_{-} V h_{2} i C$ - did not yield Hitt. -VhhiC-, but, for instance, ${ }^{*-\bar{V} i C}$-. If so, then we are allowed to assume that šāizzi reflects an athematic verbal form $*_{s e ́ h}^{2} i-t i$. As a $m i$-inflecting root present, we would in principle expect ablaut in the stem and therefore 3pl.pres.act. *sh $i$ i-énti, which regularly should have yielded Hitt. išhiianzi (like išhiianzi 'they bind' < *sh $_{2}-i$-énti in the paradigm $\left.i s ̌ h a i-{ }^{i} / i s ̌ h i-\right)$. It is quite understandable, however, that a paradigm šāizzi, išhiiianzi was not retained as such and that the singular stem $\check{s} \bar{a} i$ - was introduced into the plural. Note that this generalization of the stem s$\check{a} a \bar{a}-$ must have taken place in the periode before the contraction of $* V i V$ to $* \bar{V}$, since *šāianzi participated in it, yielding attested $\check{s} a ̄ n z i$. This scenario demands that the only specific hatrae-class inflected form, 1sg.pret.act. šānu[n] (OH/NS) (instead
of expected $* *$ šāinun), must be regarded as secondary, which is unproblematic in view of the high productivity of the hatrae-class inflection in NH times.
šai- ${ }^{i} /$ ši-; šijie/a- ${ }^{z}{ }^{i}$ (IIa4 > Ic1 > Ic2; Ic1 > Ic2) 'to impress, to seal; to put on (headgear); to pitch (a tent); to prick, to sting; to propel, to shoot, to throw; (with $\check{s} a r \bar{a}$ ) to push up, to send up; (with katta) to send down; (midd.) to squirt, to spurt, to flow; (midd.) to shoot out, to spring out; to press': 1sg.pres.act. ši-ia-mi (NH), ši-am-mi, 3sg.pres.act. ši-i-e-ez-zi (MH/MS), ši-e-ez-zi (NS), ši-i-e-z[i], ši-ía-az-zi (NH), ši-i-i-ia-a-iz-zi, ši-i-i-ia-iz-zi (OH/NS), ši-i_ia-iz-zi (OH/NS), ša-a-i(MS), 1pl.pres.act. ši-íia-a-u-e-ni (MH?/MS?), ši-i-e-[u-e-ni?] (OH/NS), 3pl.pres.act. ši-ía-an-zi (MH/MS), 1sg.pret.act. ši-ía-nu-un (NH), ši-įa-a-nu-un (NH), 2sg.pret.act. ši-iš-ta (OH/NS), 3sg.pres.act. ši-i-e-et (OH/MS), ša-a-iš, ša-i-iš, ši-ía-a-it (NH), ši-a-it (NH), ši-i-ía-it (NH), 2pl.pret.act.(or imp.) ša-a-iš-tén,
 $i$ (MH/NS), 2pl.imp.act.(or pret.) ša-a-iš-tén, še-iš-te-en (OH/NS), 3pl.imp.act. ši-$i-i a-a n-d u(\mathrm{OH} / \mathrm{NS})$, ši-i $i a-a n-d u(\mathrm{MH} / \mathrm{NS}), s ̌ i-i-i a-a-a n-d u$; 3sg.pres.midd. ši-i-e-et-ta-ri (OH/NS), ši-e-et-ta, ši-ịa-a-ri (NS), ši-íia-ri (NS), 3pl.pres.midd. ši-íia-an-

 (NH); inf.II ši-i্da-an-na (NH); part. ši-ia-a-an-t-(OH/MS), ši-ia-an-t- (MH?/NS), ši-i-i_ia-an-t-; impf. ši-i-eš-ke/a- (OH/MS), ši-íla-eš-ke/a- (OH/NS), ši-i-i-ia-iš-ke/a-, ši-eš-ke/a-.
 šiīěšn-, šiiéěššar, šišša- ${ }^{i} /$ šiššs-, šiššiiia-, šiššiiant-, šittar(a)- and šittariiela- ${ }^{z i}$.

PIE *sh $h_{1}$-ói-ei, $*_{s} h_{l}-i$-énti; * $h_{l} s$-ié-ti, $* h_{l} s$-ió-nti.
See CHD Š: 15 f . for attestations and semantic treatment. It is generally thought that we are dealing here with the conflation of two verbs, namely a hi-verb šai- ${ }^{i}$ / ši- 'to press, to seal, to put on headgear' and a mi-verb šiie/a- ${ }^{z i}$ 'to throw, to shoot, to sting' (cf. CHD Š: 21; Kimball 1987b). CHD states, however, that "unfortunately the extent and timing of such a conflation cannot be determined from the available evidence". I therefore have followed CHD in citing all forms under one lemma. The conflation is the logical result of the fact that $\check{s} a i^{i}{ }^{i} / \check{s} i-$, which inflects according to the dāi/tiianzi-class, in younger times secondarily was taken over into the -ie/a-class (in this case šiie/a- ${ }^{z i}$ ) on the basis of the reinterpretation of 3pl.pres.act. šii-anzi as šiīa-nzi (cf. huuai- ${ }^{i}$ / hui- with secondary huiela- ${ }^{z i}$, išpai- ${ }^{i} /$ išpi- with secondary išpiiela ${ }^{z i}$, etc.).

According to Kimball (1987b), the verb šiie/a- ${ }^{z i}$ 'to shoot' is to be connected with Skt. asyati 'to shoot' and reflects *hls-ie/o-, whereas šai- ${ }^{i} / \check{s} i-$ 'to press, to seal' belongs with the verbs for 'to sow' in the other IE languages: Lat. serō, Goth. saian, Lith. sëju, OCS sějg 'to sow' < *seh $1_{l^{-}}$(Kimball 1999: 433, followed by e.g. $\mathrm{LIV}^{2}$ ). This would mean, however, that PIE $*^{\text {seh }} h_{1}$ - originally meant 'to sow by pressing the seed into the ground', which, on the one hand yielded the Hittite meaning 'to press', and, on the other, the meaning 'to sow' in the rest of the IE languages. As I have shown in Kloekhorst fthc.a, the verbs of the dāi/tiiianzi-class reflect a structure *CC-oi- / *CC-i-. In this case, it would mean that we have to reconstruct *sh ${ }_{1}$-ói-ei, $*_{s h_{l}-i-e ́ n t i . ~}^{\text {. }}$
šākk- ${ }^{i} /$ šakk- (IIa2) 'to know (about), to experience, to heed, to pay attention to, to recognize; to remember, to be expert in; to be acquainted with' (Akk. ID $\bar{U}$ ): 1sg.pres.act. ša-a-ak-hi (OH/MS), ša-a-ak-ka $a_{4}-a[h-h i](\mathrm{OH} / \mathrm{MS}), \check{s} a-a k-k a_{4}-a h-h i$ ( $\mathrm{OH} / \mathrm{NS}$ ), $\check{s} a-k a_{4}-a h-h i \quad(\mathrm{NH}), 2$ sg.pres.act. $\check{a} a-a-a k-t i \quad(\mathrm{OH} ? / \mathrm{MS} ?), \check{s} a-a k-t i$ (MH/MS), še-ek-ti (NH), 3sg.pres.act. ša-a-ak-ki (MH/NS), ša-ak-ki (OH/NS), 1pl.pres.act. še-ek-ku-ẹ[? $\left.{ }^{-}-n i^{?}\right]$ (KBo 47.153 obv.? 1 (MS?)), še-ek-ku-e-ni (NH), še-ek-ku-u-e-ni (NH), še-ek-ku-ú-e-ni (NH), ši-ik-ku-e-ni (NH), še-ek-ku-ua-u-e$n i \quad(\mathrm{NH}), 2$ pl.pres.act. $\check{s} a-a k-t e-e-n i \quad(\mathrm{OS}), \check{s} a-a k-t e-n i(\mathrm{OH} / \mathrm{NS})$, še-ek-te-ni (MH/NS), še-ek-te-e-ni (NH), 3pl.pres.act. [š]a-kán-zi (OH/NS), še-ek-kán-zi (MH?/MS?), še-kán-zi (NS), 1sg.pret.act. ša-ag-ga-ah-ḩu-un (NH), ša-ka $a_{4}-h u-$ $u\left[n^{?}\right](\mathrm{NH}), 2$ sg.pret.act. $\left.\check{s} a-a-a k-t a \ll-a s ̌ »\right\rangle(\mathrm{MH} / \mathrm{MS}), \check{s} a-a k-k i-i \check{s}(\mathrm{OH} / \mathrm{NS})$, $\check{s} a-a k-$ ta (NH), 3sg.pret.act. ša-a-ak-ta (NH), ša-ak-ta (NH), še-ek-ta (MH/NS), 1 pl.pret.act. še-ek-ku-e-en (NH), še-ek-ku-u-e-en (NS), 3pl.pret.act. še-ek-ke-er (NH), š[e]-ek-k[er] (NH), 1sg.imp.act. še-eg-ga-al-lu (NH), ši-ig-ga-al-lu (NH), 2sg.imp.act. $\check{s} a-a-a k$ (MH/MS), $\check{s} a-a k$ (NH), 3sg.imp.act. ša-a-ak-ku (MH/MS), $\check{s ̌ a-a k-k u \quad(\mathrm{MH} / \mathrm{NS}), \check{s} a-a k-d u(\mathrm{NH}), \check{s} a-a-a k-d u(\mathrm{NH}), 2 \mathrm{pl} . i m p . a c t . \quad[\check{s}] a-a k-t e ́ n}$ (NS), še-ek-tén (NS), ši-ik-tén, 3pl.imp.act. še-ek-kán-du (MH/MS); part. ša-ak-kán-t- (MH/MS), še-ek-kán-t- (MH/MS), ši-ik-kán-t-.
Derivatives: see šak(k)antat(t)ar.
IE cognates: Lat. secō 'to cut', sciō 'to know', OCS sěšti, sěko 'to cut', PGerm. *sagó (n) 'to saw'.

PIE *sókh $h_{l}$-ei, *sk $h_{1}$-enti
See CHD Š: 21f. for attestations. Usually, this verb is cited as $\check{s} a \bar{k} k-/ \check{s} e k k-$, which is incorrect. Although a stem $\check{s} e k k$ - indeed is attested often, the oldest weak-stem form of this paradigm is 2 pl.pres.act. $\check{s} a-a k-t e-e-n i$ (OS), showing a weak stem $\check{s} a k k$-. This stem is supported by 3pl.pres.act. [š] $a-k a ́ n-z i(\mathrm{OH} / \mathrm{NS})$ and part. $\check{s} a-$
$a k-k a ́ n-t-(\mathrm{MH} / \mathrm{MS})$. I therefore cite this verb as šākk-${ }^{i} /$ šakk- here. The stem šekk- is attested from MH times onwards, in weak stem forms (1pl.pres.act. šekkueni (MS?), 2pl.pres.act. šekteni (MH/NS), 3pl.pres.act. šekkanzi (MH?/MS?), 3pl.imp.act. šekkandu (MH/MS), part. šekkant- (MH/MS)), as well as in strong stem forms (2sg.pret.act. šekti (NH), 3sg.pret.act. šekta (MH/NS), 1 pl.pret.act. šekkuen (NH), 3pl.pret.act. šekker (NH), 2pl.imp.act. šekten (NS)). I will first focus on the etymological interpretation of the root, and then look at the origin of the three different stems.
Regarding the root-etymology, we must take into account the fact that we find geminate $-k k$ - throughout the paradigm, which is quite remarkable (compare e.g. $\bar{a} k i / a k k a n z i)$. Oettinger (1979a: 412f., following a suggestion by Benveniste 1932: 140f.) connects this verb with Lat. sāgīre 'to have a good nose, to perceive keenly', Goth. sokjan 'to search', Gr. $\mathfrak{\eta} \gamma \varepsilon$ ع́o $\alpha \boldsymbol{\prime}$ 'to lead the way; to command, to believe' from *seh $h_{2} g$-. He explains the geminate $-k k$ - out of $*-h_{2} g$ - in $*(s e-) s o h_{2} g-$ $e i$. This is in contradiction with the reconstruction of $\check{s} a \bar{a} a \bar{a} i^{-}$'sign, omen' as ${ }^{*} s^{s} h_{2} g$-ōi- as well as ūāki 'bites' as *uóh $h_{2} g$-ei, however. The weak stem šekk-, which is taken as original by Oettinger, is explained as reflecting ${ }^{s} s e-s h_{2} g$ - (i.e. $*_{s e-s h_{2}} g$-eh $h_{1}$-re $>\check{s} e k k e r$ ), under the assumption that $*_{-z g g->-k k-\text {. This is not }}$ very credible, however. So, despite the fact that this etymological connection is semantically quite acceptable (pace Melchert 1994a: 69, who states that this etymology "must be rejected on semantic grounds"), its formal side is unsatisfactory.
Justus (1982: 322 ff .) connects $\check{s} \bar{a} k k-/ s ̌ a k k-$ with "*sek-" 'to cut', which in fact must be *sekH- on the basis of Lat. perf. secū (Rix 1999: 525-6). The semantic development would be parallel to the one seen in Lat. sciō 'to know' < *skH-ie/o-. This etymology is widely followed (e.g. Melchert 1994a: 69; LIV²). For Hittite, this means that šākki must reflect *sókH-ei, in which $-k H$ - was not lenited by the preceding *ó. The fact that $\check{s} a \bar{a} k k-/ s a k k$ - does not inflect according to the $\operatorname{tarn}(a)$-class, in my view shows that the laryngeal must have been $* h_{l}$, since a preform *sókh $h_{2 / 3}$-ei would have yielded Hitt. **šakkai (cf. mallai 'mills' < *molh ${ }_{2} e i$, paddai 'digs' $<{ }^{*} b^{h}$ od' $h_{2} e i$, iškallai 'splits' < *skolh $h_{2 \beta} e i$ and išparrai 'tramples' < *spórh $2_{2 / 3} e i$ ). I therefore reconstruct $\check{s} \bar{a} k k i$ as $*_{s o ́ k h}^{l}$-ei.
The interpretation of the different stems found within the paradigm of this verb, has caused much debate. On the basis of the fact that most of the forms of this verb shows either a stem $\check{s} a ̄ k k$ - or a stem šekk-, it was always assumed that this verb shows an original ablaut $\check{s} a \bar{a} k k-/ s ̌ e k k-$. Such an ablaut, $a / e$, is rare in the Hittite verbal system. Within the hi-verbs, it can only be found in karāp- ${ }^{i}$ / kare/ip- 'to devour', šarāp- ${ }^{i}$ /šarip- 'to sip', hamank- ${ }^{i}$ hame/ink- 'to tie' and ašăš- ${ }^{i}$ / aše/iš-
'to seat'. Within the mi-verbs, we only find tamā̌̌š- ${ }^{z i}$ / tame/ǐ̌š- 'to (op)press'. For the $a / e$-ablauting $h i$-verbs, Jasanoff (1979: 85-6; 2003) has proposed to assume that they reflect a PIE ablaut $*_{o / e}$, a special category of " $h_{2} e$-inflecting" verbs. This view has been widely followed. In my opinion, it is incorrect, however. Nowhere in the IE languages, a verbal ablaut *o/e is attested: its only trace would be these Hittite verbs. As I have shown under their respective lemmas, the -e-grades in karāp-/kare/ip-, šarāp-/šarip-, hamank-/hame/ink- and $a \check{s} a ̄ s ̌-/ a s ̌ e / i s ̌-$ are to be explained as a secondary introduction of the anaptyctic vowel /i/ in the original zero-grade stems, just as we must assume in the case of tame/išš-.

The case of alleged $\check{s} \bar{a} k k-/ s \check{s} e k k$ - is different, however, since we have seen that the original inflection is $\check{s} a \bar{a} k-/ \check{s} a k k$-, whereas the stem $\check{s} e k k$ - is attested from MH times onwards only. This situation reminds us of the verb $\bar{a} r-{ }^{i} / a r$ - 'to arrive'. In this verb, the original ablaut is $\bar{a} r$-/ar-, but from MH times onward, a stem er- is attested as well. As I have shown under its lemma, the introduction of this er-was the result of the analogy aranzi : ārer with ašanzi : ešer 'to be', after which 3pl.pret.act. $\bar{a} r e r$ was altered to erer. In NH times, we see that this stem er-has spread throughout all plural forms (e.g. erueni, erteni, eruen, erten, erir, etc.).
For šākk-, I would like to propose the following scenario. The original paradigm must have been *sókh $e i$, *skh énti (with normal *o/ $\varnothing$-ablaut as in all other hiinflecting verbs), which should regularly have yielded Hitt. /sāki/, **/iskanzi/. This paradigm could not be tolerated, however: nowhere in Hittite we find an ablaut $\check{s} V C$ - : ǐ̌C-. It therefore was altered to /sāki/, /skanzi/, spelled $\check{s} a \bar{a} k-/ s ̌ a k k-$. An initial cluster /sk-/ without an epenthetic vowel /i-/ was rare in Hittite, however: the only other example I know is /ságn/ : /sgnás/ 'oil' (see under šākan / šakn-). It therefore was eager to be replaced by something better. When in MH times a similar analogy as described above for $\bar{a} r e r \gg$ erer yielded 3sg.pret.act. šekker 'they knew', this new stem šekk- was quickly used to replace all cases of /sk-/ (yielding šekkueni, šekteni, šekkanzi, šekkandu and šekkant-). In NH times, it spread to all plural forms with an original strong stem as well (yielding šekkuen and šekten). Although this stem šekk- indeed goes back to virtual *sekh $l^{-}$, the vowel -e- was secondarily introduced in analogy to $m i$-verbs, and not part of the original ablaut.
šāgāi- (c.) 'sign, omen; miracle(?); warning; feature, characteristic' (Sum. ISKIM): nom.sg. ša-ga-i-[i]š (OS), ša-ga-a-iš (MH/MS), ša-ga-iš (OH/NS), ša$k a-e s ̌, ~ \check{s} a^{?}$-ga-eš, acc.sg. ša-ga-in (OH/MS?), ša-ga'-a-in (OH/NS), ša-a-ga-a-in
( $\mathrm{OH} / \mathrm{NS}$ ), gen.sg. $\check{s} a-k i-\underset{1}{i} a-a s ̌(\mathrm{NH}), \check{s} a-k i-a s ̌$, abl. $\check{s} a-a-k i-i a-a z(\mathrm{MH} / \mathrm{MS})$, nom.pl. $\check{s} a-g a-a-u s ̌(\mathrm{NH})$, coll.? ${ }^{?}$ ša-ga-e, ša-ga-a-e (MS).

Derivatives: šākiielaz- ${ }^{\text {i }}$ (Ic1) 'to give a sign, to give an omen; to reveal; to exemplify’ (2sg.pres.act. ša-ki-iš-ši (NH), 3sg.pres.act. ša-a-ki-ez-zi (OH/MS?),
 $n u-u n(\mathrm{OH} / \mathrm{MS}),[\check{s}] a^{?}-k i-i a-n u-u n(\mathrm{NH}), 3 \mathrm{sg} . p r e t . a c t . ~ s ̌ a-k i-a t, ~ s ̌ a-a-k i-i \underline{i} a-a t(\mathrm{NH})$; impf. ša-a-ki-eš-ke/a-, ša-ki-iš-ke/a-, ša-a-ki-iš-ke/a- (NH)), šakiiahhh- ${ }^{i}$ (IIb) 'to indicate, to signal, to give a sign or an omen' (3sg.pres.act. ša-ki-ia-ah-zi (NH), 2sg.pret.act. ISKIM-ah-ta, 3sg.pret.act. ša-ki-ia-ah-ta (NH), 3pl.pret.act. ša-ki-īa-ah-he-er; 3sg.pret.midd. ISKIM-ah-ta-at; verb.noun ISKIM-ah-hu-ua-ar, gen.sg. ša-ki-ía-ah-hu-u-ua-aš), *'šakiaššar / šakiašn- (n.) 'sign, omen' (dat.-loc.sg. ša-ki-aš-ni (NS)), šakiiauunant- (adj.) ‘ominous’ (nom.sg.c. ša-ki-ia-u-ua-an-za).
IE cognates: Lat. sāgīre 'to have a good nose, to perceive keenly', Goth. sokjan 'to search', Gr. $\grave{\eta} \gamma \varepsilon ́ o \mu a ı ~ ' t o ~ l e a d ~ t h e ~ w a y ; ~ t o ~ c o m m a n d, ~ t o ~ b e l i e v e ' . ~$

PIE *Seh ${ }_{2} g-\bar{o} i-$
See CHD Š: 32f. for attestations. This word is a diphthong-stem, for which see Weitenberg 1979. These stems go back to a structure *CéC-ōis, *CC-ói-m, *CC-$i$-ós. Regarding its etymology, this word is generally connected with the root *seh ${ }_{2} g$ - 'einer Fährte nachgehen' (thus $\mathrm{LIV}^{2}$ ). In the older literature, a reconstruction $* s_{2} g$-ōis is often given, in which $* h_{2}$ is supposed to have vocalized to -a- (Eichner 1973a: 71; Oettinger 1979a: 345, $413^{34}$ ). Nowadays it has become clear that " $[\mathrm{t}]$ here is no solid evidence for "vocalization" of $* / \mathrm{h}_{2} /$ anywhere in Anatolian" (Melchert 1994a: 70).
When applying Weitenberg's analysis of this type, we have to assume a paradigm $*_{s e ́ h}^{2}$ g-ōi-s, $*_{s h}{ }_{2} g$-ói-m, $*_{s} h_{2} g-i-o ́ s$, in which generalization of the egrade in the root is trivial: *séh ${ }_{2} g-o \bar{o} i-s,{ }^{*} \operatorname{seh}_{2} g-o ́ i-m,{ }^{*} \operatorname{seh}_{2} g-i$-ós. This should regularly have yielded Hitt. **šāgaiš, šagāin, **šakiīāš. The assumption of egrade in the root is supported by the occasional plene spelling $\check{s} a-a-k^{\circ}$ in the paradigm of $\check{s} \bar{a} g \bar{a} i$ i- itself (which is the reason for me to cite this noun as $\check{s} a \bar{a} g \bar{a} i-$ and not as šagāa- as one often finds) as well as in its derivative $\check{s} a \bar{a} k i i{ }_{2} / a-{ }^{z i}$. Melchert (1994a: 69) even goes so far in assuming that šākiie/a-reflects *séh ${ }_{2} g$ -ie/o- and is to be directly equated with Lat. sāgīre. In my view, inner-Hittite derivation of $\check{s} \bar{a} k i i{ }_{C} / a$ - from šāgāi- is more likely, however.
šākan / šakn- (n.) ‘oil, fat' (Sum. Ì): nom.-acc.sg. ša-ga-an (pre-NS), ša-a-kán (KBo 40.69 r.col. 5 (NS)), Ì-an (OH/MS), gen.sg. ša-ak-na-a-aš (OS), ša-ak-na-
$a \check{s}$, loc.sg. $\check{s} a-a k-n i(\mathrm{MH} / \mathrm{MS})$, erg.sg. Ì- $a n-z a(\mathrm{NH})$, abl. Ì- $a z$, instr. $\check{\text { ša }} a-k a ́ n-d a$ (OS), ša-kán-ta, Ì-it.

Derivatives: šakniie $/ \boldsymbol{a} \boldsymbol{a}^{-{ }^{i}}$ (Ic1) 'to anoint, to smear (with oil), to oil' (3pl.pres.act. ša-ak-ni-i्Ia-an-zi (NH), Ì-an-zi (NH)), šaknuuant- (adj.) 'filled with fat or oil, fatty' (nom.sg.c. [š]a-ak-nu-ūa-an-za (NH), nom.-acc.sg.n. ša-ak-nu-an (MH/MS), nom.pl.c. ša-ak-nu-ưa-an-te-eš (NS), acc.pl.c. Ì-an-te-eš, dat.-loc.pl. Ì$n u$-an-ta-aš), see iškiie/a- ${ }^{z i}$.

Anat. cognates: CLuw. tāin (n.) 'oil' (nom.-acc.sg. ta-a-in, ta-a-i-in, $[t] a-i n-z a$, $d a-a-i m=p a$, dat.-loc.sg. Ì-i, abl.-instr. ta-a-i-na-a-ti, ta-a-i-na-ti, da-a-i-na-ti).

See CHD Š: 35f. for attestations. For a long time the forms with šakn- were regarded as belonging to the paradigm of šakkar, zakkar 'excrements', untill Hoffner (1994) proved that we are dealing with a separate word šāgan / šakn'oil, fat'. Although no good IE cognate is known, the inflection of this word looks so archaic that an IE origin is likely. Rieken (1999a: 294) assumes a preform *se ${ }^{( }{ }_{g}^{(h)}$-en-. Mechanically, we must reconstruct a paradigm *sóg-n, *sg-n-ós, which should regularly have given Hitt. /sāgn/, **/isgnās/. Since an ablaut $\check{s} V C$ : $i \check{s} C$ is unparalleled in Hittite, the form **/isgnās/ probably was remade to /sgnās/ (cf. at $\check{s} a \bar{a} k-^{i} / \check{s} a k k$ - for a similar scenario). Nevertheless, it cannot be excluded that the $o$-grade was introduced into the oblique cases (so /sagnā́s/). Yet the fact that we are dealing with an OS attestation šaknāš that clearly is accentuated on the ending in my view indicates that this form is to be analysed as /sgnā́s/. According to Rieken (1.c.), the verb iškiie/a- ${ }^{z i}$ 'to anoint, to oil' must be regarded as a derivative of this noun, reflecting $* s g^{\prime} g^{(h)}-i e / o-$. See there for discussion.

Oettinger (2003: 340) adduces CLuw. tāin- 'oil', which he assumes to reflect a collective *sog-én. Although semantically this connection is convincing, the formal side is difficult, especially with regard to the initial $t$ - in CLuwian. Nevertheless, there are some other words in which CLuw. $t$ - seems to correspond to Hitt. š-: CLuw. tāųa/i- ~ Hitt. šākuúa- ‘eye' and CLuw. dūr / dūn- ~ Hitt. šēhur / šēhun- 'urine'. It is remarkable that in all these cases we are dealing with a word in which PAnat. *g disappeared in Luwian.
šak(k)antat(t)ar (n.) 'appliqué’: nom.-acc.sg. ša-kán-ta-tar, nom.-acc.pl. ša-ag-ga-an-ta-at-ta-r[a], ša-kán-ta-ad-da-ra, [ś]a-kán-ta-at-ta-ra.

Anat. cognates: CLuw. šakantama/i- (adj.) 'decorated with appliqué(?)’ (nom.acc.sg.n. ša-kán-ta<-am>-ma-an-za, nom.pl.c. ša-kán-ta<-am>-me-en-zi).

See CHD Š: 40 for attestations. It is unclear whether these forms are genuinely Hittite or of Luwian origin. According to Starke (1990: 516ff.) the words are derived from *šakkant(i)-, which he interprets as an old part. of $*_{s e k h_{1}-}$ 'to cut', for which see $\check{s} a \bar{a} k-^{i} / \check{s} a k k$-.
šakkar, zakkar / šakn- (n.) 'excrement, dung, faeces’: nom.-acc.sg. ša-ak-kar ( $\mathrm{OH} / \mathrm{NS}$ ), za-ak-kar ( OH or MH/NS), gen.sg. ša-ak-na-aš (MH/NS).

Derivatives: šaknēšš- ${ }^{z i}$ (Ib2) 'to be(come) impure, defiled' (3sg.pres.act. ša-ak$\left.n i-e s ̌-z i, ~ s ̌ a-a k-n i-e-e\left[\check{s}^{\prime}-z i\right]\right)$, šaknuunant- (adj.) 'defiled by šakkar, impure, soiled' (nom.sg.c. $\check{s} a-a k-n u-a n-z a(\mathrm{MH} / \mathrm{NS}), \check{s} a-a k-n u-u a-a n-z a(\mathrm{NH})$, acc.sg.c. ša-ak-nu-ua-an-da-an, nom.-acc.sg.n. ša-ak-nu-üa-an (NH), dat.-loc.sg. ša-ak-nu-una-an-ti, abl. $\check{s} a-a k-n u-u)^{\prime} a-a n-d a-z a$, nom.pl.c. ša-ak-nu-ûa-an-te-eš (NH), $\check{s} a-a k-n u-a n-t e-$ eš (pre-NS), dat.-loc.pl. ša-ak-nu-ūa-an-ta-aš), šaknumar (n.) 'defilement(?), defecation(?)' (nom.-acc.sg. ša-ak-nu-mar (NH)), see zašgaraiš.
IE cognates: Gr. $\sigma \kappa \tilde{\omega} \rho$, бкатóৎ 'excrement', Av. sairiia- 'dung', PGerm. *skarna- 'dung, filth', Russ. sor 'dung', Latv. sãrņi 'dung'.

$$
\text { PIE } *_{s o ́ k} k-r, *_{s k} k-o ́ r, *_{s k-n-o ́ s}
$$

See CHD Š: 41f. for attestations. Since Benveniste (1935: 9) and Sturtevant (1936: 183f.) this noun is generally connected with Gr. $\sigma \kappa \tilde{\omega} \rho$, $\sigma \kappa \alpha$ tóc 'excrement' (going back to an $r / n$-stem as well) and Av. sairiia-, PGerm. *skarna-, Russ. sor and Latv. sãrņi 'dung' that seem to reflect *sker-. The interpretation of the Hittite forms is not fully clear. The form šakkar is generally thought to reflect *sók-r (cf. Rieken 1999a: 295). From a PIE point of view, we would expect that the oblique forms belonging to *sók-r should have had a form *sḱ-én- (compare *uód-r, *ud-én- 'water'). This form is not attested, however. The form zakkar must reflect a "coll." *sk'-ór (not *sék-ōr, compare úidār < *ud-ốr!), certainly in view of the spelling za-aš-ga-r /tskar/ as attested in its derivative zašgaraiš (q.v.). The expected oblique form belonging to this collective is *sk-n-ós, which in my view is the preform of gen.sg. šaknaš (so possibly phonetic /sknā́s/, cf. šākan / šakn-).
The initial $z$ - of zakkar has caused much discussion. For instance, Rieken (1.c.) follows Oettinger (1994: 326f.) in assuming that the development of $\check{s}$ - $>z$ - is due to nasal anticipation, and assumes a development ${ }^{\text {sakn }}>{ }^{*}{ }_{n s a k n-}>{ }^{n} n^{t}$ sakn- > *tsakn-, after which zakkar was formed. This is unconvincing: the only form that contains a nasal shows initial $\check{s}$ - (šaknă̌), whereas zakkar has no nasal. I would like to propose an alternative solution. The only other case that I know of where $*_{s}$ - > Hitt. z- is zama(n)kur 'beard' < *smo(n)k'ur (note that zinni-/zinn- 'to finish' < *ti-n(e)- $h_{l^{-}}, z \bar{e}-$ 'to cook' < *tieh $h_{1}$ - and zēna- 'autumn' < *tieh $h_{1}-n o-$ and
therefore do not show $*_{s}$ - $>$ Hitt. $z$-). It is remarkable that its derivative šamankuruant- 'bearded' does not show initial $z$-. So the development $*_{s-}>z$ seems to be limited to two words only, which both are neuter and have an initial cluster $*_{s C}$-. I therefore want to propose that this development is due to a false analysis of the syntagms *tod smókur and *tod skốr (or whatever preceding pronoun) as *tod 'smóḱur and *tod 'skórr respectively. This would explain why zis only found in the nom.-acc. of neuter words and not in their oblique cases or derivatives. This development only took place with $*_{s} C$ - and not with $*_{s} V$ (hence šakkar < *sókrr).

It should be noted that nom.-acc.sg. *sók'r regularlly should have yielded **sākar (with lenition of $*_{-k}$ - to $/ \mathrm{g} /$ due to the preceding ${ }^{\prime} o ́$, cf. *-ótr $>$ Hitt. - $\bar{a}$ tar), which means that unlenited $-k k$ - must have been restored out of the oblique cases.
šāklāi- (c.) 'custom, customary behavior, rule, law, requirement; rite, ceremony; privilege, right': nom.sg. ša-ak-la-iš (MH/MS), ša-ak-la-a-ǐ̌ (MH/NS), $\check{s} a-a-a k-$ la-a-iš (NH), acc.sg. ša-ak-la-in (MH?/MS?, OH/NS), ša-ak-la-a-in (MH/NS), $\check{s} a-a k-l i-i n(\mathrm{OH} / \mathrm{MS} ?), \check{a} a-a-a k-l i(n)=m a-a n(\mathrm{OH} / \mathrm{MS})$, dat.-loc.sg. $\check{s} a-a k-l a-a-i$ ( NH ), $\check{s} a-a k-l a-i(\mathrm{NH}) . ~ s \check{a}-a k-l i-i \underline{i} a(\mathrm{MH} / \mathrm{NS})$, gen.sg. ša-ak-la-a-ia-aš (NH), abl. ša-ak-la-ia-za, nom.pl. ša-ak-l[a-a-eš] (NH), ša-ak-la-uš (NH), acc.pl. ša-ak-la$u \check{s}$ ( NH ).

PIE * $\operatorname{seh}_{2} k-l \bar{o} i-$
See CHD Š: 44f. for attestations. Since Sturtevant (1933: 87), this word is generally connected with Lat. sacer 'sacred' and ON sátt 'treaty'. These words reflect a root ${ }^{*} s(e) h_{2} k$ - (cf. Schrijver 1991: 97), so šakläi- must reflect ${ }^{*} s(e) h_{2} k$ $l \bar{o} i-s$. If in the root the zero-grade has generalized, then this word would show a development *sh2 $k->$ šak- (thus Kimball 1999: 419), but this is unlikely in view of the fact that " $[t]$ here is no solid evidence for "vocalization" of $* / h_{2} /$ anywhere in Anatolian" (Melchert 1994a: 70). We should rather assume generalization of the $e$-grade throughout the paradigm, which is strongly supported by the plene spellings $\check{s} a-a-a k$ - (in an $\mathrm{OH} / \mathrm{MS}$ text already).
šakruule/a- ${ }^{-3 i}$ : see šakuruue/a- ${ }^{z i}$
šāktae- ${ }^{z i}$ (Ic2) 'to provide sick-maintainance': 3sg.pres.act. ša-a-ak-ta-a-ez-zi (OS), ša-ak-ta-iz-zi (NH).
IE cognates: OIr. socht 'stupor'.

See CHD Š: 51f. for attestations. See Watkins (1975: 70-1) for semantics and
 be denominative from a noun $*$ šakta- < *sokto-. He connects this noun with OIr. socht 'stupor', which he further compares to Skt. ví-ṣaktā 'dry (cow)', from the verb *sek- 'to dry'. This etymology demands the assumption of a semantic development *sokto- 'dryness' > 'sickness', which may not be very appealing. Despite its semantic unattractiveness, this etymology is followed by Oettinger (1979a: 377) and Melchert (1994a: 93).
šakuiššai- (gender undet.) a body part: dat.-loc.sg. ša-ku-iš-ša-i (NS).
This word occurs in one context only:
KUB 45.24 i
(9) $n u-u=s ̌-s ̌ i-i=\check{s}-s \check{a} a-a n ~ s ̌ a-k u-i \check{s}-s ̌ a-i-i=s ̌-s ̌ i ~ k u-i t ~ S ̌ A ~ S I ́ G ~[S] A_{5}$
(10) šu-ú-i-el ḩa-ma-an-«<-ga>>-kán nu MUNUS ŠU.GI šu-ụ-e[l ...]
//
KBo 33.37 rev. + IBoT 2.48
(2/3) $[(n u-u=\check{s}-s \check{s} i-i=s \check{a}-a)] n ~ s \check{a} a-k u-[i \check{s}-s ̌] a-i k u-i\left[(t \check{S} A\right.$ SÍG $\left.) \mathrm{S}\left(\mathrm{A}_{5} \check{s} u-u ́-i-e l\right)\right]$
(3/4) $\left.h\left[\left(a^{?}-m a-a\right)\right] n-k a ́ n \ll-a n » ~ n u ~ M U N U S ~[S ̌] U . G I ~ s ̌ u-u ́-i ̣[(-e) l ~ . .] ~.\right] ~$
'Whatever thread of red wool is tied onto his (i.e. the client's) šakuiššai-, the
Old Woman will [...] (that) thread'.
From this context, we have to conclude that $\check{s} a k u i s ̌ s ̌ a i-~ i s ~ a ~ b o d y ~ p a r t ~ o n t o ~ w h i c h ~$ threads could be tied. The formal similarity with šākuua- 'eye' has led Haas \& Wegner (1988a: 326 and 1988b: 160) to translate 'Augenpartie', but this is rejected by CHD Š: 77. For the form šakuǐ̌šit, which CHD (1.c) cites as a possible instr.-form of this word, see the lemma šakuiššiie/a- ${ }^{z i}$. Further unclear.
šakuiššīe/a- ${ }^{z i}$ (Ic1) '?': 3sg.pret.act.(?) ša-ku-iš-ši-et (KUB 17.28 i 15)
This verb is hapax in the following context:
KUB 17.28 i
(14) $\check{s} a-p i ́-i k-k u-u s ̌-t a-a \check{s}-s ̌=a$ URUDU- $a \check{s} n u-u=\check{s}-s ̌ a-a n$ A-ta-an-ta
(15) ša-ku-iš-ši-et $n=a$-an še-er hu-i-nu-um-me-ni
'There is a copper pin. It has $\check{s}$.-ed with water and we let it run up and hammer it down'.

On the basis of this context, the meaning of šakuiššiet cannot be determined. It has been suggested to read the form as $\check{s} a-k u-i=s \check{s}-\check{s} i-i t$ 'its eye' (i.e. of the šapikkušta-, which is then interpreted as 'needle'), but there is no positive evidence for this. Moreover, the word for 'eye' is an $a$-stem, šākuua- (q.v.), and not an $i$-stem. CHD Š: 77 further suggests an interpretation as instr. of the noun šakuiššai-, a body part (q.v.), but this cannot be ascertained either. I have therefore chosen to interpret this word as a verbal form (on the basis of the fact that it stands in sentence-final position), namely 3sg.pret.act. of a further unattested verb šakuiššiie/a- ${ }^{z i}$.
šak(k)uni- (c.) 'spring, well' (Sum. TÚL?): nom.sg. ša-kuィ-ni>-iš (NH), gen.sg. ša-ku-ni-i_a-aš (MH?/NS), all.sg. ša-ku-ni-ía.

Derivatives: šakuniiela- (Ic1) 'to well up' (part.nom.-acc.sg.n. ša-ku-ni-ina-an (MH/NS); impf.2sg.pres.act. ša-ku-ni-eš-ke-ši (NH)), šakku(ua)ni- (c.) 'mud plaster' (acc.sg. ša-ku-u_u-ni-in, ša-ak-ku-ni-in, ša-ku-ni-in, case? ša-ak-ku-una-ni-$i[a-\ldots])$.

PIE *sok ${ }^{w}-n-i-$
See CHD Š: 58 and 77 for attestations. Note that CHD is quite inconsistent in its treatment of these words. For instance, KBo 10.45 ii (11) ša-ku-ni-ia-an (12) [ša$r a-a$ ] da-a-i is translated on page 58 'She takes [up] mud-plaster(?)' (as if belonging with $\check{s} a k k u(u a) n i-$ 'mud-plaster'), whereas on page 78 it is translated 'She takes [up] welled-up mud' (as if a part.nom.-acc.sg.n. of the verb šakuniie/a'to well up'). A close look at all the contexts in which the above mentioned forms occur shows that we should distinguish the following words: the noun šakuni'spring, well' (but not šakuniía- as cited in CHD), the noun šakkuuani-, šakkuni-'mud-plaster' (but not šakkuniía- as cited in CHD) and the participle šakuniiiant-'welled-up', derived from the verb šakuniie/a-. Despite the fact that šakkuuani-, šakkuni- is the only one of these words that shows spellings with geminate $-k k$ (besides occasional single $-k$-), I assume on the basis of the semantic similarity that all these words are related and that the lack of geminate spelling $-k k$ - in the words šakuni- and šakuniie/a- is due to chance (pace Rieken 1999a: $61^{288}$ ).
The formal connection between šakuni- and šakuniie/a- is clear, but the relation to šakku(ưa)ni- is less obvious. Schmid (1988: 314-5) proposed a connection with
šākuua- 'eye' (which is semantically likely in view of Akk. $\overline{\text { m }} \boldsymbol{n} u$ that denotes 'eye' as well as 'well'), assuming a derivation of it with the suffix *-uon-/-un- (and thus explaining šakkuuani- besides šakkuni-). Rieken (l.c.) rejects this suggestion on the basis of her idea that ${ }^{*}$-uon- should have yielded Hitt. ${ }^{* *}$-man- next to labiovelar. This is incorrect, however: the labial element of labiovelars does not participate in the sound law *-uu- > -um- (cf. akueni 'we drink' < *h $h_{l} g^{w h} u e ́ n i$ ). Nevertheless, assuming an $n$-suffix is formally possible as well.
All in all, we have to assume a preform $*^{*}{ }^{\prime} k^{w}-n$-, $*_{s}(o) k^{w}$-ón- ${ }^{*} *$ eye-like $>$ well' (or *sók $k^{w}$-un-, *s $(o) k^{w}$-uón- if one likes), from which $i$-stem derivatives on the one hand yielded *sok'-n-i- > šakkuni- 'well, spring' and *sok'-n-ie/o- > šakkuniie/a- 'to well up', and on the other $*_{\text {sok }}$ w-on-i- > šakkuuani- 'mud-plaster (i.e. what has welled up)'. The fact that $* k^{w}$ was not lenited in these forms (unlike in šākuua- 'eye') is due to the fact that unlenited $* k^{w}$ was generalized from the oblique cases. See at $\grave{\text { sa ākuúa- for further etymology. }}$
šakuruule/a- ${ }^{-}$i (Ic4) '(trans.) to water (animals); (intr. with $=z$ ) to drink': 3pl.pres.act. ša-ak-ru-ưa-an-zi (MH/MS), ša-ku-ru-u-an-z[i] (MH/MS), [š]a-ku-ru-u-ua-an-zi (MH/MS), 3pl.pret.act. ša-ku-ru-u-e-er (MH/MS), 3?.imp.act. ša$a k-r u-x[. .$.$] (NS); inf.I ša-ku-ru-u-ua-ưa-an-zi (MH/MS), ša-ak-ru-ú-ua-an-zi$
 (MH/MS).

PIE *srog ${ }^{*}$ ru-ie/o- ??
See CHD Š: 50f. for attestations. There, this verb is cited as "šakruwai-, šakuruwai-", despite the fact that it is stated (with reference to Melchert 1997a: 132) that "šakruwe/a-"to water" is a denominative verb in *-ye/o- with regular loss of intervocalic * $y^{\prime \prime}$.
We find spellings that show a stem šakuruue/a- and šakruue/a-. Because the form šakuruue/a-seems to be the older one (it is the predominant spelling in MS texts, whereas šakru- occurs in NS texts), I cite the verb as šakuruue/a- here. Apparently, šakuruūe/a- (/sag ${ }^{\mathrm{w}}$ rue/a-/?) was dissimilated to šakruúe/a-(/sagrue/a-/) in the late MH period. This šakuruue/a- is, as stated by CHD, a denominative in *-ie/o- of a stem *šakuru-. Melchert (1994a: 170) assumes that this stem is metathesized from $*^{s a g}{ }^{w} u r$. Moreover, he assumes that "[d]issimilatory loss of */r/ is seen in *srakur-ye- 'water' > *srakru-ye- ... > *sakruye- > sakruwe-. The base noun *srakur (i.e. */srag ${ }^{\text {w}}$-wr/) belongs to the poorly attested $s(a) r a k u$ - (/sragw-/) 'to water'" (o.c.: 169). See at šaraku- for further etymology.
šakutta(i)- (n.) 'thigh(?)': nom.-acc.pl.(?) ša-ak-ut-ta-i (OH/NS), ša-ku-ta-a-e (NS), ša-ku-ut-ta (NS).
IE cognates: ?Skt. sákthi- 'thigh'.

```
PIE *sokw}tH-
```

See CHD Š: 81 for attestations. This word is attested in a list of body parts that are arranged top-down: eyes, shoulder, back, breast, heart, lungs, kidneys, auli, šakuttai, knee, feet, hands. This means that šakutta(i)- is a body part (although it does not carry the UZU-determinative) that is located above the knees, but below the auli-, which is situated below the kidneys. CHD therefore suggests 'rump, haunches, thigh or shank'. Normier apud Kühne (1986: 103 ${ }^{61}$ ) proposes a connection with Skt. sákthi- 'thigh', which would formally fit and semantically certainly be possible. If this etymology is correct, we have to reconstruct *sok ${ }^{w} t H-o-$. The fact that we do not find geminate spelling $-k k$ - in šakutta(i)$/ \operatorname{sak}^{\mathrm{w}} \mathrm{ta}(\mathrm{i})-/$ may be due to chance, although the broken spelling ša-ak-ut-ta-i could in fact show that we have to read it as $\check{s} a-a k r-k u r-u t-t a-i$.
 $E-N I$, all.sg.(?) ša-ku-ưa (OH/NS), nom.-acc.pl. ša-a-ku-ūa (OS), ša-ku-ua-a (MH/MS), ša-ku-ua (OH/NS), gen.pl. ša-ku-ua-aš (OH or MH/NS), ša-a-ku-ua$a \check{s}$, dat.-loc.pl. $\check{s} a-k u-u{ }_{c} a-a \check{s}$ ( $\mathrm{OH} / \mathrm{NS}$ ), abl.pl. [ $\left.\check{s} a-k\right] u-u{ }_{\lambda} a-z a$, instr.pl. $\check{s} a-a-k u-i t$ (OS), ša-ku-i-it (OH/MS), ša-a-ku-una-at (MH/MS).
Derivatives: šakuulal- (n.) 'eye-cover' (nom.-acc.sg. [š] $a^{?}$-a-ak-ku-uaa-al (MS), instr. [ša-a-a]k? ${ }^{?}$ ku-u्रa-li-it (MS), nom.-acc.pl. ša-ku-una-a[l-l(i)]), see šakuuaie/a- ${ }^{z i}$ and šakuuantariie/a- ${ }^{z i}$.

Anat. cognates: CLuw. tāua/i- (c./n.) 'eye' (nom.sg. da-a-u-i-iš, dat.-loc.sg. ta-$a-u-i$, coll.pl. $d a-a-u-u a, \mathrm{IGI}^{\mathrm{HIIA}}-u a$, dist.nom.-acc. $\mathrm{IGI}^{\mathrm{HI} . \mathrm{A}}-u a-a n-t a$, dist.dat.-loc. $d a-a-u ́-u a-a n-t[a-a n-z a]$, ta-ua-an-ta-an-[za], abl.-instr. ta-a-ú-ua-ti, gen.adj.nom.sg.c. $\quad \mathrm{IGI}^{\mathrm{HIIA}}-u{ }_{-} a-a \check{s}-s ̌ i-i s ̌, \quad$ gen.adj.nom.-acc.sg.n. $\mathrm{IGI}^{\mathrm{HIIA}}-u{ }_{2} a-a \check{s}-s{ }^{\prime} a-a n-z a$, gen.adj.abl.-instr. ta-u_a-aš-ša-ti, da-a-u-ua-aš-ša-ti, ta-a-u-ua-aš-ša-an-za-ti, da-$a-u-u a-a \check{s}-\check{-} a-a n-z a-t i)$, daûalli(ia)-' 'to cast the evil eye upon' (3sg.pres.act. da-ua-al-li-it-ti (KUB 44.4+KBo 13.241 rev. 33)); HLuw. tawa/i- 'eye' (acc.sg. "LITUUS" $t a-w a ́ l i ́-n a-{ }^{\prime}\left(\right.$ KAYSERİ §3), abl.-instr. ${ }^{\text {COR }}{ }^{t} a-w a / i+r a / i$ (KÜRTÜL §4), gen.adj.abl.-instr.(?) "COR" $t a-w a / i-s a ̀-t a-t i(A S S U R ~ l e t t e r ~ e ~ § 10)) ; ~ L y c . ~ * t e w e-~$ 'eye' (coll.pl. tawa), ñtew $\tilde{\boldsymbol{e}}$ (adv.) 'facing, opposite, toward'.

PAnat. * $\operatorname{só}^{w}{ }^{w} o-$
IE cognates: PGerm. *sex ${ }^{w}$ an 'to see'

PIE *sók ${ }^{w}$-o-
See CHD Š: 65 f . for attestations. The oldest attestations of this word is nom.acc.pl. šākuua (OS). The bulk of the attested forms are plural, which means that we are practically dealing with a pluralum tantum. Often, the word is written with the sumerogram IGI, but it is not clear whether IGI always stands for šākuua-. For instance, the NS spelling IGI-anda for menahhanda may show that IGI was associated with meni- 'face' as well (q.v.). This is important for our judgement of a few cases where IGI is phonetically complemented with $i$-stem endings: nom.sg.c. $\mathrm{IGI}^{\mathrm{HILA}}-i \check{s}\left(\mathrm{MH} / \mathrm{MS}\right.$ ), acc.sg.c. $\mathrm{IGI}^{\mathrm{HILA}}$-in (NS) (see CHD (1.c.) for attestations). On the basis of these forms, e.g. CHD assumes that šākuúa- was an $i$-stem originally, and cites the lemma as "šakui-". Nevertheless, the appurtenance of these $i$-stem forms to the word that I cite as šākuua- is unlikely, not only because all phonetically spelled forms of this word show the $a$-stem šākuua-, but also because these $i$-stem forms are commune whereas šākuıa- shows neuter forms only. As an extra argument in favour of the assumption that 'eye' originally was an $i$-stem šakui-, the form $\check{s} a-k u$-iš-ši-it (KUB 17.28 i 15) is interpreted by CHD as nom.-acc.sg.n. šakui=̌̌šit 'its eye'. As we will see at its own lemma, this word is rather a verbal form belonging to a stem šakuiššiie/a- ${ }^{z i}$ (q.v.). Starke (1989: 665f.) states that the forms with $\mathrm{IGI}^{\text {HI.A }}-i$ - should be read as Luwian tāua/i-, but according to CHD (Š: 67) there is no evidence for this assumption. Rieken (1999a: 61) suggests to interpret the form $\check{s} a-a-k u-i($ KBo 34.129, 2) as reflecting an old dual ending in $*_{-i} i h_{l}$, but the fact that it stands right before a break ( $\check{s} a-a-k u-i[(-) \ldots])$ makes any interpretation uncertain (according to CHD an interpretation as dat.-loc.sg. is equally possible). All in all, we have to start from a neuter noun $\check{s} a ̄ k u u a-$, which is almost consistently attested in the plural. There is no evidence that the commune forms $\mathrm{IGI}^{\mathrm{HILA}}-i$ - should be read šakui-, and therefore I will further leave these out of consideration here.
There are two different etymological proposals for this word, both going back to Sturtevant (1927b: 163). The first one connects šākuua- with * $h_{3} e k^{w}$ - 'to see', which would imply that in Hittite we are dealing with an $s$-mobile: $*_{s}-h_{3} e k^{w}$-. The second one connects šākuûa- with PGerm. *sexwan 'to see' from *sek ${ }^{w}$-. Both etymologies have their problematic sides. The assumption of an $s$-mobile in $*_{s}$ $h_{3} e k^{w}$ - is rather awkward, although one can compare šankuuai- 'nail' < $*_{s}-h_{3} n g^{h}$ $u$ - and possibly išhahru- 'tear', if this reflects $*_{s} h_{2} e k ' r u$-. A meaning 'to see' of PGerm. ${ }^{*}$ sex ${ }^{w}$ an is often thought to derive through a secondary development from PIE *sek ${ }^{w}$ - 'to follow' (< 'to follow with the eyes'). Both etymological proposals have the problem that PIE $*-k^{w}$ - does not seem to correspond to Hitt. single $-k u$-,
which rather points to $*_{-} g^{w(h)}$. This last problem is solved differently by different scholars. For instance, Eichner (1973a: 82) assumes a lengthened grade $*_{S h_{3}}{ }^{\prime} k^{w}$ $o$ - that should have caused lenition. He does not explain, however, how this $* \bar{e}$ could have yielded Hitt. $\bar{a}$, since it should not have been coloured according to his own law. Moreover, assuming lengthened grade in this formation is ad hoc. Melchert (1994a: 61) states that the PIE phoneme *-kw- turns up as Hitt. $/ \mathrm{g}^{\mathrm{w}} /$ unconditionally. According to him, this is not only visible in šākuua- but also in $n e k u z$ 'night' < *nek ${ }^{w} t s$ and tarku- besides "Luw." taru- 'to dance' < *terk ${ }^{w}$-. As I will show at their own lemmas, nekuz and $\operatorname{tar}(k) u$ - have alternative solutions. Besides, words like šakkuuani- 'mud-plaster' < *sokw-on-i-, tekkuš- 'to show, to present' $<{ }^{*} d e k^{w} s$-, takku 'if, when' $<* t o-k^{w} e$ and nekku 'not?' $<* n e-k^{w} e$ clearly show that in Hittite a phoneme $/ \mathrm{k}^{\mathrm{w}} /<*^{w}$ is available, which means that the assumption of such a general lenition of $* k^{w}$ is incorrect. Moreover, it would be very difficult to offer a phonetic explanation for a general lenition of $* k^{w}$ whereas $* k, * t$ and ${ }^{*} p$ remain unlenited in similar positions.
My solution for the lenited $/ \mathrm{g}^{\mathrm{W} /}$ in šākuua- is that we see here an example of lenition due to a preceding accentuated *ó. As I have stated in § 1.4.1, I assume that *ó lenited a following consonant, which is for instance the source of the characteristic alternation between $-C$ - and -CC- in hi-verbs (e.g. āki /akkanzi). So in my view, *-ók ${ }^{w}$ o- regularly yields Hitt. - $\bar{a} k u u a-$. All in all, I would reconstruct $\check{s} a ̄ k u u a-$ as $*$ sók ${ }^{w}-o-$, and, to be more precise, nom.-acc.pl. šākuúa as ${ }^{*} \operatorname{só}^{w} e h_{2}$ (from which šakuuaie/az- ${ }^{z i}$, q.v.).
The interpretation of CLuw. tāua/i-, HLuw. tawa/i- and Lyc. tewe- 'eye' is difficult. Szemerényi (1980: 26-8) connected these words with Lat. tueor 'to look at' (followed by Melchert 1987a: 188 ${ }^{17}$ (but retracted in 1994a: 274-5), and by Rieken 1999a: $60^{284}$ ). LIV ${ }^{2}$ states that Lat. tueor reflects a root $*$ teuH-, which is translated "(freundlich) beachten, betrachten; schützen". If correct, the connection with 'eye' would not be very attractive semantically. In my view, the formal and semantic similarity between Luw. tāua/i- and Hitt. šākuua- is too big not to attempt connecting them etymologically. The latter part of the word is no problem: Hitt. - $\bar{k} k u и a-$ points to PAnat. *-óc $g^{w} o-$, which would yield Luw. -āua/ias well. The initial part is more problematic, however: Luw./Lyc. $t$ - does not regularly correspond to Hitt. $\check{s}$-. Yet there are a few more words in which we do find this correspondence: CLuw. tāin- 'oil' could possibly belong with Hitt. šākan / šakn- 'oil' and CLuw. dūr / dūn- 'urine' could possibly belong with Hitt. šēhur / šēhun- 'urine'. When compared to Luw. tāua/i- ~ Hitt. šākuua-, we notice that in all these cases we are dealing with a word in which PAnat. */g/, */g/ or */g ${ }^{\mathrm{w}} /$ is lost: tāin- < *sógen-, dū $<$ *ség $^{w} r$ and tāúu/i- < *só́g ${ }^{*} o-$. Perhaps this
loss of $* / \mathrm{g} /$ was a decisive factor in the development of PAnat. *s- to pre-Luw. $*_{t}$ -
šakuūīie/a- ${ }^{z i}(\operatorname{Ic} 3>\operatorname{Ic} 2)$ 'to see, to look': 3sg.pres.act. ša-ku-ua-e[z-zi] (here?), 1sg.pret.act. $\check{s} a-[k] u-u{ }_{C} a-i a-n u-u n, \quad 3$ sg.pret.act. $\check{\sim}$ MH/NS), ša-ku-ua-įa-at (NH), ša-ku-ua-et, ša-ku-ưa-a-[et] (MH/NS), [ša-] $]$-ku-ua-i-e-et, [̌̌] $a-k u-u a-i-e-e t, 2$ sg.imp.act. ša-ku-ua-ía (OH/MS), 2pl.imp.act. $\check{s} a-k u-$ ua-at-te-en ( OH or MH ); verb.noun gen. ša-kuィ-una--ia-u-ua-ǎ̌; impf. ša-a-ku-iš$k e / a-(\mathrm{OH} ? / \mathrm{NS}), \check{s} a-k u-e \check{-s}-k e / a-$ (MH/MS), ša-ku-iš-ke/a-(OH or MH/NS), ša-ku$u s ̌$-ke/a-.

PIE *sok ${ }^{w} e h_{2-i}$ ie/o-
See CHD Š: 55f. for attestations. This verb is generally seen as a derivative of šākuua- 'eye'. As this noun is virtually pluralum tantum (nom.-acc.pl. šākuu_a< *sók ${ }^{w} e h_{2}$ ), it is likely that this verb is derived from ${ }^{*} s^{\prime} k^{w} e h_{2}$ and reflects *sok ${ }^{w} e h_{2}$-ie/o-, which explains why this verb belongs to the tāie/a-class. See for further etymology at šākuua-.
šakuunantariie/ $\boldsymbol{a}^{z i}$ (Ic1) 'to stay, to remain, to rest; to be neglected, to be unvisited, to be untended, to be uncelebrated' (Sum. IGI-unantariie/a-): 3sg.pres.act. $\quad \check{a} a-k u-u a-a n-t a-r i-i a-z i \quad(M H / N S), \quad[I G] I-u a-a n-d a-r i-e z-z i$, 3pl.pres.act. ša-ku-ua-an-ta-ri-ía-an-zi (NS), 1sg.pret.act. ša-a-ku-ua-an-ta-ri-ía-nu-un (NH), ša-ku-una-an-ta-ri-ia-nu-un (NH); impf. ša-ku-una-an-da-ri-eš-ke/a(NH), ša-ku-ua-an-da-ri-iš-ke/a- (NH).
Derivatives: šaku(una)ntariianu- ${ }^{z i}$ (Ib2) 'to neglect' (3sg.pres.act. ša-ku-un-tar-ri-ía-nu-zi (NH), 2pl.pres.act. ša-ku-ua-an-ta-ri-ia-nu-te-ni (OH or MH/NS); part. ša-ku-ua-an-ta-ri-ia-nu-u_u-an-t- (NH); impf. ša-ku-ua-an-ta-ri-į्a-nu-uš-ke/a(NH), IGI-ua-an-ta-ri-ia-nu-uš-ke/a-(MH/NS)).

PIE *sok ${ }^{w}$-ent-r-ie/o-
See CHD Š: 58f. for attestations. Oettinger (1979a: 352) derives this verb from an adjective *šakuunant- 'seeing' (cf. šākuuna- 'eye', šakuuaie/az- ${ }^{z i}$ 'to see'), which would mean that šakuuantariie/ $a_{-}^{z i}$ is formally comparable to gimmantariie/az- ${ }^{z i}$ 'to spend the winter', derived from gimmant- 'winter', and nekumandariie/a- ${ }^{z i}$ 'to undress', derived from nekumant- 'naked'. Semantically, this connection makes sense: *'to be seeing' > 'to be waiting/resting'. The causative in $-n u$ - denotes 'to neglect', which must derive from *'to make (someone) waiting'. On the basis of transitive šakuuantariïanu- ${ }^{z i}$ a secondary intransitive stem šakuuantariie/a - $^{z i}$ 'to
be neglected' was created which formally fell together with the original verb šakuu_antariie/az- ${ }^{-2}$ 'to stay, to remain', but semantically is slightly different. For further etymology see at šākuųa-.
šalliiie/a- ${ }^{\text {ta(ri) }}$, šalla- ${ }^{\text {tta(ri) }}$ (IIIg / IIIh) 'to melt down': 3sg.pres.midd. šal-la-at-ta-ri (NS), šal-li-įa-it-ta (MH/NS), [šal-l]i-i-e-et-ta (MH/NS), 3sg.imp.midd. šal-la-at-ta-ru (MS?), šal-li-et-ta-ru (MH/NS), šal-li-e-et-ta-ru (MH/NS), 3pl.imp.midd. šal-la-an-ta-ru (NH); verb.noun šal-la-u-ua-ar (here?).

Derivatives: šallanu- ${ }^{z i}$ (Ib2) 'to melt down (a wax figure); to flatten' (3sg.pres.act. šal-la-nu-uz-zi (NH), 2pl.imp.act. [šal-la-n]u-ut-tén, 3pl.imp.act. šal-la-nu-ua-an-du; impf. šal-la-nu-uš-ke/a- (MH?/NS)).

See CHD Š: 82 for attestations. We find three stems, šalla-, šalliie/a- and šallizae-. Of these stems, šalla- is the oldest attested, whereas šalliie/a- and šalliíae- are younger secondary formations. Oettinger (1979a: 249, 355) translates "breit werden, zerlaufen" and assumes a connection with šalli- / šallai- 'big'. See there for further etymology.
šalai- ${ }^{i} /$ šali- (IIa4) '?’: 3pl.pres.act. ša-li-i-an-zi (KUB 59.14 rev. 1.col. 24 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pret.act. ša-la-i-iš (KBo 3.45 obv. 11 ( $\mathrm{OH} / \mathrm{NS}$ )).

These forms are treated in CHD under different lemmas: $\check{s} a-l i-i-a n-z i$ is cited under šallanna- ${ }^{i} / \check{s}$ sallanni-, but this is formally totally unlikely; $\check{s} a-l a-i-i s ̌$ is cited under šallai- ${ }^{i}$ / šalli-, but this is formally awkward as all other forms show -ll-, and semantically unnecessary as the meaning of the other forms cannot be determined. I therefore have chosen to cite these forms in this lemma, but I am not able to prove that they are really part of the same paradigm. The contexts in which they occur run as follows:

KUB 58.14 rev. l.col. (additions from KBo 25.175 r.col 3-4)
(21) [
$-t] a-k i \mathrm{UDU}^{\mathrm{HILA}}-u s ̌ d a-a n-z i$
(22) $\left[\left(^{\text {LÚ.MEŠ }}\right)\right]$ UR.BA[R.R]A hu-u-ma-an-te-eš UDU-li-ila
(23) $\left[p a a^{?}-\right] a^{?}-a n-z i n=a-a \check{s}-t a$ UDU $^{\text {HIA. }}-u s ̌$ UDU-li-i $a-a z$
(24) [ $\check{s}] a-r a-a ~ s ̌ a-l i-i-a n-z i$ MUNUS ${ }^{\text {GIŠs }}$ GIDRU
(25) [ $\left.{ }^{\mathrm{L}}\right]^{\mathrm{U}}$ har-ta-ag-ga-an GI-it $1=S ̌ U$ ši-i-e-ez-zi
'... they take the sheep. All the wolfmen go to the pen and š. the sheep upwards out of the pen. The female staff-holder shoots at a wolfman once with an arrow'.

Out of this context it is clear that šaliianzi describes the action by which the wolfmen get the sheep out of the pen. CHD (Š: 85) translates "drag(?)" and therefore cites it under šallanna- ${ }^{i}$ / šallanni- 'to pull, to drag'.

KBo 3.45 obv.
(4-10) 'We Hittites under King Muršili made the gods sick by taking and plundering Babylon'
(11) [nu ma]-a-an ša-la-i-iš at-ta-aš ut-tar p[é-eš-ši-ila-at (?)]
'And when he (= Mursili) $\check{s}$.-ed, he d[isregarded(?)] the word of his father'.
CHD translates 'grew up' and connects it with šalli- / šallai- 'big'. This is not likely because of the single -l- vs. geminate -ll- in šalli-. E.g. Hoffner (1975: 56f.) translates 'became rebellious'.

All in all, we have to conclude that šaliianzi must mean something like 'to get/pull/drag (someone out of the water)', whereas the meaning of šalaiiš is unclear. It therefore remains unclear whether these forms belong to one verb. If so, then they show the dāi/tiiianzi-class inflection. Further unclear.
šallai- ${ }^{i}$ / šalli- (IIa4) '?’: 3sg.pres.act. ša-al-la-i (OH?/pre-NS?) (here?), 3pl.pres.act. šal-li-įa-an-zi (OH/NS), 3sg.pret.act. šal-la-iš-ta.

See CHD Š: 83 for attestations. There, the form $\check{s} a-l a-i-i s ̌$ (KBo 3.45 obv. 11) is cited as well, but I have chosen to separate the forms with geminate -ll- and the forms with single $-l$-.

The forms that belong in this lemma are all attested in contexts that are too broken to determine their meaning. Formally, a connection with šalli- / šallai'big' has been suggested, but this cannot be proven on semantic grounds. If the forms all belong together, they would show the dāi/tiianzi-class inflection. Further unkown.
šallakarta- (n.) 'presumptuousness': nom.-acc.pl. šal-la-kar-ta, gen. šal-la-kar-ta-aš (NH).

Derivatives: šallakartahh- ${ }^{i}$ (IIb) 'to offend someone through arrogance' (3sg.pret.act. šal-la-kar-ta-ah-ta (NH)), šallakartae- ${ }^{z i}$ (Ic2) 'to offend someone through arrogance' (3pl.pret.act. šal-la-kar-ta-a-er (NH), part.nom.-acc.sg.n. šal-la-kar-ta-an), šallakartatar / šallakartann- (n.) 'presumptuousness' (nom.acc.sg. \& šal-la-kar-ta-tar, abl. šal-la-kar-ta-na-za).

See CHD Š: 83f. for attestations. The word is a clear compound of šalli- / šallai'big' and ker / kard(i)- 'heart'. The meaning 'presumptuousness, arrogance' can be compared with ModHG Hochmut, ModDu. hooghartigheid (lit. 'high-heartedness') 'arrogance'. It is unclear to me whether the - $a$ - in šallakarta- is from older -aia-, or shows a real replacement of $-i$ - by ${ }^{*}$-o- comparable to e.g. Lith. ugnãviete 'fire-place' from ugnis 'fire'. The single spelling of $-k$-, which seemingly contradicts the fact that ker / kard(i)- reflects *ker / *krd-, is nonprobative: the univerbation may have occurred at a time that all initial stops were lenis. See šalli- / šallai- and ker / kard(i)- for further etymology.
šallanna- ${ }^{i}$ / šallanni- (IIa5) 'to pull, to drag': 3sg.pres.act. šal-la-an-na-a-i ( $\mathrm{OH} / \mathrm{NS}$ ), šal-la-an-na-i (MH/MS), 3pl.pres.act. šal-la-an-ni-ia-an-zi (OH/NS), [ša]l-la-an-ni-an-zi (OH/NS); impf. šal-la-an-ni-iš-ke/a-.

See CHD Š: 85 f . for attestations and semantics. There it is argued that šallanna/imust be near-synonymous with huett- ${ }^{(t) a(r i)}$, huttiie/a- ${ }^{z i}$ 'to pull, to drag', because in the Song of Release (StBoT 32) both verbs translate the same Hurrian verb. In CHD, a form šaliianzi is cited as belonging to this verb as well, but this is formally unlikely. I treat this form under the lemma šalai- ${ }^{i}$ / šali- (q.v.)

Often, šallanna/i- is connected with the verb šalla- tari, šalliide/a- tari 'to melt down': e.g. Laroche (1966: 161) translates šallanna/i- as 'étirer, tirailler' and remarks that it is related to "šallai-/šalliya-" as "pai-/piya-" is to "piyanai-" (which is actually peianae- ${ }^{z i}$ and does not have anything to do with pai- ${ }^{i} / p i-$ 'to give'), or Oettinger (1979a: 355), who translates šallanna/i- as 'in die Breite ziehen, einschmelzen', on the basis of the meaning of šalla-, šalliie/a-. These connections are semantically weak, however.
Formally, we would expect that šallanna/i- is derived from a noun *šallātar / šallann-, but a connection with šallātar 'greatness' (see under šalli- / šallai-) is semantically unlikely. Further unclear.
šalli- / šallai- (adj. / c.) '(adj.) big, great, large, important, full-grown, vast, principal, main; (c.) head, chief, notable' (Sum. GAL, Akk. RAB̄̄): nom.sg.c. šal-li-iš ( $\mathrm{OH} / \mathrm{NS}$ ), ša-al-li-iš $(\mathrm{OH} / \mathrm{NS})$, šal-li-eš $(1 \mathrm{x}, \mathrm{NH})$, nom.-acc.sg.n. šal-li (MH/NS), acc.sg.c. šal-li-in (NH), voc.sg. GAL-li (OH/NS), gen.sg. šal-la-ía-aš, šal-la-īa-š=a (MH/MS), šal-la-aš (OH/NS), all.sg.(?) šal-la (MH?/MS), dat.loc.sg. šal-la-a-i (MH/MS), šal-la-i (OH/NS), šal-li (NH), abl. šal-la-ía-a[z], nom.pl.c. šal-la-e-eš (NS), šal-li-eš (NS), šal-la-uš (OH/MS), nom.-acc.pl.n. [ša-]al-la (OH/NS), ša-al-la-ía (OH/NS), šal-la-i (NH), acc.pl.c. šal-la-a-i-uš
(NS), šal-la-mu-u[š] (NS), gen.pl. šal-la-ịa-aš, dat.-loc.pl. šal-la-ịa-aš (OH/NS), šal-li-ía-aš (NH).

Derivatives: šallātar / šallann- (n.) 'greatness; kingship, rulership' (nom.acc.sg. šal-la-a-tar, šal-la-tar (NH), dat.-loc.sg. šal-la-an-ni (OH?/NS)), šallanu${ }^{z i}$ (Ib2) 'to raise, to bring up; to exalt, to magnify; to .... emphatically' (1sg.pres.act. šal-la-nu-mi (NH), 3sg.pres.act. ša-al-la-nu-zi (NH), 1sg.pret.act. šal-la-nu-nu-un (NH), 2sg.pret.act. ša-al-la-nu-uš (OH/MS), 3sg.pret.act. šal-la$n u-u t(\mathrm{NH}), 3$ pl.pret.act. šal-la-nu-e-er, 2sg.imp.act. ša-al-la-nu-ut (OS), šal-la-nu-ut (MH/MS), 2pl.imp.act. ša-al-la-nu-ut-te-en (MS, OH/NS), šal-la-nu-ut-tén (MS); 3pl.pret.midd. šal-la-nu-ua-an-ta-ti; part. šal-la-nu-ua-an-t- (NH); inf.I šal-la-nu-ma-an-zi (NH), šal-la-nu-um-ma-an-zi (NH); verb.noun. šal-la-nu-mar (NS), abl.(?) šal-la-nu-mar-ra-za (NH); impf. ša-al-la-nu-uš-ke/a- (OS), šal-la$n u-u s ̌-k e / a-(\mathrm{OH} / \mathrm{NS}))$, $\check{s} a l l \overline{s ̌ s ̌ ̌} \mathbf{-}^{z i}$ (Ib2) 'to become large, to grow up, to increase in size or power; to become too big, to become too difficult to resolve' (3sg.pres.act. šal-le-e-eš-zi, šal-li-iš-zi, šal-le-eš-zi (NH), 3sg.pret.act. šal-le-eš-t=a-aš (KBo 32.14 iii 3 (MH/MS), šal-le-eš-ta (OH/NS), šal-li-iš-ta (NS), 3pl.pret.act. šal-le-$e$-eš[-šer], [ša]l-le-eš-še-er ( OH ?/NS?), 3sg.imp.act. šal-le-e-eš-du ( $\mathrm{OH} / \mathrm{NS}$ ); impf. šal-le-eš-ke/a- (NS), šal-li-išs-ke/a- (NS)), see šallakarta- and šalla- ${ }^{\text {ttari }}$, salliiela- ${ }^{\text {ttari }}$.
IE cognates: OIr. slán 'complete', Lat. salvus 'complete, intact', Gr. ö $\lambda$ os 'whole, complete', Skt. sárva- 'whole, all'.

PIE *solH-i-
See CHD Š: 92f. for attestations. Since Sturtevant (1933: 138) these words are generally connected with Lat. salvus 'complete, intact', Gr. ö 1 os 'whole, complete', Skt. sárva- 'whole, all', etc., despite the semantic problems (Hitt. 'big, great' vs. 'whole, all' in the other IE languages). The OIr. cognate, slán 'complete, sane' reflects ${ }^{*} s l H$-no- (note that the colour of the laryngeal cannot be determined on the basis of this form alone), which is supported by the fact that Hitt. -ll- can go back to *-lH-. This means that in Lat. salvus, Skt. sárva- and Gr. ö $\lambda$ os that all seem to reflect $*$ sol-uo-, an original laryngeal was lost due to the $o$ grade: *solH-uo-.

Within Hittite, we come across a noun šalhiianti-, šalhanti-, šalhitti- (cf. CHD Š: 92) that occurs in lists of desirable states, e.g.

KUB 17.10 i
(10) ${ }^{\mathrm{d}}$ Te-li-pí-nu-š=a ar-ha i-ía-an-ni-iš hal-ki-in ${ }^{\mathrm{d}}$ Im-mar-ni-in
(11) ša-al-hi-an-ti-en ma-an-ni-it-ti-en iš-pí-ía-tar-r=a pé-e-da-aš
'And Telipinu went away. He carried off grain, Immarni, šalhianti-, manittiand satisfaction'.

Goetze (1933: 135) translates it as 'Wachstum?', which has been taken over by Friedrich HW: 179. This translation is solely based on a presupposed connection with šalli- / šallai-, however, and therefore is far from ascertained. Nevertheless, this noun is used as an argument to reconstruct šalli- as solh $_{2}-i$ - or $*_{\text {selh }_{2}-i-\text {, with }}$ *- $h_{2}$. The CLuwian form ša-al-ha-a-ti (KUB 35.121, 7), which is interpreted as the abl.-instr. of an adjective *šalha/i- 'great, grown' by e.g. Melchert (1993b: 186) and therewith as the Luwian counterpart of Hitt. šalli- / šallai-, is found in such a broken context that its meaning cannot be independently determined. All in all, none of the forms with šalh- can be surely identified as a cognate of Hitt. šalli- / šallai-, which means that the colour of the laryngeal in *solH-i-cannot be determined.
Sometimes, šalli- is reconstructed as *selH-i- (e.g. Melchert 1994a: 51) under the assumption that $* e R H V>a R R V$. As I show under the lemma erh- / arah- / arh-, this sound law is incorrect, which means that šalli- must reflect *solH-i-.
šal̆̄k- ${ }^{\text {a(ri) }}$ (IIIa) 'to touch, to have contact with; to approach; to intrude into, to invade, to penetrate, to violate, to have (illicit) sexual intercourse; to reach to': 3sg.pres.midd. ša-li-i-ga (OS), ša-li-ga (OS), ša-a-li-ga (OS), ša-a-li-ka* (NS), ša-li-ka4-ri, ša-li-ka4-a-ri (NS), ša-a-li-ga-ri, ša-li-ga-a-r[i], ša-li-ga-r[i], 1pl.pres.midd. [š]a-li-ku-ua-aš-ta-ti (OH/NS), 2pl.pres.midd. ša-li-ik-tu-ma-ri (OS), [ša-li-i]k-tu-ma, 3pl.pres.midd. ša-li-ki-an-ta (MH/MS), 3sg.imp.midd. ša$l i-k a-r u(\mathrm{NH}) ; 1$ sg.pres.act. ša-lik-mi (NH), 2sg.pres.act. ša-li-ik-ti (OH/NS), ša-$a-l i-i k-t i \quad(\mathrm{OH} / \mathrm{NS}), 3 \mathrm{sg} . \mathrm{pres} . a c t . \quad$ ša-li-ik-zi (NH), $\check{s} a-l i k-z i$, ša-li-ga-i (NH), 3pl.pres.act. ša-li-kán-zi, [š]a-li-ga-an-zi, [š]a-a-li-kán-zi, [š]a-li-in-kán-zi (MS, but see discussion below), 1sg.pret.act. ša-li-ku-un (NH), 2sg.pret.act. ša-li-ka ${ }_{4}-a s ̌$ (NH), 3sg.pret.act. ša-li-ka-aš (MH/MS), ša-li-ik-ta (NH), 2sg.imp.act. [ $s$ ]a-li-ki ( $\mathrm{OH} / \mathrm{MS}$ ), $\check{s} a-l i-i-i k$; part. ša-li-ga-an-t- (NS); inf.I ša-li-ki-u-úa-an-zi (MH/MS); verb.noun ša-li-ku-ar (NH); impf. ša-li-kiš-ke/a- (MH), ša-li-ki-iš-ke/a-, ša-li-ki$e s ̌-k e / a-(N H)$.
IE cognates: OIr. sligid 'to strike (down)', ModEng. slick, OHG slīhhan 'to sneak', Gr. $\lambda i ́ \gamma \delta \eta \nu$ 'striking, touching superficially'.

PIE *sléíg' $o$ or *slig' $\left.{ }^{( }\right)$-óri
See CHD Š: 100f. for attestations. In the oldest texts (OS and MS) we predominantly find middle forms. Active forms are occurring occasionally in MS
texts, but are mostly found in NS texts only. The situation regarding plene spelling is quite unclear. In OS texts, we find the forms $\check{s} a-l i-i$ - $g a$ as well as $\check{s} a-a$ -li-ga (besides ša-li-ga), whereas younger texts also show ša-li-ga-a-ri. Nevertheless, if we assume an IE origin of this verb, we can only conclude that the stem originally must have been /slig-/ (a PIE root *seliK- does not make sense). Perhaps the spellings with plene $\check{s} a$ - $a$ - $l i$ - show that already in OH times, a phonetic anaptyctic vowel developed in the initial cluster sl- (so phonetic [salig-]), but phonological /slig-/, cf. Melchert 1994a: 108, 155). When the original middle stem was taken over into the active, it usually was inflected as šalik- ${ }^{z i}$, but we find a stem šalika- ${ }^{i}$ / šalik- as well (tarn(a)-class). A few forms show a stem šalikiie/a- ${ }^{z i}$ (3pl.pres.midd. šalikianta (MH/MS) and inf.I šalikiuuanzi (MH/MS)). One form seems to show a stem šalink-: 3pl.pres.act. [š]a-li-in-kán-zi (KBo 29.133 iii 2). We could argue that it shows a secondary form in analogy to li(n)k-, but because the context is quite broken, I do not think that it is impossible to read the text as $[\ldots-$-s] $]$ li-in-kán-zi (or even $[\ldots-t]$ a li-in-kán-zi).

Melchert (1994a: 330) tentatively suggests a connection with OIr. sligid 'to strike (down)' and ModEng. slick. In LIV ${ }^{2}$, OIr. sligid is connected with OHG slīhhan 'to sneak' and Gr. $\lambda i ́ \gamma \delta \eta \nu$ 'striking, touching superficially' from a root *slei ${ }^{(\prime)}$ - 'schmieren, glatt machen' (LIV ${ }^{2}$ reconstructs a palatovelar on the basis of OCS slbzъkъ 'slippery', which must reflect *slig' ${ }^{h}$-, however, because of the absence of Winter's Law). Either we have to reconstruct *sléig'o $-o$ (class IIIa, but note that we then must assume a phonetic development *leiK $>l \bar{l} k$, perhaps comparable to ${ }^{*} \mathrm{Kei}>K \bar{l}$ ) or ${ }^{*}$ slig ${ }^{\left({ }^{\prime}\right)}-\dot{o}($ class IIIc).
šalk- ${ }^{z i}$ (Ia4 > Ic1) 'to knead, to mix together': 1sg.pres.act. šal-ga-mi (NH), 3sg.pres.act. ša-al-ak-zi (OS), šal-ki-ez-zi (MH/MS), 3pl.pres.act. šal-kán-zi (MH/NS), 1sg.pret.act. [š]a-al-ku-un, ša-al-ku-u[n]; part. šal-kán-t-.
IE cognates: ?Gr. ह́ $\lambda \kappa \omega$ 'to draw, to drag', TochB sälk- 'to draw, to pull', OE sulh 'plough'.

PIE *selk-ti, *slk-enti?
See CHD Š: 106 for attestions. The alternation between šal-ga-mi and ša-al-ak-zi besides šal-kán-zi clearly shows that we are dealing with a stem/salk-/. Once, we find a stem šalkiie/a-zi (šalkiezzi).

The etymological interpretation of this verb is in debate. Kimball (1994a: 80) discusses two possibilities: either a connection with Skt. srjáti 'to set free' from *selǵ- (but this is semantically quite weak), or a tie-in with Gr. é $\lambda \kappa \omega$ 'to draw, to
drag' and TochB sälk- 'to draw, to pull' from *selk- (semantically better, but still not self-evident). Rieken (1999a: $316^{1538}$ ) states that a semantic connection with *selǵ- is unsatisfying, and therefore connects šalk- with the root *sleh ${ }_{l} g-$ 'schlaff, matt sein' ("'verkneten' aus trans. 'weich machen'"). This connection is semantically hardly better (how can a clearly intransitive root suddenly be used transitively?). The formal side is unattractive as well: we would expect that *sléh ${ }_{1} g$-ti, $*_{\text {slh }}^{1}$ g-énti would yield Hitt. /slégt ${ }^{\mathrm{s}} \mathrm{i} /$,/slgánt ${ }^{\mathrm{s}} \mathrm{i}$ /, which could only become the attested Hittite paradigm through generalization of the weak stem. Although such generalizations are known (e.g. gulšmi, gulšanzi $<*^{w} l s$-), the semantic and formal problems make this etymology less convincing. I therefore stick to the connection with Gr. $\check{\wedge} \lambda \kappa \omega$, but must admit that a better proposal would certainly be welcome.
(GIŠ)’̌am(a)lu- (n.) 'apple (tree)(?)' (Sum. ${ }^{\text {GIŠ }} \mathrm{H} \mathrm{HS}$ ŠHUR): nom.-acc.sg. ša-ma-lu (OH?/NS), erg.sg. ša-ma-lu-ua-an-za (NS), abl. GIŠHAŠHUR-lu-ua-an-za, instr. GIŠHAŠHUR-it; unclear (erg.sg. or abl.) ša-am-lu-una-an-za (OH/NS),
Anat. cognates: Pal. šamlū(ua)- 'apple?’ (dat.-loc.pl.(?) ša-am-lu-ú-ūa-aš).
See CHD Š: 112f. for attestations. The equation of Hitt. šam(a)lu- with the sumerogram ${ }^{\text {GIŠ }}$ HAŠHUR is certain. The meaning of ${ }^{\text {GIŠSHAŠHUR is not fully }}$ clear, however. Usually, a translation 'apple' is given, but 'apricot' sometimes as well (cf. CHD Š: 114). The Palaic form šamlūuaš is interpreted as 'apples' because of the formal similarity to Hitt. šam(a)lu- only.

Ivanov (1976: 160-2) tried to connect this word with the words for 'apple' in the other IE languages, which reflect $* h_{2} e b-l-$, assuming that an original cluster *-ml- remained as such in the Anatolian language group but yielded *-bl- in the other IE languages. Such a development is not attested anywhere else, however. The only sound that $\check{s} a m(a) l u$ - and $* h_{2} e b-\bar{o} l$ have in common is $-l-$, which is not enough to establish an etymology. Further unclear.
šāmă̈na- (c.) 'foundation(s); foundation deposit': nom.sg. ša-ma-na-aš (NH), acc.sg. $\check{s} a-m a-n a-a n$, abl. $\check{s} a-m a-n a-a z$, $\check{s} a-a m-m a-n a-a z$, acc.pl. $\check{s} a-a-m a-n u-u \check{s}$ (MH/MS), ša-ma-nu-uš (OH/NS), [̌̌]a-am-ma-nu-uš (NS), ša-ma-a-nu-uš (NS), $\check{s} a-a-m a-a-n u-u \check{s} \quad$ (NS), dat.-loc.pl. $\check{s} a-m a-n a-a-a \check{s} \quad(\mathrm{MH} / \mathrm{NS}), \quad \check{a} a-a-m a-n a-a \check{s}$ (MH/NS), ša-ma-na-ǎ̌ (MH?/MS?), ša-am-ma-na-ǎ̌, gen.pl. ša-ma-na-aš.
Derivatives: *šamanatar / šamanann- (n.) 'foundation deposit' (dat.-loc.sg. ša-ma-na-an-ni (NH)).

See CHD Š: 115f. for attestations. Note that HW: 180 cites a form acc.pl. šamenuš of this word, but this form occurs in a broken context (KUB 31.112, 11), and is interpreted by Oettinger (1976c: 99) as 2sg.pret.act. of šamenu- ${ }^{z i}$ (see under šamen- ${ }^{z i}$ / šamn-). Spellings with geminate -mm- only occur in NS texts and therefore are probably non-probative. One of the MH/MS forms shows plene spelling of the first $-a-$, $\check{s} a-a-m a-n u-u \check{s}$, which occurs a few times more. Nevertheless, we also come across plene spellings like ša-ma-a-nu-uš, ša-a-ma-a$n u-u s ̌$ and $\check{s} a-m a-n a-a-a \check{s}$.

Oettinger (1979a: 366, followed by e.g. Starke 1990: 416 and Kimball 1999: 418) connected $\check{s} \bar{a} m a \bar{a} n a-$ (which he cites as šamana-) with the verb šamnae- ${ }^{z i}$ 'to create', but I do not find the semantic connection very appealing. He further connects it with Arm. himn 'fundament' (following Laroche 1963: 76f.) that in his view must reflect *seh $h_{1}$-men-, a derivative from the PIE root *seh ${ }_{1}$ 'to press in, to sow' (see also at šai- ${ }^{i} / \check{s} i-$ ). He therefore reconstructs the Hittite word "šamana-" as *sh $h_{1}$-men-, giving especially ša-me-nu-uš < *sh $_{1}$-mén-ms as a key example. This is not likely because (a) šāmăna- does not show an $n$-stem inflection, (b) this etymology cannot explain the plene spellings $\check{s} a-a-m a-n^{\circ}$, and (c) $\check{s} a-m e-n u-u \check{s}$ probably does not belong to this word. Kimball states that the preform ${ }^{\text {sesh }}{ }_{1}$-mn- (as visible in Arm. himn) underlies the noun ši-im-ma-an-ta (KBo 1.44+ KBo 13.1 iv 32) 'form, facial features' and the verb " $\operatorname{sem}(m) n \bar{a}(i)-$ 'to create'". The first statement is phonetically, semantically and morphologically impossible, and the second statement is based on a wrong interpretation of the verbal forms starting in šemn- (see at šamnae- ${ }^{z i}$ as well as šamen- ${ }^{z i} /$ šamn-).
All in all, an etymological connection with Arm. himn seems formally impossible to me. The inner-Hittite connection with šamnae- ${ }^{z i}$ in my view has to be given up as well, because this verb probably reflects *sm-no-ie/o-, which would not be able to account for šāmă̄na- in a coherent way.
šammanae- ${ }^{z i}$ : see šamnae- ${ }^{z i}$
šamankuruant-: see at zama(n)kur
šame- ${ }^{-1}$ : see šamen- ${ }^{z i} /$ šamn-
šamen- - $^{i}$ / šamn-, šemen- ${ }^{i}$ / šemn- (Ia1) 'to pass by/away/off, to withdraw, to disappear; to relinquish/forfeit one's right to': 3sg.pres.act. še-me-en-zi (OS), ša-me-en-zi (OS), ša-me-in-z[i] (NH), ši-me-en-zi (MS?), 3pl.pres.act. ša-am-na-an$z i(\mathrm{OH} / \mathrm{MS}$ ?), še-em-na-an-zi (NS), ša-me-ía-an-zi (OH/NS), 3sg.pret.act. ša-me-
en-ta (OH/NS), ša-mi-en-ta (MH/MS?), 3sg.imp.act. ša-me-en-du (OH/NS), ša-$m[i-e n-d u]$ ( $\mathrm{OH} / \mathrm{NS}$ ), ša-me-ed-du (MH/MS); part. ša-am-na-an-t-.

Derivatives: šamenu- ${ }^{z i}$ (Ib2) 'to make (something/-one) pass by, to bypass, to dispense with(?); to ignore (someone)' (2sg.pres.act. ša-me-nu-ši (NH), 3sg.pres.act. ša-me-nu-uz-zi (OH/NS), 2pl.pres.act. ša-me-nu-ut-te-ni (NH), ša$m i-n u-u[t-t e]-n i, 3 p l . p r e s . a c t . ~ s ̌ a-m i-n u-a n-z i(\mathrm{OH} / \mathrm{MS} ?), 2 \mathrm{sg} . \mathrm{pret} . a c t .(?) \check{s} a-m e-$ $n u-u s ̌, 3 p l . p r e t . a c t . ~ s \check{a}-m i-\left[n u^{?}-e r^{?}\right](\mathrm{OH} / \mathrm{NS})$; part. $\left.\check{s} a-m e-n u-a n-t-\right)$.

PIE *smén-ti / smn-énti
See CHD Š: 120-1 and Oettinger (1976c) for discussions and citations. It is not always easy to determine whether a form belongs with this verb or rather with šamnae ${ }^{z i}$ 'to create' (q.v.). This is the reason why the list of attestations given here slightly differs from the lists as given by CHD and by Oettinger. For instance, ša-am-na-an-zi (KBo 17.46, 28 (OH/MS?)) is cited in CHD (Š: 124) under the lemma šamnae-. Oettinger (o.c.: 98) states, however: "eine auffassung von samnanzi als zu samnae- 'gründen, schaffen' gehörig ist nicht nur lautlich unwahrscheinlich - zu erwaten wäre *samnānzi-, sondern auch semantisch, da es sich um eine Opferliste und nicht um ein Bauritual handelt". The context is difficult:

```
KBo \(17.46+\) KBo 34.2
(50) LÚ \({ }^{\text {MEŠ }}\) AN.BAR 20 [pur-]pu-ru-uš AN.BAR šu-uh-ha-an-z[i ...]
(51) LÚMEŠ KÙ.BABBAR 20 [pur-]pu-ru-uš KÙ.BABBAR šu-uh-ha-an-[zi ....]
```



```
(53) [x-x-]x-u-lu-ma-aš ša-me-en-zi \(\mathrm{LU}^{\mathrm{M}}\left[^{\mathrm{Es}} . ..\right]\)
```

'The iron-workers(?) heap up(?) 20 [b]alls of iron, the silver-workers(?) heap $\operatorname{up}(?) 20$ [b]alls of silver, the coppersmiths šamnanzi, the men [...], [..]x-ulumaš passes by'.

Because of šamenzi in line 53 (which cannot be interpreted otherwise than as 3sg.pres.act. of šamen-), it is likely that šamnanzi belongs with šamen- as well. CHD (Š: 125), although citing šamnanzi as belonging to šamnae-, states that "possibly šamnai- in these examples is a homonymous verb with a meaning 'compete'", and thus admits that a translation 'to create' may not be very appropriate in this context. I therefore follow Oettinger in assuming that šamnanzi is 3pl.pres.act. of šamen-

Another difficult form is $\check{s} a-a m-n a-a n(K B o 3.19$ rev. 20), which in CHD (Š: 125 ) is translated as 'created' and therefore interpreted as belonging with šamnae-. The context in which it occurs is that unclear, however, that other interpretations could be possible as well. On formal grounds, I treat it as belonging with šamen-/šamn-.
The 3pl.pres.act. še-em-na-an-zi (KBo 8.102, 8) is cited in CHD Š: 124 under the attestations of šamnae-, but in the lemma itself it is stated that its interpretation is "unclear". In my view, the context could justify an interpretion as a form of šamen-/šamn-:

KBo 8.102
(6) $[\quad . .]$.$x ar-ta u_a-a-tar iš-pár-nu-u[z-zi]$
(7) $[\quad . .$.$] -un šu-up-pí-ia-ah-hi 2$ DUMU $^{\mathrm{MES}}$ É.G[AL]
(8) $[\quad . .$. M]A-HAR I-NIM še-em-na-an-zi $\check{s}=a-a[t]$
(9) $\left[\ldots \check{s} i^{?}-p a^{?}-a\right] n^{?}-t a-a n-z i$
'[...] stands up and spreads water out. [...] purifies [..]. Two palace servants pass by before the eyes [of? ...]. They [liba]te it [...]'.

So all in all, I think we are dealing with a verb that can be characterized by the forms šamenzi, šemenzi besides šamnanzi, šemnanzi. CHD (Š: 120) states that "the vacillation of the vowel in the initial syllable suggests a pronounced *smen-", which is also the interpretation of Oettinger, who further interprets šamnanzi as *smn-enti (comparing tamenta besides damnant-). So the forms šamenzi : šamnanzi are to be interpreted /smént ${ }^{\text {si/ }} \mathrm{i}$ :/smnánt ${ }^{\mathrm{s}} \mathrm{i}$, whereas šemenzi : šemnanzi show occasional anaptyxis in the initial cluster: /simént ${ }^{\text {si}} \mathrm{i}$ : /simnánt ${ }^{\text {si}} \mathrm{i} /$.

This verb cannot reflect anything else than *smén-ti, *smn-énti, for which I know no cognates. Oettinger (o.c.: 100) translates the verb as 'verschwinden' and connects it with Arm. manr 'little’, Gr. $\mu \alpha v o ́ s ~ ' s c a r c e, ~ s c a n t y ', ~ \mu о v ̃ v o c ~ ‘ a l l o n e ’, ~$ OIr. menb 'little'. These words probably reflect *menH-(u-), however, and are semantically not very close: the connection is therefore unconvincing.

We find a few forms that show a stem šame- (3pl.pres.act. šameinanzi, 3sg.imp.act. šameddu) which are explained by Oettinger (o.c.: 99) as a backformation on the basis of impf. *smen-ske/o-, which according to him regularly should have become ${ }^{* *}$ smeske/a-. This is problematic since ${ }^{*}$ smen-sḱe/o- would have given **šma(n)ške/a- (which would be the outcome of *smn-sk'e/o-, the morphologically expected imperfective, as well, cf. ${ }^{*} g^{w h} n$-skée/o- >
kuuaske/a-). We should rather assume an analogy to the forms *smemi, *smesi, *smeuen (cf. kuemi, kueši, kueuen from kuen- ${ }^{\text {zi }} /$ kun-).

Oettinger (o.c.: 99) states that the verbs šamešǐie/a- ${ }^{z i}$ and šamešanu- ${ }^{z i}$ 'to burn (something)' derive from an original meaning 'to make disappear'. CHD convincingly connects these verbs with šami- 'smoke', however. Moreover, CHD distinguishes between a verb šame/inu- ${ }^{z i}$ 'to make pass by, to let someone go, to ignore (someone)' (derived from šamen-/šamn-) and the verb šame/inu- ${ }^{z i}$ 'to burn (something)' (derived from šami-, q.v.), which Oettinger interprets as belonging to one and the same verb 'to make disappear; to burn as incense'. Melchert (1984a: 107) draws attention to the fact that in KBo 17.21+ the causative is spelled ša-mi-nu-, whereas the basice verb is spelled $\check{s} a-m e-e n-$. He explains this as a difference in accentuation: *smen-néu- vs. *smén-; but in my view we are rather dealing with a difference between /sminu-/ < *smn-néu- (for /CminC/ < *CmnC, compare hame/ink- < *h $h_{2} m n g^{h}$ - (see at hamank- ${ }^{i}$ / hame/ink-)) vs. /smén-/ < *smén-
The form ša-me-nu-uš (KUB 31.112, 21) is interpreted by Oettinger (o.c.: 99) as 2 sg.pret.act. of šamenu- ${ }^{z i}$, whereas the edition of this text (Pecchioli Daddi 1975: 108f.) analyses it as acc.pl. of the noun šamana- 'foundation' (q.v.).
šammenant- (adj.) '?': acc.pl.c. ša-am-me-na-an-du-uš (OH/NS).
This word is hapax in the following context:
KBo 10.37 ii
(9) a-ua-an ar-ha pár-ah-tén $\mathrm{EME}^{\mathrm{MES}} \mathrm{HUL}-l\left[a^{?}-m u^{?}-u s^{?}\right]$
(10) ša-am-me-na-an-du-uš
'Drive away the evil tongues, which are $\check{s}$. '.
On the basis of this context, we cannot determine its meaning. On formal grounds it is often regarded as belonging to šamen- ${ }^{z i}$ / šamn- 'to pass by' (e.g. Oettinger 1976c, who regards this form as 3pl.imp.act. šammenandu) or to šamnae ${ }^{z}{ }^{i}$ 'to create' (e.g. CHD Š: 125). In both paradigms it would not fit, however: as a participle of šamen-/šamn- it would be the only form with a geminate -mm-, and in the paradigm of šamnae- it would be the only form showing an $e$. I therefore have chosen to treat it separately. Further unclear.
šami- ‘smoke(?)': gen.sg.? ša-mi-i्टa-aš (OH/NS).

Derivatives: šaminuu ${ }^{-{ }^{i}}$ ( Ib 2 ) 'to burn (something)' (3sg.pres.act. ša-mi-nu-zi (NS), 3pl.pres.act. ša-mi-nu-ua-an-zi (NH), ša-me-nu-ua-an-zi (OH/NS), impf. ša-am-mi-nu-uš-ke/a- (MH/NS)), šamešiie/a- ${ }^{z i}$, šimišiiela $\boldsymbol{a}^{-{ }^{z i}}$ (Ic1) '(act.) to burn (something) for fumigation; (midd.) to burn for fumigation (intr.); (act.) to interrogate’ (3sg.pres.act. ša-me-ši-ĭia-zi ( $\mathrm{OH} / \mathrm{NS}$ ), ša-me-ši-ez-zi, ša-mi-ši-ez-zi ( $\mathrm{OH} / \mathrm{NS}$ ), ša-me-še-ez-zi ( $\mathrm{OH} / \mathrm{NS}$ ), ša-mi-ši-e-ez-zi (MH/NS), 1sg.pret.act. ši-me-še-e-nu-[un] (NH), ši-mi-ši-i-i $a-n u-u n(N H), 3 s g . p r e s . m i d d . ~ s ̌ a-m i-s ̌ i-i j a, ~ s ̌ a-m e-s ̌ i-i-$ $e-i t-t a ;$ impf. ša-mi-ši-iš-ke/a-), šamešanu- ${ }^{z i}$ ( Ib 2 ) 'to burn (something) into smoke' (3pl.pres.act. ša-me-ša-nu-an-zi).

See CHD Š: 118f. for attestations and contexts. Although the context of the hapax noun šamiiáš is broken and its meaning therefore not fully clear, a translation 'smoke', which is based on the formal simililarity with šaminu- ${ }^{z i}$ 'to burn', would fit. This latter verb clearly belongs with ša/imi/ešiie/a- ${ }^{z i}$ and šamešanuz- ${ }^{z i}$, both meaning 'to burn' as well, although the formal relationship is unclear. Oettinger (1979a: 346) calls "šamešie-" a "(wahrscheinlich aoristischer) $s$-Erweiterung", but that is just a mere guess. Etymologically, one could think of a connection with PGerm. *smūkan 'to smoke' but apart from the fact that this verb stands further isolated in IE, it is not easy to formally connect it. I would rather think that these Hittite verbs are of non-IE origin.
šamnae- ${ }^{z i}$ (Ic2 > Ic1) 'to create': 3pl.pres.act. ša-am-ma-na-a-an-zi (NS), 1sg.pret.act. [š]a-am-ni-įa-nu-un (NS), 2sg.pret.act. ša-am-na-a-eš (OH/MS), 3sg.pret.act. ša-am-na-a-it (MH/NS), ša-am-na-it (NS), ša-am-ni-i-et (OH/NS), ša-am-ni-ila-at ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pres.act. ša-am-ni-er (NS), ša-am-ma[-na? -er? ${ }^{?}$ (NS), [ $\check{s} a^{?}$-a]m-ni-e-er (MH/NS); 3sg.imp.midd. ša-am-ni-ía-ta-ru (OH/NS), ša$a m-n i-e-t[a]-r u(\mathrm{OH} / \mathrm{NS}), 3 \mathrm{pl} . \mathrm{imp} . m i d d . \quad \check{s} a-[a] m-n i-i{ }_{2} a-a n-t a-r u(\mathrm{OH}$ or MH/NS), ša-am-ma-ni-i̇a-an-ta-ru (OH/NS); part. ša-am-ni-ia-an-t-; impf. ša-am-na-iš$k e / a$-, ša-am-ma-ni-eš-ke/a-, ša-am-ni-eš-ke/a-.

IE cognates: Skt. sám, GAv. hām, Lith. sañ-, OCS sQ-'together'.
PIE *sm-no-ie/o-?

It is not always fully clear which forms belong to this verb, especially because of the formal similarity with šamen $^{z i} /$ šamn- 'to pass by' (q.v.). The forms mentioned above in my view certainly belong here. CHD Š: 124f. cites the stem of this verb as "šamnāi-, šamma/enāi-, šamniye/a-, šemnai-". Some of the forms that are cited are doubtful regarding their appurtenance to 'to create', however.

A stem "šemnai-" is given on the basis of 3pl.pres.act. še-em-na-an-zi (KBo 8.102, 8 (MS)) only, but CHD judges this form as "uncertain" itself. I rather take this form as belonging with šamen- ${ }^{z i} /$ šamn- 'to pass by' (q.v. for a treatment of the context). A stem "šammenāi-" is given on the basis of $\check{s} a$-am-me-na-an-du-uš (KBo 10.37 ii 10) only, which is translated as 'created' in CHD. This translation is not supported by the context, however, and formally šammenanduš stands quite apart from the other forms of this verb as it would be the only one to show a vowel -e-. As appurtenance to šamen-/šamn- is unlikely as well, I have treated this word under its own lemma, šammenant- (q.v.). The form $\check{s} a-a m-n a-a n-z i$ (KBo 17.46, 28 ( $\mathrm{OH} / \mathrm{MS}$ ?)) is translated 'they created' in CHD, but with doubt. Under the lemma šamen- ${ }^{z i}$ / šamn- I have treated its context and argued that it rather belongs there. The form $\check{s} a$-am-na-an (KBo 3.19 rev . 20) is translated 'created' in CHD, but this is merely a possibility. Formally, it could belong to šamen-/šamn- as well (q.v.), which perhaps is more likely since the other attested participles of šamnae-, šamniiela- show a form šamniilant-.
So all in all, we are left only with the forms as cited above. The spelling alternation between $\check{s} a-a m-n^{\circ}$ and $\check{s} a-a m-m a-n^{\circ}$ probably denotes that we have to phonologically interpret $/ \mathrm{saMn}^{\circ} \%$ We encounter two stems: šamnae-zi (šammanānzi, šamnāeš and šamnāit) and šamniie/a- ${ }^{z i}$ (šamniįanun, šamniiet, šamniįat, šamnier, [ša]mniier, šamniíataru, šamnietaru, šamniįantaru and šamniïant-). Although the stem šamniie/a- is attested more often (but is found in NS texts only), the oldest form, šamnāeš (OH/MS), shows that the stem šamnaeis more original.

Verbs that belong to the hatrae-class usually are denominatives, derived from $o$-stem nouns. In this case, we have to assume that a noun *šamna- has served as the basis for this verb. Unfortunately, this noun is unattested itself. If from IE origin, it could only go back to *smno- (note that *somno- would have yielded **šamma-). Perhaps we are dealing with a nominal derivative of PIE *som 'together' (Skt. sám, GAv. h̄̄m, Lith. sañ-). If so, then we can reconstruct a semantic development *smno- 'togetherness' > *smno-ie/o- 'to bring together' > 'to create'.
šamniiela- ${ }^{z i}$ : see šamnae- ${ }^{z i}$
$=(\boldsymbol{S})$ šan sentence particle indicating superposition ('over', 'upon', 'on' etc.); indicating contiguity or close proximity; accompanying 'for (the benefit of)' or 'about, concerning'; accompanying ideas of measuring or counting; indicating
'off, from'? (only OH ).: $C=\check{s} a-a n(\mathrm{OS}), V=\check{s}-s \check{a} a$ - $a n(\mathrm{OS}$, often) $V=\check{s} a-a n(\mathrm{OS}$, less often)

PIE *som
When the preceding element ends in a vowel, this sentence particle, which always occupies the last slot of an initial chain of particles, is usually spelled with geminate $-\check{s} \check{s}-$, but spellings with single $-\check{s}$ - are attested as well (cf. ke-e=ša-an, una-al-ha-an-zi=ša-an, both OS). For the semantics, see CHD Š: 126-155. There it is stated that "it would appear that -šan suggests or implies an unexpressed dative-locative in clauses with verbs that can or regularly do take locatives. -šan also occurs in clauses with expressed locatives, perhaps to reinforce them". In my corpus of OS texts (consisting of 23.000 words), = ̌̌šan occurs 76 times ( 3.3 promille), in my corpus of MH/MS texts (consisting of 18.000 words) 48 times ( 2.7 promille) and in my corpus of NH texts (consisting of 95.000 words) 71 times ( 0.75 promille). We see that the use of =ššan is diminishing from MH times onwards. In NS copies of OH texts, =ššan is replaced by $=k k a n$ or just omitted.

According to Melchert (1994a: 154), the geminate writing of =ššan originates in the forms where it stood in posttonic position. From there it spread to postposttonic places (where Melchert expects lenited -š-). According to Melchert, $=s \check{s}$ šan is to be equated with the element =ššan as found in kiššan 'thus', kuššan 'when', iniššan 'thus' and apiniššan 'thus'.
According to Eichner (1992: 46), =( $\left.\tilde{s}^{\prime}\right)$ šan is cognate to the adverbs Skt. sám, GAv. hām, Lith. sañ-, OCS sQ-, Gr. à- (in à $\delta \varepsilon \lambda \varphi \varepsilon$ ćৎ 'brother') 'together' < *som, *sm, which ultimately must be cogante with PIE *sem 'one' (through the meaning 'in one'). See at šani- 'the same' for a possible other descendant of PIE *sem 'one'.
šanna- ${ }^{i}$ / šann- (IIa1 $\gamma$ ) 'to hide, to conceal': 1sg.pres.act. ša-an-na-ah-hi ( $\mathrm{OH} / \mathrm{NS}$ ), 2sg.pres.act. ša-an-na-at-ti (MH/MS), 3sg.pres.act. ša-an-na-a-i ( OH or MH/NS), 2pl.pres.act. $\check{s} a-a n-n a-a t-t e-n i \quad(\mathrm{OH} / \mathrm{NS}), \quad \check{a} a-a-n a-a t-t e-e-n i$ (MH?/NS), $\check{s} a-a n-n a-a t-t e-e-n i \quad(N H), \quad 3 p l . p r e s . a c t . \quad \check{s} a-a n-n a-a n-z i \quad(N H)$, 2sg.pret.act. ša-an-na-aš (NH), 3sg.pret.act. ša-an-ni-eš-ta (NH), ša-an-ni-iš-ta (NH), 3pl.pret.act. ša-an-ni-er (NH); 3sg.pres.midd. ša-an-na-at-ta (MH/NS); part. ša-an-na-an-t-; verb.noun $\check{s} a-a n-n u$-um-mar (NH); impf. ša-an-na-aš-ke/a(MH/MS), ša-an-ni-iš-ke/a- (NH).

Derivatives: see šannapi.

IE cognates: Gr. ảvev 'without', Skt. sanutár 'away, far off, aside', Lat. sine 'without', OIr. sain 'without' etc.

PIE *sn-nó- $h_{1}$-ei, *sn-n- $_{1}$-énti
See CHD Š: 156 f . for attestations. The verb inflects according to the $\operatorname{tarn}(a)$ class. The stem šann- is visible in verb.noun šannummar. According to Oettinger (1979a: 159f.), šanna-/šann- must go back to a nasal infixed verb. He reconstructs * $_{s n-n-}-h_{2^{-}}$on the basis of a connection with Gr. ävev 'without', Skt. sanutár 'away, far off, aside', Lat. sine 'without' etc., which forms he all interprets as reflecting a root $*_{s e n h}^{2}$-. This interpretation is followed by e.g. CHD (Š: 158 and 159 (sub šannapi)) and Kimball (1999: 415), but the formal side is problematic: *sn-nó- $h_{2}$-ei would yield Hitt. **šannaḩi. This problem can be solved by Schrijver's reconstruction of Gr. ävev as *snh $h_{1}$-eu (1991: 218), on the basis of which Lat. sine $<*_{s n h_{1}-i}$, OIr. sain $<*_{s n h}^{l} h_{1} i-$ etc. For šanna-/šann-, this would mean that we have to reconstruct $*_{s n-n o ́-h} h_{1}$-ei, $*_{s n-n-h_{1} \text {-énti, which would }}$ regularly yield Hitt. šannāi, šannanzi. The semantic side of the etymology is convincing as well. Originally, the root $*_{s n h_{l^{-}}}$must have meant something like 'unavailable, away'. Like the other nasal infixed verbs in Hittite, šanna-/šannhas to be interpreted as a causative formation, so originally *'to make unavailable, to make away' > 'to hide, to conceal'.
šannapi (adv.?) '?’: ša-an-na-pí ša-an-na-pí 'scattered here and there' (OH or MH/NS).
Derivatives: šannapili- (adj.) 'empty(-handed); not pregnant; plain(?) (modifying hay)' (nom.sg.c. ša-an-na-pí-li-iš (MH or NH/NS), acc.sg.c. ša-an-na-pí-li-in (MH/NS), dat.-loc.sg. ša-an-na-pí-li (NH), instr. ša-an-na-pí-li-it (OH/NS), nom.-acc.pl.n. ša-an-na-pí-li (OH/MS), ša-an-na-pí-la (OH/NS), acc.pl.c. $\left.\left.\quad[\check{s} a-a n-n a-p i ́-l] i i^{?}-u s ̌, \quad[s \check{a} a-a n-n] a-p i ́-l a-a-u s ̌ \quad(?)\right)\right)$, šannapili- (n.?) 'emptiness, void' (Sum. SUD; erg.sg. SUD-li-an-za (NH), loc.sg. ša-an-na-pí$l[i]$, SUD-li (NH)), šannapilahh- ${ }^{i}$ (IIb) 'to empty' (3sg.pres.act. ša-an-na[-pí-la$a h-h i]$, 3pl.pres.act. ša-an-na-pí-la-ah[-ḩa-an-z]i (NH); part. ša-an-na-pí-la-ah-ha-an-t-), šannapilē̌̌š- ${ }^{z i}$ (Ib2) 'to be emptied, to be deprived off' (3sg.pres.act. ša-anı-nà-pí-le-eš-zi, 3sg.pret.act. ša-an-na-pí-le-eš-ta (MH/NS), 3sg.imp.act. ša-an-na-pí-le-eš-du).
IE cognates: Gr. ävev 'without', Skt. sanutár 'away, far off, aside', Lat. sine 'without', OIr. sain 'without' etc.

PIE * $\operatorname{sonh}_{1} o-b^{h} i$

See CHD Š: 158f. for attestations. The syntagm šannapi šannapi (KUB 13.4 iii 47) is hapax and probably denotes 'scattered here and there'. In form and meaning it can be compared to e.g. kuuapi kuuapi 'wherever'. Since a large part of the semantics of šannapi šannapi seems to lie in the fact that it is repeated, it is difficult to determine the exact meaning of šannapi itself. Nevertheless, it is likely that šannapi is connected with šannapili 'empty' and its derivatives (although this is semantically difficult to prove). On the basis of the meaning 'empty', CHD (Š: 159) etymologically connects šannapi and šannapili with Lat sine 'without', etc., which they reconstruct as senh $_{2}$-. As I have pointed out at the lemma of šanna- ${ }^{i}$ / šann- 'to hide', which is cognate with Lat. sine etc. as well, the reconstruction should be $*_{\operatorname{senh}}^{1}$-. This would mean that šannapi(li) reflects *sonh ${ }_{1}-o-b^{h} i(-l i)$. Note that inner-Hittite derivation from šanna-/šann- 'to hide' is semantically difficult. A reconstruction $*_{s n h}^{l^{-}-o-}$ is impossible because *CRh $h_{1} V$ yields Hitt. CaRV but not ${ }^{* *}$ CaRRV (cf. parai- ${ }^{i} /$ pari- 'to blow' < *prh $l^{-}$ (o) $i$-).
$\check{\sin }(\boldsymbol{n}) \boldsymbol{h}^{-\mathbf{z}^{i}}$ (Ib3) 'to seek, to look for; to investigate; to attempt; to avenge; (apppan) to loof after; to clean, to sweep clean': 1sg.pres.act. ša-ah-mi (MH/MS), ša-an-
 (NH), ša-an-ḩa-ti(NH), ša-an-ḩa-at-ti(NH), 3sg.pres.act. ša-ah-zi (OS), ša-an$a h-z i(\mathrm{MH} / \mathrm{MS}), \check{s} a-a n-h a^{2}-z i(\mathrm{NH}), \check{s} a-a n-h a-a z-z i(\mathrm{OH} / \mathrm{NS})$, $\check{s} a-a n-z i(\mathrm{MH} / \mathrm{NS})$, 2pl.pres.act. ša-ah-te-[ni?] (MH/MS), ša-an-ah-te-ni (NH), ša-an-ȟa-te-ni, ša-an-ha-at-te-ni (NH), 3pl.pres.act. ša-an-ḩa-an-zi (OH or MH/NS), ša-an-ha-a-an-zi (NH), ša-ḩa-an-zi (MH?/MS?), ša-a-ḩa-an-zi, ša-an-ah-ḩa-an-zi, 1sg.pret.act. ša$a n-h u-u n(\mathrm{OH} / \mathrm{NS}), s \check{a}-a n-a h-h u^{\prime} u n(\mathrm{NH}), s \check{a}-a h-h u-u n(\mathrm{NH}), 2$ sg.pret.act. $\check{a} a-a n-$ $a h-t a(N H), \check{s} a-a n-n a-a h-t a(1 x, N H), s ̌ a-n a-a h-t a(1 x, N H), 3 s g . p r e t . a c t . ~ s ̌ a-a h-t a$ (OS), ša-an-ah-ta (OH/NS), ša-an-ḩa-ta (OH/NS), ša-na-ah-ta (1x, NH), ša-a-an-ah-ta (NS), 1pl.pret.act. ša-an-huu-u-i-en, 2pl.pret.act. ša-an-ah-tén (NS),
 ( $\mathrm{OH} / \mathrm{MS}$ ), $\check{a} a-a n-a h(\mathrm{OH} / \mathrm{MS})$, $\left.\check{s} a-a n-h)^{(N H}\right)$, 3sg.imp.act. ša-ah-du (MH/LS), ša-an-a[h-d]u, 2pl.imp.act. [š]a-a-ah-tén (OH/NS), ša-an-ha-at-tén (NH/LS), ša-an-ah-tén (MH/NS), ša-na-ah-tén (NH), 3pl.imp.act. ša-an-ḩa-an-du (MH/MS); inf.I ša-an-hu-u-ua-an-zi (MH/NS), ša-an-hu-ua-an-zi; part. ša-an-ha-an-t(MH/NS); impf. ša-an-hi-iš-ke/a- (OS), ša-an-hhi-eš-ke/a- (MH/MS), ša-ah-hi-iš$k e / a-(\mathrm{NH})$.
Derivatives: see ša(n)hu-z.
IE cognates: OHG sinnan 'to strive after', Skt. san'- 'to win, to gain'.
PIE *senh ${ }_{2}$-ti, *snh ${ }_{2}$-enti.

See CHD Š: 162f. for attestations. The verb has two quite distinct meanings, namely 'to search' and 'to sweep clean'. Despite some claims that we are dealing with two separate homophonic verbs (e.g. Oettinger 1979a: 182), CHD treats all attestations as belonging to one verb. It states ( $(\check{S}: 171)$ that the basic meaning of $\check{s} a(n) h$ - was 'to seek' and that "growing out of mng. 7 [i.e. 'to search through'], where the accusative object is the area searched, is mng. 8 [i.e. 'to clean, to sweep clean'] ... in which the area or object cleaned is the direct object. The idea is that the area or object cleaned is "searched" for the impurities, which are then removed". For now I will follow this explanation, but I would certainly welcome a convincing etymological account by which can be shown that we are dealing with two etymologically distinct verbs that have phonetically fallen together in Hittite.
We find spellings with $\check{s} a-a n-a h-C$ as well as $\check{s} a-a n-h a-C$, which, together with spellings $\check{s} a-a n-a h-h V$, show that we are dealing with a stem /sanH-/. Besides these forms, we also find the spelling $\check{s} a-a h$-. In the oldest texts, the distribution between šanh- and šah- is that šanh- is found in front of vowel (šanh-V), whereas $\check{s} a h-$ is found in front of consonant ( $\check{s} a h-C$ ), which is comparable to e.g. $l i(n) k-{ }^{z i}$, harni(n) $k^{z i}$, huni(n) $k^{z i}$, etc. Already in MS texts, we find that this distribution is getting blurred (e.g. $\check{s} a-a n-a h-z i(\mathrm{MH} / \mathrm{MS})$ ).
Since Eichman (1973: 269ff.), $\check{s} a(n) h$ - is generally connected with OHG sinnan 'to strive after', Skt. $s a n n^{i}$ - 'to win, to gain', Gr. ä $v v \mu$ 'to fulfil' etc., which point to a root ${ }^{*} \operatorname{senh}_{2}$-. This means that for Hittite we have to reconstruct ${ }^{*} \operatorname{senh}_{2}-t i$, ${ }^{*} s_{n h} h_{2}$-enti.
Puhvel (1979b: 299ff.) argued for a separation of $\check{s} a(n) h$ - 'to seek, to search' and $\check{s} a(n) h$ - 'to clean' because of his claim that the latter rather means 'to flush (down), to wash, to rinse' and is derived from the root *sneh $2^{2}$ 'to bathe, to swim' (Lat. nāre, Skt. snắti, etc.). However, Tischler (HEG S: 825-8) shows and explicitly states that $\check{s} a(n) h$ - predominantly denotes 'dry' cleaning, i.e. sweeping the floor, and not 'wet' cleaning, as claimed by Puhvel and that therefore Puhvel's etymological proposal must be rejected on semantic grounds.
For the possibility that $\check{s} a(n) h u_{-}^{z i}$ 'to roast' is cognate, see there.
ša(n)hu- ${ }^{z i}$ (Ib3) 'to roast': 3sg.pres.act. ša-an-ḩu-uz-zi (MH/MS), 3pl.pres.act. ša-
 MH/NS), 3pl.imp.act. ša-an-ḩu-u-ua-an-du (MH/NS); 3sg.pres.mid. ša-an-hुu-ta ( OH or MH/NS); part. ša-an-ḩu-ưa-an-t- (MH/MS), ša-an-hu-u-ua-an-t-, ša-huu-ua-an-t- (OH/NS), ša-a-an-ḩu-u-uূa-an-t-, ša-an-hu-un-t- (NS).

Derivatives: šanhuuá- (c.), a food (nom.pl. ša-an-hูu-u-uáaš (OH/NS)), šanhuna-, a food (gen.sg.(?) ša-an-ḩu-na-aš (NH)).

IE cognates: Gr. ävv $\mu$ 'to fulfil, to bring to an end'.

$$
\text { PIE } \text { senh }_{2}-u-t i *_{s_{2}} \text {-u-enti. }
$$

See CHD Š: 172f. for attestations. If the one form ša-ḩu-uূa-an (KUB 29.1 iii 46) is linguistically real, it would show that this verb, too, shows an alternation between forms with and without $-n-$, like $l i(n) k-{ }^{z i}$, harni(n) $k-{ }^{z i}$, ša $(n) h-^{z i}$, etc. The original distribution between this ablaut is that $* C V n C V>C V n C V$, whereas * $C V n C C>C V C C$ (so loss of *-n- before two consonants). This case, then, would be an extra argument in favour of the view that the sequence -hu- within Hittite is not to be regarded as consonant+vowel /-Hu-/, but as a consonantal phoneme $/-\mathrm{H}^{\mathrm{w}}-/\left(\mathrm{cf}\right.$. Kloekhorst fthc.c, § 1.3.5 and at $\left.\operatorname{tarh}^{2}{ }^{z i}\right)$. Here it is necessary since in a stem /sanHu-/ the nasal would never stand before two consonants (e.g. /sanHumi/), whereas in $/ \mathrm{sanH}^{\mathrm{w}}$-/ this is possible (e.g. $* / \mathrm{sanH}^{\mathrm{w}} \mathrm{mi} /$ should regularly give $/ \mathrm{saH}^{\mathrm{w}} \mathrm{mi} /$ ). We see that, just as in $\check{s} a(n) h^{-z i}$, already in MS texts the original distribution between /sanH ${ }^{\mathrm{w}} \mathrm{V}-/$ and $/ \mathrm{saH}^{\mathrm{w}} \mathrm{C}$-/ has been blurred.
Eichner apud Oettinger (1979a: 367) connects $\check{s} a(n) h u^{-z^{i}}$ with Gr. ävvut 'to fulfil, to bring to an end', which is semantically likely (cf. ModEng. well done 'thoroughly baked', but also Hitt. $z \overline{e_{-}}{ }^{\text {ari }}$ 'to cook $<*$ to be finished' (q.v.)). The Greek verb is usually seen as an $u$-extension of the root *senh $2_{2}$ 'to achieve, to try to accomplish'. This latter root is the parent to Hitt. $\check{s} a(n) h_{-}{ }^{z i}$ 'to search', which is semantically that far from 'to roast' that we must assume that the $u$-extension as visible in $\check{s} a(n) h u_{-}{ }^{z i}$ is from PIE origin already and therewith directly cognate to the Greek verb (see at tarhu- ${ }^{z i} \sim$ Skt. túrvati for a similar scenario).
šani- (adj.) 'the same, one and the same': dat.-loc.sg. ša-ni-ía (OS), ša-ni-i-ia ( $\mathrm{OH} / \mathrm{NS}$ ), $\check{s} a-n i-e, ~ s ̌ a-n i-i(\mathrm{NH})$.
Derivatives: šanezzi-, šanizzi- (adj.) 'first-class, excellent, outstanding; pleasant, tasty, fragrant' (nom.sg.c. ša-ni-iz-zi-iš (MH/MS, OH/NS), ša-a-ne-ez-zi-iš (OH/MS), ša-ne-ez-zi-ǐ̌ (NH), acc.sg. ša-ni-iz-zi-in (MH/MS), ša-ne-ez-zi-in (pre-MH/NS), nom.-acc.sg.n. ša-ne-ez-zi (MH/NS), ša-ni-iz-zi (OH or MH/NS), ša-ni-i-iz-zi (MH/NS), abl. ša-ni-iz-zi-az (OH/NS), [ša-n]e-ez-zi-az (NH), instr. $\check{s ̌ a-n i-i z-z i-i t ~(M H / N S ?), ~ n o m . p l . c . ~ s ̌ a-n i-i z-z i-u s ̌ ~(N H), ~ n o m .-a c c . p l . n . ~ s ̌ a-n i-i z-z i ~}$ (MH/MS), ša-ne-ez-zi (OHNS)), šanezziiahhh- (IIb) 'to make pleasant; to enjoy oneself' (2sg.imp.act. [ša-n]i-iz-zi-ia-ah (NS), ša-ne-ez-zi-i $\left[a^{?}-a h^{?}\right] \quad$ (NS);

pleasant' (3sg.pres.act. ša-ne-ez-zi-iš-ta, ša-ni-iz-zi-e-eš-ta, 3sg.imp.act. [̌̌]a-ni$i z-z i-i \check{s}-d u, \check{s} a-n e-e z-z i-i s ̌-d u)$.

Anat. cognates: HLuw. sanawa/i- (adj./n.) 'good/goods' (nom.sg.c. sa-na-wa/i$s a$ (multiple times), nom.-acc.sg.n. sa-na-wa/i-ia-za (SULTANHAN §18), dat.loc.sg. sa-na-wa/i-ia (often), abl.-instr. sa-na-wa/i+ra/i, nom.-acc.pl.c. sa-na-wa/i-i-zi (ASSUR letter $b$ §9), nom.-acc.pl.n. ${ }^{{ }^{B O N U S}}{ }_{s a-n a-w a ́ / i ́}$ (KARATEPE 1 §14), sa-na-wa/i-ia (ASSUR letter $g$ §36), ${ }^{\text {BONUS }}$ sa-na-wa/i-ia (KARATEPE 1 $\S 15 \mathrm{Hu}$.$) , "BONUS" sa-na-wá/i-ia (KARATEPE 1 \S 15 \mathrm{Ho}$.$) , etc.), sanawazi- (adj.)$ 'good' (acc.sg.c. sa-na-wa/i-zi-na $a^{-i}$ (ASSUR letter $d$ §8), sa-na-wa/i-zi-na-' (ASSUR letter $e$ §23)), sanawastar- 'goodness' (abl.-instr. (")BONUS(") sa-na-wa/i-sa-tara/i-ti (KARATEPE $1 \S 18$ Hu. and Ho.), sa-na-wa/i-sat-tara/i-ri+i (KULULU 5 §13), sa-na-wa/i-sa-tara/i-ri+i (SULTANHAN §45)).

See CHD Š: 173f. for attestations. Eichner (1992: 45-6) assumes an etymological connection with PIE *sem 'one' (e.g. Gr. हैv). Although semantically this is appealing, formally it is quite difficult. The idea is that the $i$-stem šani- is comparable to e.g. aši / uni / ini that reflects * $h_{1} o s+i, * h_{l} o m+i$, etc. Problematic, however, is that forms showing an inflected stem uni- are found in younger texts only, whereas the inflected stem šani- is found in an OS text already. Moreover, because ${ }^{\left(h_{1} o m+i\right.}$ yields uni, šani- cannot go back to ${ }^{*}$ som $+i$. Eichner therefore states that *šan may reflect *sem "if weak stress can be assumed to here cause Hitt. $a$ instead of $e$ " (l.c.).
The adjective šanezzi-, šanizzi- is peculiar as well. Usually, it is compared to the adjectives hantezzi(ia)-, appezzi(ia)-, e.a., but these all show an $a$-stem -ezziïa- in OH and MH texts. Such a stem is unattested for šanezzi-, šanizzi-, which is remarkable. On the other hand, šanezzi-, šanizzi- does not show suffix-ablaut as is usual in normal $i$-stem adjectives ( $-i-/-a i-$ ), with which it does fit the other adjectives in -ezzi(ia)- that do not show suffix-ablaut either when they have adapted the $i$-stem form -ezzi- in younger texts. Another peculiarity is the fact that we find the spelling $\check{s} a$-NI-IZ-zi- beside $\check{s} a-N E-I Z-z i$-. According to CHD (Š: 175), "given the fact that the sign NI is often read né from OH and later, an interpretation/sanezzi/ is possible for occurrences of $\check{s} a$-NI-IZ-zi-". Although it does occur that NI should be read né, it is a quite restricted phenomenon. Moreover, as CHD admits, " $[t]$ he single occurrence of $\check{s} a-n i-i-i z-z i$ KUB 15.31 i 25 (MH/NS) would seem to require a $n i$ reading of NI". Perhaps we should read the forms with $\check{s} a$-NI-IZ-zi- as ša-ni-ez-zi-, having the stem šani- restored (compare e.g. the few attestations appaezzi- instead of original appezzi(ia)-, in
which the basic noun $\bar{a} p p a$ was restored). The spelling $\check{s} a$-NI- $i$-IZ-zi- could then be read ša-ni-i-ez-zi-.
All in all, although I would be tempted to follow Eichner in assuming an etymological connection with PIE $*_{\text {sem }}$, the formal peculiarities are difficult to explain.
šankuūāi- (c.) 'nail; a unit of linear measure' (Sum. UMBIN): nom.sg.c. ša-an$k u-u{ }_{c}-i a-a \check{s}(\mathrm{NH})$, erg.sg. ša-an-ku-ua-ia-an-za (NH), nom.pl.c. ša-an-ku-ua-i-$\check{s}=a-a t(\mathrm{OH} / \mathrm{MS})$, nom.-acc.pl.n. [ša-a]n-ku-u$a-a-i$ (pre-NS), $\check{s} a-a n-k u-u a-i$, dat.-
 unclear: ša-an-ku-i-ša-at, ša-an-ku-ua-a[-..] (OH/MS).
Derivatives: ${ }^{\text {URUDU }}$ Šankuual(li)- (n.), a metal implement for care of the nails? (nom.-acc.pl. ša-an-ku-ua-al-li (OH/NS)).

IE cognates: Lat. unguis, Gr. ővv乡, OIr ingen, OCS nogъtb, Lith. nagùtis, Arm. ełungn 'nail', Lith. nagà 'hoof'.

$$
\text { PIE } *_{s}-h_{3} n g^{h}-u-o i-?
$$

See CHD Š: 180 for attestations. There it is stated that "the oldest attestation $\check{s} a$ $a n-k u-w a-i-\check{s}(a)(\mathrm{OH} / \mathrm{MS})$ establishes the word as common gender and its stem as šankuwai-". Nevertheless, we find many neuter forms as well. In an overview of the forms, CHD gives four forms that they cite as commune. The first one, nom.sg.c. ša-an-ku-ua-a[-iš] (KBo 13.31 iii 10 (OH/MS)) occurs in an 'If of an omen...'-text:

KBo 13.31 iii
(10) ták-ku ša-ki-aš ša-an-ku-u $u-a[-\ldots]$
(11) DUMU.LUGAL ${ }^{\text {GIš }} \mathrm{GU} . Z \mathrm{ZA} A-B I=\check{S} U e-\mathrm{x}[\ldots]$.

These lines, which are quite broken, are read by Riemschneider (1970: 76) as :
(10) ták-ku ša-ki-aš ša-an-ku-ua-a[-iš?]
(11) DUMU.LUGAL ${ }^{\text {GIŠ }}$ GU.ZA $A-B I=\check{S} U$ e-e[p-zi]
"(10') Wenn der Huf (die Hufe) eines "Vorzeichens [ .....] (11') Der Sohn des Königs wird den Thron seines Vaters ergrei[fen.]".

Apparently, CHD took over this interpretation as a commune-form, but as we can see, this is unascertained. The second one, nom.sg.c. ša-an-ku-ua-ída-aš (KUB 9.4 i $26(\mathrm{NH})$ ), is clearly secondary and attested in a text that shows many errors (see

Beckman 1990 for an edition). Of the third one, nom.sg.c. $\check{s} a-a n-k u-i-s ̌ a-a t$ (KUB 24.13 ii 19 (MH/NS)), CHD itself states that "the form $\check{s} a-a n-k u-i-s \check{a} a-a t$ KUB 24.13 ii 19 is corrupt and stands for an expected abl.": inclusion in the overview of attested forms as a nom.sg.c. apparently was erronuous. The fourth one, nom.pl.c. $\check{s} a-a n-k u-u a-i-\bar{s}=a-a t$, is found in the following context:

KUB 33.66 (OH/MS) ii
(3) har-ga-na-u-i-š=a-at ka-lu-l[u? ${ }^{?}$-pa-aš pí-i-e-er $]$
(4) $k a-l u-l u-p i ́-\check{s}=a-a t ~ s ̌ a-a n-k u-u a-i$
(5) ša-an-ku-ua-i-š=a-at da-an-ku-ua-it[a-ga-an-zi-pi]
(6) pí-i-e-er
'The soles of the feet [gave it to] the toes; the toes [gave] it to the toenails; the toenails gave it to the dark e[arth]'.

Here, šankuuaiš indeed seems to be a genuine plural form (because of piier), and commune because of the ending -š. Nevertheless, because šankuuaiš is found in an enumeration (following harganauiš and kalulupiš), it can easily be a corrupt form, as often happens in enumerations. So all in all, of the four forms that are cited by CHD as commune, only two turn out to be genuinely commune, and these forms can easily be or likely are corrupt.
The neuter forms are interpreted in CHD as "collec.nom.-acc.neut.": [ $\check{s} a] n k u u \bar{a} i$ (1x: MS) and šankuuai (2x, undat. and NS). As we see, one of them occurs in an MS text (KBo 9.127 l.col. 5, dated by CHD as "pre-NS") and is therefore just as valuable as the (possibly corrupt) nom.pl.c. šankuuaiš ( $\mathrm{OH} / \mathrm{MS}$ ). Additional proof for neuter gender is the attestation of an erg.sg. šankuuaianza (KUB 9.4 i 35 (NH)), which form would only be necessary if the basic word was neuter (although one must admit that in the preceding line (KUB 9.4 i 34) an unusual form kalulūpanza is found, whereas kalulupa- 'finger' is a commune word: Beckman (1990: 50, following Puhvel 1976: 26) interprets it as 'a set of toes'). All in all, I conclude that it is more likely that šankuuai- originally was neuter, and that the two commune forms are of secondary origin.
The word clearly shows a diphthongstem in -ai-, on which see Weitenberg (1979). He has left šankuuai- out of the discussion, however, because of its difficult interpretation.
The etymological interpretation is difficult as well. Since Forrer apud Feist (1939: 194), it is generally connected with Lat. unguis, Gr. ővv乡, OIr. ingen, OCS nogъtb, Lith. nagùtis 'nail' etc., which all point to PIE * $h_{3} n e g^{h}-u-,{ }^{*} h_{3} n g^{h}-u$ - (cf.

Schrijver 1991: 62, who specifically speaks against reconstructing a form $* h_{3}$ eng $^{h}-u$-). This connection does not account for the initial $\check{s}$ - (on the basis of which e.g. Beekes (1969: 47) rejects it). Nevertheless, if we assume an $s$-mobile (which is admittedly quite $a d h o c$ ), then we can reconstruct $*_{s}-h_{3} n g^{h}-u$-oi- which would regularly yield Hitt. šankuuai-. An $s$-mobile has also been suggested for išhahru- 'tear' (q.v.) and šākuúa- 'eye’ (q.v.).
šapašiie/a- ${ }^{z i}$ (Ic1) 'to scout, to reconnoitter': 3pl.pret.act. ša-pa-ši-ía-ar (MH/MS), 3pl.imp.act. ša-pa-ši-i-ia-an-du (MH/MS), [ša-p]a-ši-an-du; sup. ša-pa-ši-íla-u-a[n] (MH/MS); inf.I ša-pa-ši-i_ia-u-an-z[i] (MH/MS).
Derivatives: ${ }^{\text {Lú }}$ šapašalli- (c.) 'scout, lookout' (nom.sg. ša-pa-a-ša-al-li-iš, nom.pl. $\check{s} a-p[a-s \check{a}-a l-l i-e-e s ̌]$, acc.pl. ša-pa-ša-al-li-u[̌̌] (MH/MS), $\check{s} a-p a-\check{s} a-a l-l i-$ $e$-eš (MH/MS)).

See CHD Š: 204f. for attestations. The verb is attested in the Maşat Höyük-letters only. Its derivative, ${ }^{\text {Ĺs šapašalli-, is also attested in texts from Boğazköy, }}$ however. Note that Alp (1991: 21) reads HKM 6 rev. (22) ša-pa-ši-ía-ar incorrectly as ša-ú-ši-ía-ar, on the basis of which he cites this verb as šapašiía- / šaušį̄a- (e.g. Alp 1988).
The etymological interpretation of these words is difficult. The fact that the verb shows a stem šapašiie/a-, whereas the noun is derived from the unextended stem šapaš-, looks like an Indo-European feature. Yet the stem šapaš- is difficult to explain as an inherited root: if it is to be interpreted as /sabas-/ it can hardly be of IE origin because of the fact that it is disyllabic; if it is to be interpreted /spas-/, it cannot be inherited because ${ }_{s} T$ - would in principle yield Hitt. $i s ̌ T$ - (but see at e.g. šākk- ${ }^{i}$ / šakk- and šākan / šakn- for some cases where we do find an initial cluster /sT-/, from secondary origin). Van Brock (1962b: 115) connected šapašalli- with Lat. speciō, OHG spehōn 'to see' < *spek'-ie/o-, however, which indeed is semantically attractive. Nevertheless, the sound laws, which predict that *spek-ielo- would yield Hitt. **išpekkiie/a-, prevent us from deriving šapašiie/aand šapašalli- from *speḱ(-ie/o)- through the Anatolian way. Szemerényi (1976: 1069) therefore derives šapašiie/a- from *spek-ielo- through the Indic way: he assumes that šapaš(iie/a)- is a borrowing from Indic/Mitanni *spać(-ina)- < *speḱ(-ie/o)-. This is formally certainly possible: the word $\bar{a} s ̌ s ̌ u s ̌ a n n i-~ ' h o r s e-~$ trainer', which must (partly) be a borrowing from Indic/Mitanni *aćva- < *h $h_{1} e^{\prime} u o-$, shows that Indic -ć- is borrowed into Hittite as a sibilant. Semantically, a connection between šapaš(iie/a)- and *speḱ(ie/o)- is also attractive. Moreover, the meaning 'to scout' would fit the sphere of meanings of the other borrowings
from Indic/Mitanni into Asia Minor (which all have to do with horse-training and warfare). All in all, I am quite positive regarding Szemerényi’s proposal (but compare scepticism by Mayrhofer 1982: 86).
(URUDU $^{\text {s.apikkušta-: see }}{ }^{\left(\text {URUDU }^{\text {s }} \text { šepikkušta- }\right.}$
šaptaminzu (adj.?) ‘sevenfold(?)’: case? ša-ap-ta-mi-en-zu (OH/NS).
PIE *sptm-in-Hsu?
This word is hapax in KUB 29.1 iii (2) nu GEŠTIN-an ú-da-ú 9 ša-ap-ta-mi-en$z u$ 'and let him bring out wine, nine $\check{s}$.'. On the basis of this context, its meaning cannot be determined. Nevertheless, it has been suggested that because of the formal similarity with 8 -in-zu 'eight-fold', it is likely that šaptam- is a numeral as well and then derived from *septm 'seven' (cf. Tischler HEG S: 852-3: note that on the basis of this comparison I cite ša-ap-ta-mi-en-zu as šaptaminzu and not as šaptamenzu, which is more common in the literature). CHD Š: 208 therefore translates 'nine sevenfold (offerings?)'.

In view of šiptam- 'seven' as attested in šiptamiiáa- 'seven-drink' (q.v.) and šiptamae- ${ }^{z i}$, which seem to reflect the Hittite outcome of PIE *septm, it has been suggested that šaptam- as found here must be the Luwian counterpart, showing *e $>a$. Although this is a possibility (but as far as I know -inzu is not attested in Luwian), I would not want to exclude that we are in fact dealing here with the Hittite outcome of the cardinal $*_{\text {sptm- showing an analogical aphaeresis of the }}$ initial $i$ - (which we would expect as the regular prothetic vowel to solve the initial cluster $* s T$-, so */isptm-/) in analogy to the full-grade *septm- as visible in šiptamiía- and šiptamae- (see there for a similar account for the female name ${ }^{\mathrm{f}} \check{S}$ Sa-áp-ta-ma-ni-kà as attested in texts from Kaniš, which probably literally means 'seventh sister' and reflects ${ }^{*}$ sptmo-).
According to CHD (1.c.), $-z u$ is comparable to HLuw. $-s u$ and Lyc. $-s u$ ' $x$-fold' (e.g. HLuw. " 3 " tara/i-su-u, Lyc. trisu 'thrice'). Note that Lyc. -s- cannot reflect a plain $*_{s}$ (which should have become Lyc. $-h$-), but should go back to $* s s$ from older $* s H$ or *Hs. A form *-Hsu could explain Hitt. -nzu in view of genzu- 'lap' < *ǵenh ${ }_{l} s u$ - (whereas $* V n s V>$ Hitt. VššV). The element -in- is still unclear, but hardly can reflect anything else than *-in-. So, all in all, šaptaminzu must reflect *sptm-in-Hsu (or *septm-in-Hsu if one insists on Luwian origin of this word).
šar- ${ }^{(t) a(r i)}$, šariiele/a- ${ }^{-i}$ (IIIc/d; Ic1) 'to embroider(?), to sew on(?); to truss(?) / sew(?) up': 3sg.pres.act. ša-ri-ez-zi (OS), 3pl.pres.act. ša-ri-an-zi, ša-ri-ía-an-zi,
ša-a-ri-i_ia-an-zi (NS), [š]a-ra-a-an-zi (KUB 48.124 obv. 14 (NH), KBo 5.1 iii 53 (NS)), 3sg.imp.act. ša-ri-i ia-ad-du (NS); 3pl.pres./pret.midd. ša-ra-an-t[a(-)...] (OS); part. ša-ri-ia-an-t- (NH), ša-a-ri-ia-an-t-; inf.I ša-ra-a-u-an-zi (KBo 5.1 iii 54 (NS)); impf. ša-ri-iš-ke/a- (NS).
IE cognates: Lat. serō, Gr. عlp $\omega$ 'to string together'.
PIE *sr-(t)ó-ri, *sr-ie/o-

See CHD Š: 257-8 for attestations and semantics. Note that CHD distinguishes between a verb "šariya-" 'to embroider, to truss / sew up' and "šarai- 'to unravel(?)'", which both show a 3pl.pres.act. ša-ra-a-an-zi (KUB 48.124 obv. 14 is translated by CHD as 'they embroider' whereas KBo 5.1 iii 53 is translated as 'they unravel'). I do not understand this distinction. In my view we rather translate this context as follows:

KBo 5.1 iii
... $n u^{\text {MUNUS.MEŠ }} k a$-at-re-e-eš
(53) TÚG-an ša-ra-a-an-zi
(54) $m a-a h-h a-a n=m a$ TÚG-an ša-ra-a-u-an-zi
(55) zi-in-na-an-zi
'The $k$.-women embroider(?) a cloth. When they finish embroidering the cloth,
...'

The oldest attestations of this verb are 3pl.pres. or pret.midd. ša-ra-an-t[a(-)...] (OS) and 3 sg.pres.act. ša-ri-ez-zi (OS). In younger texts we only find active forms, showing the stems šariie/ $a^{-z i}$ as well as šarae- ${ }^{z i}$ (according to the prodcutive hatrae-class inflection). This points to an original situation in which we find a middle stem šar- besides an active stem šariiela- (cf. hatt- ${ }^{-a(r i)}$ besides hazziie/a- ${ }^{z i}$ and huett- ${ }^{(t)}$ a(ri) besides huttiie/a - $^{z i}$ ).
Despite the fact that the semantics are not fully clear, it is probable that this verb denoted something like 'to sew together'. Duchesne-Guillemin (1947: 78) therefore proposed to connect it with Lat. serō and Gr. $\varepsilon$ l' $\rho \omega$ 'to string together', which makes sense semantically as well as formally. I therefore reconstruct *sr-(t)ó-ri, *sr-ie/o-.
šārr- ${ }^{i} /$ šarr- (IIa2 > IIa1 $\gamma$, Ic1) (act.) 'to divide up, to distribute; to split, to separate'; (midd. trans.) 'to cross (a threshold); to pass through (a doorway); to transgress (borders); to violate (an oath)'; (midd. intr.) 'to be divided; to split up':

2sg.pres.act. šar-ra-at-ti (NH), 3sg.pres.act. ša-a-ar-ri (MH/MS), šar-ri (NS), ša-ar-ri (NS), šar-ra-a-i (OH/NS), šar-ra-i (NH), šar-ri-e-ez-zi (MH/NS), šar-ri-ez-
 ( $\mathrm{OH} / \mathrm{NS}$ ), 2pl.pres.act. šar-ra-at-te-ni ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pres.act. šar-ra-an-zi (OS), 1sg.pret.act. šar-ra-ah-ḩu-un (NH), 3sg.pret.act. $\check{s} a-a$-ar-ǎ̌ (OS), šar-ra-aš (MH/MS), šar-ri-i-e-et (NH), 1pl.pret.act. šar-ru-me-en (NH), šar-ru-um-me-en (NS), 3pl.pret.act. šar-re-er (MH/MS), šar-ri-i-e-er (NH), šar-ri-e-er or šar-re-eer ( NH ), 2sg.imp.act. šar-ri (NS); 2sg.pres.midd. šar-ra-at-ta (MH/MS), 3sg.pres.midd. šar-rị-et $[-t a]$ (KUB 36.106 rev. 5 (OS or MS)), šar-ra-at[-ta] (KUB 36.108 obv. 10 (OS or MS); for this addition, cf. Oettinger 1976a: 59), šar-ra-at-ta-ri (MS), šar-ra-ta-ri (OH/NS), šar-ra-at-ta (OH/NS), 2pl.pres.midd. šar-ra-ad-du-ma (MH/MS), šar-ra-at-tu-ma ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pres.midd. šar-ra-an-ta (MS), šar-ra-an-ta-ri (NS), 1sg.pret.midd. šar-ra-ah-ȟa-at (OH/MS), 3sg.pret.midd. šar-ra-at-ta-at (MH/MS), 3pl.pret.midd. šar-ra-an-ta-ti (MH/MS), šar-ra-an-da-at (NH); part. šar-ra-an-t- (MS); verb.noun šar-ru-mar ( $\mathrm{OH} / \mathrm{NS}$ ), gen.sg. šar-ru-ma-aš (OH/NS); inf.I šar-ru-ma-an-zi (OH/NS); inf.II šar-ra$a n-[n] a$ (NS); sup. ša[(r-ri)-i] $a-u-u a-a n(N S), ~ s ̌ a r-r i-i ̨ a-u-a n(N S) ; ~ i m p f . ~ s ̌ a r-r a-~$ $a \check{s}-k e / a-(\mathrm{OH} / \mathrm{MS})$, šar-ri-iš-ke/a- (NS), šar-ri-eš-ke/a- (NS).
Derivatives: see šarran-, šarra-.

$$
\text { PIE } \text { sórh }_{l} \text {-ei, } \text { *srh }_{l} \text {-énti }
$$

See CHD Š: 230f. for attestations. This verb has basically two meanings; 'to divide up, to distribute' and 'to transgress (oaths, borders, doorways)'. In the OH and MH period, active forms denote 'to divide up, to distribute', intransitive middle forms denote 'to be divided' or 'to split up (intr.)' and transitive middle forms denote 'to transgress (oaths, borders, doorways)' (for the latter, see e.g. Oettinger 1976a: 59f. and Melchert 1984a: 18). In NH times the latter category is transferred to the active inflection as well (compare e.g. KUB $36.75+$ Bo 4696 ( $\mathrm{OH} / \mathrm{MS}$ ) i (7) n=a-aš-ta ne-pí-ša-aš KÁ-uš zi-ik=pát (8) [aš-ša-nu-u]a-an-za ${ }^{\mathrm{d}} \mathrm{UTU}-u \check{s}$ šar-ra-aš-ke-et-ta 'You alone, O established Sun-god, pass through the gate of heaven' that shows an active form in its NS duplicate: KUB 31.127 + KUB 36.79 i (31) šar-ri-eš-ke-ši).
CHD states the following about the formal side of this verb (based on Oettinger 1979a: 287): "The oldest texts show a root thematic class verb, mi-conjugation with diagnostic forms šarrezzi, šarranzi, šarret, šarrer, šarratta, šarra/eške- [...] All hi-conjugation forms [...] are secondary and belong to the late MH and NH periods". This is entirely incorrect. Oettinger has based his analysis on the alleged 3sg.pret.act.-form "šarret" as found in the OS text KUB 36.106 rev. 5 (note that

Košak 2005b: 175 dates this tablet as "ah.?/mh.?", however). Melchert (1984a: $18^{36}$ ) correctly states that apart from the fact that the surrounding context of these lines demands a present verb, the meaning 'to transgress (words)' in OH texts is expressed with middle forms. We therefore should rather read the context as follows:

KUB 36.106 rev.
(5) [ ... ke-e-el tu]p-pí-aš ut-ta-a-ar šar-rị-ẹt[-ta]
(6) $[n=a$-an ke-e $] l i-i n-k i-i a-a n-t e-e s ̌ ~ a p-p a-a n-t u$
(7) $[\quad .] \quad n=.a-a s ̌$ har $a k-t u$
'[Whoever] transgresses the words of [this] tablet, him must [these] oaths seize, and he must perish'.

Having eliminated the "3sg.pret.act. šarret", we must regard the attestations of this verb with a fresh look. In the active paradigm, we see that the oldest forms are 3sg.pret.act. ša-a-ar-aš (OS), 3pl.pres.act. šar-ra-an-zi (OS) and 3sg.pres.act. $\check{s} a$ - $a$-ar-ri (MH/MS). In my view, these clearly point to an original hi-inflecting stem šārr- ${ }^{i} /$ šarr- (compare $\bar{a} r r_{-}{ }^{i} /$ arr- 'to wash' for similar forms). In NS texts, we find forms that point to a stem šarra- ${ }^{i} / \check{s} a r r$-, according to the $\operatorname{tarn}(a)$-class, and šarriie/a- ${ }^{z i}$, according to the $-i e / a$-class. Since both the $\operatorname{tarn}(a)$-class and the -ie/a-class are highly productive in NH times, these secondarily created stems are fully understandable and completely in line with the fact that $\bar{a} r r^{-}{ }^{i} / \operatorname{arr}$ - shows the secondary stems $\operatorname{arra-}{ }^{i} / \operatorname{arr}$ - and arriie/a- ${ }^{z}$ in NH texts. The middle inflection shows a stem šarriie/a- ${ }^{\text {tta(ri) }}$ besides šarra- ${ }^{\text {tta(ri) }}$ and therewith is comparable to e.g. marriie/a- ${ }^{\text {tta(ri) }}$, marra- ${ }^{\text {Hta(ri) }}$ 'to dissolve'.

Kimball (1999: 414) connects this verb with Gr. $\dot{\rho} \omega$ oual 'to move violently, to rush' and reconstructs ${ }^{*}$ serh $_{3}$-. Semantically this connection does not make sense, however. Despite the fact that I know no good comparanda, formally šārr- ${ }^{i} /$ šarrcan only go back to a root ${ }^{*} \operatorname{serh}_{l^{-}}$(compare at $\bar{a} r r_{-}{ }^{i} / \operatorname{arr}$-, which reflects a root *h $h_{l} e r h_{1}$-). I therefore mechanically reconstruct this verb as *sórh $h_{l}$ eei/*srh $h_{1}$-énti.
šarā (adv., postpos.) 'up(wards), aloft (adv.); on top of, above (postpos.)' (Sum. UGU): ša-ra-a (OS).
Derivatives: šarāzzi(iau)- (adj.) 'upper, superior' (nom.sg.c. ša-ra-a-a-z-zi<-aš) (KUB 33.68 iii 7 ( $\mathrm{OH} / \mathrm{MS}$ )), $\check{s} a-r a-a-a z-z i-i s ̌(\mathrm{OH} / \mathrm{NS})$, acc.sg.c. ša-ra-a-az-zi-íaan (MH/MS), nom.-acc.sg.n. ša-ra-a-az-zi (MH/NS), ša-ra-az-zi (OH/NS), ša-ra$z i(\mathrm{OH} / \mathrm{NS})$, gen.sg. ša-ra-a-az-zi-aš (OH/MS), ša-ra-a-az-zi-ía-aš (OH/NS), dat.-
loc.sg. ša-ra-a-az-zi (MH/MS), ša-ra-a-az-zi-ịa (MH/NS), ša-ra-az-zi (MS), abl. $\check{s} a-r a-a-a z-z i-i \underline{C} a-a z \quad$ (NS), $\quad \check{a} a-r a-a z-z i-i a-a z \quad$ (MS?), nom.pl.c. $\check{c} a-r a-a-a z-z i-i s ̌$ ( $\mathrm{OH} / \mathrm{MS}$ ), UGU-az-zi-uš (NS), nom.-acc.pl.n. ša-ra-az-zi (NH)), šarazzi (adv.) 'up(wards)' (ša-ra-az-zi), šarāzzziiaz (adv.) 'on the upper side, upstream' (ša-ra-a$a z-z i-i a-a z$ (MS), [ša-r]a-az-zi-ịa-az (MS), ša-ra-az-zi-az (NS)), šaraziēěšs ${ }^{z i}$ (Ib2) 'to prevail’ (impf.3pl.pres.act. ša-ra-zi-eš-kán-zi (NH)), šarāzziiiahh- ${ }^{\text {i }}$ (IIb) 'to make (a litigiant or a legal case) win' (3sg.pres.act. ša-ra-az-ia-hi (MH/NS), 2pl.pres.act. ša-ra-a-az-zi-ía-ah-te-ni (NS), 3sg.pret.act. ša-ra-a-az-z[i-i]a-ah-ta (NH), ša-ra-a-zi-ía-ah-t[a] (NH), 3pl.imp.act. ša-ra-az-zi-ía-ah-ha-an-du, ša-ra$a z-z i-a h-h a-a n-d u)$, šarāzziïatar (n.) 'height, summit' (Akk. MŪLÛ; nom.-acc.sg. ša-ra-a-az-zi-įa-tar (NH)), šarāmnaz (adv.) 'from above' (̌̌a-ra-a-am-na-az, [ša-]ra-a-am-na-za)).

Anat. cognates: CLuw. šarri (adv., preverb, postpos., prepos.) 'above, up; for?’ (šar-ri, ša-ar-ri), šarra (adv., prepos.) '(up)on, thereon’ (šar-ra, ša-ar-ra); Lyc. $\boldsymbol{h r i}$ 'up; on (top)', hrppi 'on (prev.), for (prep.)', hrzze/i- (adj.) 'upper' (acc.sg.c. $h r z z i$, nom-acc.sg.n. $h r z z \tilde{e}$, dat.-loc.sg. $h r z z i)$.

PAnat. *sér(-i), *sr-ō
IE cognates: Gr. ค́íov 'mountain-ridge'

$$
\text { PIE } *_{s e r-,} *_{s r-}
$$

This adverb is virtually consistently spelled $\check{s} a-r a-a$ ( $1000+$ examples in my files), whereas a spelling ša-ra occurs 3 x only (cf. CHD Š: 210: $\check{s} a-r a=m a[=u a]$, $k a t-t a^{\prime}=\check{s} a-r a=a t=k a ́ n$ and $\left.\check{s} a-r a-a=m-m u\right)$. The Anatolian evidence is clear: we are dealing with an old noun, of which the endingless locative *sér yielded Hitt. $\check{s} e ̄ r$ (q.v.), the dat.-loc. *sér-i yielded CLuw. šarri, and the old all. *sr-ó yielded Hitt. šarā /sráá. CLuw. šarra must reflect *séro. Outer-Anatolian cognates are obscure. The only suggested connection is with Gr. ṕíov 'mountain-ridge', which Heubeck (1964) reconstructed as *sriiom.
See footnote 196 for the phonological implications of the equation between Hitt. šarāzzi(ína)- and Lyc. hrzze/i-.
šarae- ${ }^{z i}$ : see šar-, šariịe/a- ${ }^{z i}$
šaraku- (IIa2?) 'to give water to (?)': part.nom.pl.c. ša-ra-ku-una-an-te-eš (KUB 35.148 iii 39); impf. 3pl.imp.act. ša-ra-ak-ku-uš-kán-du (KBo 3.8 ii 8 ), $\check{s} a-r a-a k-$ ku-iš-kán-du (Bo 4010, 2).

PIE srog $^{w(h)}-$ ??

See CHD Š: 239 for attestations and contexts. We are dealing with a stem šaraku-, of which the $/ \mathrm{g}^{\mathrm{w}} /$ gets fortited in front of the -ške/a-suffix: šarakkuške/a(compare akkuške/a- from eku- ${ }^{z i} / a k u$ - 'to drink', lakkiške/a- from lāk-' / lak- 'to make lie down'). Because of its poor attestation, we cannot decide to which conjugation this verb originally belongs. The fact that we seem to deal with $/$ srag $^{\mathrm{w}}$-/ could point to original hi-conjugation, however (in a $m i$-verb, we would expect $* * /$ sreg $\left.^{\text {w }}-/\right)$. Mechanically, we have to reconstruct ${ }^{*} \operatorname{srog}^{w(h)}-$, but I know of no possible IE cognate. See at šakuruue/a- 'to water (animals)' for the possibility that this latter verb is derived from šaraku- and reflects *sragw-ur-ie/o-.
šarran-, šarra- (c.) 'portion, share, half part, division': nom.sg. šar-ra-aš (NS), šar-ra-a-aš (NS), acc.sg. šar-ra-an (NS), gen.sg. šar-ra-na-a[̌̌] (NS), šar-ra-aš (NS), abl. šar-ra-az (NS), šar-ra-na-za (NS), šar-ra-an-za (NH).

PIE *serh ${ }_{1}$-on-
See CHD Š: 229f. for attestations. This noun shows $n$-stem as well as $a$-stem nouns. Because this word is attested in NS texts only, we cannot say much on the chronological distribution between these forms. Nevertheless, it is in my view likely that the $n$-stem forms are more original. For a similar case compare hāran'eagle' that shows a stem hुāra- in NS texts.
Etymologically, it is clear that šarran- belongs with the verb šārr- ${ }^{i}$ / šarr- 'to divide up, to distribute'. It therefore is likely that originally, šarran- inflected *serh ${ }_{1}$-ón-s, ${ }^{*}$ srh $_{1}$-ón-m, ${ }^{*} \operatorname{srh}_{1}-n$-ós, which was levelled out to šarran-, also under influence of the verb's weak stem šarr-. See there for further treatment.
šarāp- ${ }^{i} /$ šarip- (IIa3) 'to sip': 3sg.pres.act. ša-ra-pí (KUB 27.29 iii 9 (MH/NS)), ša-a-ra-pí (KUB 34.97, 15 (MS?)); verb.noun gen.sg. ša-ri-pu-ua-aš (KUB 17.23 i 10,15 (NS)), š[a-]ri-pu-u-ua-aš (KUB 17.23 ii 43 (NS)), ša-ra-ap-pu-ua-aš (VBoT 24 iii 17 (MH/NS)); inf.I [ša-r]i-pu-una-an-zi (KBo 29.144, 7 (MS)), ša-ri-pu-u-ua-a[n-zi] (KBo 24.27, 11 (NS), KUB 27.58 i 6 (NS)), [š]a-ri-pu-u-ua-an-zi (KBo 14.94 iii, 22 (fr.) (NS), KBo 29.131, 3 (NS)), [ša-r]i-pu-u $a-a n-z[i]$ (FHL 4, r.col. 4 (NS)); impf. ša-a-ra-pí-eš-ki-iz-zi (KUB 34.97, 17 (MS?)).

IE cognates: Lat. sorbeō, Gr. $\dot{\rho}$ оф́́ $\omega$ 'to slurp, to swallow', Lith. sur̃bti 'to suckle', srébti 'to slurp', OCS srъbati 'to slurp'.

PIE *srób ${ }^{h}$-ei, *srb ${ }^{h}$-énti
See CHD Š: 243f. for attestations. The morphological interpretation of this verb is difficult. We find three different spellings: $\check{s} a-r a-p^{\circ}, \check{s} a-a-r a-p^{\circ}(2 \mathrm{x})$ and $\check{s} a-r i-p^{\circ}$.

On the one hand, the two forms with plene spelling $\check{s} a-a-r a-p^{\circ}$ seem to indicate that the first $-a$ - is real, whereas on the other the alternation between $-a$ - and $-i$ seems to point to ablaut and would show that the second $-a$ - is a real vowel. If this verb is of IE origin, it is unlikely that the stem would contain two real vowels: /sarab-/ can hardly reflect a PIE root. I therefore want to propose to regard the two attestations $\check{s} a-a-r a-p^{\circ}$ as mistakes (note that they both occur on the same tablet, only two lines from each other). Perhaps they are even scribal errors for $\check{s} a-r a-a-p^{\circ}$.
All in all, I assume that this verb is to be compared with ašǎss- / ašeš-, hamank - $^{i}$ / ḩame/ink-, karāp- ${ }^{i}$ / kare/ip- and represents šarāp- ${ }^{i}$ / šare/ip- (note that a difference between $-e$ - and $-i$ - is not visible since the sign RI can be read $r i$ as well as $r e$ ), and therewith is one of the few verbs that shows an ablaut $-a-/-e / i-$.
Its root etymology has been clear since Neumann (1967: 32), who convincingly connected this verb with Lat. sorbē, Gr. $\rho \circ \varphi \varepsilon ́(\omega$, etc. 'to slurp, to swallow' < $*_{s r e b}{ }^{h}$-. The exact details of the reconstruction are in debate, especially with regard to the $-a-/-e / i$-ablaut. The usual explanation of this type is the assumption that it reflects a PIE ablaut *o/e. Since such a verbal ablaut is not attested anywhere else in the Indo-European languages, I am quite sceptical about it. In my view, we rather have to assume that Hitt. $e / i$ in the cases of synchronic $-a-/-$ $e / i$-ablaut is to be interpreted as an anaptyctic vowel $/ \mathbf{i} /$. In this case, the $/ \mathfrak{i} /$ emerged in the zero-grade form of a root of the structure * $C R V C$-. On the basis of the full grade $* C R V C$-, the zero-grade $* C R C$ - $>C a R C$ - was too aberrant and was replaced by *CRíC-: karāp- ${ }^{i}$ / kare/ip- < *g ${ }^{h} r o ́ b^{h}-/{ }^{*} g^{h} r b^{h}$-, hamank- ${ }^{i}$ / hame/ink$<* h_{2}$ móng $^{h}-/ * h_{2}$ mn $^{\prime}{ }^{h}-$, but also terepp $z^{z i} /$ terepp- < *trép- $/ *$ trp-. This means that, in this case, šarāpi / šaripanzi represents /srábi/, /sríbánt ${ }^{\mathrm{s}} \mathrm{i} /<$ *srób $^{h} e i$, *srb ${ }^{h}$ énti.
šarāuar / šaraun- (n.) 'storm-clouds(?)': nom.-acc.sg. ša-ra-a-u-una-ar (OS), ša-ra-u-ua-ar (NS), erg.sg. ša-ra-u-na-an-za (NH).

PIE *sr-ó-ur / *sr-ó-un-?
See CHD Š: 246-7 for attestations and semantic treatment. The meaning of this word cannot be ascertained, but 'storm-clouds' could be possible. It belongs to the small class of nouns in -āuar / -aun- (also ašāuar / ašaun-, haršāuar / ḩaršaun-, karāuar / karaun- and partāuar / partaun-). As is clear from the other nouns (see their respective lemmas, haršāuar under hुarsší), this class represents *CC-ó-ur, i.e. a derivation in *-ó-urr of a zero-grade root (compare the abstract nouns in -ātar / -ānn- that reflect *CC-ó-tr). For šarāuar this means that we are
dealing with a root šar-. Etymologically, this can only reflect ${ }^{s} s r$-, and one could therefore consider an etymological connection with the noun *ser- 'top(?), aboveness(?)' that must underly the words šarā 'upwards' and $\check{s} \bar{e} r$ 'above, on top' (q.v.).
šarhiiela- ${ }^{z i}$ (Ic1) 'to attack(?), to press upon(?)': 2pl.pres.act. šar-hi-e[t-te-ni] (NS), 3sg.pret.act. šar-hुi-ia-at (NH), 3sg.imp.act. šar-hi-i-e-ed-du (MH/MS);
 $a t[-\ldots]$ (MH/MS).
Derivatives: šarhuntalli- (adj.) 'attacking(?), posing a threat(?)' (nom.sg.c. šar-hu-un-ta-al-liš (NH)).
IE cognates: Gr. $\dot{\rho} \omega ́ \mathrm{o} \mu a 1$ 'move with speed or violence'.

$$
\text { PIE *srh }{ }_{3}-\mathrm{ie} / o-?
$$

See CHD Š: 252 for attestations and semantic treatment. The exact meaning is unclear, but on the basis of

KUB 24.3 ii
(44) $k a-r u-u ́=[i a]\left[\left(\mathrm{KUR}^{\mathrm{U}}\right)\right]^{\mathrm{RU}}$ KÙ̀.BABBAR-ti IŠ-TU ${ }^{\mathrm{d}} \mathrm{UTU}^{\text {URU }} A-r i-i n-n a$
(45) $a-r a-a h-z e ́-n a-a \check{s} A[-N] A$ KUR.KUR ${ }^{\text {HIA-TIM }}$ UR.MAH ma-a-an šar-hi-iš-ke-et
'Formerly, with the help of the Sun-goddess of Arinna, the land of Hatti used to continually $\check{s}$. the foreign countries like a lion',
it is clear that šarhiie/a-must certainly mean something like 'to attack'. This is supported by

KBo 16.25 i $4+16.24$ i
 ha-an-te-ez-zi-an šar-ḩi-i-e-ed-du
'[When it (i.e. the army) begins to join] battle, it must $\check{s}$. the first (rank) of [the enem]y' (for additions and translation see CHD Š: 252).

The interpretation of the form šarhiíat (KUB 44.4 rev. $27+$ KBo 13.241 rev. 15) is less clear, but in my opinion a translation 'to attack' may be possible as well (for an edition, see Beckman 1983: 178):

```
(25) \(a\) - \(a s ̌-m a=u a-r=a-[a] t\) í-ua-an-zi \(\mathrm{UH}_{7}{ }^{\mathrm{HLAA}}-u s ̌ \mathrm{MUNUS}^{\text {MEŠ }}-i s ̌\)
(26) \& h hu-u-ua-an-da-za \({ }^{\mathrm{NA}_{4}} \mathrm{KA}-i n \mathrm{x}^{?}[d] a^{?}-a-i\) GIŠ tág-an-za KI.MIN ši-ua-al har-zi
```

```
(27) IGI- \(a n-d a=z=a-a \check{s}=k a ́ n ~ s ̌ a r-h i-i a-a t[m] a-a n-n i-i s ̌\) MUNUS- \(i s^{\text {MUNUS }}\) ŠÀ.ZU
    \({ }^{\mathrm{NA}_{4}} \mathrm{KA}^{?}-\check{s}=a-a \check{s}=k a ́ n\) EME- \(a n\)
(28) ku-e-er \({ }^{!}-d u\) ši-ua-la-z=a-an IG[I \(\left.{ }^{\mathrm{H}}\right]^{\mathrm{I} . \mathrm{A}}-\underset{\sim}{\text { u }}\) a ta-aš-ua-ah-ha-an-du
```

'(She says:) "Look, they are coming, the sorceresses". She takes a flint' from a huuanda, wood from the earth likewise (and) she holds a dagger?. (Placing) herself opposite, she has attacked them, the manni- woman, the midwife (saying): "May the flint" cut off the tongue! May they blind his eyes with the dagger!"".

The edition of this text translates 'She presses' them against herself', (o.c.: 179), but this does not seem more likely to me.
Formally, šarhiiela- ${ }^{z i}$ can hardly reflect anything else than $*_{s r h_{2 / 3}-i e / o-. ~ C ̌ o p ~}^{\text {Con }}$ (1955a: 398) suggested a connection with Gr. $\dot{\rho} \omega \dot{o} \mu a \iota$ 'move with speed or violence', which could reflect ${ }^{\text {ssrh}}{ }_{3}$-ie/o-.

The adj. šarhuntalli- occurs in a vocabulary only, where it translates Sum. [Š]U'.ŠÚ'! and Akk. $A L-P U$ 'threatening'.
${ }^{\text {(UZU) }}$ šarhuulant- (c.) 'belly; innards; foetus, unborn child' (Sum. ŠA ŠÀ-BI-ŠA): acc.sg. šar-hu-ưa-an-da-an (MH/NS), šar-ḩu-u-ua-an-ta-an (MH/NS), dat.loc.sg. šar-hu-una-an-ti (MS), abl. šar-hu-una-an-ta-az (OH/NS), šar-hu-u-ua-an$d a-a z$ (NS), instr. [š]ar-hu-ua-an-ti-t $[=a-a] t=k a ́ n(\mathrm{OS})$, šar-hu-ua-an-ti-it (NS), acc.pl. šar-hu-ua-an-du-uš (OH/NS), nom.-acc.pl.n. šar-hu-ua-an-da- (OH/NS), šar-hu-u-ưa-an-da (OH/NS), šar-há-an-ta (KUB 5.5 i 21, iv 13); unclear šar-ḩu-$u-u a-a n-d a-a s ̌$ (NS).
IE cognates: Arm. argand 'womb'.

$$
\text { PIE } *_{s r} h_{2} \text { uent- ?? }
$$

See CHD Š: 253-4 for attestations and semantics. Note that CHD Š: 279 also cites a noun ${ }^{\text {UZU }}$ šarnanta- 'afterbirth(?)' (KUB 5.5 i 21 , iv 13), which in my view
 only differ one vertical stroke vs. winkelhaken from each other).
The only credible etymology that I know of is by Čop (1955a: 403-6) who connected this word with Arm. argand 'womb'. If the Armenian sound laws permit it, we could reconstruct ${ }^{*} \operatorname{sr}_{2}$ uent-.

```
šariiela- \({ }^{z i}\) : see šar-, šariiela- \({ }^{z i}\)
```

šarriie/a- ${ }^{z}$ : see šārr- ${ }^{i} /$ šarr-
šarip-: see šarāp- ${ }^{i}$ / šarip-
${ }^{\text {TúG }}$ Šarriųašpa- (c.) a garment: nom.sg. šar-ri-una-aš-pa-aš (IBoT 1.31 obv. 7 (NH)).

This word is hapax in an inventory of garments. It is clearly a compound of šarri+ úašpa- 'garment', although the interpretation of šarri- remains elusive. One could think of Hurr. šarri- 'king' or CLuw. šarri 'upper'.
šarku- / šargaú- (adj.) 'eminent, illustrious, powerful', (c.) 'an eminent person': nom.sg.c. šar-ku-uš (OH/NS), acc.sg.c. šar-ku-un (NS), voc.sg. šar-ku (OH/NS), šar-ku-i (OH/NS), dat.-loc.sg. šar-ga-u-i (NS), nom.pl.c. šar-ga-u-e-eš (MH/NS), šar-ga-a-u-e-eš (NS), acc.pl.c. šar-ga-mu-uš (NS), dat.-loc.pl. šar-ga-u-ūa-aš.
Derivatives: šargaunatar / šargauann- (n.) 'eminence' (nom.-acc.sg. šar-ga-uatar, [š]ar-ga-u-ua-tar (NS), šar-g[a-ua-tar] (MS), dat.-loc.sg. šar-ga-ua-an-ni (MH?/MS)), šarkiške/a- ${ }^{z i}$ (Ic6) 'to be eminent' (2sg.pres.act. šar-[k]i-iš-ke-ši
 'to become mighty' (3sg.pres.act. šar-ku-e-e[ז̌-zi] (MS)).
IE cognates: TochB ṣärk- 'to be better than', Lat. sarciō 'to patch up, to mend'. PIE *srk'-(e)u- or *sork'-(e)u-

See CHD Š: 268f. for attestations. This adjective is often translated 'high in status' (cf. also CHD), which goes back to Juret (1942: 43) who assumed an inner-Hittite connection with šarā 'upwards' and šēr 'on top'. As we will see below, this connection cannot be correct, and šarku- / šargaú- therefore should be translated 'eminent, illustrious, powerful' without semantically linking it to 'high'. We are clearly dealing with an $u$-stem adjective derived from a root šark-, which probably is visible as such in the verb šarkiške/a- 'to be good' < *šark-ške/a-. Note that the editors of CHD (Š: 267) translate this verb as "to ascend", which they admit to have based "on the supposed link to šarku- 'high, eminent'". Moreover, in order to illustrate this meaning they only cite one context, KUB 24.7 iv 25-26, which is broken and therefore non-probative. The other context in which this verb occurs is much clearer (for the reading šar- $[k] i$ -iš-ke-ši, cf. šarku- ${ }^{\text {d }}$ UTU-u- 'eminent Sun-god' in ibid. i 15, 18, 58):

KUB 31.127 i
... ha-an-da-an-za=kán
(9) $a[n-t] u-u h-s ̌ a-a s ̌ ~ t u-u k=p a ́ t ~ a-a s ̌-s ̌ u-u s ̌ ~ n=a-a n ~ z i-i k=p a ́ t$
'When righteous, a man is dear to you, and you are therefore always good to him, o Sun-god'.

Kronasser (1957: 123, 127) convincingly connects šarku- with TochB ṣärk- 'to surpass, to be better than'. Since this latter verb is a causative and attested in the middle only (p.c. M. Peyrot), the basic meaning of this verb may be 'to be good' as well (so *'to make onself good (with regard to someone else)' > 'to surpass, to be better than'). Moreover, within Hittite we may think of a connection with the causative šarnink- ${ }^{z i}$ 'to compensate' (q.v.), which then must go back to *'to make (someone) good' (cf. ModDu. vergoeden 'to compensate', lit. *'to make (someone) good'). This verb is generally connected with Lat. sarciō 'to patch up, to mend' < *srk'-ié/ó-, on the basis of which we must reconstruct a root *serk'-.
šarkuйe/a- ${ }^{z i}$ (Ic4) 'to put on footwear': 3sg.pres.act. šar-ku-e-ez-za (here?, OS), šar-ku-ez-zi (MS), šar-ku-e-ez-zi (OH/NS), šar-ku-i-ịa-zi (OH/NS), [šar-k]u-e-íla$z i \quad(\mathrm{NS}), ~ s ̌ a r-k u-u z-z i \quad(\mathrm{NS}), ~ s ̌ a r-k u-z i \quad(\mathrm{NS}), 3 p l . p r e s . a c t . ~ s ̌ a r-k u-u a-a n-z i$, 3sg.pret.act. šar-ku-et ( $\mathrm{OH} / \mathrm{NS}$ ), šar-ku-ut-ta ( $\mathrm{OH} / \mathrm{NS}$ ), 2sg.imp.act. šar-ku-i (NH), šar-ku, 3sg.imp.act. šar-ku-ía-ad-du (MH/NS), šar-ku-ud-du (MH/NS); part. šar-ku-ua-an-t- (OH/NS).
Derivatives: šarkuiųant- (adj.) 'having shoes on(?)' (nom.sg.c. šar-ku-i-uূa-an$z a$ (NS)).

IE cognates: Gr. $\dot{\alpha} \rho \pi i ́ \varsigma,-i ̃ \delta o \varsigma ~ ‘ k i n d ~ o f ~ s h o e ’ . ~$
PIE *srk ${ }^{w}$-ie/o- ?
See CHD Š: 271f. for attestations. This verb clearly is a -ie/a-derivative of a stem *šarku- 'shoe', which could be the reading of the sumerogram ${ }^{\text {KUŠ }}$ E.SIR 'shoe'. See CHD Š: 270, however, for the fact that there are no unambiguous phonetic complements to ${ }^{\text {KUŠ̌ }}$ E.SIR to prove that it really has to be read šarku-.
The etymological interpretation of this word is difficult. Sommer \& Falkenstein (1938: 86) equated *šarku- 'shoe' with šarku- 'eminent'. The idea is that šarkuue/a- in fact means 'to put (shoes) up high' (adapted by Neumann apud Oettinger 1979a: 335 as *šarku- 'shoe' < *'high shoe'). Semantically, this does not seem very attractive to me. Moreover, šarku- 'eminent' in fact is an $u$-stem šarku- / šargau-, whereas in the case of *šarku- 'shoe' there is no evidence at all that we are dealing with a stem *šark-u- (rather a labiovelar $*_{s a r} K^{w}$-). Eichner (1973b: 224) compared *šarku- with TochB serke, TochA sark 'cycle, circle' and Skt. sraj- 'wreath, garland'. Apart from the semantic difficulties ('cycle' and
'garland' do not have anything to do with shoes, unless one assumes that Hittite shoes were made of reed, which was not the case as we can see by the use of the determinative KUŠ 'leather'), the formal side of this etymology is unattractive as well since a connection of PToch. *serke $<$ *sorKo- with Skt. sraj- would show $^{\text {s }}$ an undesirable Schwebe-ablaut.
A possible alternative could be a connection with Gr. $\dot{\alpha} \rho \pi i ́ c$, -ĩoç 'a kind of shoe' if from $*_{s r} k^{w}$-. In principle, labiovelars would yield $\tau, \delta, \theta$ in front of $i$ or $e$,
 'glove', derived from $\chi \varepsilon i \rho$ 'hand', for the same suffix).
šarli- (adj.) 'upper(most), superior': acc.sg.c. šar-li-in (MH/NS), nom.-acc.pl.n. šar-li-ía (MH/NS).

Derivatives: šarlae- $^{z i}$ (Ic2) 'to exalt, to praise; to let prevail; to lift off, to remove' (1sg.pres.act. šar-la-a-mi (MH/MS), 3sg.pres.act. šar-la-a-ez-zi (MH/MS), šar-la-iz-zi (NS), 3pl.pres.act. šar-la-an-zi (NH), 3sg.pret.act. šar-la-a-et (MH/MS), šar-la-it (NS), 1pl.pret.act. šar-la-u-e-en (NS), š[ar-l]a-a-u-e[n] (NS), 2sg.imp.act. šar-la-a-i (OH/NS); part. šar-la-a-an-t- (MH/MS), šar-la-an-t(MS?); verb.noun gen.sg. šar-lu-ma-aš (NS), šar-lu-u-ma-aš (MH/NS); impf. šar-li-iš-ke/a- (OH/NS), šar-li-eš-ke/a-(NH)), šarlaim(m)i- (adj.) 'exalted(?)' (nom.sg.c. šar-la-i-mi-iš (NH), šar-la-im-mi-iš (NH), acc.sg.c. šar-la-i-mi-in (MS), šar-la-a-i-mi-in, šar-la-i-me-en (NS), šar-la-im-mi-in (NS), gen.sg. šar-la-i-mi-aš (MS?), šar-la-i-mi-ía-aš (NS), šar-la-im-mi-ía-aš, šar-la-a-i-ma-aš), šarlamiš- (n.) 'glory' (Luw.nom.-acc.sg. šar-la-mi-iš-ša (MH/MS)), (SISKUR/SíSKUR) ${ }^{\text {surarlatta- }}{ }^{(\text {SISKUR })}$ (n.) 'exaltation(?); praise offering' (nom.-acc.sg. šar-la-at-ta-an (NH), Luw.nom.-acc.sg. šar-la-at-ta-an-za (MH/NS), dat.-loc.sg. šar-la-at-ti, gen.sg. šar-la-a-at-ta-aš (MS), šar-la-at-ta-aš (NS), nom.-acc.pl. šar-la-at-ta (MH/MS)), šarlattašši- (adj.) 'related to praise / exaltation' (nom.sg.c. šar-la-ad-da-aš-ši-iš (NH), šar-la-at-ta-aš-š[i-iš] (NH), šar-la-da-aš-ši-iš (NS), acc.sg.c. šar-la-at-ta-aš-ši-in (MH/MS), [šar-la-a]t-ta-aš-ši-in (MH/NS), [šar$l] a-a-a t-t[a-a \check{s}-s \check{s} i-i n])$.

PIE *sr-li-
See CHD Š: 277-8 for attestations. The adj. šarli- and its derivatives are clearly cognate with $\check{s} \bar{e} r$ 'on to', šarā 'upwards' and therefore must reflect *sr-li-. See at $\check{s} \bar{e} r$ and $\check{s} a r a \bar{a}$ for further etymology.
${ }^{\mathbf{U Z U}}{ }_{\text {šarnanta-: }} \mathrm{see}^{(\mathrm{UZU})}$ šarhuûant-
šarni(n) $\boldsymbol{k}^{z i}$ (Ib3) '(abs.) to give compensation; (+ acc.) to compensate for something, to make up for something; ( $(+\mathrm{acc}$.$) + abl.) to compensate (for$ something) with something; (+ dat. + acc.) to compensate someone for something': 1sg.pres.act. šar-ni-ik-mi (OS), 3sg.pres.act. [šar-ni-ik-]za (KBo 6.2 iv 55 (OS)), šar-ni-ik-zi (OS), 1pl.pres.act. šar-ni-in-ku-e-ni (NH), šar-ni-in-ku-u-$e-[n i]$ (NS), 2pl.pres.act. šar-ni-ik-te-ni (MH/MS), 3pl.pres.act. šar-ni-in-kán-zi (OH/NS), šar-ni-en-kán-zi (OH/NS), šar-ni-kán-zi (OH/NS), 1sg.pret.act. šar-ni-in-ku-un (NH), 3sg.pret.act. šar-ni-ik-ta (NS), 1pl.pret.act. [š]ar-ni-in-ku-en, 3pl.pret.act. šar-ni-in-ker (NH), šar-ni-ke-er (MS?), 3sg.imp.act. šar-ni-ik-tu (MS), šar-ni-ik-du (OH/NS), 3pl.pres.act. [ša]r-ni-in-kán-du (MS); part. šar-ni-in-kán-t- (NH); verb.noun gen.sg. šar-ni-in-ku-ua-aš (NH), šar-ni-in-ku-u-ua-aš (NH), nom.pl. šar-ni-in-ku-e-eš (NH); inf.I šar-ni-in-ku-u_a-an-zi (NH), šar-ni-in-ku-u-ua-an-zi (NH); impf. šar-ni-in-ki-iš-ke/a- (OH/MS), šar-ni-in-ki-eš-ke/a(MH/MS), šar-ni-ki-iš-ke/a- (NH), šar-ni-en-ki-iš-ke/a- (NH).
Derivatives: šarnikzil- (n. > c.) 'compensation, compensatory damages, replacement' (nom.sg.c. šar-ni-ik-zi-il (OS), šar-ni-ik-zi-i-il (OH/NS), šar-ni-ik-zi-el (NH), nom.-acc.sg.n. šar-ni-ik-zi-il (MH/MS), šar-ni-ik-zi-el (MH/NS), gen.sg. šar-ni-ik-zi-la-aš (NH), dat.-loc.sg. šar? ${ }^{?}-n i^{!}-i k-z i-l i(N H)$, abl. šar-ni-ik-zi$l a-a z(N H)$, acc.pl.c. [ša]r-ni-ik-zi-lu-uš (NS), nom.-acc.pl.n. [šar-ni-]ik-zi-el ${ }^{\text {H.A. }}$ (NH), [šar-]ni-ik-zil'-el ${ }^{\mathrm{MEŠ}} \quad(\mathrm{NH})$ ), šarnikzilēššz ${ }^{i} \quad$ (Ic2) 'to pay/make compensation' (impf.1sg.pres.act. šar-ni-ik-zi-le!-e-eš-ke-m[i] (NH)).

IE cognates: Lat. sarciō 'to patch up, to mend', TochB ṣärk- 'to surpass, to be better than'.

PIE *sr-nén-kí- $t i$
See CHD Š: 282f. for attestations and semantics. This verb belongs to the group of nasal-infix verbs that show an infix -ni(n)-, cf. the treatment of class Ib3 in $\S 2.2 .2 .1 . \mathrm{m}$ as well as $\S 2.2 .4$. Just as e.g harni(n) $k{ }^{z i}$ is derived from hark- ${ }^{z i}$ and ištarni(n) $-_{-}^{z i}$ from ištar $(k) z^{z i}$, we sould expect that šarni(n) $k^{z^{i}}$ is derived from a verb šark-. Moreover, since nasal-infix verbs usually have a causative meaning, we would expect that this verb would have the meaning 'to be good' (cf. ModDu. vergoeden 'to compensate', which literaly is a causative 'to make good', derived from goed 'good'). Pedersen (1938: 145) found such a stem in Lat. sarciō 'to patch up, to mend' < *srk-ie/o- (cf. Schrijver 1991: 492-3), but such a stem is now also available within Hittite, namely in the adjective šarku- / šargaú'eminent' and, more importantly, in the verb šarkiške/a- ${ }^{z i}$ 'to be good' (see at šarku- / šargaū- for both), which have been connected with TochB ṣärk- 'to
surpass, to be better than'. All in all, šarni(n) $k^{z i}$ must reflect *sr-nen- $k$ - $t i$. See at § 2.2.4 for a detailed account of the infix -nin-.
šarta- ${ }^{i} /$ šart- (IIa1 $\gamma>$ Ic2, Ic1) 'to wipe, to rub': 3sg.pres.act. šar-ta-i (OS), šar$t a-i z-z i \quad(\mathrm{NH})$, [šar-]da-a-iz-zi (undat.), 1sg.pret.act. šar-ti-i-ia-nu-un (MH/NS), 3pl.pres.act. šar-te-er (OS), šar-ti-er (OH/NS), 3sg.imp.act. šar-ta-a-id-du (NS); verb.noun gen.sg. šar-ta-u-ua-aš (NH).
Derivatives: ${ }^{\text {URUDUǓ̌artal- (n.), a trowel(?), spatula(?) (nom.-acc.sg. šar-ta-al }}$ (NS)).

IE cognates: ON serða 'to sodomize', MHG serten 'to violate (women/animals)'.

PIE *sórd ${ }^{h} h_{2 / 3}$-ei, $*_{s r d}{ }^{h} h_{2 / 3}$-énti
See CHD Š: 290-1 for attestations. Note that it does not mention the attestations 3sg.pres.act. šar-ta-i (KBo 17.18 ii 16 (OS), KUB 36.110, 20 (OS)), whereas the attestation šar-ta-i (KBo 17.43 i 14) is dated as "OH/NS?", which in fact should be OS (as is correctly done lower in the text). This means that the oldest attestations are 3 sg .pres.act. šartai and 3pl.pret.act. šarter (both OS), which point to the $\operatorname{tarn}(a)$-class inflection. In NS texts we find the trivial secondary stems šartae- ${ }^{z i}$ (̌̌artaizzi, [̌̌ar]dāizzi, šartāiddu, šartauuă̌), according to the hatraeclass and šartiie/a- ${ }^{z i}$ (šartiiianun and šartier), according to the -ie/a-class.
Tarn(a)-class verbs reflect roots with a root-final laryngeal, either $* \mathrm{CoH}-$ or * $\mathrm{Ce}-\mathrm{CoH}-$, but also ${ }^{*} \mathrm{CoCh}_{23^{-}}$(for this latter root structure, compare malla- ${ }^{i}$ / mall- 'to mill, to grind', padda- ${ }^{i} /$ padd- 'to dig', iškalla- ${ }^{i} /$ iškall- 'to slit, to split', išparra- ${ }^{i}$ / išparr- 'to trample', etc.; cf. § 2.2.2.2.d). In this case, only a structure *sor $^{\text {Th }} h_{2 / 3}{ }^{-}$is possible.
Melchert (2002) convincingly connects šarta- ${ }^{i}$ / šart- with ON serða 'to sodomize', MHG serten 'to violate (women/animals)' (note that these verbs do not merely denote 'to have intercourse', as Melchert states, but denote sodomy (in ON) and violation (in MHG), p.c. Guus Kroonen), of which he assumes that it goes back to a meaning *'to move the surface of one object obliquely against that of another'. These latter verbs point to $* \operatorname{ser}^{h}-$, which, on the basis of the $\operatorname{tarn}(a)$ class inflection in Hittite, means that we have to reconstruct PIE $*_{s e r d}{ }^{h} h_{2 / 3}$. Note that Melcherts further connection with Skt. sárdigrdi- 'portio vaginalis' is formally impossible as Skt. $-d$ - does not match PGerm. $*-d-<{ }^{*}-d^{h}$-.
šardi- (gender unclear) 'help': dat.-loc.sg. šar-di-ía (MH/NS).

Derivatives: ${ }^{(L U ́)}$ క̌ardiĩa- (c.) 'ally, supporter, helper' (nom.sg. šar-di-aš (OS), šar-ti-i̇ia-aš (OS), šar-di-i_ia-aš (MS), acc.sg. šar-ti-an (OS), šar-di-a(n)=š-ša-an (OS), šar-di-ia-an (OH/NS)), šardiiatar / šardiiann- (n.) 'alliance, help' (nom.acc.sg. šar-di-i[a-tar], dat.-loc.sg. šar-di-ía-an-ni).

$$
\text { PIE } *_{s r}-d^{h} h_{1}-i-? ?
$$

See CHD Š: 292f. for attestations. The etymological interpretation is quite uncertain. Duchesne-Guillemin (1947: 78, 90) connected these words with PIE *ser- 'to protect', as reflected in Gr. őpovtaı 'they keep watch', Av. har- 'to beware', hauruuaiti 'protects', but also possibly in Lyd. sarẽta- and saroka- if indeed 'protector' and 'protection' (thus Melchert 1994a: 341). If correct, then we have to assume a root-extension $*$ ser- $T$ - for Hittite. In view of the assibilation of the dental stops before $*_{-i-}$, we could perhaps think of $*_{s r-} d^{h} h_{1}-i-$. Nevertheless, I would judge this etymology as mildly probable only.
šartiiela- ${ }^{z i}$ : see šarta- ${ }^{i} /$ šart-
šāru- (n.) 'booty, plunder': nom.-acc.sg. ša-a-ru (NS), dat.-loc.sg. ša-a-ru-i (NH), ša-a-ru-ú-i (NH), nom.-acc.pl. ša-a-ru-u $a(\mathrm{NS})$.
Derivatives: šaruue/a- ${ }^{z i}$, šaruuae- ${ }^{z i}$ (Ic4 > Ic2) 'to plunder, to loot (something); to take (something) as plunder' (3sg.pret.act. ša-ru-ua-it (MS), ša-ru-ua-a-it (NH), ša-ru-u-ua-it (NH), šar-ua-it (MH/NS), 3pl.pret.act. ša-ru-u-e-er (MH/MS), ša-ru-ua-a-er (NH), ša-ru-ûa-er, ša-ar-uá-er (NS); part.nom.pl.c.(?) ša-a-ru-un-t[i-eš] (NH); inf.I ša-a-ru-ua-u-ua-an-zi (NH), [ša]-a-ru-u-ua-u-ua$a n-z i(\mathrm{NH})$ ).
IE cognates: MIr. serb 'theft', We. herw 'plundering', Latv. sirt 'to loot'.
PIE *sór-u-
See CHD Š: 296 and 298 for attestations. This word was connected by DuchesneGuillemin (1947: 78) to Latv. sirt 'to loot', MIr. serb 'robbery', to which possibly Lith. sarióti 'to devestate, to loot' belongs. Especially MIr. serb, which together with We. herw 'plundering' reflects *seruā, seems to be closely cognate with Hitt. šāru- that we must reconstruct as *sór-u-.
(\&) šarunta/i- (c.) 'spring, well': acc.sg. \& ša-ru-un-ti-in (NH), abl. ša-ru-un-ta$a z$.
IE cognates: Skt. srav-, Gr. $\rho \dot{\varepsilon} \omega$ 'to flow'. PIE *sru-nt- ??

See CHD Š: 299 for attestations. The use of the gloss wedge and the alteration between an $a$ - and an $i$-stem seems to point to Luwian origin. If from IE origin, one could think of a connection with the PIE root *sreu- 'to flow' (Skt. srav-, Gr. $\rho \dot{\rho}(\omega$, etc. 'to flow'). Although the formation is not fully clear, we could perhaps reconstruct *sru-nt-.
šaš-: see šešs- ${ }^{z i} /$ šaš-
šašha-: see šišha- ${ }^{i} /$ šišh-
šattaunartanna (adv.) 'for seven rounds': (4) ša-at-ta-ua-ar-ta-an-na.
See CHD Š: 313. The word is only attested in the Kikkuli-text on horse-training. It is generally derived from Indic *sapta-uartana- 'seven-rounds'. See also aikauartanna, nauartanna, panzauartanna and tierauartanna.
šaudišt- / šāūitišt- (c.) 'weanling’: nom.sg. ša-ú-di-iš-za (OS), [ša-]a-ú-te-eš-za ( $\mathrm{OH} / \mathrm{NS}$ ), $\check{s} a-a-u ́-t i-e s ̌[-z a] \quad(\mathrm{OH} / \mathrm{NS}), \check{s} a-u ́-i-t i-i \check{s}-z a \quad(\mathrm{OH} / \mathrm{NS}), \check{s} a-a-u ́-i-t i-i \check{s ̌-z a}$ ( $\mathrm{OH} / \mathrm{NS}$ ), ša-a-ú-i-te-eš-za (OH/NS), ša-a-ú-i-ti-eš-za $(\mathrm{OH} / \mathrm{NS})$, gen.sg. ša-ú-i-ti$i s ̌-t a-a \check{s}(\mathrm{OH} / \mathrm{NS}), \check{s} a-a-u ́[-i-t i]-i \check{s}-t a-a \check{s}(\mathrm{NS})$, gen.pl. $\check{s} a-u ́-i-t i-i \check{s}-t a-a \check{s}(\mathrm{OH} / \mathrm{NS})$.
Derivatives: šauitišstae- ${ }^{z i}$ (Ic2) 'to wean' (3sg.pres.act. ša-ú-i-ti-iš-ta-iz-zi (NH); verb.noun gen.sg. $\check{s} a-a-u ́-t i-i s ̌-t a-a-u-u[a-a \check{s}](\mathrm{NH})$ ).

PIE *só-ut-es-t- / *só-uet-es-t-
See CHD Š: 318-9 for attestations and semantics. From the contexts it is clear that the $\check{s} \bar{a} u i t i s ̌ t-$ is a cow younger than the one-year-old calf, and therefore must be translated 'weanling'. The oldest attestations (OS) are spelled $\check{s} a-u ́-d i-i s s^{\circ}$ (/saudist-/), whereas in younger texts we find $\check{s} a-(a-) u ́-i-t i-i s^{\circ}$ (/sāuidist-/). Rieken (1999a: 147) assumes that in OH times *šāuritišt- was syncopated to šaudišt-, of which she states: "[b]ei der Synkopierung handelt es sich aber nicht um einen konsequent durchgeführten Lautwandel". All the parallels she adduces of forms where we find $-i$ - in NH forms vs. $\varnothing$ in OH forms are found in names and a few words of foreign origin, however. Moreover, the supposition of a phonetic development that has not been consistently carried through, and even has been reversed, is against the principles of historical linguistics. In my view, if this word is from IE origin, we should rather view the difference between šaudišt- and šāuitišt- as ablaut.

Hrozný (1917: $93^{2}$ ) saw in šāuitišt- a compound of *som 'one' (see šamnae- ${ }^{z i}$, $=(\check{s})$ šan and šani-) and *uet-es- 'year' (see also under uitt-), literally meaning '(a cow) in its first year', which has been widely followed. This etymology demands that we assume that this word is a $t$-stem: *sóm-uetes-t-. Although the disappearance of $* N$ in front of $-u$ - has parallels in e.g. kueuen 'we killed' < *g $g^{w h}$ en-uen or $m \bar{a}=\underset{\sim}{u} a<{ }^{2} \bar{a} n=u a$, this etymology cannot explain the form šaudišt-. Kimball (1999: 233) more cogently assumes a compound of the demonstrative pronoun $*_{s o-}$ and $*_{\text {uetes-, }}$ lit. meaning '(a cow) of this year'. Formally, this is much more convincing: *só-uetes-t- would by regular soundlay yield Hitt. /sáuidist-/ (accentuated *ó yields / $/ \overline{\mathrm{a}} /$; raising of $* e$ to $/ \mathrm{i} /$ between $* u$ and $* t$; lenition of $* t$ to /d/ between unaccentuated vowels; weakening of posttonic $* e$ to /i/ in closed syllable), whereas a zero-grade formation *só-utes-t- would regularly yield /sáudist-/ (the accentuated diphthong *óu yields /áu/ (with short $/ \mathrm{a} /!$ ) in front of dental consonants; lenition of $* t$ to $/ \mathrm{d} /$ after accentuated diphthong; weakening of posttonic $* e$ to /i/ in closed syllables). For semantic parallels, cf. e.g. Skt. vatsa-'calf' < *uet-s-o-, Goth. wiprus, OE weper 'wether' <*uet-ru-, etc.
${ }^{\text {SI }}$ šāūātar-: see ${ }^{\text {SI }}$ šāū̄tra-
šāuitišt-: see šaudišt-
${ }^{\text {St }}$ Šāū̃tra-, ${ }^{\text {SI }}$ Šāūātar- (n.) 'horn (a musical instrument); horn (a drinking vessel)' (Sum. SI): nom.-acc.sg. ša-a-ú-i-it-ra-an (OS), [ $\check{s}] a-u ́-i-i t-r a-a n, ~ s ̌ a-a-u a-a-t a r$
 tar (NS), ša-a-ú-ûa-tar (MH/NS), ša-ú-ua-tar (MH?/NS), Luw.nom.-acc.sg. ša-
 [š] $a-u ́-i-i t-r a-a \check{s}(\mathrm{NS})$, abl. SI- $a z(\mathrm{NS})$, instr. SI-it (OH/NS), nom.-acc.pl. ša-a-ú-i$i t-r a$ (NS), ša-ú-i-it-ra (NS), ša-ui $i_{5}-i t-r a$ (NS).
Anat. cognates: Pal. šāuita/ir- (n.?) 'horn(?)’ (acc.sg. ša-a-ú-i-ti-ra-an, nom.acc.pl. $\check{s} a-a-u ́-i-d a-a-a r)$.

See CHD Š: 317-8 for attestations. The word's identification as 'horn' is determined by the fact that it often uses the determinative SI 'horn', but also can be written sumerographically with SI. Note that šāū̄tra-, šāūātar- denotes 'horn' as a musical instrument or a drinking vessel only. The 'horn' of cows and other animals is expressed by the word ${ }^{(\text {SI })}$ karāuar (q.v.).

The interpretation if this word is quite difficult. Already in OS texts, we find two stems: šāū $\bar{\imath} t r a$ - and šāū $\bar{a} t a r-$. The alteration $-\bar{l}-/-\bar{a}$ - is hard to explain from an IE point of view. Oettinger (1979b) treats this word extensively and reconstructs it as *sóuh $h_{1}$-e-tro- "Instrument zum Stoßen" (derived from *seuh $l_{1-}$ 'to push, to shove' as visible in Hitt. šuųe/a-z 'to push, to shove'). There are three problems regarding this etymology. (1) I do not see what 'to push' has to do with 'horn'. (2) Oettinger's explanation that the alternation between šāū̃tra- and šāuātra- is due to analogy with uātar 'water' besides uidār (pl.) (1.c.: 202 ${ }^{31}$ ) is far from compelling. Starke (1990: 400f.) argues that šāūātar- is the Luwian form that corresponds to Hitt. $\check{s} \bar{a} u \bar{\imath} t r a$-, but this is unlikely in view of the fact that gen.sg. $\check{s} \bar{a} u \bar{a} t a r a s ̌ ~ i s ~ f o u n d ~ i n ~ a n ~ O S ~ t e x t ~ a l r e a d y: ~ L u w i a n ~ l o a n w o r d s ~ a r e ~ u s u a l l y ~ n o t ~ f o u n d ~$ that early in Hittite texts. Nevertheless, the existence of a Luwian stem šāuatarcannot be denied in view of the NS Luwian inflected nom.-acc.sg. šāuuatarša. Melchert (1994a: 138-9) states that the alternation between $-i$ - and $-a$ - is due to the different outcome of posttonic $* e$ in Hittite, namely /i/ in closed syllables (so $\check{s} a ̄ u i t r V<*_{\text {sóuedrV }}$ ) and /a/ in open syllables (šāuatar < *sóuedrr). This is contradicted by šāuitišt- < *só-uetes-t-, which shows that the raising of $* e$ to $i$ between $* u$ and a dental consonant precedes the weakening of $* e$ to $a$ in open syllable. (3) In the preform $*_{\text {souh }_{1}}$ etro- we would expected monophthongization of $*$ ou to $/ \mathrm{o} /$ in front of $h_{l}$ (cf. * $\operatorname{souh}_{1 / 3}$ u- $^{\prime}>$ Hitt. /só?u-/, šu-u-ú- 'full'), so *sóuh ${ }_{l}$ etro- should have yielded $* * /$ só?etro/ $>* * /$ sóitra-/, spelled ${ }^{* *}$ šu-u-it-ra-.
All in all, Oettinger's etymology cannot be correct. In my view, it is much more likely that we are dealing with a cultural Wanderwort.
$=$ šše (encl.pron. 3sg. dat.) 'for him/her/it': $V=\check{s}$-še (OS), $C=\check{s} e$ (OS), $V=s ̌-s ̌ i$ ( $\mathrm{OS}+$ ), $C=\check{s} i(\mathrm{OS}+), V=\check{s} i(\mathrm{NS})$.

PIE *-soi
This enclitic pronoun denotes 'for him/her/it' and is in the oldest texts always spelled with geminate - $-\check{s} s$ - when this could be expressed (so after a word or another enclitic that ends in a vowel). Spellings with single $-s \check{-}$ are found sporadically, and in NS texts only. In OS texts, we find = ̌̌še (e.g. nu-u=̌̌-še, ta-$a=\check{s-s ̌ e} e$ ) more often than =šši, but in MS and NS texts = $\check{s} \check{s} e$ is not found anymore: we then only find $=\check{s} s ̌ i$. This means that an original $=s \check{s} \check{s} e$ is getting replaced by $=\check{s} \check{s} i$ from OH times onwards (which is the reason why I cite this lemma under $=s \check{s} e)$, probably in analogy to the dat.-loc.sg.-ending -i (cf. Melchert 1984a: 94 ${ }^{37}$ ).

This enclitic pronoun is generally reconstructed as *-soi and regarded as ultimately belonging with the PIE demonstrative pronoun *so-, *to-. For the ending, compare encl. dat.-loc.sg. Gr. $\mu$ ot 'to me', $\sigma$ ot 'to you'.

šēhur / šēhun- (n.) 'urine': nom.-acc.sg. še-e-hur (KBo 10.45 iv 37 (MH/NS), KUB 9.28 iii 17 (MH/NS)), še-e-hu-ur (KBo 21.20 i 25 (NS)), še-e-hu-ưa-ar (KUB 58.90 ii 5 (NS)), [ $\check{s}] e-e-h u-u a^{2} a[r]$ (KUB 60.116, 11 (NS)), gen.sg. še-e-ḩu-na-aš (IBoT 1.36 i 46 (MH/MS)), ši-e-ḩu-na-aš (KUB 7.5+ i 9 (MH/NS)), dat.-loc.sg. še-e-hu-ni (KUB 35.132+ iii 7 (NS)), še-hu-ni (KBo 45.244, 2 (NS)), all.sg. še-e-ḩu-na (IBoT 1.36 i 44 (MH/MS)), še-ḩu-na (IBoT 1.36 i 45 (MH/MS)), erg.sg. še-e-hu-na-an-za (IBoT 1.36 i 34 (MH/MS)), instr. [š]e-e-hu-ni-it (KBo 12.111, 7 (NS)).

Derivatives: šēhuriie/a- ${ }^{z i}$ (Ic1) 'to urinate' (3sg.pret.act. še-e-hu-ri-ía-[a]t (KUB 31.71 iii 11 (NH)), impf.3sg.imp.act. şe-hur-ri-eš-kẹ-ẹd-dụ (KUB 17.27 iii 12)), šēhurae- ${ }^{z i}$ (Ic2) 'to urinate' (inf.I [še-]e-hu-ra-u-ua-an-zi (KUB 60.116, 6 (NS))), šēhuganiiauant- (adj.) 'besmeared with urine' (nom.sg.c. še-e-hu-ga-ni-ia-u-ua$a n-z a($ KBo 10.37 ii 25, iii 49 (OH/NS))), see dūr / dūn-.

## PIE *séik $r$, * séik ${ }^{w} n$ ? ??

The noun is an $r / n$-stem and shows the stems šēhur besides šēhun-. The NS attestations šehuuar are to be compared to the few attestations pahhuuar besides pahhur and probably show an occasional phonetic realization [sếhwr ${ }^{\mathrm{r}}$ ] of phonological /séh ${ }^{\mathrm{w}} \mathrm{r}$ /. The hapax spelling ši-e- is found in an NS text, and is probably not to be taken seriously phonetically.

The noun shows the same inflection as mēhur / mēhun- 'time'. On the basis of the idea that mēhur reflects * mé $h_{2}$-ur (but see at mēhur / mēhun- for an alternative etymology), Eichner (1973a: 69-70) similarly reconstructs šēhur as *séh $h_{2}$-ur, a derivative in -ur of the root $*_{s e h}^{2^{-}}$"verunreinigen, beschmutzen". This reconstruction has been widely followed (e.g. Oettinger 1979a: 512; Rieken 1999a: 340f.; Kimball 1999: 152). Nevertheless, a root * seh $_{2^{-}}$"verunreinigen, beschmutzen" does not occur in Hittite. The verb šāh $h^{-}$, which is translated "verunreinigen, besudeln" by Eichner (l.c.), in fact means 'to clog, to stuff, to stop, to block, to fill in, to plug up' and probably reflects PIE * seh $2_{2}$ 'to stuff up' (from which ${ }^{s}$ seh $_{2^{-}}$'to satiate'), whereas CLuw. šahha-, which Eichner translates as "Schmutz" (on the basis of Laroche 1959: 83), does not exist (cf. Starke 1990:

228-9). With the disappearance of a root *seh $h_{2^{-}}$'to pollute, to defile' I see no reason anymore to assume that šēhur must reflect *séh $h_{2}-u r$.

It is quite common that words like 'urine' are borrowed because of tabooistic reasons (e.g. inherited ModDu. zeik 'urine' (*seikw-) is seen as too rude and therefore replaced by urine 'urine'). Kortlandt (2004: 11) therefore states that šēhur must be a loan from Semitic. In my view, the inflection of šēhur / šēhunlooks too IE to be borrowed from Semitic. I therefore would rather assume borrowing from another Anatolian language. For instance, a preform * séik ${ }^{w}-r$ / *séik ${ }^{w}-n$-, derived from the PIE root ${ }^{*}$ seik ${ }^{w}$ - (OHG seihhen 'to urinate', SerbCS sbcati 'to piss', Skt. siñcáti 'to pour out, etc.), would yield šēhur / šēȟun- in Palaic by regular sound laws: PIE *séik ${ }^{w}-r / *_{s}$ séik $^{w}-n$ - 'urine' > PAnat. *sēg ${ }^{w} r$ / *sēg ${ }^{w} n->$ Pal. šēhur / šēhun- (compare ahuuanti 'they drink' < PAnat. * Pg wanti < $* h_{1} g^{w h}$ enti). Although it is hard to prove, I would certainly regard borrowing from Palaic (or another Anatolian language in which PAnat. * $g^{w}$ yielded $-h u$-) as a possibility.

See at $d \bar{u} r$ / dūn- 'urine' for the possibility that CLuw. du $\bar{r}$ / du$n$ - is derived from PAnat. *sēeg ${ }^{w} r *^{*}$ séik $^{w} r$ as well.

For the interpretation of šēhuganiiauant- as either *šēhur-ganiįa or *šēhun-ganiiauant- cf. Rieken (1999a: 341-2).
In the handcopy of KUB 17.27 iii 12 we find the form "s, $e \check{s}$-HAR/HUR-ri-eš-ke-e $d-d u$, which often is interpreted as ešharrieškeddu 'he must bleed'. Nevertheless, if we look closely at the photograph of this tablet (available through Hetkonk), we see that it actually reads 3
 read šehurrieškeddu 'he must urinate'. This latter form also fits the context best:

KUB 17.27 iii
... $n=a-a t a n-d a$
(12) $\left[\mathrm{GIR}^{\mathrm{MES}}\right]-$ it iš-pár-ra-ah-ḩu-un n=a-at=kán ANŠE-aš še-hur-re-eš-kẹ-ed-du (13) $[n=a$-at $]=k a ́ n ~ G U D-u s ̌ ~ k a m-m a r-s ̌ i-e \check{s}-k e-e d-d u$
'I have trampled it with my feet. May the donkey piss on it and may the cow shit on it!'.
šekk-: see šākk- ${ }^{i} /$ šakk-
(TÚG) šeknu- / šeknaū- (c./n.) 'cloak’: acc.sg.c. še-ek-nu-un (often), še-ek-nu-$u(n)=\check{s}$-ša-an, ši-ik-nu-un, nom.acc.sg.n. še-ek'-nu-u=š-me-et (KBo 3.34 i 21 (OH/NS)), ši-ik-nu-u=š-ši-it (917/u + iv 11 (NS)), ši-ik-nu-u=š-še-et (KUB 53.3 v 3 (NS), KUB 53.5, 5 (NS)), gen.sg. še-ek-nu-uš (KBo 2.3 ii 33 (MH/NS)), še$e k-n u-u a-a \check{s}$, dat.-loc.sg. še-e-ek-na-u-i-i=š-mi (KBo 17.36 iii 5 (OS)), še-ek-nu-$i=\check{s}-\stackrel{s}{i}$, abl. ši-ik-nu-az, acc.pl.c. še-ek-nu-uš, ši-ik-nu-uš.
IE cognates: Skt. saj- 'to adhere, to hang on', Lith. segù 'to adhere', OIr. sén 'safety net'.

PIE *ség-n(e)u-
See Weitenberg 1984: 227f. for semantics and attestations. The remarkable form $\check{s e} e-k u-n u-u=\check{s}$-me-et (KBo 3.34 i 21 ) is in my view to be regarded as a scribal error for še-ek! $-n u-u=\check{s}$-me-et. The only OS form, šēknauni=šmi shows plene spelling of the vowel -e- as well as full grade in the suffix syllable -nau- (cf. also hēu- / he(i)au-' 'rain').
Eichner (1979a: 42 ${ }^{4}$ ) reconstructs *sék-nu- from the root "*sek-" 'to cut' (actually $*_{s e k}^{l^{-}}$, see at $\check{s} a \bar{a} k k^{-}{ }^{i} /$ šakk-), but Weitenberg rather follows Hrozný's connection (1919: $76^{8}$ ) with Lat. sagum 'soldier's cloak' which points to the PIE
 segù 'to adhere', OIr. sén 'safety net'). This means that we should reconstruct * ség-n(e)u-.
šēli- (c.) 'grain pile, grain storage': nom.sg. še-e-li-iš (KUB 39.41 ii 14 ( $\mathrm{OH} / \mathrm{NS}$ )), $\check{s} e$-li-iš̌ (HKM 84 rev. 14 (MH/MS)), acc.sg. še-li-in (KUB 30.24 iii 37 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 39.41 ii 13 (OH/NS), HKM 111 obv. 9 (MH/MS), KUB 33.103 ii 11 (MH/NS), KUB 36.16 iii 19 (MH/NS), KUB 30.66 i 8 (NS)), gen.sg. [še-]ẹ-li-ía-aš (KBo 6.3 iv 19 ( $\mathrm{OH} / \mathrm{NS}$ )) // še-e-lil-ía-aš (KBo 6.7, $2(\mathrm{OH} / \mathrm{NS})$ ), še-li-aš (KUB 18.16,4 (NS)), še-la-aš (?) (KUB 55.14 obv. 10 (NS)), dat.-loc.sg. še-e-liía (KBo 6.3 iv $19(\mathrm{OH} / \mathrm{NS}))$ // še-e-lị (KBo 6.7, $1(\mathrm{OH} / \mathrm{NS})$ ), še-e-li (KUB 5.9 i 35 (NS), KUB 30.46 l.col. 8 (NS)), še-li (KBo 13.260 iii 40 (NS), KUB 55.54 iii 3 (NS)), nom.pl. šẹ-li-e-eš (HKM 36 obv. 19 (MH/MS)), acc.pl. še-e-li-uš (KBo 11.32, 28 ( OH/NS)), še-li-uš (KBo 13.260 iii 35 (NS), KUB 21.17 iii 14 (NH)), še-li-aš (KUB 21.17 iii 10 (NH)).
IE cognates: OIr. sil 'seed', Lith. pasèly̌s 'seed'.

$$
\text { PIE } *_{s e h}^{1-} \text {-li- }
$$

This word is firmly attested as 'grain pile, grain storage'. If the one gen.sg.-form še-la-aš indeed belongs here, it would show the ablauting $i$-stem gen. in -aš <
*-aiaš. This word has plausibly been compared by Oettinger (1979a: 541 ${ }^{29}$, followed by e.g. Kimball 1999: 146) with OIr. sil 'seed' and Lith. pasèlys 'seed' and reconstructed as $*_{s e h}$-li-, a derivative in $*-l i$ - from the root $*^{s} \operatorname{seh}_{1}$ ' 'to sow'.
šemen- ${ }^{z i}$ / šemn-: see šamen- ${ }^{z i} /$ šamn-
šena-: see šīna-
-šepa-: see at ${ }^{(\mathrm{f})}$ tagānzepa-
 $\check{s} a-p[i ́-k] u-u \check{s}-t a-s ̌=a(\mathrm{MH} / \mathrm{MS})$, ši-pí-i[k-k]u-uš-ta-aš (MH/MS), ša-pí-ik-ku-uš$t a-a \check{s}$ (NS), ša-a-pí-ku-uš-ta-aš (NS), [̌̌]a-pí-ku-uš-ta-aš (NS), acc.sg. ša-pí-ku-uš-ta-an (MH/MS), ši-pí-[ik-ku-u]š-ta-an (MH/MS), še-pí-ku-uš-ta-a[n] ( $\mathrm{OH} / \mathrm{NS}$ ), gen.sg. $\check{s} e-p i ́-i k-k u-u s ̌-t a-a \check{s}(\mathrm{OH} / \mathrm{MS})$, dat.-loc.sg. še-pí-ku-uš-ti (NS), nom.pl. [ś]e-pí-ku-uš-te-eš (NS), acc.pl. še-pí-ik-ku-uš-tu-uš (MS), ša-pí-ik-ku-uš$d u$-uš (NS).

See Beckman 1983: 63-4 for attestations and semantic treatment. According to Beckman, the word "may be said to designate a long pointed metal object with a single shaft", i.e. 'pin'. We encounter spellings with ša-pí-, še-pí- and ši-pí-, which are all found in MS texts already. This alteration in vocalism is remarkable. Melchert (1994a: 31) states that it "points unambiguously to initial /sp-/, and derivation from PIE *sp(e)ik- is straightforward". To my knowledge, a preform with initial $*_{s p \text { - would have yielded Hitt. } i s ̌ p-\text {, however. }}^{\text {h }}$
šeppitt- (n.) a kind of grain: nom.-acc.sg. še-ep-pí-it (often), še-pí-it (KBo 10.45+ iii 51, KBo 4.2 i 9), gen.sg. še-ep-pí-it-ta-aš (OS, often), še-ep-pí-id-da-aš (KUB 20.66 iv 6), še-ep-pí-da-aš (StBoT 25.54 iv 5 (OS)), [še]-ep-pí-da-aš (StBoT 25.56 iv 14 (OS)), še-ep-pí-tạ-aç (VSNF 12.56 obv. 8), instr. še-ep-pí-it-ti-it (KBo 30.73 iv $^{?} 11$ ), nom.-acc.pl. še-ep-pí-it-ta (HKM 109 obv. 3, 7 (MH/MS)).

PIE *sep-it- ??
See Rieken 1999a: 158f. for a treatment of this word. She argues that the occasional OS attestations gen.sg. šeppidaš (with single - $d$-) may show lenition of $*_{-} t$ - in posttonic position (*sépitas), whereas later on the unlenited variant (geminate -tt-) was generalized throughout the paradigm.

Because of the many OS attestations and because of the similarity in formation with militt- 'honey' (q.v.) it is not unlikely that šeppitt-, too, is of IE origin. Nevertheless, no good comparandum is known. Rieken's connection with Hitt. šeba- 'sheaf(?)', which she reconstructs as *sēp-o-, seems unconvincing to me.
šēr (adv.) 'above, on top': še-e-er (OS), še-er (OS).
PIE *sēr
In the oldest texts we see traces of the fact that originally šer belonged to a nominal paradigm. The attestations še-e-er=ša-me-et (OS), še-e-er=še-me-et (OS) 'above them' and $\check{s} e-e-e r=\check{s} i$-it 'above him', indicate that $\check{s} \bar{e} r$ originally was nom.-acc.sg.n. The form še-e-er=ši-i 'above him' may show that šēr was dat.loc.sg. as well. Of the noun $*_{\text {ser-, the old allative is visible in šarā (adv.) }}$ 'up(wards)' (q.v.). This latter form never has enclitic possesive pronouns, which indicates that it already earlier was seen as adverbial only. So we have to reckon with an original paradigm nom.-acc.sg. šēr, dat.-loc.sg. šēr, all.sg. šarā. I would interpret dat.-loc.sg. šēr as an endingless locative *sēr, but Melchert (1984a: $88^{18}$ ) rather reconstructs a loc. ${ }^{*}$ séri, in which the word-final -i regularly dropped. This *séri then would be the direct preform of CLuw. šarri as well. See at šarā for a treatment of this latter form and for further etymology of the root $*_{\text {ser }}$-.
šerha- (gender unclear) an object to rinse feet with: acc.sg. še-e-er-h[(a-an)] (KBo $20.26+$ KBo 25.34 ii 12 (OS) // 327/b + 330/b rev. 3), instr. še-e-er-hi-it (KBo 17.43 i 14 (OS)), še-er-hi-it (KBo 17.18 ii 16 (OS)).

This word occurs in OS ritual texts only, denoting some object with which feet are rinsed, e.g. KBo 17.43 i (14) ${ }^{\text {LÚ.MEŠ }} \mathrm{ALAM.ZU}{ }_{9}$-an GÍR ${ }^{\text {HI.A }}=S ̌ U-N U$ še-e-er-hुi-it šar-ta-i 'he rubs the feet of the clowns with the šerha-'. Its exact meaning cannot be determined. Usually, it was thought that this word cannot be of IE origin, because of the fact that Melchert (1994a: 83) describes a sound law *eRHV $>a R R V$, due to which the sequence -erha- as found in šerha- should not be possible. As I have shown under erh- / arah- / arh-, however, the examples in favour of this sound law should all be interpreted otherwise, which means that there is no evidence that in $*_{e} R H V$ the $-e$ - would get coloured to $-a$-. Nevertheless, the development $* V R H V>V R R V$ is real, which means that the sequence $-V r h ̧ V$ - in šerha- needs an additional explanation. Such an explanation could be, for instance, that we are dealing with an originally ablauting noun ${ }^{*} \operatorname{serh}_{2 / 3}{ }^{-},{ }^{*} \operatorname{srh}_{2 / 3}$; because in the zero-grade stem the laryngeal would be retained,
we could assume that it was restored in the full grade stem. So, all in all, if šerhais of IE origin, it formally must go back to an original ablauting root noun *sérh $h_{2 / 3}$ *sérh ${ }_{2 / 3}-m$, *srh $h_{2 / 3}$-ós, which was later on thematicized. I know of no convincing IE cognate, however (but compare šarhiie/a- ${ }^{z i}<*_{s r h_{3}-i}^{l} / o-$-).
šešz- ${ }^{z i}$ / šaš- (Ia3) 'to sleep, to rest, to lie down': 1 sg.pres.act. še-eš-mi (KUB 5.1 i 101, KBo 3.7 i 25), še-eš-m[i] (KUB 12.61 iii 3), 2sg.pres.act.(?) še-eš-ti (KBo 13.58 ii 16 (MH/NS)), 3sg.pres.act. še-eš-zi (often), še-e-eš-zi (KBo 19.128 vi 29), še-iš-zi (KUB 9.34 iii 9), 1pl.pres.act. ša-šu-e-ni (KBo $17.1+25.3$ ii 29 (OS)), še-e-šu-e-ni (KUB 36.56 ii 5), 3pl.pres.act. ša-ša-an-zi (KBo 20.56 obv. 11, KUB 25.37 iv 36), ša- $a-s \check{a}$-an-zi (KBo $23.27+$ KBo 35.183 ii 37, 38), še-e$\check{s ̌ a-a n-z i ~(K B o ~} 5.11$ i 5), 1sg.pret.act. še-e-šu-un (KBo 4.4 iv 16, KUB 40.3 ii 4), $\check{s ̌ e-s ̌ u-u n ~(K U B ~ 43.46, ~ 7), ~ s ̌ e-e s ̌-s ̌ u-u n ~(K U B ~} 52.91$ ii 4), 3sg.pret.act. še-eš-ta (often), še-e-eš-ta (KUB 31.39 iv 3), 1pl.pret.act. še-eš-u-en (KBo 41.126, 3), 3pl.pret.act. še-e-š[e-er] (KUB 36.37 ii 9), 2sg.imp.act. še-e-e[š] (KUB 36.35 i 10), 3sg.imp.act. še-eš-du (often); part. ša-ša-an-t- (OS); verb.noun še-e-šu-u-ua-[ar] (KUB 15.15 i 4), gen.sg. [š] $]$-šu-ưa-a-aš (ABoT 7 vi 4); inf.I še-šu-an-zi (KUB 5.1 i 38, 61), še-e-šu-u-u_u-an-zi (KUB 13.4 iii 6), še-šu-u-a-an-zi (AnSt 20 iv? 6), še-e-šu-u-an-zi (KUB 13.4 iii 2, 30); inf.II ša-ša-an-na (HKM 46 rev. 21 (MH/MS), KBo 10.20 iv 10 (NS)); impf. še-eš-ke/a- (OS), še-eš-ki-eš-ke/a-, še-eš-ki-iš-ke/a-, še-eš-kiš-ke/a-, še-eš-kiš-ki-eš-kán-zi (KUB 16.16 obv. 27).
Derivatives: šešuuaš É.ŠÀ 'bed room' (gen.sg. še-šu-ưa-aš É.ŠÀ-na-aš (KUB $33.87+$ iii 12) ), šašant- (c.) 'concubine’ (nom.sg. ša-ša-an-za (KBo 3.7 iv 19 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 17.6 iv 16 (fr.) (NS)), acc.sg. $\check{s} a-s ̌ a-a n-d a-n=a-x[\ldots]$ (KBo 8.69, 4 (NS)), dat.-loc.sg. $\check{s} a-s ̌ a-a n-t i-i=s ̌-s ̌ i ~(K U B ~ 8.41 ~ i i ~ 7(O S)), ~[s ̌ a-s ̌] ~ a-[a] n-d i ~(V B o T ~$ 124 ii 10 (OS))), šaš(ša)nu- ${ }^{z i}$ (Ib2) 'to make sleep (with someone), to bring to bed' (2sg.pres.act. ša-aš-nu-ši (KUB 48.123 iii $20(\mathrm{NH})$ ), 3pl.pres.act. ša-aš-nu$a n-z i(\mathrm{KBo} 17.36+$ iii 2 (OS), KBo 13.120, 14 (MS)), ša-aš-nu-una-an-zi (KUB 59.40 obv. 2, IBoT 4.15 obv. 5), ša-aš-ša-nu-an-zi (IBoT 1.29 rev. 51 (MH?/MS?), KUB 25.37 iv 19 (OH/NS)), 3sg.pret.act. ša-aš-nu-ut (KUB 33.118, 24 (NS)); verb.noun gen.sg. ša-aš-nu-ma-aš (317/v, 6 (NS), KUB 12.5 iv 9 (MH/MS)); impf.2pl.pres.act. ša-aš-nu-uš-ga-at-te-ni (KBo 7.28 obv. 24 ( $\mathrm{OH} / \mathrm{MS}$ )), impf.3pl.pres.act. ša-aš-nu-uš-kán-zi (KUB 25.37 iii 9 (OH/NS)), ša$a \check{s ̌-s ̌ a-n u-u s ̌-k a ́ n-z i ~(K U B ~} 51.50$ iii ${ }^{?} 13$ (NS), KUB 55.65 iv 12, 23)), ${ }^{\text {(TÚG) }}$ šašt(a)(c.) 'sleep, bed’ (nom.sg. ša-aš-za=ti-iš (KUB 33.8 iii 19 ( $\mathrm{OH} / \mathrm{NS}$ )), $\check{a} a-a \check{s ̌-z a}$ (KBo 22.84, 7 (NS)), ša-aš-ta-aš (MH?/NS), acc.sg. ša-aš-ta-an (MH?/NS), ša$a \check{s}-d a-a n(N S)$, gen.sg. ša-aš-ta-aš (KUB 17.31, 24 (MH/NS)), dat.-loc.sg. ša-aš$t i(\mathrm{OH} / \mathrm{MS})$, ša-aš-te (KUB 31.127 iii 5 (OH/NS), KBo 34.105 i 2 (NS)), abl. ša-
$a \check{s}-t a-a z$ (MS), $\check{s} a-a s ̌-t a-z a$ (MH/NS), acc.pl. $\check{s ̌ a-a s ̌-d u-u s ̌ ~(M H / M S), ~ s ̌ a-a-a s ̌-d u ̣-~}$ $u \check{s}$ (KBo 5.8 ii $28(\mathrm{NH})$ ), dat.-loc.pl. $\check{s} a-a \check{s}-t a-a s ̌ ~(K U B ~ 42.94$ i 4 (NS)), [ša- $a \check{s}-t] a-$ aš (KUB 29.41, 2 (MH/NS))).
IE cognates: Skt. sas- 'to sleep', Av. hah- 'to sleep'. PIE *sés-ti, *ss-énti

This verb clearly shows an ablaut $\check{s} e s ̌$ - / šaš-. It is consistently spelled with single -š-: a spelling with a geminate is found only once ( $\check{e} e-e \check{s}-\check{s} u-u n$ ), in a NS text. Friedrich HW: 191 cites 3pl.pret.act. šeššir, but I have not been able to find this form. Perhaps this citation is based on a wrong interpretation of $p a-r a-a-s ̌ e-e s ̌-s ̌ i-$ er 'they dispersed'' (KBo 5.8 i 20, 22) (see at parāše $\check{\text { čs }} \mathrm{s}^{z i}$ ). The impf. šeške/aaparently was reinterpreted as a single stem as we can see by its impf. šeškiške/a-. Once we even find šeškiškiške/a-.
An etymological connection with Skt. sas- and Av. hah- 'to sleep' was first suggested by Mudge apud Sturtevant 1933: 89, and is generally accepted since. It means that we have to reconstruct a PIE root *ses-. The interpretation of the full grade stem is clear (*sés- regularly yielded Hitt. /sés-/), but the fate of the zero grade stem is less evident. In my view, we have to assume that PIE *ss- regularly yielded Hitt. /ss-/, which phonetically was realized [səs-], spelled $\check{s} a-s^{\circ}$. Likewise $\check{s} a \check{s}(\check{s} a) n u$ - must phonologically be interpreted as /sSnu-/ (with fortition of the second $*_{s}$ due to its contact with $* n$ ), which phonetically was realized [səs:nu-], spelled $\check{s} a-a \check{s}(-\check{s} a)-n u-$.
The derived noun šašt(a)- (originally a $t$-stem, thematicized in NH) is extensively treated by Rieken (1999a: 129f.). It probably reflects *sós-t-s, as is possibly still visible in the plene spelling of acc.pl. šāšduš.

The CLuwian forms šašša- and šaššumai- are often cited as belonging with Hitt. šeš- ${ }^{z i} /$ šaš-. Melchert (1993b: 192), however, interprets the former as 'release, grant' and states of the latter: "meaning 'beschlafe' is mere guess and difficult formally". CHD (Š: 310) tentatively translates šaššumai- as 'to make (someone) sorry/contrite'.
šeš̌- ${ }^{z i}$ 'to prosper, to proliferate': see $\check{s} i \check{s} \check{S}^{-z i}$
šeša- (gender unclear) body part of cow: acc.sg. še-ša-an-n=a (KBo 11.72 ii 44), še-e-ša-an (KBo 30.69 iii 17).

The word occurs twice and is rather unclear regarding its meaning. Nevertheless, the word seems to denote a body part of cows in the following context:

KBo 30.69 iii
(16) $[n] u$ LÚ $^{\text {MEŠ GIŠ }}$ BANŠUR ha-an-te-ez-zi ti-an-zi
(17) $[n] u^{\text {LÚ.MEŠ }}$ MUHALDIM $=m a$ GU $_{4}$-aš še-e-ša $a-a n ~ t i-a n-z i$
(18) [G]IM-an=ma=kán \{Rasur\} $\mathrm{TU}_{7}{ }^{\text {HI. }}$ ta-ru-up-da-ri
(19) [ $n$ ] $u^{\text {LÚ.MEŠ }}$ MUHALDIM ${ }^{\text {GIŠ }}$ ha-ap-ša-al-li da-an-zi
(20) $[n]=a-a \check{s}-t a^{\text {LÚ.MEŠ MUHALDIM da-ga-an-zi-pu' }-u s ̌ ~}$
(21) $[\check{s}] a-a n-h ̧ a-a n-z i$
'The table servants step forward, and the cooks place the $\check{s}$. of the cow. When the soups have been finished, the cooks take a footstool(?) and the cooks sweep the earth'.

In another context it seems to be on a par with 'feet':
KBo 11.72 ii
(43) nụ=kạ́n kat-ta-an-ta ši-pa-an-ti UZU ${ }^{\mathrm{HIIA}}=m a z a-n u-a[n-z i \ldots]$
(44) GÌR ${ }^{\text {HI.A }}$ še-ša-an-n=a Ú-UL pé-eš-ši-an-zi
'They libate downwards and they make the pieces of meat coo[k ... ]. Feet and $\check{s}$. they do not throw away'.

Rieken (1999a: 75) assumes a connection with ${ }^{\left({ }^{(U Z U)} \text { šišai- (q.v.), which she }\right.}$ suggests to interpret as 'paw'. This is a possibility but far from assured.
šešša- ${ }^{i} /$ šešš-: see šišša- ${ }^{i} / s ̌ i s ̌ s ̌-$

GIššēšan(a)-: see ${ }^{\text {Giš }}$ šēšatar / šēšann-
šešariiie/a- ${ }^{z i}$ (Ic1) 'to sieve': impf.2pl.imp.act. še-ša-ri-iš-ke-tén (KUB 13.3 iii 23), še-ša[-ri-iš-ke-tén] (KUB 13.3 iii 38).

IE cognates: OCS sěti 'to sieve', Lith. sijóti 'to sieve'.
PIE * seh $_{1}$-sr-ielo-?
For semantics, cf. the following contexts:
KUB 13.3 iii
(22) nu-u=š-ma-aš ú-ui $i_{5}-t e-n a-a s ̌ ~ n a-a h-h a-a n-t e-e s ̌ ~ e-e s ̌-t e ́ n ~$
(23) nu ú-uís-ta-ar GIšše-ša-ru-li-it še-ša-ri-iš-ke-tén
'You must be careful with the water. Sieve the water with a sieve!';
ibid. iii
(36) $k i-n u-u n=m a-a=s ̌-m a-a \check{s} \check{s ̌ u}-m e-e-e s ̌ L^{\mathrm{L}}{ }^{\mathrm{M}}{ }^{\mathrm{ES}}$ A.ÍL.LÁ]
(37) ú-ui-te-na-aš na-ah-ha-an-te-eš [e-eš-tén пи ú-ui-ta-ar]
(38) ${ }^{\text {GIŠ̌̌̌e-ša-ru-li-it še-ša-[ri-iš-ke-tén }]}$
'Now you, water-carriers, must be careful with the water. Sieve the water with a sieve!'.

The stem to both šešariîe/a- and šešarul- must be šešar-. I wonder to what extent these words can be connected with OCS sĕti 'to sieve' and Lith. sijóti 'to sieve' < *seh $_{1}$-. Regarding its formation, we could compare nahšariie/a- ${ }^{z i}$ 'to be afraid' (see under nāh- ${ }^{i}$ / nahh-), which must reflect *neh $h_{2}-s r-\frac{i}{2} / o-$. In the case of šešariie/a- we therefore perhaps could reconstruct *seh $h_{1}$-sr-ie/o-. If this is correct, it shows that *-éh $h_{l} s r$ yields Hitt. -ešar, which contrasts with *-ésr > Hitt. -eššar (e.g. *g' ${ }^{h}$ ésr $>$ keššar 'hand').
*GIŠ̌̌̌ēšatar / šēěann- (n.) 'fruit-tree?’: gen.sg. ${ }^{\text {GIŠ }}$ še-e-ša-an-na-aš (KUB 24.1 iv 12), ${ }^{\text {GIŠ }}$ še-e-ša-na-aš (KUB 24.2 rev. 14).

The gen.sg.-forms ${ }^{\text {GIŠ }}{ }_{s ̌ e-e-s ̌ a-a n-n a-a s ̌ ~(K U B ~}^{24} 24.1$ iv 12) and ${ }^{\text {GIšše-e-ša-na-aš }}$ (KUB 24.2 rev. 14) are duplicates of each other. The use of the determinative GIŠ and the context could indicate that the words denote 'fruit-tree (vel sim.)' (thus CHD L-N 237):

KUB 24.1 iv (with duplicate KUB 24.2 rev. 12ff.)
(9) $A$-NA LUGAL=ma MUNUS.LUGAL DUMU ${ }^{\text {MEš }}$.LUG[(AL $\dot{U} A$-NA KUR
${ }^{\text {URU }}{ }^{H}$ a-at-t $\left.\left.t i\right)\right]$
(10) TI-tar ḩa-ad-du-la-tar in-na[(-ra-ua-tar MU ${ }^{\mathrm{KAM}}$ GÍD.DA)]
(11) EGIR.UD ${ }^{M I} d u-u s ̌-g a-r a-a t-t a-a n[(-n=a p) i ́-e s ̌-k(i) n u ? ~ h a(l-k i-i a q-a \check{s})]$
 $\left.\left.\mathrm{UDU}^{\mathrm{HILA}}-a \check{s} \mathrm{UZ}_{6}{ }^{\mathrm{HILA}}-a \check{s}\right)\right]$
(13) ŠAH-aš ANŠE.GÌR.NUN.NA ${ }^{\text {HI.A }}-a \check{~ A N S ̌ E . K U R . R A-a s ̌ ~} g[(i-i m-r a-a \check{~}$ hu-u-it-ni-it)]
(14) DUMU.LÚ. $\mathrm{U}_{19} . \mathrm{LU}-a \check{s}-\check{s}=a$ ŠA EGIR.UD ${ }^{M}\left[{ }^{I}\right.$ mi-ia $a$ - $a$-tar pí-eš-ki)]
'But grant to the king, the queen, the princes and to Hatti-land life, health, strength, long years in the future and happiness. And grant future growth of
grain, vines, $\check{s}$-s, cattle, sheep, goats, pigs, mules, horses - together with wild animals of the field - and of humans'.

On the basis of the attestation šéšannaš a stem šešatar is cited by Friedrich HW Erg. 3: 28. This would imply that šēšanaš is to be emended to še-e-ša-<an->na-aš. A stem šēšanna- cannot be excluded either, of course. If the meaning 'fruit-tree' is correct, it is possible that šěšatar belongs with šišs ${ }^{z i}$ 'to prosper, to proliferate' (q.v.), althought the latter verb shows geminate -šš- in e.g. verb.noun šēššauuaš, whereas šēšatar is spelled with single $-\check{s}$-.

šeššišar (n.) 'negligence': nom.-acc.sg. šẹ-ẹ̌̌-ši-š[a]r' (KUB 14.4 iii 26).
This word is hapax in the following context:
KUB 14.4 iii
(23) ma-a-an=ma I-NA KUR URU Kum-ma-an-ni=ma pa-a-un A-BU=IA I-NA ${ }^{\mathrm{d}} H{ }^{H}$ é-pát ${ }^{\text {URU }}$ Kum-ma-an-ni
(24) EZEN hal-zi-i_a-u-ua-aš ta-ra-a-an har-ta pé-eš-ta=m=a-an=ši na-a-ú-i
(25) $n=a$-aš am-mu-uk na-ak-ke-e-eš-ta-at nu I-NA ${ }^{\text {URU }}$ Ki-iz-zu-ua-at-na pa-a-un

(27) ar-ha š[a]r-ni-ik-mi
'When I went to Kummanni, (it was the case that) my father had promised to
Hepat of Kummanni a Feast of Summoning, but he had not yet given it to her, and she troubled me! I went to Kummanni and spoke thus: 'I come to do penance for the negligence(?) of my father'".

Although the meaning 'negligence(?)' seems quite certain, I know no good etymology for this word.
šešd $\mathbf{-}^{z i}:$ see šiš- ${ }^{z i}$
šeš(š)ur: see šiššur
šī- (numeral) ‘one’ (Sum. 1 (DIŠ)): nom.sg.c. 1-iš (OS), 1-aš (NS), acc.sg. 1-an (OS), 1-in (HKM 47 rev. 49 (MH/MS)), ši-an (here?, NH), nom.-acc.sg.n. 1-at$t=a$ (KBo 17.104 ii 7), 1-e (KBo 18.172 obv. 16), gen.sg. ši-i-e-el (OH/NS), dat.-
loc.sg. ši-e-da-ni (OH/MS), ši-e-ta-ni (MH/MS), abl. ši-i-e-ez (MH/NS), ši-e-ez (NH), še-e-ez (NH), 1-e-da-az, 1-e-da-za, instr. ši-e-et (OS), še-e-et (OH/NS), ši-e-et-ta $(\mathrm{NH}), 1-e-t a-a n-d a(\mathrm{NH})$.

Derivatives: šiela- (adj.) 'of one’ (nom.sg.c. 1-e-la-aš (KBo $1.44+$ KBo 13.1 i 54 (NS)), nom.pl.c. ši-e-le-eš (KBo 6.3 ii 16 ( $\mathrm{OH} / \mathrm{NS}$ )), nom.-acc.pl.n.(?) 1-e-la (KUB 45.77 i 7 (NS))).
IE cognates: Gr. nom.sg.f. 'la 'one'.

$$
\text { PIE } * s i h_{2}
$$

The stem ši-, with the forms gen.sg. šiliell, dat.-loc.sg. šietani, abl. šiiez and instr. šiet, was usually interpreted as a demonstrative 'that' or 'this'. Goedegebuure (2006) convincingly shows that an interpretation as a pronoun does not fit the usage of these forms, however, and argues that they in fact denote 'one' and therefore must be regarded as the phonetic reading of the sumerogram 1 'one'. On the basis of a combination of the phonetic and sumerographic writings she reconstructs a paradigm nom.sg.c. */sias/, acc.sg.c. /sian/, nom.-acc.sg.n. */siat/ and */sie/, gen.sg. /siel/, dat.-loc.sg. /siedani/, abl. /siets/ and */siedats/, instr. /siet/ and */siedant/ and assumes a basic stem šiia-. Although I largely agree with her reconstruction of the paradigm, I think that the interpretation of the nom.sg.c. must be adapted. Despite the fact that we do find the sumerographic writing nom.sg.c. 1-aš, which indeed would point to /sias/, the oldest attested nom.sg.c.form is 1 -iš (OS). Goedegebuure interprets this form as belonging to an $i$-stem paradigm, of which she assumes that it is not necessarily identical to the $a$-stem forms. In my view, the absence of any other $i$-stem forms (note that acc.sg.c. 1-in is attested only once (HKM 47 rev. 49), which can easily be analogical to nom.sg.c. 1-iš in the preceding line (ibid. 48)) indicates that this form is not part of another paradigm but must in fact belong to this one that we have reconstructed. This is supported by the fact that nom.sg.c. 1-aš is found in younger texts only (its oldest attestation is KUB 12.19 iii 28 ( $\mathrm{OH} / \mathrm{MS}$ or NS): note that the OS-status of KBo 40.200 (that has 1 -aš in r.col. 4) seems quite dubious to me), whereas 1 -iš is found in OS and MS texts. This points to a situation in which the original nom.sg.c. of 'one' was /sis/, spelled 1-iš. In analogy to acc.sg.c. /sian/, nom.sg.c. /sis/ was in younger times secondarily changed to /sias/, spelled 1-aš.
For the etymological interpretation of this numeral, Goedegebuure refers to Beekes (1988b: 81) who states that in Greek, besides the feminine $\mu i^{\prime}{ }^{\prime}$ 'one' (*sm$i h_{2}$ ), also a form 'la exists (Hom., supported by Lesbian, Thessalic and Boeotian material). On the basis of this latter form, he assumes that the original feminine
form of 'one' was $* s i h_{2}$, which was altered to $*_{s m-i h_{2}}$ in analogy to masculine *sem 'one'. This is further supported by e.g. the fact that Skt. dat.sg.m. tásmai 'to him' < *tó-sm-ōi (containing -sm- 'one') corresponds to dat.sg.f. tásyai 'to her' < *tó-sih $h_{2}-\bar{o} i$ (containing -sih $2^{-}$'one'). In Hittite, this ${ }^{*} \operatorname{sih}_{2^{-}}$is the basis for the paradigm as attested: addition of the pronominal endings nom.sg. $-s$, acc.sg. $-a n$, gen.sg. -el, etc. yielded $/ s \bar{i} s /, / s \bar{a} a n /, / s \overline{1} e l /, / s \bar{e} e d a n i /, ~ e t c . ~ N o t e ~ t h a t ~ t h e ~ l e n g t h ~ o f ~-\bar{l}-$ in nom.sg. $/ \mathrm{s} \overline{\mathrm{s}} /$ is not independently attested, but cannot be disproven either. It is supported by spellings like ši-i-e-el and ši-i-e-ez.
The adjective šiela-, which since Hrozný (1922a: 24-5) generally has been translated as 'in love', has now by Hoffner (2006) been identified as a derivative of the gen.sg. šiēl 'of one'.
-ši (2sg.pres.act.-ending of the mi-flection)
Anat. cognates: Pal. -ši; CLuw. -ší; HLuw. -si.
IE cognates: Skt. $-s i$, Gr. - $\sigma$, Lith. $-s i$, Goth. $-s$, Lat. $-s$, etc.
PIE *-si

The ending for the 2 sg .pres.act. for the $m i$-conjugation is -ši. Postvocalically, it is consistently spelled with single $-\check{s}$-. In the OS texts, we find $-s ̌ i$ postvocalically (e.g. ú-ua-ši 'you come', ak-ku-uš-ke-ši 'you drink', ar-ša-ne-e-ši 'you are envious', ha-an-ta-a-i-ši 'you arrange together', $i-e-s ̌ i ~ ' y o u ~ m a k e ', ~ p a-i-s ̌ i ~ ' y o u ~$ go', te-ši 'you say') as well as after consonant (e-eš-ši 'you sit / you are', e-uk-ši 'you drink', har-ši 'you have', pu-nu-uš-ši 'you ask', with fortition to /-Si/ after stops, cf. $e-k u-u s ̌-s ̌ i ~ ' y o u ~ d r i n k ', ~[e-e z-z a-a] s ̌-s ̌ i ~ ' y o u ~ e a t ') . ~ I n ~ y o u n g e r ~ t i m e s, ~ t h e ~$ $h i$-ending -tti (q.v.) is spreading to the mi-conjugation, replacing -ši. The first traces of this replacement is visible in MH times, where we occasionally find -tti in verbs that end in a consonant (ha-ap-ti 'you attach', har-ti 'you have'). In NH times, this has become the normal situation (in NH/NS texts we find for instance 15x e-ep-ti vs. 2 x e-ep-ši 'you seize'). Moreover, in NS texts we occasionally find $-t t i$ in verbs that end in a vowel: ar-nu-ut-ti 'you settle', im-me-at-ti 'you mingle' and pa-it-ti 'you go'. These are the first signs of what probably eventually meant the end of the ending -si in favour of the hi-ending -tti.
Etymologically, -ši goes back to two endings. On the one hand, it directly reflects the PIE athematic primary 2sg.-ending *-si used in PIE root-presents ( $\sim$ Skt. -si, Gr. - $\sigma$, Lith. -si). On the other hand, it reflects the PIE athematic secondary ending $*-s$ used in PIE root-aorists ( $\sim$ Skt. $-s$, Gr. $-\varsigma$ ) extended with the 'presentic' $-i$.
$=$ š̌̌i $:$ see $=\check{s} \check{s ̌ e}$
 $C=\check{s} i-i \check{s}(\mathrm{OS}), V=\check{s ̌ i}-i \check{s}($ rare, OS$), V=\check{s}$-̌̌e-eš (NS), $C=\check{s} e-i \check{s}(\mathrm{NS})$, acc.sg.c. $V(n)=\check{s}-$ $\check{s} a$ - $a n(\mathrm{OS}), \mathrm{Sum} .=\check{s} a-a n(\mathrm{OS}), V n=\check{s} a-a n(\mathrm{NS}), V(n)=\check{s}$-ši-in (NS), Sum. $=\check{s} i$-in (NS), nom.-acc.sg.n. $V=\check{s}$-še-et (OS), $V(n)=\check{s}$-še-et (OS), $C=s ̌ e$-et (OS), $V=s ̌ e$-et ( $\mathrm{OH} / \mathrm{MS}$ ), $V(n)=\check{s}$-ši-it $(1 \mathrm{x} \mathrm{OS}, \mathrm{MS}), V=\check{s}$-ši-it ( $\mathrm{OH} / \mathrm{MS}$ ), $V=s \check{i}$-it (NS), $C=\check{s} i$-it (1x OS, MS), gen.sg. $V \check{s}=\check{s} a-a \check{s}(\mathrm{OS}), V(\check{s})=\check{s} a-a s ̌(1 \mathrm{x}, \mathrm{NS})$, dat.-loc.sg. $V=\check{s}-\check{s} i$ (OS), $V=\check{s}-$ še ( $1 \mathrm{x}, \mathrm{NS}$ ), $V=\check{s} i(\mathrm{MS}), V=\check{s} e(1 \mathrm{x}, \mathrm{NS})$, all.sg. $V=\check{s}-\check{s} a$ (OS), abl.-instr. $-a z=\check{e} e-e t(\mathrm{OS}),-a z=\check{e} e-e-e t(\mathrm{OH} / \mathrm{MS}),-z a=s ̌ i-i t(\mathrm{OH} / \mathrm{NS})$, nom.pl.c. Sum. $=\check{s} e-e s \check{s}$ (OS), V=š-še-eš (MS), V=š-še-iš (MS), V=š-ši-iš (NS), acc.pl.c. Sum.=šu-uš
 (MS), $V=\check{s}$-ši-it (NS), $V=\check{s} i-i t(\mathrm{NS})$, dat.-loc.pl. $V \check{s}=\check{s} a-a \check{s}(\mathrm{OS}), \mathrm{Sum} .=\check{s} a-a \check{s}(\mathrm{NS})$. PIE *si-, *so-, *se-

See CHD Š: 324f. for an overview of attestations and spellings. From this overview, we can conclude that the oldest attestations show geminate -šš- (when this could be expressed in the spelling) and that the original inflection is nom.sg.c. =ššiš, acc.sg.c. =ššan, nom.-acc.sg.n. =ššet, gen.sg. =ššaš, dat.-loc.sg. $=$ šši, abl.-instr. = ̌̌šit, nom.pl.c. = loc.pl. =ššaš. For the original distinction between nom.-acc.sg./pl.n. =ššet vs. abl.-instr. =̌̌šit see Melchert 1984a: 122-6. This means that we are dealing with an ablauting stem $=\check{s} s ̌ i-/=\check{s} \check{s} a-/=\check{s} \check{s} e^{-}$. This vocalization can hardly reflect anything else than PIE $*_{-i-}$, $*_{-o-}$ and $*_{-}-$-, but an exact explanation for the distribution of these vowels is still lacking (cf. also $=m i-/=m a-/=m e-$ ' my ', =tti- / =tta- / =tte- ‘your (sg.)', =šummi- / =šumma- / =šumme- ‘our' and =šmi- / =šma- / =šme- 'your (pl.); their'). Etymologically, this enclitic possessive must

šiia - 'one': see šī-

UTÚľ̌iijammi- (n.) a certain dish prepared in a jar: nom.-acc.sg. ši-i्d a-am-mi (KBo 2.7 i 15, 29), ši-ía-mi (KUB 17.35 i 35 ).

The word occurs a few times only. Its exact meaning is unclear. Formally, it looks like a Luwian participle in -amma/i-. Further unknown.

É šiialannaš 'treasury (house of sealing)' : É ši-i_ia-an-na-aš.

This word denotes 'treasury' and is usually transliterated Éši-ia-an-na-aš. Nevertheless, it is better read É ši-ía-an-na-aš 'house of šiiātar', in which *šiiātar denotes 'sealing' and is the verbal abstract of the verb šai- ${ }^{i} / s ̌ i-$ 'to seal'. See there for further etymology.
šiiant- (n.) 'alcoholic beverage?’: nom.-acc.pl. ši-ía-an-ta (KUB 14.3 ii $62(\mathrm{NH})$ ).
This word is hapax in the following context:
KUB 14.3 ii
(61)
... nu A-NA ${ }^{\mathrm{m}} \mathrm{P}$ í-ía-ma-ra-du \& za-ar-ši-ía-an $\mathrm{x}[\ldots]$
(62) \& za-ar-ši-ia-aš=ma I-NA KUR Hat-ti kiš-an ma-a-an NINDA ši-ia-an-ta
(63) ku-e-da-ni up-pa-an-zi nu-u=š-ši=kán HुUL UL ták-ki-iš-ša-an-zi
'[I have given] a safeconduct to Piiamaradu. A safeconduct in Hatti (goes) as follows: Whenever they send bread (and) šiianta to someone, to him they will not conduct evil'.

Sommer (1932: 132) tentatively translates šiianta as 'Rauschtrank(?)'. Formally, the word is identical to the nom.-acc.pl.n. of the participle of šai- ${ }^{i} /$ ši-, šiie/a- ${ }^{z i}$ 'to impress; to shoot'. Semantically, however, a translation in the field of food-stuff or drinks would be better, for which we possibly could compare šiliēššar / šiīēšn'beer'.

GIŠ̌siiattal- (n.) 'spear(?)' (Sum. ${ }^{\text {GIŠŠU.I): nom.-acc.sg. ši-į् a-at-tal (KUB } 33.106}$ iii 47, iv 15, KUB 36.95 iii 8), ši-ía-tal (KUB 17.7+ iii 17, KUB 33.92 iii 12, KUB 33.95 iv 2).
Derivatives: šiiatalliške/a- ${ }^{z i}$ (Ic6) 'to hunt (with a spear)' (3sg.pres.act. ši-ía-tal-li-iš-ke-ez-zi (KUB 2.1 vi 6, 8, KBo 12.59 i 3, 6, KUB 40.107+ rev. 18), ši-ía(-at)-tal-li-iš/eš-ke-ez-zi (KBo 11.40 vi 3, 16, 19, 22, 25)).

PIE * $h_{l}$ s-io-tlo-
See Starke (1990: 200-205) for an extensive treatment of this word, although he reads it as $\check{s} i-i \underline{i} a-(a t-) r i$ (the sign RI can be read ri as well as tal), which he interprets as a Hittitization of a Luwian stem šiiatrit-. See Rieken (1999a: $432^{2136}$ ), however, for the view that the word in fact was šiiat(t)al. Within Hittite, it is clearly derived from the verb šiie/a- ${ }^{z i}$ 'to shoot, to hurl' (see at šai- ${ }^{i} /$ ši-; šiie $/ a-^{z i}$ ) and could go back to ${ }^{*} h_{l}$ s-io-tlo-, showing the instrumental suffix $*$-tlo-.

In the nom.-acc.sg. the ending *-tlom should have yielded Hitt. -ttal, according to the sound law *-Clom >-Cal as formulated by Melchert 1993c.
šiiattalliiie/a- ${ }^{z i}$ : see šittariie/a- ${ }^{z i}$
*šiiiatar / šiiiann-'spurting': gen.sg. ši-ía-an-na-aš (KBo 5.2 i 38).
This word occurs only once, in the following context:
KBo 5.2 i
(37) ${ }^{\mathrm{NA}_{4}}$ ZA. GÌN $t e-p u{ }^{\mathrm{NA}_{4}}$ GUG $t e-p u{ }^{\mathrm{NA}_{4}}$ AŠ. $\mathrm{NU}_{11}$.GAL $t e-p u$
(38) hu-u-uš-ti-iš-š=a te-pu 14 kap-pí-iš ŠE pa-ra-a ši-i (39) GIŠŠINIG $t e-p u{ }^{\text {GIŠ }}$ ERIN $t e-p u$
'a bit of lapis lazuli, a bit of carnelian, a bit of alabaster, and a bit of hūssti-. Fourteen bowls of grain that has spurted forth, a bit of tamarisk and a bit of ceder'.

It is clearly a gen.sg. of a abstract noun *šiiatar, derived from the verb šiie/a- ${ }^{z i}$ (see at šai- ${ }^{i} / \check{s} i-;$ šiie/ $a_{-}{ }^{z i}$ ). See there for further etymology.
šiíattariiue/a- ${ }^{z i}$ : see šittariiela- ${ }^{z i}$
šiiée- 'one': see ši-
šīie/a- ${ }^{z i}$ : see šai- ${ }^{i} /$ ši-; š̌iie/a- ${ }^{z i}$
${ }^{\mathbf{U Z U}}$ šiešai-: see $^{\left({ }^{(\mathrm{UZU})} \text { šišai- }\right.}$
šīiēěšar / šīièěsn- (n.) 'beer’ (Sum. KAŠ): nom-acc.sg. ši-e-eš-šar (KUB 43.30 iii 19 (OS)), ši-i-e-eš-šar (KUB 7.1 iii 35 (OH/NS), KBo 16.27 ii 11 (MH/MS)), ši-$i$-e-eš[-šar] (KBo 21.21 iii 7 (MH/MS)), ši-i-eš-ša $[r]$ (KBo 20.49, 20 (MS)), abl. ši-i-e-<eš->na-az (KBo 30.125 iv 8 ( $\mathrm{OH} / \mathrm{NS}$ )), instr. ši-i-e-eš-ša-ni-it (KBo 20.34 obv. 12 ( $\mathrm{OH} / \mathrm{MS}$ )), ši-i-e-<eš-ヶni-it (KBo 15.34 ii 8 (OH/NS)).

PIE * ${ }_{s} h_{1}-i-e ́ h_{l} s h_{1} r$ ?
The word is well attested in OS and MS texts. Formally, it looks like a derivative
 Semantically, I would prefer a connection with šai-/ši- 'to impress; to sow'
because of the fact that beer is produced from grain. If so, then šiiēššar would reflect *sh $h_{l}-i$-ésrs. See at $\check{s} a i^{-}{ }^{i} / \check{s} i$ - for further etymology.
šiìēššar (n.) ‘shooting (vel sim.)?’: nom.-acc.sg. ši-i-e-eš-šar (KBo 17.61 rev .7 ).
PIE * $h_{l} s-i$-é $h_{l} s h_{l} r$ ??
Hapax in KBo 17.61 rev. (7) ne-pí-ša-az=kán kat-ta ši-i-e-eš-šar ši-ía-ti 'From heaven š. spurted down'. Formally, šiiēēšar is identical with šieiéššar 'beer'. Semantically, however, we rather expect a figura etymologica with šiiati, so 'shooting (vel sim.)'. If so, then it must reflect *h $h_{1} s-i-e ́ h_{1} s h_{10}$. See at šiie/a- ${ }^{z i}$ (under šai- ${ }^{i} /$ ši-; šiie/a ${ }^{z}{ }^{i}$ ) for further etymology.
šietti- (c.) a certain hairdo(?) (Sum. GÚ.BAR): nom.sg. ši-e-et-ti-iš (KBo 1.42 iii 22).

The word only occurs once, in a vocabulary, where it glosses Sum. GÚ.BA[R]. Friedrich (HW: 192) translates 'eine Haartracht?'. No etymology.
šimišīie/a- ${ }^{z i}$ : see šamišiiela- ${ }^{z i}$ under šami-
šīna- (c.) 'figurine, doll': nom.sg. ši-i-na-aš (KUB 9.7 iii 6 (MS), KUB 17.18 ii 13 (NS), KUB 59.43 i 9 (NS)), še-e-na-aš (KUB 17.14 rev. 16, 22 (NS)), $\check{s}[e-e ?-$ $n] a-a \check{s}$ (KUB 12.58 i 25 (NS)), acc.sg. ši-i-na-an (KBo $17.1+25.3$ i 5 , iv 18 (OS), KBo 17.3+ iv 14, 24 (OS), še-na-an (KUB 55.3 obv. 10 (OH/MS?), KUB 7.2 i 22 (NS)), še-e-na-an (KBo 29.17 iii 8 (NS), KUB 7.53+ ii 53 (2x), iii 15 (NS), KUB 24.14 i 13, 14 (NS)), gen.sg. ši-i-na-aš (KUB 60.161 ii 42 (NS)), ši$n a-s ̌=a=k a ́ n(K U B 60.161$ ii 11 (NS)), ši-e-na-aš (KUB 17.18 ii 14, iii 20 (NS)), še-e-na-aš (KUB 46.46 ii 13 (NS)), dat.-loc.sg. ši-i-ni (KBo $17.1+25.3$ iv 13 (OS), KBo 17.3+ iv 26 (OS), še-e-ni (KUB 17.14 rev. 11, 13 (NS)), nom.pl. ši-e-ni-eš (KUB 17.18 ii 10 (NS)), acc.pl. še-e-nu-uš (KUB 24.13 iii 6 (MH/NS), KUB 7.53+ ii 1, 14, 16 (NS), KUB 24.14 i 11 (NS)), še-e-nu!-uš (KBo 12.107 rev. 13 (MH/NS)).

Derivatives: ${ }^{\text {NINDA }}$ Šīna- (c.), bread in the shape of a figurine (nom.sg. ši-i-na-aš (ABoT 5+ iii 6 (OS)), še-e-na-aš (KBo 5.1 ii 33 (MH/NS), KUB 55.40, 4 (NS)), acc.sg. ši-i-na-an (KBo 21.34 + IBoT 1.7 ii 16 (MH/NS), KBo 39.180+181, 7, 9, 11 (NS)), še-na-an (KBo 30.96 iv 5 ( $\mathrm{OH} / \mathrm{NS}$ )), še-e-na-an (KBo $21.34+\mathrm{IBoT}$ 1.7 iii 9 (MH/NS)), acc.pl. še-e-nu-uš (KBo 39.180+181, 4 (NS), KUB 55.12 iii 2 (NS?))).
 $\check{s} e-e-n^{\circ}$ and $\check{s} e-n^{\circ}$ are found in NS texts only (the dating of KUB 55.3, where we find $\check{s} e-n a-a n$, as MS is not fully assured) according to the lowering of $\mathrm{OH} / \mathrm{i} /$ to NH /e/ before $-n$ - as described in § 1.4.8.1.d.

The etymological interpretation of this word is unclear. Mechanically, we would expect a preform *siHno- or $* d^{(h)}$ iHno-. Unfortunately I have not been able to find cognates.
-šipa-: see at ${ }^{(\mathrm{f})}$ tagānzepa-
šip(p) $\overline{\boldsymbol{a}} \mathrm{nt}_{-}{ }^{i} /$ šip(p)ant- : see išpānt $-{ }^{i} /$ išpant-
(URUDU) $^{\text {sipipikkušta-: }}$ see ${ }^{(\text {URUDU) }}$ šepikkušta
šiptamiía- (n.) ‘seven-drink’ (Sum. VII-mi-ía-): nom.-acc.pl. ši-ip-ta-mi-ia (KBo 5.1 iv 35), VII-mi-ía (Bo 4951 rev. 15).

Derivatives: šiptamae- ${ }^{z i}$ (Ic2) 'to seven(?)' (3sg.pres.act. ši-ip-ta-ma-iz-zi (543/s iii 2), VII-iz-zi (KUB 51.18 obv. 10)).
IE cognates: Skt. saptá, Av. hapta, Gr. غ̀ $\pi \tau \alpha ́$, Lat. septem, Goth. sibun 'seven'. PIE *septm-io-

The word is hapax in the following context:

KBo 5.1 iv
(34) UD-az=ma=kán iš-tar-na pa-iz-zi
(35) nu ši-ip-ta-mi-ía te-ri-ia-al-la
(36) iš-pa-an-da-an-zi
'The day goes by. They libate seven-drink (and) three-drink',
which has a parallel in
Bo 4951 rev. (see Burde 1974: 124f.)
(15) [...] III-ia-al-la VII-mi-ía ši-pa-an-ta-an-zi
'[...] they libate three-drink and seven-drink'.
This proves that šiptamiïa- must mean 'seven' and must go back to *septmio-. On the form šiptamaizzi see Neu (1999).

In the texts from Kültepe we find the PN ${ }^{\mathrm{f}} \check{S}$ á-áp-ta-ma-ni-kà which could well originally mean 'seventh sister'. It has been assumed that šaptama- here is to be interpreted as the Luwian outcome of *septm (with *e $>$ Luw. a), but this is unlikely in view of the clearly Hittite element -nika- 'sister' (which corresponds to CLuw. *nānašra-). Perhaps this šaptama- is the outcome of the PIE cardinal *sptmo- 'seventh', showing a secondary aphaeresis of expected $i$ - (which is the regular prothetic vowel in front of an initial cluster ${ }^{*} s T$-) in analogy to the fullgrade forms šiptam- (compare e.g. šākan / šakn- 'oil' šakkar / šakn- 'excrement' and šākk-' / šakk- 'to know' for similar scenario's). See at šaptaminzu for a possibly similar case.
šiš- ${ }^{-2 i}$ (Ib1) 'to prosper, to proliferate': 3sg.pres.act. še-eš-zi (KBo 3.7 i 7 (OH/NS)), 3sg.imp.act. ši-iš-du (KUB 12.43, 2, 3 (OS), KBo 7.28 obv. 15, rev. 41 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 24.2 rev. 18 (NH)), še-iš-du (KUB 24.3 iii 41 (MH/NS)), ši$e s ̌-d u(\mathrm{VBoT} 121$ obv. 6 (MH/NS)), še-eš-du (KBo 3.7 i 5 (OH/NS), KUB 14.12 rev. $14(\mathrm{NH})$, KUB 24.1 iv $17(\mathrm{NH})$ ), še-ẹ $[-e s ̌-d u]$ (KBo 2.32 rev. 6 (NS)), 2pl.imp.act. ši-iš-te-en (KBo 8.35 ii 15 (MH/MS)), ši-iš[-t]e-en (KUB 23.78b, 11 + KUB 26.6 ii 12 (MH/MS)); verb.noun ši-iš-du-ua-ar (KUB 15.34 ii 23 (MH/MS)), gen.sg. še-iš-du-ua-a[š] (KUB 24.3 iii 39 (MH/NS)), še-e-eš-ša-u-ua-


The oldest attestations of this verb (OS and MS) are spelled $\check{s} i-i \check{s}-$, whereas the spellings še-iš-, ši-eš-, še-eš- and še-e-eš- occur in NS texts only, which is due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-s{ }_{-}$- as described in § 1.4.8.1.d.
Usually, this verb is cited as šišd- or šě̌d-. The assumption that $-d$ - is part of the stem is based on the verbal noun šišduuar 'proliferation' (KUB 15.34 ii 23) and gen.sg. šešduua ${ }^{2}$ šs] (KUB 24.3 iii 39). Awkward, however, is the fact that in no other form a $-d$ - is found (3sg.pres.act. šešzi instead of ** šešzazzi, 3sg.imp.act. šišdu instead of **šišzadu, 2pl.imp.act. šišten instead of **šišzatten, and, perhaps more importantly, verbal noun šiššauaš, šēššauuaš). The question is whether the $-d$ - is dropped in all other forms (thus Melchert 1994a: 166, who posits a sound law *-stt-> -št-, but this does not account for šiššauaš and šēššauuaš) or whether the two attestations of the verbal noun inserted a $-d$-. In the case of $\check{s} e-i s ̌-d u-u a-$ $a[\check{s}]$ (KUB 24.3 iii 39) it is striking that a few lines further the 3sg.imp.act. $\check{s} e$-iš$d u$ (ibid. 41) is attested. In my view, it is possible that this form has influenced the verbal noun. In the case of $\check{s i-i s ̌}-d u$ - $u a-a r$ (KUB 15.34 ii 23) such a form is absent, but since 3 sg.imp.act. $\check{s} i s ̌ d u$ is the most frequent form of this verb, it is
possible that šišduuar was secondarily created in analogy to it. If so, then we are

The verb practically always occurs together with mai- ${ }^{i} / m i$ - 'to grow' and therefore probably denotes 'to prosper, to proliferate'. Carruba apud Friedrich HW Erg. 3: 28-9 proposed to interpret šišd- as reflecting *si-sd-'to sit', but this is semantically unconvincing and therefore must be rejected. I know no other good etymology, however.
šišša- ${ }^{i} /$ šišš- (IIal $\gamma:$ impf. of šai- ${ }^{i} /$ ši-) 'to impress': 2sg.pres.act. ši-iš-ša-at-ti (KUB 1.16 iii 58 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. ši-iš-ša-an-z[i] (KBo 10.16 i 3 (NS)), še-eš-ša-an-zi (KUB 57.79 i 40 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.imp.act. [ $\check{s}] i-i s ̌-s ̌ a-a n-d u$ (KUB 11.1 iii 10 (MS?)), ši-iš-ša-an-du (KUB 31.2+17+ iii $10(\mathrm{OH} / \mathrm{NS})$ ), [š]i-e-eš-ša$a n-d u(\mathrm{KBo} 3.1$ iii 45 ( $\mathrm{OH} / \mathrm{NS}$ )); 3pl.pres.midd. ši-iš-ša-an-da-ri (KUB 8.22(+) ii 17 ( $\mathrm{OH} / \mathrm{NS}$ )), $\check{s i} i-i s ̌-s ̌ a-a n-d[a-r i]$ (KUB $8.22(+)$ iii $1(\mathrm{OH} / \mathrm{NS})$ ).

PIE *sh $h_{1}-i-s o ́ h_{1}-e i, *_{s h_{1}-i-s h_{1}-e ́ n t i}$
This verb is the imperfective in $-\check{s} \check{s}(a)$ - of $\check{s} a i^{-}{ }^{i} / \check{s} i-$ 'to press'. Like the other
 this verb, too, shows a phonetic development $-i \check{s ̌ s ̌}(a)->-e s ̌ s ̌(a)-$. See at $\check{s} a i^{-}{ }^{i} / \check{s} i^{-}$ and $-\check{s} \check{s}(a)$ - for further etymology.
 $\check{s} a-i($ KUB 9.31 i 8, KUB 29.1 ii 43, KUB 56.59 iv 6), $\check{s} i-e-s \check{a} a-i(K U B 29.1$ ii 42),

This word occurs in two contexts only:
KUB 9.31 i (with additions from KUB 56.59 iv 4-6)
(5) [ ... ]x ke-e-lu-un ga-an-ga-ah-ḩi nu-u=š-ši ḩu-up-pa-li ZABAR
(6) [ x x x$] \mathrm{x}-l i-i=\check{s-s ̌ i} i-i t ~ S ̌ A ~ K U S ̌ ~ U R . M A H ु ~ u a-a r-h u-u a-i c a-a \check{s}$
(7) $\left[{ }^{\text {GIŠ }}\right.$ GİR.GUB $\left.\left.=\check{S}\right)\right] U=m a{ }^{\mathrm{NA}_{4} k u-u n-k u-n u-u z-z i-i a-a s ̌ ~ h a-a z-z i-u l=s ̌ e-e t-[t=(a)] ~}$

(9) $[\mathrm{xxx} \times \mathrm{x}-k i=m a \check{s} a-a-s ̌ a-a \check{s}$
'[...] I hang the kelu. It has a bronze huppali. Its $x$ - $l i$ is of the rough skin of a lion, but its stool is of basalt and its hazziul is of lapislazuli. The heavy šišai is of a bear, but the $\mathrm{x}-k i{ }^{2} s i s ̌ a i$ is of a šāša-';

KUB 29.1 ii
(41)
... nu ki-nu-u-pí í-da
(42) $k i-n u-p i ́=m a-a=\check{s}-s \check{a} a-a n$ an-da ŠA UR.MAH $\check{s} i-e-s \check{a} a-i$
(43) pár-ša-na-aš UZU ši-ša-i šu-mu-ma-ah $n=a-a t ~ h ु a r-a k$
(44) $n=$-at ta-ru-up $n=a$-at $1^{E N}$ i-ia $n=a$-at LÚ-aš ŠÀ $=s ̌ i$
(45) pé-e-da nu LUGAL-ua-aš ZI-aš kar-di-i=š-ši=ía
(46) ta-ru-up-ta-ru
'Bring the kinupi-box here. In the kinupi-box, šumumahh- the šešai of a lion (and) the šišai of a leopard. Hold them and unite them and make them one. Bring them to the heart of the man. May the soul and the heart of the king be united'.

We have to conclude that the $\check{s} i(e) \check{s} a i$ is a body part of bears, $\check{s} \bar{a} \check{s} a-\mathrm{s}$, lions and leopards, but it is not totally clear what body part is referred to. Perhaps we have to assume that here 'tails' are meant that have to be plaited together (which would explain 'unite them'; see also under šumumahh- ${ }^{\text {T}}$ ). Rieken (1999a: 74) assumes that the word shows a reduplication from the root šai- ${ }^{i} /$ ši- 'to press', and suggests that the word means either 'paw' or 'teeth' (both body parts can be 'pressing') and reconstructs $*_{s i-s o h_{l} i \text {. One should always be cautious, however, }}^{\text {, }}$ when the meaning of a word is assumed on the basis of etymological considerations only.
šišha- ${ }^{i} /$ šišh $-(* I I a 5>\operatorname{IIa} 1 \gamma)$ 'to decide, to appoint': 1sg.pres.act. še-eš-ha-ah-hi (KUB 5.20+ iii 42 (NS), KUB 15.11 iii $11(\mathrm{NH})$, Bronzetafel ii $25(\mathrm{NH})$ ), še-eš-háa-mi (KUB 14.19, $10(\mathrm{NH})$ ), 3sg.pres.act. še-eš-ḩa-a-i (KBo 5.9 iii $6(\mathrm{NH})$ ), 3pl.pres.act. še-eš-ȟa-an-zi (KUB 9.15 iii 19 (NS), KUB 42.91 ii 9, 21 (NS)), 3sg.pret.act. še-eš-ha-aš (KUB 36.67 ii 30 (NS), KUB 33.120 ii 46 (MH/NS)), 3pl.pret.act. ši-iš-he-er (KBo 32.14 ii 36 (MH/MS)), 2sg.imp.act. še-eš-hi (KBo 18.48 rev. $14(\mathrm{NH})$ ), 2pl.imp.act. ša-aš-ha-at-tén (KUB 36.51 i 9 ( $\mathrm{OH} / \mathrm{NS}$ )); 3sg.pres.midd.(?) še-eš-ḩa-at-ta (KUB 33.114 i 13 (NS), KUB 33.120 ii 36 (MH/NS)); part. nom.pl.c. še-eš-ḩa-an-te-eš (KUB 14.19, 10 (NH)).

PIE *si-sh ${ }_{2}$ oi-e, *si-sh $_{2}$-i-enti
The oldest attested form of this verb, 3pl.pret.act. ši-iš-he-er (MH/MS), has an -ithat contrasts with the $-e$ - of all the other attestations, which show $\check{s} e-e \check{-}-h^{\circ}$. Since these forms are found in NS texts, only, it is in my view likely these are due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-s \check{c}$ - (cf. § 1.4.8.1.d) and that šišh- therefore must have been the original stem. I therefore cite this verb as šišha- ${ }^{i}$ / šišh-here. Most of the attested forms show the $\operatorname{tarn}(a)$-inflection. Only once, we find a miinflected form šešhami (according to the hुatrae-class inflection). Because allmost
all attestations are from NS texts, it is not necessarily the case that the $\operatorname{tarn}(a)$ class inflection was the original one. We know, for instance, that méma/i-class verbs are taken over into the $\operatorname{tarn}(a)$-class from MH times onwards. It is therefore quite possibe that šišha- / šišh- goes back to an older stem šišha- ${ }^{i}$ / *šišhi(perhaps the stem *šišhi- is still visible in 2sg.imp.act. še-eš-ḩi (KBo 18.48 rev . 14), if this form is read correctly (cf. e.g. Hagenbuchner 1989: 8 who reads "še$e \check{s}$-ten',")). As I have argued under the treatment of the $m \bar{e} m a / i$-class in $\S 2.2 .2 .2 . \mathrm{h}$, this class consists of polysyllabic verbs that used to belong to the dāi/tiiianzi-class. For *šišha/i- this would mean that we can assume an even older inflection *šišhai- ${ }^{i}$ / šišhi-. In my view, this stem *šišhai-/šišhi- is to be connected with išhai- ${ }^{i}$ / išhi- 'to bind; to obligate with' (q.v.). Not only the formal similarity is striking (*šišhai-/šišhi- could well show the reduplicated form of išhai-/išhi-), the semantic similarity is too. I therefore reconstruct šišha- / šišh- through an intermediate stage *šišha- / šišhi- as *šišhai- / šišhi- < *si-sh ${ }_{2}$-oi- / *si-sh ${ }_{2}-i$. See at išhai-/išhi- for further etymology.
The aberrant vocalism in šašhatten (if this form really belongs here: the context is too broken to determine its meaning independently) is remarkable.
šiš̆hau- (n.) 'sweat' (Akk. ZUDU): nom.-acc.sg. ši-i-iš-ḩa-u (KBo 3.2 obv. 26). PIE *si-sh ${ }_{2} \mathrm{Ou}$ ?

Hapax in KBo 3.2 obv. (26) ma-ah-ha-an=ma ANŠE.KUR.RA ${ }^{\text {MEŠ }}$ al-la-ni-i-ia-an$z i$ ši-i-iš-ha-u ar-ha ú-ez-zi 'when the horses perspire (and) sweat breaks out'. Schmitt-Brandt (1967: 67) connected this noun with the verb išhuuai- ${ }^{i} /$ išhui- 'to $^{\text {to }}$ throw, to pour' that, together with šuhha- / šuhh- 'id.' reflects PIE *sh ${ }_{2} e u-$ / *suh $2^{-}$'to pour'. This would mean that šlšȟau- reflects a reduplicated formation *si-sh ${ }_{2} o ́ u$, *si-sh ${ }_{2} u$-ós, which originally meant 'outpourings' (vel sim.). Note however that the word-final sequence ${ }^{\circ} a-u$ is very remarkable. The only other instance that I know is ${ }^{\text {GIŠ }} z a-a-u$ '?', in all other cases we find ${ }^{\circ} a-\dot{u}$. If this spelling means that we should phonologically interpret ši-i-iš-h $a-u$ as /sīshao/, an IE origin is very unlikely.
šiššiía- (stem) 'need'
Derivatives: šǐš̌̌iiatar / šiššiíann- (n.) 'need’ (instr. ši-iš-ši-íia-<an-sni-it (KBo 32.15 ii 4)), šiššiiauuant- (adj.) 'being in need' (nom.sg.c. [ši-i]š̌-ši-i्व-u-an-za (KBo 32.15 ii 6)), ${ }^{\text {Lúšiššǐiala- (c.) 'needy one' (acc.sg. ši-iš-ši-i_ia-la-an (KBo }}$ 32.15 ii 18)).

PIE *si-sh $h_{- \text {-io- }}$

These words occur in one text only, namely KBo 32.15, which is part of the Song of Release (see StBoT 32):

KBo 32.15 ii
(4) [ ... ma-a-an $\left.{ }^{\mathrm{d}}\right]$ M-aš ši-iš-ši-ina-<an-sni-it dam-mi-iš-ha-a-an-za
(5) [pa-ra-a tar-nu-mar ú-]e-uıa-ak-ki ma-a-an ${ }^{\mathrm{d}} \mathrm{IM}-a \check{~}$
(6) $[\quad . . \quad \check{s} i-i] s \check{s}-s ̌ i-i a-u-a n-z a n u \quad k u-i s ̌-s ̌=a{ }^{\mathrm{d}} \mathrm{IM}-u n-n i$
(7) [1 GÍN KÙ(.BABBAR $p$ ) $a-a(-i)$ ]
'[When] the Storm-god is suffering of need and asks for release: When the Storm-god is in need [of silver] everyone will give a shekel of silver to the Storm-god';
ibid.
(18) $n=a$-an $=k a ́ n ~ h u-i s ̌-n u-m e ́-n i ~{ }^{\mathrm{d}} \mathrm{IM}-a n^{\text {LÚ }}$ Ši-iš-ši-íia-la-an
(19) dam-mi-iš-hi-iš-ke-ez-zi=an ku-iš Ú-UL=m=a-an i-ia-u-e-ni pa-ra-a tar-nu-mar
'We will rescue him, the Storm-god, who is in need. Whoever keeps on damaging him, to him we will not grant release'.

All forms are derived from a stem šiššiiza- which I translate as 'need'. Etymologically, this stem probably is a reduplication of the verb šai- ${ }^{i} /$ ši- 'to $^{\text {to }}$ press, to seal', which means that we have to assume a semantic development *'pressing' > 'need'. See at šai- ${ }^{i} / s \check{i}$ - for further etymology.

GIššišiiam(m)a- (n.) '?’: nom.-acc.sg. ši-ši-ía-am-ma (KUB 12.51 i 11, KUB 12.62 rev .7 ), ši-ši-a-ma (KBo 6.10+ ii 3).

This word is attested a few times only, always with the determinative GIŠ 'wood':

KUB 12.62 rev.
(7) Ú.SAL-i ${ }^{\text {GIŠši-ši-i-ia-am-ma ar-ta } k a t-t a-a n=m a ~ t a-a s ̌-u ̨ a-a n-z a ~ d u-d u-m i-i ́ a-a n-z a ~}$
(8) $a-s ̌ a-a n-z i$
'In the meadow a šišiiamma is standing. Under it, a blind and a deaf man are sitting'.

In the Hittite Laws we read:

KBo 6.10+ ii
(3) ták-ku ${ }^{\text {GIIŠ̌i-šisi-a-ma }[k u-i(s ̌ \text { š-ki ta-a-i-e-ez-zi } 3 \text { GÍN KÙ.BABBAR)] }] ~}$
(4) $p a-a-i$
'When someone steals a šišiama, he must pay three shekels of silver'.
From the first context, one would be tempted to conclude that sisiiam(m)a is a tree. In the second context, it is obvious that this hardly can be the case. Apparantly, the šišiiam(m)a-denotes some wooden object or device that stands in the meadow. That it must have been quite valuable is visible from the fact that the penalty for stealing a šišiama is equal to the penalty of e.g. stealing a loaded carriage. Nevertheless, it is not clear exactly what is meant. No etymology.
šiššiíant- (adj.) 'sealed’: nom.-acc.sg.n. ši-iš-ši-ía-an-n=a (KUB 29.7 ii 56).
PIE *si-sh $h_{1}$-i-ent-
This word is hapax in the following context:
KUB 29.7 ii
(56) [ke]-e ud-da-a-ar pár-ku-i ši-iš-ši-i_ia-an-n=a e-eš-tu $\operatorname{DINGIR}^{L U M}=m a \mathrm{EN}$

SÍSKUR=ia $a$ a-pé-e-ez
(57) $[u d-d a-a]-n a-a z$ pár-ku-una-e-eš $a-s ̌ a-a n-[d] u$
'May these words be pure and šiššǐiant- and may through those words the deity and the patient be pure!'.

Apparently, šiššiizant- is comparable in meaning to parkui 'pure, clean'. It therefore has been suggested to interpret šiššiizant- as a reduplication of the verb $\check{s} a i^{i}{ }^{i} /$ ši- 'to seal'. In this case, šiššiiant- 'sealed' may be used in the sense 'untouched'. For an etymological treatment, see at šai- ${ }^{i} / \check{s} i-$.
šišd $-^{z i}:$ see šišs- ${ }^{z i}$
šiššur (n.) ‘irrigation': gen.sg. ši-iš-šu-ú-ra-aš (KBo 6.26 iii 5 (OH/NS)), še-e-šu-

Derivatives: šiššuriịe/a- ${ }^{z i}$ (Ic1) 'to irrigate' (inf.I ši-išs-šụu-u-ri-ia-i-ųa-an-zi (KUB 31.100 rev.? 17 (MH/MS)), impf. ši-iš-šu-ri-eš-ke-ed-du (KBo 26.96, 6 (NH))), šiššiuriie/a- ${ }^{z i}$ (Ic1) 'to irrigate' (impf. ši-iš-ši-u-ri-iš-ke/a- (KUB 31.84 iii 54, 55 (MH/NS))).

PIE * $h_{l} s i-h_{l} s-u r$ or $* h_{l} s i-h_{l} s-i e ́-u r$
The alteration between šišš- and $\check{s} e \check{s} \check{s}$ - can be explained if we assume that the spellings with $-i$ - reflect the original form of these words, whereas the spellings with $-e$ - are the NH variants according to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-\check{s}$ - as described in § 1.4.8.1.d.
See Rieken (1999a: 329f.) for an extensive treatment of this word. She connects it with šiiela- ${ }^{z i}$ 'to shoot, to spurt, to flow' (see at šai- ${ }^{i} /$ ši-; šiie/a- ${ }^{z i}$ ) and reconstructs * $h_{l} s i-h_{l} s-u r$, whereas the variant šiššiur is derived from the verb šišiie/a- ${ }^{z i}$. Alternatively we could assume that šiššur- reflects $* h_{l} s i-h_{l} s-i e ́-u r$ in which *VsiV > Hitt. /VSV/ (cf. § 1.4.4.2). This would mean that in šiššiuriie/athe $-i$ - has been restored. See at $\S$ 1.3.9.4.f, where I have shown that the spellings with the sign U , which represent /siSor-/, must be the correct ones (compare e.g. a-ni-u-ur /Rniór/ < *h ${ }_{3} n$-ié-ur), whereas the spelling with the sign Ú should be regarded as a scribal error.
šittar(a)- (n. > c.) sharp-pointed metal object, 'spear-point(?)' (not 'solar disc'!): nom.-acc.sg. ši-it-tar (often), ši-tar (KUB 20.92 vi? 5), acc.sg.c. ši-it-ta-ra-an (KUB 30.32 i 7 (NS?)), ŠU.I-ta-ra-an (KUB 36.95 iii 4 (NS)), abl. ši-it-tar-ra-za (KBo 2.1 i 35), ši-it-tar-za (KBo 2.1 i 9, ii 13, iii 14, 27, 35, iv 20), ši-it-tar-az-za (KBo 2.16 obv. 12), instr. ši-it-ta-ri«<iš»>-it (KUB 5.7 obv. 21), nom.-acc.pl. ši-it-tar-ra (KUB 10.28 i 20, KUB 11.21a vi 10), nom.pl.c. ši-it-ta-re-eš (KUB 29.4 i 22 (NS)), acc.pl.c. ši-it-tar-aš (KUB 48.6 ii 5 (OH/NS)).

Derivatives: ${ }^{\text {Hur.sAG }}$ Šittara-, name of a mountain (stem? ši-it-ta-ra[...] (KBo 25.162 r.col. 3)).

Anat. cognates: CLuw. šittar- (n.) ‘id.’ (nom.-acc.sg. ši-it-tar); HLuw. "FUSUS" sitar- (n.) 'spindle’ (nom.-acc.pl. "FUSUS" si-tara/i (KARATEPE 1 §25)).

PIE * $h_{l} s$-ie-tr?
See Starke 1990: 408f. for an extensive treatment of the meaning and attestations of this word. He convincingly shows that the usual translation 'solar disc' is not supported by the facts, and that the contexts seem to point to a meaning 'sharppointed metal object, spear-point'. If the one attestation ŠU.I-ta-ra-an (KUB 36.95 iii 4) can be regarded as denoting šittaran, then a meaning 'spear-point' is likely. Starke argues that the word is of Luwian origin, and that in Hittite we have to separate a thematic stem šittara- from athematic šittar-. The first stem is an older (MH) Hittitized loan from Luw. šittar-, whereas the latter represents real Luwianisms within the NH texts. Starke suggests a connection with šai- ${ }^{i} / \check{s} i-$,
šiie/a- ${ }^{z i}$ 'to shoot, to press' and reconstructs *séh - tro-. The root *seh $h_{1}$, however, is the basis of šai- ${ }^{i} / \check{s} i-$ 'to impress, to sow', whereas šiie/a- ${ }^{z i}$ 'to shoot' must reflect ${ }^{*} h_{l} s$-ielo- (see at šai- ${ }^{i} /$ ši-; šiiela- ${ }^{z i}$ for an etymological treatment). Melchert (1993b: 195) therefore assumes that šittar- is a contraction of *šizattar'the shoot-thing' and reflects $* h_{l} s$-ie-tro- (although it seems to me that $*$-iewould yield Luw. -i- regularly). If this etymology is correct, it would show that initial $* h_{l}$ is dropped in front of $-\check{s}$ - in Luwian.
šittariiela- ${ }^{z i}$ (Ic 1) 'to seal': 3sg.pres.act. ši-it-ta-ri-ez-zi (KBo 6.2+ ii 19, 24 (OS)),
 ii 45 ( $\mathrm{OH} / \mathrm{NS}$ )), ši-i-ia-at-tal-li-ía-az-zi (KBo 6.5 iv 3 (OH/NS)), 3sg.pret.act. ši-it-ta-ri-et (KBo 6.2+ iii 19 (OS)).

PIE *sh $h_{1}-i-t r-i e / o-$
The oldest attestations of this verb (in the OS version of the Hittite Laws) show the stem šittariie/a- (which is the reason for me to cite this verb under the lemma šittariie/ $a_{-}{ }^{z i}$ ). In the MS copies of the Laws, this stem is replaced by šiiattariie/a-. Because the verb denotes 'to seal' it is likely that it is ultimately derived from the verb šai- ${ }^{i} / \check{s i n}^{-}$'to impress, to seal', probably through a noun *ši(ída)ttar-. In the OH period this noun was *šittar-, showing the weak stem ši- of šai-/ši- (note that this weak stem originally was not **šiia-!). When in the MH times the weak stem of $\check{s} a i-/ \check{s} i$ - is secondarily changed to šiie/a- (on the basis of false analysis of 3pl.pres.act. ši-anzi as šiia-nzi), this verb, too, was altered from šittariie/a- to šiiattariie/a-. The only attestation from a NH copy of the Laws is the aberrant form ši-ía-at-tal-li-ía-az-zi which is clearly caused by misreading the sign RI/TAL of the (MS) text from which this version was copied (which perhaps was spelled $* *$ ši-ía-at-ri-ia-az-zi ?). The confusion shows that this verb probably was not used anymore in NH times.
All in all, I would reconstruct šittariie/a- as *sh $h_{1}-i-t r-i e / o-$. See at šai- ${ }^{i} / s ̌ i-$ for further etymology.
${ }^{(\mathrm{d})}$ š̄̄u-, ${ }^{(\mathrm{d})}$ šīuna- (c.) 'god' (Sum. DINGIR, Akk. ILUM): nom.sg. ši-i-úú-uš (KUB $35.93+32.117$ iii 4 (OS)), ši-ú-uš, ši-uš=mi-iš (KBo 3.22 rev. 47 (OS)), DINGIR$u s ̌$ (OS), DINGIR ${ }^{L U M}-n a-a \check{s}(\mathrm{NH})$, acc.sg. ši-ú(n)=šum-m[i-in] (KBo 3.22 obv. 39 (OS)), ši-ú(n)=šu[m-(mi-in)] (KBo 3.22 obv. 41 (OS)), ši-ú-na-an or ši-ú-n=a-an (KBo $17.51 \mathrm{i}^{?} 8$ (OS)), ši-ú-na-an (MS, NS, often), gen.sg. ši-ú-na-aš (OS, often), dat.-loc.sg. ši-ú-ni (OS, often), ši-i-ú-ni (KUB 30.10 rev. 11, 17 (OH/MS)), abl. ši-ú-na-az (KBo 10.7 ii 17, $20(\mathrm{OH} / \mathrm{NS})$ ), instr. ši-ú-ni-it (KBo 6.28 obv. 5 (NH),

KBo 22.6 i 25 ( $\mathrm{OH} / \mathrm{NS}$ )), nom.pl. DINGIR ${ }^{\text {MEš }}$-eš ( OS ), ši-ua-an-ni-e-eš (KBo 20.73 iv 8 (MS), KUB 35.146 iii 8 (NS)), ši-ua-an-ni-eš (KUB 9.34 iii 45 (NS)), acc.pl. ši-mu-uš (KBo 45.3 obv. 5 (OH/NS)), [̌̌]i-mu-uš (VSNF 12.30 iv 8 ( $\mathrm{OH} / \mathrm{NS}$ )), gen.pl. DINGIR ${ }^{\mathrm{MES}}$-na-an (OS), ši-í-na-an, ši-ú-na-aš, dat.-loc.pl. ši$u ́-n a-a \check{s}$ (OS), ši-i-ú-na-aš (KUB 28.45 vi 15 (OH/NS)).
Derivatives: see šiunal(a/i)-, *šiuniie/a- ${ }^{-2}$, šiuniíahh- ${ }^{\text {ª }}$, šiųannant-, $\mathrm{NINDA}_{\text {šiuannanni-, }}{ }^{\text {MUNUS }}$ Šiuanzanna-.
Anat. cognates: Pal. tiuna- (c.) 'god' (nom.sg.c. ti-ú-na-aš); Lyd. ciw- (c.) 'god' (nom.sg. ciws, acc.sg. ciwv, abl.(?) ciwad, dat.-loc.pl. ciwav).

PIE *diēu-
In the oldest texts we find the following paradigm: nom.sg. ši-ú-uš, ši-i-i-ú-uš acc.sg. *ši-ú-un and acc.pl. ši-mu-uš. This points to a stem /sīu-/ (note that Neu 1974a: 122 and, following him, Rieken 1999a: 36, cites a nom.pl. šiueš, but this form is unattested: we only find DINGIR ${ }^{\text {MEŠ }}$-eš besides the aberrant šiuanniē̆s). Already in OH times, we see a proliferation of a thematic stem ši-(i-)ú-na-/sīuna-/, with acc.sg. šiunan (unless the OS attestations ši-ú-na-an (KBo $17.51 \mathrm{i}^{\text {? }}$ 8) is to be interpreted $\check{s} i-u ́-n=a$-an, cf. Neu 1983: $168^{496}$ ), gen.sg. šiunaš, dat.-loc. šiuni etc. in OS texts already. In NH times we even find nom.sg. DINGIR ${ }^{L U M}$-naš. The fact that we find a similar stem in Pal. tiuna- and Lyd. ciwvali- 'divine' (see under šiunal(a/i)-) as well, may point to a PAnat. stem *diēu-no-. Nevertheless, this is not necessarily the case in view of the fact that in Greek we find a similar, independent development, with nom.sg. Zévৎ, acc.sg. Zŋ̃v, gen.sg. $\Delta$ tó $̧$ being replaced by younger acc.sg. Z $\eta v a$, gen.sg. Zqvóc.
All attestations of $\check{s i u}(n a)-$ are spelled with $\dot{u}$. The few plene spellings of $-i$ indicate that we have to phonetically interpret the stem as /síu-/ and /síuna-/. This /síu-/ is the direct outcome of *diéu-. See Rieken (1999a: $37^{160}$ ) on the peculiar nom.pl. šiuanniēš, who argues that the texts in which this form occurs probably were translations from Luwian texts. Formally, šiúanniēš looks like a thematization of *šiūātar 'deity', just as the animatized form šiunannant- 'god'.
The fact that Hittite, Palaic and Lydian use the same word for 'god' (Hitt. šīu(na)-, Pal. tiuna-, Lyd. ciw-), whereas CLuwian, HLuwian and Lycian show a stem massan- (CLuw. maššan(i)-, HLuw. DEUS-n(i)- (= massan(i)-?) and Lyc. mahan(a)-), can be used as an argument for the dialectology of the Anatolian language branch.
${ }^{(\mathrm{d})}$ šīuna-: $\operatorname{see}{ }^{(\mathrm{d})}$ šīu-, ${ }^{(\mathrm{d})}$ šīuna-
šiunal(a/i)- (c.) ‘divine one(?)’: nom.pl. ši-ú-na-li-eš (KBo 10.24 iii 14), [ši-ú$n]$ ạ-lị-iš (KBo 30.5 iii 4).

Anat. cognates: Lyd. ciwvali- ‘divine’ (nom.sg.c. ciwvalis).
This word occurs in one context only:

KBo 10.24 iii (with duplicate KBo 30.5)
(10) ma-a-an ti-i-e-eš-te-eš la-ri-i-e-eš
(11) a-ru-na-aš túh-ḩa-an-da-at
(12) še-e-r=a-a=š-ša-an ne-pí-ši
(13) ši-ú-na-li-eš u-e-eš-kán-ta
'When the $t$.-s (and) $l$. -s (or 'the $t$. l.-s) of the sea produce smoke, above in heaven the divine ones(?) will be sent'.

It is likely derived from ${ }^{(\mathrm{d})} \check{s} \bar{s} u-$, ${ }^{(\mathrm{d})} \check{s} \bar{s} u n a-$ 'god' (q.v.). Note the similarity in formation to Lyd. ciwvali- 'divine'.
*šiuniie/a- ${ }^{z i}$ (Ic1) '?’: 3pl.imp.act. DINGIR ${ }^{\text {MEŠ }}$-ni-ía-an-du (KBo 23.22, 2), 3pl.pres.midd. DINGIR ${ }^{\text {MEŠ }}$-ni-ina-an-ta-r $\left[i{ }^{?}\right]$ (KBo 8.77 rev. 7).
Derivatives: *LÚ̌̌̌iuniïant- (c.) 'godsman(?)' (nom.sg. ${ }^{\text {LÚ }}{ }^{\text {DINGIR }}{ }^{\text {LIM }}$-ni-an-za (KUB $14.10+26.86$ iv 11)), *šiuniiatar / šiuniiann- (n.) '(statue of) deity' (nom.-acc.sg. DINGIR ${ }^{L I M}$-ial-tar, DINGIR ${ }^{L I M}$-tar, dat.-loc.sg. DINGIR ${ }^{L I M}$-an-ni).

Both attestations of the verb are found in broken contexts: KBo 23.22 (2) [ ...
 DINGIR ${ }^{\text {MEŠ }}$-ni-i $i a-a n-t a-r\left[i^{?} \ldots\right]$. On the basis of these attestations, we cannot determine what the verb means. The nouns $*^{\mathrm{LU}}$ šiuniíant- and $*$ šiuniìatar are mentioned here for formal reasons only as they both seem to derive from a stem šiuniie/a-. Semantically there is no clue, however, that they really belong with this verb. See at ${ }^{(\mathrm{d})}$ šīu-, ${ }^{(\mathrm{d})}{ }^{\text {sizu}} \mathbf{u n a -}$ 'god' for further etymology.
šiuniiahh ${ }^{\text {ta }}$ (IIb) 'to be hit by a disease (through a god)': 3 sg.pres.midd. ši-e-ú-ni-ah-ta (KBo 6.26 i $22(\mathrm{OH} / \mathrm{NS})$ ), [š]i-ú-ni-ah-ta (KBo 6.10 iv $10(\mathrm{OH} / \mathrm{NS})$ ), ši-ú-ni-i_a-ah-ta (KBo 6.15, 13 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pret.midd. ši-ú-ni-ina-ah-ha-ti (KUB 11.1 iv $15(\mathrm{OH} / \mathrm{NS})$ ).

The verb occurs in the middle only. Note the aberrant spelling ši-e-ú-ni- of KBo 6.26 i $22(\mathrm{OH} / \mathrm{NS})$. The verb is clearly derived from ${ }^{(\mathrm{d})} \check{s} \stackrel{\imath}{\imath} u-{ }^{(\mathrm{d})}{ }^{\text {siv̀una- 'god' (q.v.), }}$ perhaps through the verb $*$ šiuniie/a ${ }^{z i}$ (q.v.).
munus šiunzanna-, munušiúunzanna- (c.) a kind of priestess (Sum.
${ }^{\text {MUNUS }}$ AMA.DINGIR): nom.sg. ši-un-za-an-na-aš (KBo 16.71+ (StBoT 25.13) iv 22 (OS)), dat.-loc.sg. ši-ua-an-za-an-na (IBoT 1.29 i $58(\mathrm{OH} / \mathrm{NS})$ ), nom.pl. ši-ua-an-za-an-ni-iš (KUB 13.2 ii 32 (MH/NS)), broken ši-ua-an-z[a-...] (IBoT 1.29 ii
12 ( $\mathrm{OH} / \mathrm{NS}$ ) ).
PIE * dieu-nt-s + anna-
The word denotes a certain kind of priestess. In KUB 13.2, MUNUS.MEŠ̌̌iuanzanniš (ii 32) alternates with the sumerographical writing ${ }^{\text {MUNUS.MEŠ }}$ AMA.DINGIR (e.g. ibid. ii 27), lit. 'mother.god'. This has led e.g. Friedrich (HW: 195) to tentatively translate šiuanzanna- as "Gottesmutter" (as if it consists of gen.sg. šiúanz + anna'mother'). In my view, an original meaning 'divine mother' might be more likely, as in this way $\check{s i u}(\underset{\text { ula }}{ })_{n z}$ can be interpreted as nom.sg.c. of a further unknown adjective šiu(ua)nt- 'divine' (which perhaps is visible in NINDA šiuandannanni(q.v.) as well) that is ultimately cognate with $\left.{ }^{(d)}{ }^{( }\right) \bar{\imath} \bar{u} u-,{ }^{(\mathrm{d})} \check{s} \bar{\imath} u n a-$ 'god' (q.v.). If this is correct, then the word must be a univerbation of original šiu(ua)nz annaš 'divine mother'. Note that the oldest attestation (OS) shows šiunzannaš. Perhaps this shows that we have to phonologically interpret this word as /siunt ${ }^{\mathrm{s} a \mathrm{Na} \mathrm{I} \text { /, which }}$ was in NH times phonetically realized as [siuənt ${ }^{s}$ aNa-], spelled ši-ua-an-za-an$n a$-. I therefore reconstruct *diéu-nt-s + anna-. See at ${ }^{(\mathrm{d})} \check{s} \bar{\imath} u$-, ${ }^{(\mathrm{d})}{ }^{\text {siv}} u n a$ - for further etymology.
šiuanna-: see ${ }^{(\mathrm{d})}$ šīu-, ${ }^{(\mathrm{d})}$ šīuna-
šiưannant- (c.) 'god': nom.sg. ši-ua-an-na-an-za (KUB 13.4 i 27 (OH/NS)).
The word occurs only once. Formally, it seems to be the erg.sg. of an abstract noun *šiūātar 'deity'. See at ${ }^{(\mathrm{d})}$ šīu-, ${ }^{\text {d) }}{ }^{\text {siviuna- 'god' for further etymology. }}$

NINDA šiuandannanni- (c.) a bread: nom.sg. ši-ua-an-da-an-na-an-ni[-iš] (KBo 29.115 iii 8), ši-ua-an-da-na-an-ni-iš (KUB 27.49 iii 7), acc.sg. ši-ua-an-da-an-na-an-ni-in (KBo 29.115 iii 3, 5, 7), ši-ua-an-ta-an-na-an-ni-in (KBo 23.87, 7); broken ši-úa-an-ta-an-na-an-n[i-...] (KUB 17.24 ii 19)

PIE * diu-ent-otn-??
It is not clear what kind of bread is meant. Formally, the noun reminds of other bread-names in -anni-: NINDA parkuuaštannanni-, NINDA armanni-, ${ }^{\text {NINDA }} \operatorname{arma}(n)$ tal(l)anni-. For the use of -anni- as a derivational suffix, compare

NINDA armanni- from arma- 'moon' and hupparanni- (a liquid measure) from huppar- 'bowl'. In the case of šiuandannanni-, we would have to assume that it is derived from *šiuandann-, which itself seems to be the oblique stem of a further unattested noun *šiuandātar. This *šiuandātar must be derived from a stem *šiuant-. To what extent this *šiuant- is identical to šiuant- found in ${ }^{M U N U S}$ Šiuanzanna- (a kind of priestess) (q.v.), is unclear. If so, then this *šiuantwould be ultimately cognate to ${ }^{(\mathrm{d})}{ }^{\text {sivu-, }}{ }^{(\mathrm{d})}$ šīuna- 'god' and probably reflect *diuent- or *dieuent-

MUNUŠ̌iuanzanna-: see ${ }^{\text {MUNUS }}$ Šiunzanna-
${ }^{(d)}$ šīuatt- (c.) 'day’ (Sum. UD ${ }^{(\mathrm{KAM})}$ ): nom.sg. ṣ̌i-i-uaa-az (KBo 17.15 rev.' 19 (OS)), $\mathrm{UD}^{\mathrm{KAM}}-a z$ (KBo 25.58 ii $7(\mathrm{OS})$ ), acc.sg. UD ${ }^{(\mathrm{KAM})}-a n$, gen.sg. ${ }^{\mathrm{S}} \check{\sin -i-u}$, $a-a t-t a-a \check{s}$ (KBo 17.15 obv! $10(\mathrm{OS})$ ), dat.-loc. ši-ua-at-ti (KBo 3.55+ ii 3 (OH/NS), ši-ú-ua-at-te (KUB 41.23 ii 13 ( $\mathrm{OH} / \mathrm{NS}$ )), ši-úú-ua-at-ti (KBo 22.170, 3 ( $\mathrm{OH} / \mathrm{NS}$ )), loc.sg. ši-i-ua-at (KBo 25.17 i 1 (OS)), ši-ua-at (KBo 3.22 rev. 60 (OS)), ši-ua-aat (KBo 21.49 iv $8(\mathrm{OH} / \mathrm{NS})$ ), acc.pl. UD ${ }^{\mathrm{HILA}}-u \check{s}$.

Derivatives: anišiuat (adv.) 'today(?)' (a-ni-ši-una-at (KBo 3.45 obv. 12 (OH/NS))).

Anat. cognates: Pal. tiiiat- (c.) 'Sun-god' (nom.sg. ti-i_ia-az, dat.-loc.sg. ti-i_ia-az); CLuw. ${ }^{(\mathrm{d})}$ Tiuad- (c.) 'Sun-god' (nom.sg. ${ }^{(\mathrm{d})} t i-u a-a z,{ }^{\mathrm{d}} \mathrm{UTU}(-u a)-a z{ }^{\mathrm{d}} \mathrm{UTU}(-u a)-z a$, voc.sg.(?) ti-ua-ta, ti-u-ua-ta, acc.sg. ${ }^{\mathrm{d}} \mathrm{UTU}-a n$, dat.-loc.sg. ${ }^{\mathrm{d}} \mathrm{UTU}-t i(-i)$, gen.adj. ${ }^{\mathrm{d}}$ ti-ua-d[a-aš-ši-), tiunaliiia- (adj.) 'of the Sun-god' (voc.sg. ti-una-li-ina), tiunariina(adj.) 'of the Sun-god' (nom.-acc.pl.n. ti-ua-ri-ia); HLuw. ${ }^{\text {DEuS }}$ tiunad(i)- (c.) 'Sungod' (nom.sg. /tiwadsas/ ${ }^{\text {DEUS }}$ SOL-wa/i-za-sa (KARKAMIŠ A6 §2), ${ }^{\text {DEUS }}$ SOL-za$s a$ (KARKAMIŠ A17a iii), ${ }^{\text {DEUS }}$ SOL-za-sá (KARATEPE 1 §73), /tiwadis/ ${ }^{\text {DEUS }}{ }^{\text {SOL-ti-i-sa }}$ (MALPINAR §11), ${ }^{\text {DEUS }}$ SOL-sa (KARKAMIŠ A4a §13), acc.sg. /tiwadin/ ${ }^{\text {DEUS }}$ SOL-wa/i-ti-i-na (TELL AHMAR 2 §6), gen.sg.? /tiwadas/ SOL-tà$s a$ (SAMSAT fr. 1), dat.-loc.sg. /tiwadi/ ${ }^{\text {DEUS }}$ SOL-ti-i (KARKAMIŠ A6 §20), ${ }^{\text {DEUS }}$ SOL-ti (ANCOZ $7 \S 4$ ), abl.-instr. /tiwadadi/ ${ }^{\text {DEUS }}$ SOL-tà-ti-i (KARKAMIŠ A15b §1), tiwadama/i- 'sun-blessed' (nom.sg. /tiwadamis/ SOL-wa/i-ra-mi-sá (CEKKE §17i), SOLwa/i+ra/i-mi-sa (CEKKE §17o, HİSARCIK $1 \S 1$ ), SOL$w a / i+r a / i-m i / s a_{8}$ (KULULU 4 §1, §2), SOL-tà-mi-sá (BOYBEYPINARI 2 §5), ${ }^{\text {DEUS }}$ SOL-wa/i-tà-mi-i-sa (KULULU 2 §1), ${ }^{\text {DEUS }}$ SOL-mi-sá (KARATEPE 1 §1), gen.sg. /tiwadamas/ ${ }^{\text {DEUS }}$ SOL-wa/i+ra/i-ma-sa-' (KARKAMIŠ A18h §1), ${ }^{\text {DEUS }}$ SOL-wa/i+ra/i-ma-sa (KARKAMIŠ A5a §1), dat.-loc.sg. /tiwadami/ ti$w a / i+r a / i-m i($ KULULU $5 \S 3),{ }^{\text {DEUS }}$ SOL-mi (KARKAMIŠ A21 §2)).

IE cognates: Skt. dyut- ‘shine’.

PIE * dieu-ot-
See Rieken 1999a: 102f. for attestations and discussion. It is remarkable that Hittite shows a consistent geminate spelling -tt-/-t-/, whereas in CLuwian we find a consistent single spelling $-t-/-\mathrm{d}-/$, which corresponds to the use of the sign $t a ̀$ (cf. Rieken fthc.) and the rhotacization in HLuwian. According to Yoshida (2000) this can be explained by assuming that the original PAnat. paradigm shows accent mobility, and that the Luwian languages generalized stem-accentuated forms (*diéu-ot-), leaving *-t- between unaccentuated vowels causing lenition, whereas Hittite generalized the forms with unlenited $-t$ - out of ending-stressed forms (e.g. gen.sg. *dieu-ot-ós). In view of the OS attestations nom.sg. ši-i-ua-az, gen.sg. ši-$i-u$ u-at-ta-aš (both with plene -i-) it might be likelier to assume, however, that the stem of the nom.sg., /síuats/, generalized throughout the paradigm, taking with it not only the accentuation of the root, but also the unlenited /t/, yielding šī̃uattaš.
It is generally accepted that šıuatt- reflects a $t$-stem of the root $*$ dieu- 'sky (god)' (cf. the Skt. $t$-stem dyut- 'shine'). The original paradigm must have been *diéu-t-s, *diu-ót-m, *diu-t-ós, which was altered to Pre-PAnat. *diéu-ot-s, *diu-ót-om, *diu-ot-ós, which yielded PAnat. */diéuots/, */diuốdom/, /diuodṓs/. In Hittite, the stem */diéuot-/ > šiuatt- was generalized, whereas in Luwian the stem */diuod-/ > tiuad- was generalised. See for further etymology ${ }^{(\mathrm{d})} \stackrel{s}{s} \bar{u} u$-, ${ }^{(\mathrm{d})}$ šīuna-.
The hapax a-ni-ši-una-at probably means 'today'. E.g. Melchert (1994a: 74-5) connects ani- with the stem anna- 'former, old' (q.v.) and states that ani- must go back to *óno-, whereas anna- reflects *éno- (with "Čop's Law"). In my opinion, the elements anna- 'former, old' and ani 'this' have opposite meanings and cannot be equated. It is much more likely that ani- is in some way related to the pronoun aši / uni/ini. I would rather assume that $a$-ni-ši-ua-at should be read $e^{!}$$n i-s ̌ i-u a-a t$, in which eni is to be equated with the NH outcome of nom.-acc.sg.n. ini.
šiưi- / šiunai- (adj.?) 'sour(?)’: acc.sg.? ši-ú-i-n=a (KUB 31.110, 3 (OH/NS)), acc.(?)pl.c. ši-ua-e-e[š] (KBo 17.4 ii 17 (OS)).
Anat. cognates: CLuw. ši(h)ưa- (adj.) 'sour(?)' (nom.-acc.pl.n. še-e-ûa), ši( $\boldsymbol{l}$ )ưai- (adj.) 'sour(?)' (nom.pl.c. ši-e-hu-una-en-zi).

Both forms cited are attested in broken contexts. The meaning of $\check{s i-u}-i-n=a$ cannot be ascertained, nor can its analysis as šiuin $+=a$. The attestation ši-ua-e$e[\tilde{s}]$ is more clear, although it appears in broken context: KBo 17.4 ii (17) [...
$h a] r-s ̌[a]-u ́-u s ̌ s ̌ i-u a-e-e[\check{s} \quad . .$.$] . Otten \& Souček (1969: 25^{12}$ ) suggest that this phrase might be paralleled by NINDA.GUR 4 .RA-uš EM-ṢÚ-TIM 'sour thickbreads' and that šiúaēs therefore must mean 'sour'. This interpretation would mean, however, that šiúaēš syntactically is acc.pl.c. whereas formally it is nom.pl.c. For an OS text this is quite remarkable if not unique. Starke (1987: $250^{26}$ ) connected this word with CLuw. $\check{s} i(h) u a(i)-$, which he interprets as 'sour' as well. Further unclear.
-ške/a- (imperfective-suffix): 1sg.pres.act. da-aš-ke-e-mi (OS), 2sg.pres.act. ak$k u-u s ̌-k e-e-s ̌ i ~(O S), ~ a k-k u-u s ̌-k e-s ̌ i ~(O S), ~ s ̌ u-u s ̌-k e-s ̌ i ~(O S), ~ 3 s g . p r e s . a c t . ~ a k-k u-u s ̌-~$ $k e-z i$ (OS), an-ni-iš-ke-ez-zi (OS), a-ša-aš-ke-ez-zi (OS), da-ǎ̌-ke-ez-zi (OS), h. ha-at-ri-eš-ke-ez-zi (OS), iš-pa-an-za-aš-ke-e[z-zi] (OS), pa-ap-pár-aš-ke-ez-zi (OS), pu-nu-uš-ke-ez-zi (OS), šu-un-ni-eš-ke-ez-zi (OS), ú-uš-ke-ez-zi (OS), za-aš-ke-ez$z i(\mathrm{OS}), z i-i-n u-u s ̌-k e-e z-z i(\mathrm{OS})$, tar-ši-ke-ez-zi (OS), 1pl.pres.act. ak-ku-uš-ke-e-ua-ni (OS), da-aš-ke-e-u-e-n[i] (OS), ša-an-hi-iš-ke-u-e-ni (OS), pí-iš-ke-u-ua-ni (MH/MS), pí-iš-ga-u-e-ni (MH/MS), 2pl.pres.act. da-me-eš-kat-te-ni (OS), pí-iš-kat-te-ni (OS), ša-an-ḩi-iš-kat-te-ni (OS), ta-me-eš-kat-te-ni (OS), 3pl.pres.act. an-ni-iš-kán-zi (OS), ap-pí-iš-kán-zi (OS), da-aš-kán-zi (OS), ha-az-zi-iš-k[án-zi] (OS), hi-in-ga-aš-kán-zi (OS), ir-ha-i-iš-kán-zi (OS), iš-ha-mi-iš-kán-zi (OS), iš-hii-iš-kán[-zi] (OS), iš-ku-ne-eš-kán-zi (OS), pal-ú-e-eš-kán-zi (OS), pí-iš-kán-zi (OS), pí-iš-ši-iš-ká[n-zi] (OS), še-eš-kán-zi (OS), tar-ši-kán-zi (OS), [ta-]ru-uš-kán-zi (OS), uš-kán-zi (OS), 1sg.pret.act. ${ }^{\circ} V$ š-ke-nu-un (MH/MS), da-aš-ga-nu-un (KUB 13.35+ i 40, 44 (NS)), 2sg.pret.act. da-aš-ke-eš (MH/MS), ha-at-ri-eš-keeš (MH/MS), zi-ik-ke-eš (MH/MS), 3sg.pret.act. ha-an-di-li-iš-ke-et (OS), ša-al-la-nu-uš-kat (OS), zi-ke-e-et (OS), 1pl.pret.act. uš-ga-u-en (MH/MS), ú-e-ki-iš-ke-u-en (NH), 3pl.pret.act. da-aš-ke-e-er (OS), da-aš-ke-er (OS), pí-iš-ke-er (OS), pí-iš-ker (OS, often), ša-al-la-nu-uš-ker (OS), 2sg.imp.act. me-e-mi-iš-ki (OS), $u s ̌-k i-i$ (OS), 3sg.imp.act. tu-u-ri-iš-ke-ed-du (MH/MS), 2pl.imp.act. iš-ta-ma-aš-ke-tén (MH/MS), ha-at-ri-eš-ketg-tén (MH/MS), 3pl.imp.act. iš-ta-ma-aš-kán-du (MH/MS), pí-eš-kán-du (MH/MS); 1sg.pres.midd. [e-e]š-ka-ah-ha-ri (OS), 3sg.pres.midd. uš-ne-eš-kat-ta (OS), pa-iš-ke-et-ta (MH/MS), e-eš-ke-et-ta-ri (MH/MS), 2pl.pres.midd. pa-iš-kat-tu-ma (OS), 3pl.pres.midd. za-ah-hi-iš-kán-ta (OS), 1sg.pret.midd. pa-iš-ga-ḩa-at (OS), 3pl.pret.midd. e-eš-kán-ta-ti (OS), 1sg.imp.midd. pa-iš-ka[-ah-ḩu-ut] (OS), 3sg.imp.midd. [pa-iš-k]at-ta-ru (OS); part. ú-nu-uš-kán-za (OS); sup. da-me-eš-ke-ua-an (OS).

Anat. cognates: CLuw. -zza- (impf.-suffix) (3sg.pres.act. hal-ua-at-na-az-za-i, hal-ua-at-na-za-i); HLuw. -za- (impf.-suffix) (3sg.pres.act. ${ }^{{ }^{P E S}}{ }_{2} p a-z a-t i, 1$ sg.pret.act. ${ }^{\mathrm{PES}_{2} p a-z a-h a, ~}{ }^{\mathrm{PES} 2} p a-z a-h a_{x}, \quad 3$ sg.pret.act. ${ }^{\text {"PES2" }} p a-z a / i-t a_{x}, \quad 3$ sg.imp.act.
"CRUS<"> ${ }^{t a-z a-t u) ; ~ L y c . ~-s-~(i m p f .-s u f f i x: ~ 3 s g . p r e s . a c t . ~ a s t t i, ~ q a s t t i, ~ 3 p l . p r e s . a c t . ~}$ tasñti, 3sg.pret.act. astte, qastte, 3sg.imp.act. qasttu; 3sg.pres.midd.(?) zasãne; inf. asñne).

PAnat. *-skée/o-
PIE *CC-skéló-
This suffix is usually called "iterative", but this should be abandoned. According to Melchert (1998b), stems in -ške/a- ${ }^{z i}$ are used to express progressive, iterative, durative, distributive and ingressive meaning, "all of which share the feature imperfectivity" (o.c.: 414), and therefore I cite this suffix as an "imperfectivesuffix". Melchert has also shown that the stems in -ške/a- are functionally equivalent to stems in $-\check{s} \check{s}(a){ }_{-}{ }^{i}$ and -anna/i- ${ }^{i}$, and even that "synchronically they function effectively as suppletive allomorphs of a single morphem" (1998b: 414). About the distribution between the three suffixes, Melchert writes that "[a] survey shows that of stems in anni/a-seven are complementary to -ške/a-, while another ten occur only sporadically (once or twice each) beside regular, productive $-s ̌ k e / a$-. There are only two cases of genuine competing stems, in both of which the -anni/a-stem has become lexicalized: nanni/a- 'to drive' beside naiške/a-, the imperfective to nai- 'turn, guide; send' and walhanni/a- 'beat' (frequentative) beside walhiške/a- imperfective to walh- 'strike'" (o.c.: 416), but see at -anna- ${ }^{i}$ / -anni- for my view on these latter two verbs.

In the overview of forms above, I have given a selection of forms from OS and MH/MS texts. In § 2.2.2.1.t, I have given a diachronic overview of the endings used with this suffix. Note that due to the rise of the anaptyctic vowel $/ \mathrm{i} /$ in clusters containing $*_{s}$ and stops, like $* d^{h} h_{l} s k e ́ e ́ / o->\mathrm{OH} /$ tské/á-/, za-aš-ke/a-> OH /tsike/a-/, zi-ik-ke/a- 'to place (impf.)', *h ${ }_{l}$ pské/ó- > Hitt. /?piské/á-/, ap-pí-iš$k e / a$ - 'to seize (impf.)' and *lg'ské/ó- > Hitt. /ləkiské/á-/, la-ak-ki-iš-ke/a- 'to fell (impf.)', the suffix -ške/a- sometimes is reinterpreted as /-iske/a-/, yielding forms like la-hu-iš-ke/a- 'to pour (impf.)' (instead of original la-hu-uš-ke/a-) or as /-sike/a-/, yielding forms like tar-ši-ke/a- 'to speak (impf.)' (instead of regular tar-aš-ke/a-, cf. Kavitskaya 2001: 284).
Within Luwian, we find a verbal suffix -za- that Melchert (1987a: 198f.) interprets as an 'iterative'-suffix and equates with Hitt. -ške/a-. His idea is then that Luw. -za- and Hitt. -ške/a- go back to PAnat. *-ske/o-, which first yielded pre-Luw. ${ }^{*}-s z a$ - and then was simplified to $-z a$-. A similar scenario then could also explain the Lycian imperfective-suffix $-s$ - (note that $s$ is the normal Lycian outcome of PAnat. ${ }^{*} k$ ). If this is correct, it would imply that we are dealing with a PAnat. suffix *-skéo-, containing a palatovelar.

From the beginning of Hittitology, the Hittite suffix -ške/a- has correctly been identified with the present-suffixes Skt. -ccha-, Av. -sa-, Gr. -бкع/o-, Arm. -c - -, Lat. -sce/o-, OIr. -c-, OHG -sc-, etc. The exact reconstruction of this suffix, with $*_{-k}$ - or with $*_{-} k^{-}$, can only be decided on the basis of the satzm languages and especially Indo-Iranian. In 2001, Lubotsky has elaborately argued that on the basis of the Indo-Iranian material we should conclude that at a PIE level the cluster $*_{-s} k^{\prime}$ - did not exist at all and that therefore the suffix should have been *-ske/o-, with a normal velar. This contrasts, of course, with the PAnat. reconstruction *-ske/o- which is required in Melchert's scenario. Either this means that one of these scholars is incorrect, or that we should assume that at the earliest stage of PIE the cluster $*_{-s k}{ }^{\prime}$ - was still available and that this suffix in fact was *-ske/o- and that only after the splitting off of Anatolian the cluster *-sk' was depalatalized to ${ }^{*}$-sk-, yielding the suffix ${ }^{*}$-ske/o- as visible in the other IE languages.
As in the other IE languages, where the suffix *-ske/o- always uses the zerograde of the root (Skt. gácchati ~ Av. jasaiti ~ Gr. ßáб $\kappa \omega<* g^{w} m$-skéló- 'to be going'; Skt. procháti ~ Av. pərəsaiti ~ Arm. harc‘ $i \sim$ Lat. poscō ~ OIr. arco ~ OHG forscōn < *prk'-sk'é/ó- 'to ask'), in Hittite the suffix -ške/a- in principle uses the zero-grade root as well, e.g. appiške/a- from epp- ${ }^{z i}$ / app- 'to seize', uške/afrom $a u_{-}{ }^{i} / u$ - 'to see', akkuške/a- from $e k u-{ }^{z i} / a k u$ - 'to drink', etc. As in the latter example, the suffix -ške/a- had a fortiting effect on the preceding consonant (also lakkiške/a- from lāk- ${ }^{i}$ / lag-, harappiške/a- from harp- ${ }^{\text {"la(ri) } / H a r b-/, ~ e t c .) . ~ S e e ~}$ $\S$ 2.2.2.1.t for a more detailed overview of the distribution between the thematic vowels -e- and -a- within the Hittite period.
=šma-: see =šmi- / =šma- / =šme-
$=$ šmaš (encl.pers.pron. acc.-dat. 2pl.) '(to) you (pl.)’: V=š-ma-aš (OS), $C=\check{s} a-m a$ $a \check{s}(\mathrm{OS})$.

The form is identical to the dat.-loc.pl. of the enclitic pronoun $=a$ - 'he, she, $\mathrm{it}^{\prime}$ ', which is not coincidental in view of the fact that the enclitic possessive pronoun of 'you (pl.)' and 'they' is identical as well, namely =šmi- / =šma- / =šme-. It is clear that the element -šm- found in both forms must be identical, but further etymological appurtenance is unclear. The element -aš probably is identical to the dat.-loc.pl.-ending -aš (q.v.).
=šme-: see =šmi- / =šma- / =šme-
=šmi- / =šma- / =šme- (encl.poss.pron. 2pl. and 3pl.) 'your (pl.); their': nom.sg.c. $=\check{s}-m i-i s ̌(\mathrm{OS}),=\check{s}-m e-i \check{s}(\mathrm{rare}, \mathrm{NS})$, acc.sg.c. $=\check{s}$-ma-an (OS), nom.-acc.sg.n. $=\check{s}$ -
 gen.sg. = $\check{s}-m a-a \check{s}(\mathrm{OS})$, dat.-loc.sg. $=\check{s}-m i(\mathrm{OS})$, all.sg. $=\check{s}-m a(\mathrm{OS})$, abl. ${ }^{\circ} a z=(\check{s})-$ $m i-i t(\mathrm{OS}),{ }^{\circ} a z-a=\check{s}-m i-i t(\mathrm{OS}),=\check{s}$-me-et, instr. e.g. $k a-l u$-lu-pí-iz-mi-it (OS), ka-lu-lu-pí-iz-me-et (OS), nom.pl.c. =š-me-eš (OS), acc.pl. = š-mu-uš (OS), nom.acc.pl.n. $=\check{s}=m e-e t(\mathrm{OS})$, dat.-loc.pl. $=\check{s}-m a-a \check{s}(\mathrm{OS})$.

The original paradigm of this particle is nom.sg.c. $=\check{s} m i \check{s}$, acc.sg.c. $=\check{s m a n}$, nom.acc.sg.n. =šmet, gen.sg. =šmaš, dat.-loc.sg. =šmi, all.sg. =šma, abl. =šmit, instr. $=s ̌ m i t$, nom.pl.c. =šmeš, acc.pl.c. =šmuš, nom.-acc.pl.n. =šmet, dat.-loc.pl. $=s ̌ m a s ̌ . ~ F o r ~ t h e ~ o r i g i n a l ~ d i s t i n c t i o n ~ b e t w e e n ~ n o m .-a c c . s g . / p l . n . ~=s ̌ m e t ~ v s . ~ a b l .-~$ instr. = šmit see Melchert (1984a: 122-6). This means that we are dealing with an ablauting stem =šmi- / =šma- / =šme-. This vocalization can hardly reflect anything else than PIE $*_{-i-}$, $*_{-o-}$ and $*_{-e-}$, but an exact explanation for the distribution of these vowels is still lacking (cf. also $=m i-/=m a-/=m e-$ ' my ',
 =šumma- / =šumme- 'our').
The characteristic element -šm- is undoubtedly cognate to -šm- found in the enclitic pronoun 2 pl . and 3 pl . =šmaš 'to you (pl.); to them' (q.v.). The exact PIE origin of this -šm- is unclear, however.
-šta (2sg.pret.act.-ending): see $-s ̌$ and $-t t a$
-šta (3sg.pret.act.-ending): see $-t$ and $-s \check{s}$
$=$ šta: see $=(a)$ šta
-štani: (2pl.pres.act.-ending of the hi-flection): see -šten(i)
-šten: (2pl.imp.act.-ending of the hi-flection): see -šten(i)
-šten(i) (2pl.-ending of the hi-flection): pres.: Vš-te-e-ni (OS), Vš-te-ni (OH/MS), $n a-i s ̌-t a-n i$ (KUB 23.72 rev. 58 (MH/MS)); pret./imp. Vš-te-en (OS), Vš-tén (MH/MS).
IE cognates: TochA 2pl.pret.-ending $-s$, TochB 2pl.pret.-ending $-s$.
PIE *-su ??

Usually, the ending -šten(i) (which stands for 2pl.pres.act. -štēni, -štani, 2pl.pret./imp.act. -šten) is regarded as a byform of the normal -tten(i) (q.v.) that must be of secondary origin. As I have demonstrated in Kloekhorst fthc.d, the ending -šten $(i)$ is only used with $h i$-inflected verbs and never with $m i$-inflected forms (which always have -tten(i) as its 2pl.act.-ending: note that of stems in -šand $-t$ - the difference between -šten(i) and -tten(i) is invisible, e.g. šaštēni 'you sleep', aztēni 'you eat'). The hुi-verbs that use the ending -šten(i) use the ending -tten(i) as well (except pai- ${ }^{i} /$ pi- 'to give', which only uses the ending -šten(i) and $^{\text {( }}$, never -tten(i)), clearly show that -sten(i) is the ending that is used in the oldest texts, whereas -tten(i) is used in younger texts only. As I have argued in detail in o.c., this indicates that -šten(i) must have been the original 2 pl.act.-ending of the $h i$-inflection, whereas -tten(i) is the ending of the $m i$-inflection. The distribution over the forms show that -šten $(i)$ is getting replaced by -tten( $i$ ) throughout the Hittite period. This replacement has already in pre-Hittite times taken place in hiverbs of which the stem ends in a consontant: in the oldest texts we only find remnants of -šten $(i)$ in a few $\operatorname{tarn}(a)$-class verbs (that go back to stems in a laryngeal), whereas in stems that end in $-k-,-p-,-t$ - or resonant no forms with -šten(i) are found anymore. In hi-verbs of which the stem ends in a vowel (dāi/tiianzi-class and mēma/i-class), the replacement of -šten(i) by -tten(i) first takes place in the late MH period.
In the present, we find -štēni as well as -štani (just as -ueni and -uani and -tteni and -ttani). Melchert (1994a: 137-8) has noticed that the variant with -a-occurs when the verb's stem is accentuated (e.g naištani $=/$ náistani/). He therefore regarded the forms with $-a$ - as the regular outcome of unaccentuated $*_{\text {-steni, }}$ *-ueni and *-tteni.
The etymological interpretation of -šteni is difficult. Since it is quite possible that the element -ten(i) was taken over from the mi-ending -tten(i) in an earlier period already, the most important element of this ending is $-s-$. Since the hiendings seem to be in one way or another connected with the PIE perfect-endings, we may have to compare this element $-s$ - with the Tocharian 2 pl.pret.-ending TochA $-s$, TochB $-s<$ PToch. *-sa that can only go back to PIE *-su (the Tocharian preterite class I-V reflects the PIE perfect endings).
$\check{s} u$ (clause conjunctive particle): $\check{s ̌ u=u}{ }^{\prime} a, \check{s} u=m u, \check{s}=a-a \check{s}, \check{s}=a-a n, \check{s}=e, \check{s}=u-u s \check{s}$.
PIE *so-

See at $t a$ for a discussion of the OH clause conjunctive particles $n u, t a$ and $\check{s} u$ and their grammatical function. Weitenberg (1992) has shown that the difference in use between $t a$ and $\check{s} u$ is determined by the tempus of the verb: $\check{s} u$ when the verb is preterite, $t a$ when the verb is present. From MH times onwards, $t a$ and $\check{s} u$ are replaced by $n u$. Of the three OH particles, $\check{s} u$ is the least attested. It should be noted that it is never attested loose: it is always accompanied by an enclitic element.
Watkins (1963) convincingly shows that Hitt. $n u, t a$ and $\check{s} u$ can functionally and formally be equated with the Old Irish preverbs no, to and se and that $t a \sim t o<$ *to and $\check{s} u \sim s e$ probably are related to the demonstrative pronoun *so-, *to- as attested in the other IE languages (Skt. sá, sáa, tád, Gr. ó, 市, тo, etc.). If this is correct, we would have expected to find in Hittite **ša instead of $\check{s} u$. Perhaps we must assume that $* * \check{s} a$ has been influenced by $n u$ and secondarily has taken over its $-u$ - (note that there are only two forms that specifically point to $\check{s} u$, namely

šu- 'to fill': see šuue/a-z
šū- 'full': see šūu- / šūuau-

šūeri- '?’: dat.-loc.sg.? šu-u-e-ri-i_ia (IBot 3.148 iii 21 (MH/NS)).
This word is hapax in the following context:
IBoT 3.148 iii
(20) nam-ma a-pé-e-da-ni=pát $\mathrm{GE}_{6}-t i$ VI $P A$ ZÌ.DA ZÍZ $A-N A$ DINGIR $^{\text {MEŠ }}$ hu-u- u-mạ-an-tạ-ạš
(21) šu-u-e-ri-ía $a^{\text {NINDA }_{z i-t i-t i ~} I-N A ~ E ́ ~ N I N D A . D U ̀ ? ' D U ̣ ̀ ~ s ̌ u-u n-n i-a n-z i ~}$
'Then, on that specific night, for all the gods they fill 6 parīsu wheat meal for? šuueri- and zititi-bread inside the bakery'.

The function and meaning of $\check{s u-u-e-r i-i} a$ is unclear.
šūhh-, šuhha- (c.) '(flat) roof': acc.sg. šu-uh-ḩa-an (KUB 53.3 v 8 (NS)), dat.loc.sg. šu-uh-hi (often), šu-u-uh-hi, all.sg. šu-uh-ha (OS), šu-u-uh-ḩa, abl. šu-u-uh-za (KUB 43.30 iii 18 (OS)), [š]u-u-uh-za (KBo 44.142 ii 4 (OS)), šu-uh-ḩa-az,
acc.pl. šu-uh-hu-uš (KUB 39.52+ iii 8, iii 13 (NS)), coll.pl.? [š]u-uh-ha (KUB 31.89 ii 7 (MH/NS)).

PIE *séuh $h_{2}-s$, *séu $_{2}-m$, ssuh $_{2}$-ós ?
See Boysan-Dietrich 1987: 85f. for the semantics of this word. Usually, this word is cited as šuhha-, but Rieken (1999a: 65f.) states that the OS attestations of abl. $\check{s} u-u-u h-z a$ indicate that we have to reckon with an original athematic root noun $\check{s u ̈ h h}$-. She assumes that only in younger times this root noun was thematicized to šuhha-. If we look at the attested forms closely, we see that an $a$-stem inflection cannot be proven however: all forms could in principle belong to a root noun $\check{s} \bar{u} h h$ - (see at the treatment of the ablative-ending $-(\bar{a}) z$ for the observation that the allomorph $-z$ is in younger times replaced by $-a z$, also in consonant-stems). Nevertheless, on the basis of e.g. huhha-, which shows a thematization from an original root noun $* h_{2} e u h_{2^{-}}$, it is in my view likely that the younger forms indeed belong to a thematic noun šuhha-.
Formally, the word can hardly reflect anything else than seuh $_{2}$-. In my view it
 ós, and that later on, on the basis of gen.sg. *suh ${ }_{2}$-ós a thematic noun ${ }^{*} s_{s} h_{2}-O->$ šuhha- was created. According to Rieken (o.c.: 66) we must assume an etymological connection with the verb šuhha- / šuhh- 'to scatter', under the assumption that "[d]ie semantischen Schwierigkeiten lassen sich durch den Hinweis auf die Konstruktionsweise der anatolischen Lehmflachdächer, die durch häufiges Aufschütten von neuem Lehm in Stand gehalten wurden, überwinden". See at šuhha- ${ }^{i}$ /šuhh- and išhuuai- ${ }^{i} /$ išhui- for further etymological treatment.
šuhha- ${ }^{i} /$ šuhh $-(I I a 1 \gamma)$ 'to scatter': 3sg.pres.act. šu-uh-ha-a-i (OH/MS) šu-uh-ḩa-i (OH/NS, MH/MS), šu-uh-ḩu-ųa-i (KBo 30.115 rev.? 5 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. šu-uh-h $h a-a n-z i(\mathrm{OS})$, 1sg.pret.act. šu-uh-ha-ah-ȟu-un (VBoT 58 ii 6 (OH/NS), 3sg.pret.act. šu-uh-hha-aš (ABoT 44 i 53 (OH/NS)), 3pl.pret.act. šu-uh-ha-er (OS); part. šu-uh-ha-an-t-; verb.noun gen.sg. šu-uh-ḩu-ua-aš (KUB 17.35 ii 2 (NS)), šu-uh-ha-ú-ua-aš (KUB 25.23 i 37 (NS)), šu-uh-hูa-u-u_a-aš (KUB 25.23 iv 50 (NS), VBoT 26, 8 (NS)).

IE cognates: Gr. v̌ $\omega$ 'to rain', TochAB su-/swās- 'to rain'.
PIE *suh ${ }_{2}$-enti ?
This verb denotes 'to scatter, to pour' and therewith is semantically almost identical to išhuuai- ${ }^{i}$ / išhui- 'to throw, to scatter, to pour'. In some cases these two verbs are used interchangeably in duplicates (cf. Puhvel HED 1/2: 408). Not
only semantically they are very similar, formally they look alike as well. E.g. Oettinger (1979a: 503) therefore treats them together: "išhuua- und šuhha'schütten'". This seems to be suported by a hybrid form like šu-uh-hu-ua-i (KBo 30.115 rev.? 5). Nevertheless, the exact formal relation between the two is difficult to judge. According to Jasanoff (1978: $90^{11}$ ), we have to start with a PIE root ${ }^{*} S_{2} e u$ - 'to pour', the zero-grade of which already in PIE occasionally metathesized to $*_{s u h_{2}}$-. This $*_{s u h_{2}}$ - is e.g. visible in Gr. Ü $\omega$ 'to rain' and TochAB su-/swās- 'to rain', whereas $*_{s h} h_{2} u$ - is visible in Hitt. išhuuai- / išhui-, which belongs to the dāi/tiiianzi-class and therefore must reflect $* s_{2} u$-oi- / *sh $h_{2} u$-i-. Note that the alleged reflex of the full grade stem *sh $2 e u-$, šišhau- 'sweat', hardly can be of IE origin.
These considerations give rise to several scenarios for the origin of šuhha- / $\check{s u h h}$-, which belongs to the $\operatorname{tarn}(a)$-class. On the one hand, we could assume that already in PIE a secondary root seuh $_{2}$ - existed, which would be inflected in preHittite as $*_{\text {Sóuh }}^{2}$-ei, *suh $_{2}$-énti. Although the plural form indeed would yield attested šuhhanzi, I would expect that ${ }^{*}$ sóuh $h_{2}$-ei would give Hitt. **šūh̄i. It is problematical, however, that I do not see how a paradigm *šūhi / šuhhanzi would be altered to šuhha- ${ }^{i}$ / šuhh - Another possibility is to assume that we have to begin with the root $*_{s h_{2}} e u$-, which would in pre-Hittite inflect $*_{s h}{ }_{2} o ́ u-e i / *{ }_{s h} h_{2} u$ énti. In the plural, we could imagine that *sh ${ }_{2}$ uénti metathesized to $* s u h_{2}$ énti $>$ Hitt. šuhhanzi. In the singular, *sh ${ }_{2}$ óuei should regularly have yielded **išh ${ }_{\text {unu }} i$. We know from other verbs in -au-, however, that such a form was not tolerated (compare $a u{ }_{-}{ }^{i} / u$ - that has 3sg.pres.act. aušzi instead of *h2óu-ei, and mau- ${ }^{i} / m u$ that has 3 sg.pres.act. maušzi instead of *móuh $h_{1}$ ei). We could imagine that on the basis of 3pl. šuhhanzi the singular secondarily was changed to šuhhai, as if inflecting according to the $\operatorname{tarn}(a)$-class.
Although in principle I would prefer the latter scenario, I must admit that it involves some drastic secondary developments. Moreover, if the noun šūh he, $\check{s u h h a-~ ' r o o f ' ~(q . v .) ~ i n d e e d ~ i s ~ e t y m o l o g i c a l l y ~ c o n n e c t e d ~ w i t h ~ s ̌ u h h a-~}{ }^{i} / \check{s} u h h$ - and išhuuai- ${ }^{i} /$ išhui-, it would show a Hittite reflex of the 'secondary' stem *seuh ${ }_{2}$, which then would better fit the former scenario.
šuhmili-, šuhpili- (adj.) 'firm(?)': nom.sg.c. šu-u-uh̄-mi-li-iš (KBo 19.132 rev.? 11 (MH/NS)), [̌̌]u-uh-mi-lị-iš (KBo 10.37 iii 1 ( $\mathrm{OH} / \mathrm{NS}$ )), [ $[\check{s}] u$-uh-mi-li-iš (KUB 9.28 iii 24 (MH/NS)), šu-uh-mi-li-iš (KUB 43.23 rev. 13, 17 (OS)), acc.sg.c.? šu-uh-mi-li-in (KBo 10.37 ii 33 ( $\mathrm{OH} / \mathrm{NS}$ )), šu-uh-pí-li-in (KUB 51.63 rev. 6 (NS)), dat.-loc.sg. šu-uh-mi-li (KBo 10.37 iii 7 (OH/NS), KUB 43.23 rev. 57 (OS)), [šu-
uh-m]i-li (KBo 13.121, 4 (OH/NS)), šu[-uh-m]i-li (KBo 13.156 obv. 8 (OH/NS)), broken šu-uh-p[í-li(-)...] (KUB 51.63 rev. 8 (NS)).

Usually, this adjective is cited as šuhmili- and translated 'well-fixed', a translation that goes back to Catsanicos 1986 ("bien fixé"). Let us first look at the contexts in which šuhmili- is used.
It occurs a few times only and in most cases, the word is used as an adjective describing (dankui-) tagānzepa- 'the (black) earth':

KBo 10.37 iii
(6) tak-na-aš $A$-NA DINGIR.MAH pár-ši-ía 1 NINDA.GUR 4 .RA [ ... ]
(7) šu-uh-mi-li $\mathrm{GE}_{6}-i \mathrm{KI}$-pí pár-ši-ía nu-x[ ...]
//
KBo 13.121
(3) [tak-na-]aš $A$-NA DINGIR.MAH゙ pár-š̌i-ia $1\left[\right.$ NINDA.GUR ${ }_{4}$.RA ... ]
(4) $[\check{s u} u-u h-m] i-l i \mathrm{GE}_{6}-i$ KI-pí pár-ši-i-i $a[$... ]
'He breaks [...] of the earth for the mother goddess. One thick-bread [...] he breaks for the šuhmili- black earth';

KUB 43.23 rev.
(13) šu-uh-mi-li-iš da-an-ku-iš da-ga-an-zi-p[a-aš ta-ak-na-a-aš-š=a ${ }^{\mathrm{d}}$ UTU-uš]
(14) ú-ua-at-te-en ${ }^{\mathrm{d}} \mathrm{IM}-n a-a \check{s}$ ịa-[a]n-ni $n u=z a$ e-ez[-za-at-te-en]
(15) e-ku-ut-te-en nu še-er kat-t $[a]$ ne-e-pí-iš-za ${ }^{\mathrm{d}} \mathrm{I}[\mathrm{M}-] a s ̌$ LUGAL-i $[a-a \check{s ̌-s ̌ u] ~}$
(16) hu-iš-ua-tar mi-ia-tar tar-[h]u-i-li ${ }^{\text {GIs }}$ tu-u-ri pí-iš-ke-e[d-du]
(17) kat-ta-ša-ra-a=ma ták-na-a-az šu-uh-mi-li-iš ta'-ga-an-zi-p[a]-aš
(18) ták-na-a-aš-š=a ${ }^{\text {d }}$ UTU-uš $A$-NA LUGAL $a-a \check{s ̌-s ̌ u ~ h l u-i s ̌-u a-t a r ~ t a r-h ु u-i-l i ~}$ (19) ${ }^{\text {GIš }}$ tu-u-ri pí-iš-ke-ed-du
'You, šuhmili- black earth and Sun-goddess of the earth, must come. You, Storm-god, must come. May above, from heaven downwards, the Storm-god give to the king [goods], life, growth (and) a victorious weapon. May down, from the earth upwards the šuhmili- earth and the Sun-goddess of the earth give to the king goods, life (and) a victorious weapon';

KUB 43.23 rev .
(56) 3 NINDA.GUR 4 . RA GIR 4 1 GAL.GEŠTIN
(57) 1 ŠAH.TUR $A$-NA KI šu-uh-mi-li
(58) ták-na-aš ${ }^{\mathrm{d}} \mathrm{UTU}-i$
'Three thick-breads from the oven, one 'head of the wine' (and) one little pig for the šuhmili- earth (and) the Sun-goddess of the earth'.

In one context, the word describes GI '(drinking) straw':
KUB 9.28 iii (with dupl. KBo 19.132 rev. ${ }^{?}$ 10f.)
(22) $2{ }^{\text {DUG }} K U-K U-U B$ ŠÀ.BA $I-N A 1{ }^{\text {DUG }} \mathrm{H} A B . H \mathrm{AB}$ KAŠ
(23) $a-k u-u a-a n-n a-a \check{~ p a ́ r-s ̌ u-i l ~ s ̌ u-u-u s ̌ ~}$
(24) 1 GI [(̌̌)]u-uh-mi-li-iš tar-na-an-za
'Two pitchers: in one pitcher of beer for drinking, a šuhmili- drinking straw full of paršuil is inserted'.

In one case, it is not fully clear what the word refers to:

KBo 10.37 ii
(31) hu-u-ưa-an-da-aš pé-eš-ketg-tén nu-u=̌̌-š[i h]a-aš-ta'-l[i-i] $] a-[t a r]$

(33) pé-eš-tén $n u-u=\check{s}$-ši šu-uh-mi-li-in ge-e-nu pé-eš-tén
'You must give [him ...] of the wind, give him courage, give him an upper arm (and/with) ability to shoot, give him a knee (and/with) šuhmili-'.
E.g. Rieken (1999a: 361) assumes that in this context šuhmilin belongs with gēnu and translates 'Gebt ihm ein festes Knie!'. Problematic, however, is the fact the gēnu is neuter, whereas šuh̆milin is commune acc.sg. Catsanicos (1986: 124) assumes that in this case the word is a contraction of *šuhmiliuan, which in his view is the nom.-acc.sg.n. of a derived stem šuhmiliiant-. In note 154 of page 147, he compares this with the form šu-up-pí-in from *šuppiįan, nom.-acc.sg.n. of šuppiiant-, of which he gives an example in KBo 12.89 ii 13. In this context, however, I have not been able to find any indication that šuppin refers to a neuter noun. The other examples that Catsanicos cites, appezzin beside appezziian and hantezzin beside hantezziian, are derived from stems that end in $-i$ - as well as in -iía- (appezzi(ia)- and hantezzi(ía)-). For šuhmili-, not a single indication for either a stem šuhbiliiia- nor a stem šuhmiliiant- are found, so the assumption that šuhbilin in this case is a nom.-acc.sg.n.-form from *šuhmilizan seems doubtful to me. If in this context šuhmilin does not belong with gēnu, it must be substantivized and mean 'something šuȟmili-'.
The other contexts of šuhbili- are broken:

KBo 13.156 obv.
(7) [

## -]e 1 NINDA.GUR 4 .RA gu[l-la-an-]te-en <br> NINDA.GUR ${ }_{4}$.RA gul-]la-an-ti-en $\check{s} u[-u h-m] i-l i$ <br> ]

All in all, we see that šuhmili- is used as en epithet of 'the (black) earth', describes a 'drinking straw' and is used as a courageous 'object' desired as a gift from the gods that goes together with 'knee', parallel to 'upper arm (and) ability to shoot'.

Catsanicos (1986) argues that the word denotes 'bien fixé' and connects it with Skt. sūmáya- 'well prepared', reconstructing $* h_{1} s u-h_{2} m(e) i-$. In my opinion, it seems as if Catsanicos especially prompted the translation 'bien fixé' on the basis of the supposed etymological connection. Although this meaning would fit for 'drinking straw' and 'knee', it is slightly odd for 'the (black) earth': the earth is not 'fixed together'. I would rather translate šuhmili- as 'firm', which would give 'the firm earth', 'a firm straw' and 'knee (and/with) firmness'.
One could ask oneself whether it is possible that a meaning 'firm' is derived from a meaning 'well-fixed' when it applies to objects that are not fixed at all (in this case the earth). This means that semantically, Catsanicos' etymology is rather weak. There are also problems from the formal side. First, this šuhmili- would be the only case where we find the proclitic $\check{s} u$ - 'well' in Hittite. Moreover, although I do think that word-initially *h2mi- would yield Hitt. hmi- (c.f. hamešha- < $* h_{2} \mathrm{meh}_{1}-s h_{2} \mathrm{o}$ ), the fate of word-internal $* h_{2} m$ - is less clear. On the basis of mahrai- < *meh ${ }_{2}$ roi-? and zahrai- < *tieh $h_{2}$ roi- one could argue that $* h_{2}$ was retained word-internally in front of a resonant, but no examples of $*-h_{2} m->-h m-$ are known.
The final lethal blow to Catsanicos' etymology, however, is the fact that a word šuhpili- is attested twice in the following context:

KUB 51.63 rev.

| (6) [ | ] šu-uh-pí-li-in $\mathrm{G}^{\text {E }} \mathrm{E}_{6}$ (?) |
| :---: | :---: |
| (7) [ | $e-] k u-z i 3$ NINDA.GUR $4 \cdot$ RA pá [r-ši-i_ia |
| (8) [ | ]LU' ${ }^{\text {MEŠ }}$ šu-uh-p[íli |

If in line 6 the traces of the broken sign are correctly interpreted as $\mathrm{GE}_{6}$, then it is very likely that šuhpilin must be regarded as identical to šuhmili- (cf. also the fact that this context looks very similar to KBo 10.37 iii 6-7 as given above). Since an alternation $p / m$ cannot be explained from an IE point of view, the word šuhmili-, šuhpili- must be of foreign (Hurrian?) origin.
šuhpili-: see šuhnili-, šuhpili-
${ }^{\text {(SÍG) }}$ šūil- (n.) 'thread’: nom.-acc.sg. šu-ú-il (KBo 15.10+ i 7 (OH/MS), KBo 32.15 iii 1 (MS), KBo 39.8 i 31, ii 5 (MH/MS), KUB 12.51+ i 8 (MH/NS), KUB 55.49 rev. 11 (NH), KUB 17.25 i 8 (fr.), 9 (NS), KUB 17.26 i 9 (fr.) (NS)), šu-ú-i-il (KUB 7.3, 7, 13 (OH/NS)), šu-ú-el (KBo 12.126+ iii 3 (MH/NS)), šu-ú-e-el (HT 1 iii 9 (OH/NS)), šu-i-el (KUB 41.1 iii 13 (MH/NS), KUB 58.109 (+) IBoT 2.126 iv 32 (MH/NS), šu-ú-i-el (KUB 45.24 i 10 (MH/NS)), šu-ú-i-li (KUB 60.36, 4 (NH)), instr. šu-ú-i-li-it (KBo 10.37 i 50 (OH/NS), KBo 11.5 vi 9 (NH), dat.loc.pl. šu-ú-i-la-aš (KUB 41.4 ii 21 (MH/NS)), šu-i-la-aš (KUB 51.83 ii 4 (MH/NS)).

IE cognates: Lat. sū̄, Skt. sútra- 'thread', Gr. ن́ $\mu \neq v$ 'thin skin, sinew'.
PIE *séuh ${ }_{1}$-el-
See Rieken 1999a: 478f. for a full treatment of this word. She argues that the suffix was -il- originally, and not eel- which is supported by the fact that all attestations of spellings with the sign EL are NS only. Nevertheless, on p. 475 she states that -il- probably arose from a PIE suffix -el- in unaccentuated position (through *CC-él, *CC-l-ós >> *CC-éll, *CC-el-ós > *CC-ēl, *CC-il-ás >>CC-il, $C C$-ilaš). The word clearly is derived from the PIE root *seuh ${ }_{1}$ 'to sew', which is further unattested in Hittite, however (note that it has recently become clear that šum(m)anza(n)- (q.v.) does not mean 'cord' and therefore cannot be regarded anymore to reflect *seuh $l_{1}$ ). The fact that this word is spelled with plene Ú, points to a phonological /súil-/, which points to a reconstruction *séuh $h_{1}$-el- (cf.
 (Lith. siúuti, Skt. sı̂vyati, Goth. siujan, OCS šijo 'to sew').
šukšuk(k)a/i- (c.) 'hide (of cow or horse)': nom.sg. šu-uk-šu-uk-ki-iš (KBo 32.15 iii 2 (MH/MS)), šu-uk-šu-uk-ki-i[ $\check{s}]$ (KUB 29.52(+) i 2 (MH/MS)), acc.sg. šu-uk$\check{s ̌ u-k a_{4}-a n ~(K U B ~ 7.53+~ i i i ~} 40$ (NS)), [šu-u]k-šu-uk-ka4-ạn (KUB 33.47+54 ii 15 ( $\mathrm{OH} / \mathrm{NS}$ )), [šu-uk-]šu-ug-ga-an (25/v, 3 (MS?)), š[u-uk-š]u-ga-an (KUB 17.10 iv 1 ( $\mathrm{OH} / \mathrm{MS}$ )).

See e.g. Neu 1996: 341f. for a treatment of this word. It denotes 'hairy skin' of horses and cows. We find $i$-stem as well as $a$-stem forms and spellings both with geminate and single $k$. Formally, it is likely that this word is a reduplication. No further etymology.
šullae- ${ }^{z i}$ 'to become arrogant': see šulle- ${ }^{z i}$
šulle- ${ }^{z i}$ (Ib2 > Ic1, Ic2) 'to become arrogant': 2sg.pres.act. šu-ul-le-ši (KUB 36.114 r.col. 6 (MS)), šu-ul-li-ída-ši (KBo 12.70 rev. 8 (NS), KBo 19.70 ii 11 (NH)), 3sg.pres.act. šu-ul-le-ez-zi (KUB 36.114 r.col. 14 (MS)), šu-ul-le-e-ez-zi (KUB 28.1 iv 36 (NS)), šu-ul-li-ịa-zi (KUB 14.3 iv 39 (NH)), šu-ul-la-iz-zi (KUB 13.32 rev. 7 (NS)), 1pl.pres.act. šu-ul-li-ịa-u-e-ni (KUB 21.37 obv. 24 (NH)), 3pl.pres.act. šu-ul-la-a-an-zi (KBo 43.77, 7 (MH/NS)), 2sg.pret.act. [šu]-ul-le-eet (KUB 14.17 iii 17 (NH)), 3sg.pret.act. šu-u-ul-le-e-et (KBo 32.14 ii 4 (MS)), šu-u-ul-le-et (KBo 32.14 ii 19, iii 16 (MS)), šu-ul-le-e-et (KUB 24.3 ii 28 (MH/NS), KBo 16.17 iii 28 (NH)), šu-ul-le-et (KUB 6.41 i 32 (NH)), šu-ul-li-ịaat (KBo 3.6 iii 33 (NH), KUB 1.9 iii 7 (fr.) (NH), KUB 26.58 rev. 5a, (NH)), šu-ul-la-a-it (KBo 5.13 i $4(\mathrm{NH})$, KUB 6.41 i $47(\mathrm{NH})$ ), 2pl.pret.act. šu-ul-le-et-te-en (KUB 4.1 ii 11 (MH/NS)), [šu-]ul-la-at-te[-en] (Bo 69/48, 2 (undat.)), 3pl.pret.act. šu-ul-le-er (KUB 4.1 i 17, ii 15 (NH)), šu-ul-li-i-e-er (KBo 5.8 iv 4, 9 (NH)); 3sg.pres.midd. šu-ul-li-íla-at-ta (KUB 19.67+ ii 32 (NH)); part. šu-ul-la$a n-t$ - (KUB 24.3 ii 34 (MH/NS), KUB 24.1+ iii 18 (NS), KUB 43.37 iii 3 (NS)).

Derivatives: šullēšš- ${ }^{-i}$ (Ib2) 'to become arrogant' (3sg.pres.act. šu-ul-le-e-eš-zi (KUB 9.15 ii 14 (NS)), šu-ul-li-iš-zi (KUB 9.15 ii 21 (NS))), šullatar / šullann(n.) 'swollen state > reckless act' (nom.-acc.sg. šu-ul-la-tar (KBo 6.26 i 29 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 6.13 i 9 (OH/NS)), dat.-loc.sg. šu-ul-la-an-ni (KBo 10.45 i 47 (MH/NS), KUB 4.4 obv. 6 (NH)), abl. šu-ul-la-an-na-az (KBo 6.3 i 4 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 6.10 ii 17), šu-ul-la-an-na-za (OH/NS)).

IE cognates: ON svella 'to swell', ModEng. swell, Lat. īnsolēscō 'to become arrogant'

$$
\text { PIE } *_{s u l H-e h_{1}}
$$

See Melchert (2004c) for the semantics of this verb. He convincingly argues that the verb denotes 'to become arrogant, to behave disrespectfully towards (someone)' (pace the usual translation 'to quarrel'). According to Melchert, this meaning derives from an original meaning '*to become swollen', which is still visible in

KUB 4.4 obv.
(2) dam-me-tar-ua-an-za LUGAL-uš
(3) UR.SAG-iš ki-im-ma-an-tan $n_{x}$
(4) ar-ma-ah-ha-an-ni
(5) ha-mi-eš-ha-an-tanx
(6) šu-ul-la-an-ni
(7) ḩa-mi-iš-h $a-a n-d a-a \check{s}=m a$
(8) a-le-el $a$-aš-ši-ía-an-ni
(9) ha-an-da-aš e-eš-ša-a[t-ti]
'You, the bountiful king, the hero, make the winter for impregnation, the spring for becoming swollen [due to the pregnancy], and the flower of spring for the sake of love'.

The exact formal interpretation of this verb is difficult. In NS texts, we find forms that show a stem šulliie/a- ${ }^{z i}$ and a stem šullae- ${ }^{z i}$. In MS texts, we find 2 sg.pres.act. $\check{s} u$-ul-LI-ši, 3sg.pret.act. $\check{s} u$ - $u$-ul-LI-e-IT and $\check{s} u$-u-ul-LI-IT. Because the sign LI can be read $l i$ as well as $l e$ and the sign IT can be read it as well as et, these latter forms can in principle be read /suLet/ or /suLiet/. The first form can only stand for/suLisi/ or /suLesi/, however, which means that the combination of these forms point to a stem/suLe-/.
Melchert (o.c.) connects šulle- ${ }^{z i}$ with Lat. ìnsolēscō 'to become arrogant' and argues that we are dealing with a stative in $*_{-e h_{1}}$ : ${ }^{*}$ sulH-eh $_{l^{-}}$(also visible in the enlarged šullēšš-zi). The root *sulH-belongs with PIE *suelH- 'to swell'. Note that he on the basis of part. sullant- statest that the verb must have shown an ablauting stem šulle-/šulla- (o.c.: 96), but this is incorrect: the part. šullant- is attested in NS texts only and therefore may well be a form derived from the NH stem šullae- ${ }^{z i}$, making it non-probative for establishing an ablaut for the original stem šulle-.

## šulliie ${ }^{-1} a^{-z^{i}}$ : see šulle- ${ }^{z i}$

šulupi- (c.) an oracle bird: nom.sg. šu-lu-pí-iš, šu-lu-pí-eš, acc.sg. šu-lu-pí-in.
The word denotes a bird mentioned in bird oracles. Its exact meaning cannot be determined, and therefore no etymology.
šum- (pers.pron. 2pl.) 'you (pl.)’: nom. šu-me-eš (OS), šu-me-e-eš (MH/MS), šu-um-me-eš (NH), šu-um-me-iš (NH), acc.-dat. šu-ma-a-aš (OS), šu-ma-aš
(MH/MS), šu-um-ma-aš, gen. šu-me-en-za-an (MH/MS), šu-me-in-za-an (MH/MS), šu-mi-in-za-an (MH/MS), šu-me-e-el (NH), šu-me-el (NH), abl. šu-me-e-da-az.
Anat. cognates: CLuw. u(n)za- 'you (pl.)' (acc. u-za-aš, case? u-un-za); HLuw. unz- 'you (pl.)' (nom. $u-z u ?$-sa (KARKAMIŠ A6 §22), $u-z u^{?}-z a$ (ASSUR letter $c$ $\S 4, ~ e ~ § 6, ~ § 16, \S 17$ ), abl.-instr.(?) $u-z a-r i+i$ (ASSUR letter $a \S 4$ ), $u-z a+r a i^{-i}$ (ASSUR letter $a \S 9$ )).

In OH and MH texts, the forms of this pronoun are all spelled with a single $-m$-. Spellings with geminate -mm- occur in NH texts only, cf. § 1.4.7.1.c. The oldest forms are nom. šumeš, acc.-dat. šumāš and gen. šumenzan. The gen. šumēl occurs in NH texts only and is clearly a secondary formation, having taken over the gen.ending - $\bar{l} l$ from the prononimal inflection of the singular.
See chapter 2.1 for a treatment of the etymology of the personal pronouns.
=šumma-: see =š̌ummi- / =šumma- / =šumme-

Úšumanzan- (n.) '(bul)rush': nom.sg. šu-ma-an-za-an (KBo 24.3 i 4 (MH/MS)), acc.sg. šu-ma-an-za-an (KBo 24.3 i 1 (MH/MS)), (KBo 20.73 i 3 (MH/MS), KUB 7.23, 9 (NS)), šu-ma-an-za-a[n] (KBo 24.3 i 4 (MH/MS)), [šum-m]a-ạn-za-na-an (KUB 39.8 iv 2 ( $\mathrm{OH} / \mathrm{NS}$ )), šum-ma-an[-za-na-an] (KUB 39.8 iv 6 $(\mathrm{OH} / \mathrm{NS})$ ), šu-ma-an-za-n[a-..] (HKM 16 rev. 23 (MH/MS)), gen.sg. šu-ma-a-an$z a ̣-[(n a-a \check{s})](K B o 20.26+\mathrm{i} 11$ (OS)), with dupl. šụ-mạ-ạ-an-za-na-aš (KBo 30.26 rev. 1 ( $\mathrm{OH} / \mathrm{MS}$ )), šum-ma-an-za-a-aš (KBo 10.45 ii 29 (MH/NS)), dat.-loc.sg. šu-ma-an-za-ni (KBo 20.8 iv 14 (OS)), abl. šu-ma-an-za-na-az (KBo $24.3+$ KBo 47.130 i 15, 22 (MH/MS)), nom.-acc.pl. šu-ma-an-za (KBo 3.8+ iii 6, 24 (OH/NS), KUB 59.43 i 9 (OH?/NS), KBo 1.45 rev! 2 (NS), KBo 11.11 i 9 (NS)), Úšum-ma-an-za (KBo 21.20 i 17 (NS)), šum-ma-an-za (KUB 12.58+ i 45 (NS), KBo 20.111, 10 (NS)), dat.-loc.pl. šu-ma-an-za-na-aš (KBo 11.11 i 2 (NS)); context broken šu-ma-an-za-an (KBo 24.2 obv. 6 (NS)), šu-ma-an-za (KUB 35.54 i 15 (MS)), šu-m[a-...] (KBo 24.2 obv. 5 (NS)).

PIE *sh $u$-ent-i-on?
Consensus had it that this word means 'cord, binding' and it therefore was generally connected with Gr. $\dot{v} \mu \eta \dot{v}$ 'sinew' from *suh ${ }_{1} m e \bar{n}$. Melchert (2003d), however, has shown that the Hittite word does not mean 'cord, binding', but rather '(bul)rush'. This means that the connection with Gr. $\dot{\cup} \mu \eta(v$ cannot be upheld. Melchert treats many attestations of this word. Although I agree with the
semantic side of his treatment, I do not share all his grammatical interpretations. Because these are important for the formal judgement of this word, I will treat the cases where I disagree with Melchert.

Melchert cites three forms as "AnimNSg" (o.c.: 132): šummanza (KUB 12.58+ i 21, KBo 1.45 rev! ${ }^{\prime}$ ) and šummanzāš (KBo 10.45 ii 29). These forms have to be interpreted otherwise. KUB 12.58+ i (21) nu šum-ma-an-za SÍG mi-i-ti-iš-š=a (22) [an-da ta-ru-up-pa-a]n-za is translated by Melchert (o.c.: 130) as 'A rush and red wool are braided together'. On the basis of the fact that [taruppa]nza is nom.sg.c., Melchert apparently concludes that šummanza is nom.sg.c. too. This is not necessary: because SÍG mītiš is a commune word, it is possible that [taruppa]nza agrees with this word only and not with šummanza. Moreover, we cannot tell whether šummanza is singular or plural here. I would therefore interpret šummanza as nom.-acc.pl.n. and translate the sentence as 'Rushes and red wool are braided together'. In the vocabulary KBo 1.45 rev!' 2, Hitt. šu-ma$a n-z a$ glosses Akk. aš-lum 'rush'. I do not understand why Melchert explicitly assumes that this form is nom.sg.c. In my view an interpretation as nom.acc.sg.pl. is just as likely. KBo 10.45 ii (29) I-NA SAG.DU $=\check{S} U ́=m a ~ s ̌ u-u m-m a-~$ an-za-a-aš pu-ru-ši-ía[-al-la-aš ki-i]t-ta-at is translated by Melchert (o.c.: 130) as 'but on her head was placed a bulrush as a fill[et]', taking šummanzāš as nom.sg.c. (although he admits that an interpretation as gen.sg. cannot be excluded). In my view, an interpretation as gen.sg./pl. is more likely: 'but on her head a headb[and] of bulrushes is laid'.

All in all, I arrive at a grammatical analysis of the forms as indicated in the overview above. This means that we are dealing with a neuter noun showing the following forms: nom.-acc.sg. šumanzan, šum(m)anzanan, gen.sg. šummanzā̄̌, dat.-loc.sg. šumanzani, abl. šumanzanaz, nom.-acc.pl. šum(m)anza, dat.-loc.pl. šumanzanaš. Although we come across a few different types of inflection, it is clear that the $n$-stem šumanzan- must have been original. On the basis of nom.acc.sg. šumanzan, which was ambiguous as to whether it belonged with an $n$-stem šumanzan- or with a thematic stem šumanza-, $a$-stem forms like gen.sg. šummanzāš and nom.-acc.pl. šumanza were secondarily created. On the other hand, on the basis of a reinterpretation of forms like šumanzani and šumanzanaz as belonging to a thematic stem šumanzana-, the secondary nom.-acc.sg. šumanzanan was created. It should be noted that the MS texts al show single $-m$-, whereas geminate -mm- occurs in NS texts only, which is due to the fortition of older intervocalic $/ \mathrm{m} /$ to $\mathrm{NH} / \mathrm{M} /$ as described in $\S$ 1.4.7.1.c. All in all, we have to conclude that this word originally was šumanzan-, a neuter $n$-stem.

Melchert (o.c.) argues that the element -anzan- (also visible in e.g. ištanzanand lahhanzan-) reflects the suffix complex *-ent-i-on-. Although I agree with him, it is unclear to me what the origin of the stem šum- would be. Formally, one could think of e.g. *sHu-ent- (perhaps *shlu-ent- 'swaying', cf. MDu. swaeien 'to sway', Russ. xvéjus'، 'to move' < *sueh ${ }_{l^{-}}$).
=šumme-: see =šummi- / =šumma- / =šumme-
šumeš- (n.) a kind of grain?: nom.-acc.sg. šu-me-eš (KUB 42.107 iii? 11 (NS)).
This word is hapax in the following context:

```
KUB 42.107 iii \(^{?}\)
(10) 6 PA ŠE ZI-KU-U'-KI ha-at-tar \(=k u\)
(11) \(z i-n a-a-i l=k u\) šu-me-eš \(=k u\)
```

'6 parīsu of zikûki-meal, either hattar, zināil or šumeš grain'.
The exact meaning of the different grain sorts cannot be determined, and therefore no etymology.
*šumeššar / šumešn- (n.) ‘big beans’(Sum. GÚ.GAL.GAL): gen.sg. šu-me-eš-na-aš (KBo 17.15 obv.? 14 (OS)), šu-me-eš-na-a[̌̌] (KBo 17.40 iv 8 (OH/MS?)), šu-me-eš-n[a-aš] (KBo 21.84 iv 6).

$$
\text { PIE *suH-u-é } h_{l} s h_{l} r \text { ? }
$$

The contexts KBo 17.15 obv.? (14) šu-me-eš-na-aš me-e-ma-a[l] GIš e-er-hu-it and KBo 17.40 iv (8) šu-me-eš-na-a[š me-e-ma-a]l GIŠMA.SÁ.AB-it are parallel to IBoT 3.1 (34) $\check{S} A$ GÚ.GAL.GAL me-ma-al TA ${ }^{\text {GIŠMA.SÁ.AB 'meal from broad }}$ beans by the basket', which means that šumešnaš must be equated with GÚ.GAL.GAL 'broad beans'. Formally, šumešnaš is clearly a genitive of a noun *šumeššar.
Regarding its etymology, I would like to propose the following. If we are allowed to assume that 'broad beans' were broad in the sense that they were wellfilled with peas, one could perhaps assume a connection with the adj. $\check{s} \bar{u} u-/$ šūuau- 'filled' (q.v.). If this connection is justified, we should reconstruct *suH-$u$-é $h_{l} s h_{1} r$. See at šūu- / šūưuu- for further etymology.
=šummi- / =šumma- / =šumme- (encl.poss.pron. 1pl.) 'our': acc.sg.c. ${ }^{\text {d Ši- }}$
 (OS)), ${ }^{\mathrm{d}} \mathrm{UTU}=$ šum-mi-in (KBo 40.60 iii 56 (fr.), 69, iv 11 (fr.), 17, 25 ( $\mathrm{OH} / \mathrm{MS}$ ), VSNF 12.30 iv 15 ( OH/NS)), ${ }^{\mathrm{d}} \mathrm{UTU}=$ šum-ma-an (KUB 43.53 obv. 17 (OH/NS), KUB 58.111 obv. 11 ( OH/NS)), nom.-acc.sg.n. ša-hé-eš-šar=šum-me-e[t] (KUB 36.110 rev. 8 (OS)), ha-at-ta-tar=šum-mi-it (KUB 24.3+ ii 18 (MH/NS)), gen.sg. ${ }^{\mathrm{d}} \check{S} i-u ́-n a-s ̌=(\check{s}) u m-m i-i \check{s}(\mathrm{KUB} 26.71,6(\mathrm{OH} / \mathrm{NS}))$, dat.-loc.sg. iš-tar-ni=šum-mi (OS), ${ }^{\mathrm{d}} \mathrm{UTU}=$ šum-mi (KBo 40.60 iii 52 (fr.), 66 ( $\mathrm{OH} / \mathrm{MS}$ )), kat-t $i=s ̌ u-m i$ (HKM 57 rev. 21 (MH/MS)), iš[-tar-ni]=šu-um-me (KUB $26.50+$ KBo 22.58 obv. 9 (NH)), acc.pl.c. $n i-e-k u-s ̌=(\check{s}) u m-m u-u s ̌$ (KBo 22.2 obv. 19 (OH/MS)).

PIE *-sum-ni/o/e- ??
This enclitic possessive pronoun functions on a par with =mi- / =ma- / =me'my', =tti- / =tta- / =tte- 'your (sg.)', = $\check{s} s{ }^{\prime} i-/=\check{s} \check{s} a-/=\check{s} s \check{s} e=$ 'his, her, its' and =šmi- / =šma- / =šme- 'your (pl.); their' (for which see their respective lemmas). It is rarely attested, however, and its paradigm therefore is incomplete. It is remarkable that in acc.sg.c. the oldest forms ( OS and $\mathrm{OH} / \mathrm{MS}$ ) seem to be =šummin, whereas =šumman is attested in NS texts only (compare the opposite situation in e.g. $=\operatorname{man}(\mathrm{OS})$ vs. $=\min (\mathrm{NS})$ ' my '). The one gen.sg.-form $=$ šummiš is found in a NS copy of the Anitta-text and is likely to be corrupt (cf. Neu 1974a: 124). Perhaps the form is influenced by the unattested nom.sg.c. *=šummiš. The oldest nom.-acc.sg.n.-form is =šummet, whereas =šummit is found in a NS text (cf. Melchert 1984a: 122-6 for the distribution between -et and -it in possessive enclitic pronouns). Although the variant =šumma- is not attested thus, it can be inferred from acc.pl.c. = šumтиц̌. The exact origin of the vowel alteration $-i-,-a-$, $-e-$, which can hardly reflect anything else than $*_{-i-}, *_{-O-}, *_{-}-$-, is still unclear. The -š- of =šummi/a/e- is consistently spelled single (in iš-tar-ni=šum-mi, kat$t i=s ̌ u-m i)$.
The other enclitic possessive pronouns are clearly etymologically related to their corresponding enclitic personal pronouns ( $=m u$ 'me', $=t t a /=t t u$ 'thee', $=\check{s} \check{s} e$ 'for him/her', =šmaš 'to you (pl.); to them'). In the case of = šummi/a/e- this would mean that we have to assume an etymological connection with =nnaš '(to) us' (q.v.). This is only possible if we assume that =šummi/a/e- reflects $*=$ sum$n i / a / e-$. The prehistory of the element -šum- is unclear, however.
(GIŠ) šummittant- (c.) 'axe': nom.sg. šum-mi-it-ta-an-za (KUB 32.123 ii 10), acc.sg. šu-um-mi-it-ta-an-ta-an (KUB 12.63 rev. 20), [š]u-um-mi-it-ta-an-da-an
(KBo 19.144 i 5), šum-mi-it-ta-an-ta-an (KUB 8.51 ii 4); broken šum-mi-it-ta-an$d a^{\prime}[-\ldots]($ KBo 39.125, 3).

The meaning of the word can be determined because šummitantan (KUB 8.51 ii 4) alternates with the akkadogram $H A-A S-I N-N U$ 'axe' (ibid. ii 6). Kimball (1999: 199) reconstructs this word as *smit-ent-, derived from a PIE root *smeias visible in Gr. $\sigma \mu i ̂ \lambda \eta$ 'cutting knife', Goth. aizasmipa and OE smib 'blacksmith', assuming that an epenthetic $-u$ - has emerged in the initial cluster $*_{s m}$-. Such an epenthetic vowel is not visible in e.g. šamenzi 'he passes by' /smént ${ }^{\mathrm{s}} \mathrm{i} /<{ }^{*}$ smén-ti or šamankuruant- 'bearded’ /smankuruant-/ < *smonk'ur-uent-. Moreover, Kimball seems to ignore the geminate -mm- (she cites the word as "šumittant-"). All in all, I reject Kimball's etymology. Unfortunately, I am not able to offer an alternative one.
šumreške/a- ${ }^{z}$ (Ic6) 'to become filled (because of a pregnancy)': sup. šum-re-eš-ke-ua-an (KUB 24.8 + KUB 36.60 iii 7, 17), šum-r[e-eš-ke-ua-an] (KBo 19.106, 7); broken šum-re-x[...] (KBo 47.150, 2).

PIE *suH-ur
This verb occurs a few times only, all in similar contexts:
KUB $24.8+$ KUB 36.60 iii
(7) $[(\mathrm{DA})] \mathrm{M}^{\mathrm{m}} A p-p u$ šum-re-eš-ke-ûa-an da-a-iš ITU.1.KAM ITU.2.K[(AM)]
(8) [IT]U.3.KAM ITU.4.KAM ITU.5.KAM ITU.6.KAM ITU.7.KAM ITU.8.KAM

ITU.9.KAM $p[a-i t]$
(9) $n u$ [(IT)]U.10.KAM $t i-\frac{1}{a} a-a t n u=z a$ DAM ${ }^{\mathrm{m}} A p-p u$ DUMU.NITA- $a n$ h ha-aš-ta
'The wife of Appu became pregnant. The first month, the second month, the third month, the fourth month, the fifth month, the sixth month, the seventh month, the eighth month (and) the ninth month went by. And the tenth month set in, and the wife of Appu bore a son'.

The expresion šumreškeưan dāiš clearly means 'she became pregnant'. This indicates that the verb šumreške/a- (or šumrae- as often cited) itself does not mean 'to become pregnant', however. The supine $+d \bar{a} i$-expression means 'to begin to', which means that šumreške/a- should have a more fientive meaning like 'to become thicker (because of the pregnancy)'. Etymologically, it is likely that šumreške/a- belongs with šūu- 'filled’. In that case, šumreške/a- could originally have meant 'to become filled (of a pregnancy)'. If this is correct, we
must assume that šumreške/a- is ultimately derived from a further unattested verbal noun *šumar < *s(e)uH-ür, probable through a *-ie/o-suffix (*šumriie/a-), whose imperfective is šumreške/a-.
šumитаhh- ${ }^{\text {i }}$ (IIb) 'to braid together(?)': 2sg.imp.act. šu-mu-ma-ah (KUB 29.1 ii 43).

This verb occurs only once, in the following context:
KUB 29.1 ii
(41) nu ki-nu-u-pí ú-da
(42) $k i-n u-p i=m a-a=\check{s}-s ̌ a-a n ~ a n-d a ~ S ̌ A$ UR.MAH $\check{S} i-e-s ̌ a-i$
(43) pár-ša-na-aš UZU ${ }^{\text {siti-ša-i }}$ šu-mu-ma-ah n=a-at har-ak
(44) $n=a$-at ta-ru-up $n=a$-at $1^{E N} i$-i-ia $n=a$-at LÚ-aš ŠÀ $=\check{s} i$

(46) ta-ru-up-ta-ru
'Bring the kinupi-box here. In the kinupi-box, šumumahh- the šešai of a lion (and) the šišai of a leopard. Hold them and unite them and make them one. Bring them to the heart of the man. May the soul and the heart of the king be united'.

The meaning of šumumahh- depends on the meaning of še/išai (body part of an animal). Apparently, šumumahh- indicates an action by which these body parts are united and made one. One could think of 'to braid together' if še/išai refers to tails or similar. No etymology.
šunna- ${ }^{i}$ /̌̌unn- (IIa1 $\gamma>$ Ic1) 'to fill': 1sg.pres.act. šu-un-na-ah-ḩi (KUB 33.70 iii 10,11 ( OH/NS), KBo 3.38 rev. $17(\mathrm{OH} / \mathrm{NS})$ ), 2sg.pres.act. šu-un-na-at-t $[i]$ (KUB 15.22, 14 (NS)), 3sg.pres.act. šu-un-na-i (OS, often), šu-un-na-a-i (less often), $\check{s}[u$-]un-ni-e-ez-zi (KBo $24.4+$ IBoT 4.14 rev. 12/17 (NS)), šu-un-ni-ez-zi (KBo 40.67 ii 6 , iv 4 (MH/NS)), šu-un-ni-ía-zi (KUB 6.45+ iv 9, 14, 19, 24 (NH) with dupl. KUB 6.46 i 41, 46, 50, 54, 58, $62(\mathrm{NH})$ ), 1pl.pres.act. šu-un-nu-me-ni (KBo 32.15 ii 16 (MH/MS)), 2pl.pres.act. šu-un-na-at-te-ni (KUB 13.4 iv 18 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. šu-un-na-an-zi (MH/MS, often), šu-un-ni-an-zi (IBoT 3.148 iii 21, 22 (MH/NS), KUB 55.58 obv. 30, 32 (MH/NS), KUB 9.32 i 40 (NS)), šu-un-niia an-an-zi (KBo 15.24 ii 44 (MH/NS), IBoT 4.30 obv. 4 (fr.) (NS), KUB 7.47 obv. 13 (fr.) (NS), KUB 20.35 iv 3 (fr.) (NH)), 1sg.pret.act. šu-un-na-ah-hu-un (KBo 10.2 i 21, ii $23(\mathrm{OH} / \mathrm{NS})$ ), šu-un-ni-ía-nu-un (KBo 10.2 i 37 ( $\mathrm{OH} / \mathrm{NS}$ )),

2sg.pret.act. $\check{s} u$-un-ni-eš-ta! (Oettinger 1979a: 158 ${ }^{50}$ ), 3sg.pret.act. šu-un-na-aš (OS), šu-un-ni-eš (HT $21+\mathrm{KUB}$ 8.80, 15 (NH)), šu-un-ni-iš-ta (KUB 1.1+ ii 79 (NH)), šu-un-ni-i̇a-at (KBo 19.111, 4 (MH/NS)), 3pl.pret.act. šunnir (HW), 2sg.imp.act. šu-un-ni, 3sg.imp.act. $\check{s ̌ u-u n-n i-e d-d u ~(K U B ~} 12.58$ iv 13 (NS)), 2pl.imp.act. šu-u-<un-»ni-iš-tén (KUB 13.3 ii 27 (OH/NS)), 3pl.imp.act. šu-un-na-an-du (KBo 39.15 iii 9 (MS?)); verb.noun šu-un-пи-тar (KBo 1.42 iii 51 (NS)), [šu-]un-nu-m[ar] (KUB 55.31 rev. 2 (MS)), gen.sg. šu-un-nu-ma-aš (KUB 59.29 iii 17 (NS)); inf.I šu-un-nu-ma-an-zi (KUB 21.17 iii 10 (NH), KBo 21.34+ IBoT 1.7 iv 37 (MH/NS)), impf. šu-un-ni-eš-ke/a- (OS), šu-un-ni-iš-ke/a-.

Derivatives: šunnummeššar (n.) 'filling(?)’ (nom.-acc.sg. [š]u-un-nu-um-me-eš-šar (KUB 13.4 i 7)).
Anat. cognates: Pal. šūna- 'to fill' (3sg.pret.act. šu-ú-na-at, 2sg.imp.act. šu-úna); CLuw. šunatruuant(i)- (adj.) 'rich in outpourings' (acc.sg.c. šu-na-at-ru-ua-an-ti-in).

$$
\text { PIE *su-nó- } h_{1 / 3}-e, s u-n-h_{1 / 3} \text {-énti }
$$

The oldest attested forms of this verb clearly point to the $\operatorname{tarn}(a)$-class inflection: šunnahhi, šunnatti, šunnai, šunnumeni, *šunništeni, šunnanzi. In texts from NH times, we occasionally find forms that belong to a mi-inflecting stem šunniie/a- ${ }^{z i}$. The $\operatorname{tarn}(a)$-class consists of $h i$-verbs ending in laryngeal, including nasal-infixed verbs of the type $C R-n o-H$-. In the case of šunna-/šunn- it is generally accepted that it must reflect a nasal-infixed stem of the root *seuH- that is visible in the adjective $\check{s ̌ u ̄ u-~ / ~ s ̌ u ̄ u a u-~ ' f u l l ' ~(s o ~ c a u s a t i v a l ~ m e a n i n g, ~ a s ~ w e ~ o f t e n ~ s e e ~ i n ~ n a s a l ~}$ infixed verbs: šūu- 'full' > šunna-/šunn- '*to make full $>$ to fill'). This means that we have to reconstruct *su-nó-H-ei, *su-n-H-énti. These forms would regularly yield Hitt. **šunai, šunnanzi, but the geminate of the plural was taken over into the singular, yielding attested šunnai (cf. zinnizzi, zinnanzi 'to finish' <<*zinizzi, zinnanzi < *ti-ne- $h_{1}-t i$, *ti-n- $h_{1}$-enti). The single $-n$ - is still visible in Pal. šūnaand CLuw. šunatruuant(i)- (-uant-derivative of an abstract noun *šunattar 'outpouring').
Of the root *seuH-, the rootfinal laryngeal cannot be $* h_{2}$ (which would have yielded $* * s ̌ u h u$ - as $u$-stem adjective), but a choice between $* h_{3}$ or $* h_{1}$ cannot be made on the basis of the Hittite material (note that hi-verbs always have o-grade and that therefore both $*_{s u-n o-h}$-ei and $*_{\text {su-no- }}^{3}$-ei would have yielded Hitt. šunnai). Melchert (1987b: 24-5) argues that on the basis of the Palaic 3sg.pret.act. $\check{s u} u$-ú-na-at, which in his view must reflect $* s u$-ne- $h_{3}-t$, we have to reconstruct $* h_{3}$. I do not understand on which grounds Melchert chooses to reconstruct e-grade here, whereas $o$-grade is equally possible (or even more likely, because of the
close similarity between the Hittite and Palaic formation), and therefore do not

šunnaziiant- (adj.) ‘brim-full': nom.pl.c. šu-un-na-zi-an-te-[eš] (KBo 11.1 rev. 19 (NH)).

This adjective is attested only once. It seems to be derived from šunna- ${ }^{i}$ / šunn'to fill' (q.v.), but its exact formation is unclear.
šūniiéla- ${ }^{-3 i}$ (Ic1) 'to dip': 1sg.pres.act. šu-ú-ni-e-mi (KBo 32.176 obv. 15), 3sg.pres.act. šu-ú-ni-e-ez-zi (KBo 15.36 ii 11 (fr.), 17), šu-ú-ni-ez-zi (KBo 3.38 obv. 29, KBo 15.36 ii 6), šu-ú-ni-ịa-zi (KUB 20.86 ii 4), 3pl.pres.act. šu-un-ni-ịa-an-zi (KUB 6.45 iv 29 (NH)), 3sg.pret.act. šu-ú-ni-at (KBo 32.14 iii 11, 12, 29 (2x)); part. šu-ú-ni-ĭa-an-t- (KBo 12.101, 13).

For semantics, compare the following contexts:
KBo 32.14 iii
(9) ${ }^{\text {NINDA }} k u$-gul-la-an UR. $\mathrm{GI}_{7}$-aš UDUN-ni-ina pé-ra-an ar-ha pát-te-nu-ut
(10) pa-ra-a=an=kán hu-et-ti-at UDUN-ni-ia-az n=a-an=kán Ì-i
(11) an-da šu-ú-ni-at ša-ak-ni-i=a-an=kán an-da
(12) šu-úu-ni-at $n=a-a s ̌=z a ~ e-s ̌ a-a t ~ n=a-a n ~ a-d a-a$-an-na da-iš
'A dog ran off with a kugulla-bread in front of the oven, he had pulled it out of the oven and dipped it in oil. In oil he dipped it, he sat down and began eating it'.

KBo 15.36 ii
(4) [nu nam-ma 1 NINDA.GU]R $\mathrm{R}_{4} \cdot \mathrm{RA} A-N A{ }^{\mathrm{d}} \mathrm{IM}{ }^{\mathrm{URU}}[K u-] l i-u ́-i s ̌-n a{ }^{\mathrm{d}} I S ̌ T A R$
(5) [ ${ }^{\mathrm{d}} \mathrm{LAMMA}=\underset{\sim}{a} a \grave{U} A$-NA $]$ DINGIR ${ }^{\text {MEš }}$ hu-u-ma-an-ta-aš pár-ši-i-ia $n=a-a s ̌-t a$
a-ua-an ar-ha
(6) $[t e-p u 3-S ̌ U]$ pár-ši-ía-az-zi n=a-aš-ta mar-hi an-da šu-ú-ni-ez-zi
(7) $[\check{s} e-r=a-a=\check{s}-\check{s} a-a] n \mathrm{SAR}^{\text {HI.A }} 3 A \check{S}-R A d a-a-i$
'Further he breaks one thick-bread for the Storm-god of Kuliuišna, for Ištar and the Patron deity as well as for all gods. He breaks (it) three times in small pieces and dips (them) into the marha-stew and places them on top of plants on three places'.

From these examples it is clear that šūniie/a- ${ }^{z i}$ denotes 'to dip'. Note that the hapax spelling šu-un-ni- is found in a NH text and therefore may not be probative:

KUB 6.45 iv

```
(28) EGIR-ŠU=ma 3 NINDA.GUR \({ }_{4}\).RA BABBAR ŠÀ.BA \(1 \mathrm{SA}_{5} A-N A{ }^{\mathrm{d}} \mathrm{U}\)
    \({ }^{\mathrm{URU}}\) Zi-ip-la-an-da
```


'He breaks three white thickbreads and one red one of it for the Storm-god of
Ziplanda, and they dip them into honey and fine oil'.

Melchert (1994a: 73) reconstructs šūniiela- as *súnh ${ }_{3}$-ie/o- (adapting his earlier view (1984a: $29^{61}$ ) that the attestations šu-ú-ni-ez-zi and šu-ú-ni-e-ez-zi can also be read /sunet ${ }^{\mathrm{s}} \mathrm{i}$ / (which is incorrect since we then would expect spellings with NE) and reflect *su-ne- $h_{1}-t i$ ), connecting it with šunna- ${ }^{i} /$ šunn- 'to fill'. I do not see a semantical connection between 'to dip' and 'to fill', however, and follow Oettinger (1979a: 159) who states that šūniie/a-"[f]ern bleibt" from šunna- / šunn-.
šunniịe/a- ${ }^{z i}$ : see šunna- ${ }^{i} /$ šunn-
šupp- ${ }^{\text {(t)a(ri) }}$ (IIIc/d) 'to sleep': 3sg.pres.midd. šu-up-pa-ri (KUB 37.190 rev.' 6! (undat.)), šu-up-ta'-ri (KBo 5.4 rev. 38 (NH)), [š]u-up-ta-ri (KUB 20.68 i 7 (OH/NS)), šu-up[-ta-ri] (IBoT 2.15 i 5 (OH/NS)), šu-up-ta-a-ri (KUB 4.47 obv. 3 ( $\mathrm{OH} / \mathrm{NS}$ )), šu-up-pa-at-ta (KUB 43.60 obv. 1 ( $\mathrm{OH} / \mathrm{NS}$ )), šu-up-pa-at«<-at»-ta (KUB 43.60 obv. $2(\mathrm{OH} / \mathrm{NS})$ ); 3sg.pres.act. [šu-u]p-zi (KUB 4.47 obv. 5 ( $\mathrm{OH} / \mathrm{NS}$ )), šụup-ú-ez-zi (KUB 12.63 rev. $4(\mathrm{OH} / \mathrm{NS})$ ), 2pl.imp.act. šu-up-tén (KUB 39.31, 3 ( $\mathrm{OH} / \mathrm{NS}$ )); part. šu-up-pa-an-da-aš (KBo 43.27, 3 (NS)); inf.I šu-pu-an-zi (KUB 18.10 iv 33 (NS)); verb.noun šu-up-pu-u-ua-ar (KBo 13.2 obv. 14 (NS)).
Derivatives: see šuppariie/a- ${ }^{z i}$ and šupparuant-.
IE cognates: Skt. svap- 'to sleep', Av. $x^{v} a f$ - 'to sleep', Lat. sōpīre 'to fall asleep', OE swefan 'to sleep'.

PIE *sup-ó, *sup-tó
This verb shows active as well as middle forms with no difference in meaning (note the switch between šuptāri (KUB 4.47 obv. 3) and [̌̌u]pzi (ibid. 5)). The middle inflection seems to be more original because it is attested more often (note that this assumption cannot be supported by chronological evidence: all attestations are from NS texts).

The etymological interpretation is clear: the verb reflects PIE *suep- 'to sleep'. We find forms with the ending *-o (šuppari), with *-to (šuptari) and a conflation of the two (šuppatta < virtual *sup-o-to). The zero-grade stem of the middle was taken over into the active, yielding the forms $[\check{s} u] p z i$ and šupten.
šuppa-: see šuppi- / šuppai-
šupp(a)l(a)- (n.) 'cattle’: nom.-acc.sg. šu-up-pa-al (KUB 36.55 ii 30 (MH/MS?)), [ $\check{s}] u$-up-pa-la-an (KUB 8.1 iii 13 ( $\mathrm{OH} / \mathrm{NS}$ )), nom.sg.c. $\check{s} u$-up-pa-la-a $=m i-i s ̌$ (KBo 3.60 ii 1 ( $\mathrm{OH} / \mathrm{NS}$ )), dat.-loc.sg. šu-up-li-i=š-ši (KBo 6.34 iv 15 (MH/NS)), erg.sg. šu-up-pa-la-an-za (KUB 36.32, 5, 8 (MS?)), nom.-acc.pl. šu-up-pa-la-$a=\check{s}$-še-et (KBo 6.19 i 22 ( $\mathrm{OH} / \mathrm{NS}$ )), gen.pl. šu-up-pa-la-an (KUB 31.127 i 43 ( $\mathrm{OH} / \mathrm{NS}$ )).
Derivatives: šuppalēššar / šuppalēšn- (n.) ‘?’ (dat.-loc.sg. šu-up-pa-le-e$e s ̌[-n(i)]$ (KUB 31.143a + VBoT 124 iii 6 (OS) with restoration from KUB 60.20 rev.? 6)).

IE cognates: ?Lat. suppus 'walking inverted, with the head downwards'.
PIE *sup-lo-?
Despite the one commune attestation nom.sg.c. šuppalaš (found in a NS text), the word originally was neuter (nom.-acc.sg.n. šuppal (MH/MS), erg.sg. šuppalanza (MS?)). The nom.pl.c. šuppalēš as cited in HW (Erg.1: 19) is now to be read as šuppalēš $[n(i)]$, a dat.-loc.sg. of a further unattested noun šuppalēššar.

According to Rieken (1999a: $432^{2135}$ ), all attestations of this word are to be interpreted as /supl-/ as can be seen by the one attestation dat.-loc.sg. šupli. She follows the etymology of Watkins (1973b), who connects šupp(a)l(a)- with Lat. suppus 'walking inverted, with the head downwards' and reconstructs *sup-lo-. In my view, this etymology, though formally possible, is not self-evident semantically.
šuppariie/a- ${ }^{z i}$ (Ic1) 'to sleep': 1sg.pret.act. šu-up-pa-ri-ía-nu-un (KUB 52.91 iii 1); 1pl.pret.midd. [šu-]up-pa-ri-ia-u-ua-aš-ta-ti (KUB 8.48 i 1); part. šu-up-pa-ri$a n-z a$ (KBo 19.109, 9, KBo 19.111, 7), šu-up-pa-ri-ía-an-za (KUB 36.89 rev. 57).

Derivatives: see also šupp- ${ }^{(t) a r i}$ and šupparuant-.
IE cognates: Lat. sopor 'deep sleep', Gr. ütap 'truth, reality < *realistic dream', Skt. svápna- 'sleep', ON svefn 'sleep', TochA ṣpäm 'sleep', TochB ṣpane 'sleep',

Arm. k'own 'sleep', Lat. somnus 'sleep', Lith. sãpnas 'dream', Latv. sapnis ‘dream', Gr. v́ $\pi v o c ~ ‘ s l e e p ’, ~ O C S ~ s ъ n ъ ~ ‘ s l e e p ’ . ~ . ~$

PIE *sup-r-ie/o-
This verb, which is attested a few times only, is clearly derived from a stem *šuppar- which is also found in the adjective šupparuant- 'sleepy(?)' (q.v.). See Rieken 1999a: $305^{1468}$ for its connection with Lat. sopor 'deep sleep' and Gr. v̂ $\pi \alpha \rho$ 'truth, reality < *realistic dream' and the -no-stems that can be found in e.g. Skt. svápna- 'sleep', Lith. sãpnas 'dream' etc. These forms point to an original heteroclitic inflection *suóp-r, *sup-n-ós. In Hittite, just as in Greek, the zerograde was generalized, yielding *sup-r, which was used as the basis for šuppariie/a-. See at šupp- ${ }^{(t) a r i}$ 'to sleep' for the basic stem *sup-.
šupparuant- (adj.) 'sleepy(?)': nom.sg.c. šu-up-pár-ua-an-za (KBo 40.219 rev.? 7, KUB 60.134 obv. 1), šu-up-pár-uূa-an-te-eš (KBo 24.56a ii? 6); broken šu-up-pár-ua-a[n-...] (HKM 91 obv. 4).
Derivatives: see also šupp- ${ }^{(t) a r i}$ and šuppariie/a- ${ }^{z i}$.
A meaning 'sleepy' is proposed by Alp 1991: 344. The stem šuppar- is also found in šuppariiela- ${ }^{z i}$ 'to sleep'. See there for further etymology.
šuppaunašhanalli-: see at šuppiunašharr ${ }^{\text {SAR }}$
šuppi- / šuppaí- (adj.) 'purified, sacred': nom.sg.c. šu-up-pí-iš (OS), šu-up-pí-eš (OS), acc.sg.c. šu-up-pí-in, nom.-acc.sg.n. šu-up-pí (OS), dat.-loc.sg. šu-up-pa-i (OS), šu-up-pa-ía, šu-up-pí, šu-up-pa, abl. šu-up-pa-az, šu-up-pa-za, šu-up-pa-ịa$a z, ~ \grave{s} u-u p-p a-i \quad a-z a$, instr. šu-up-pí-it, nom.pl.c. $\check{s} u-u p-p a-e-e s ̌, ~ \check{s u} u-u p-p i ́-i s ̌$, acc.pl.c. šu-up-pa-uš, nom.-acc.pl. šu-up-pa (OS), šu-up-pí, dat.-loc.pl. šu-up-pa$a \check{s}$ (OS), šu-up-pa-ía-aš, šu-up-pí-ia-aš.
Derivatives: ${ }^{\text {UZU}}$ šuppa (n.pl.) '(sacrilized) meat' (nom.-acc.pl. šu-up-pa (OS)), šuppiiahh ${ }^{i}$ (IIb) 'to purify, to sacrilize' (1sg.pres.act. šu-up-pi-ia-ah-mi (KUB $14.15+$ KBo 16.104 i $17(\mathrm{NH})$ ), 3sg.pres.act. šu-up-pí-ah-hi (OS), šu-up-pí-ía-ah-hi (OS), 3pl.pres.act. šu-up-pí-ia-ah-ha-an-zi, 1sg.pret.act. šu-up-pí-ia-ah-huun (KUB 19.37 ii 17 (NH), KUB 7.60 iii 17 (NS)), šu-up-pí-ía-ah-hu-u-un (KBo $12.85+$ i 25 (MH/NS)); 3sg.pret.midd. šu-up-pí-a-ah-ha-ti (OS); part. šu-up-pí-ía-ah-ha-an-t-; verb.noun šu-up-pí-ia-ah-hu-u-ua-ar; impf. šu-up-pí-(ia-)ah-hi-iš$k e / a-, \quad \check{s} u$-up-pi-ah-hi-eš-ke/a-), šuppiēšš-z (Ib2) 'to become purified' (3sg.pres.act. šu-up-pí-eš-zi (KUB 29.4 iv 40)), šuppiēššar, šuppiiiaššar (n.)
'purity’ (dat.-loc.sg. šu-up-pí-eš-ni, šu-up-pí-ia-aš'-ni (KUB 36.83 i 5), nom.acc.pl. [ś] u-up-pí-eš-šar-ri $i^{\text {HIA }}$ (KUB 18.24, 9), [šu-up-p]í-eš-šar-ril ${ }^{\text {HI.A }}$ (KUB $18.24,5)$ ), ${ }^{\text {(Dumu.munus) }}$ šuppi(e)ššara- (c.) a priestess, 'purified woman' (nom.sg. šu-up-pí-eš-šar-aš (KUB 9.27 + KUB 7.8 i 14, KBo 22.110, 3), šu-up-pí-iš-ša-raaš (KUB 33.62 iii 16 (fr.), 18), šu-up-pí-šar-aš (KUB $7.5+$ KUB 9.27 i 33), acc.sg. šu-up-pí-eš-ša-ra-an, dat.-loc.sg. šu-up-pí-iš-ša-ri, nom.pl. [šu-up-]pí-iš-ša-ra-aš (KUB 33.32 iii 8 ), šu-up-pí-iš-ri-e-eš (KUB 33.62 iii 19)), šuppiššarant(adj.) 'being purified’ (nom.-acc.pl.n. šu-up-pí-iš-ša-ra-an-ta (KBo 15.34 ii 31)), šuppiiiant- (adj.) 'purified, sacred' (acc.sg. šu-up-pi-ia-an-ta-an (KUB 27.68 i 14), nom.-acc.sg.n. šu-up-pí-ia-an (KUB 32.123 iii 38)), šuppiiatar / šuppiiann(n.) 'purity' (dat.-loc.sg. šu-up-pí-ía-an-ni (KUB 8.12, 8, 10, KUB 8.14 i 13)).

Although this word is abundantly attested from OS texts onwards and has many derivatives, it does not have known cognates within the Anatolian language branch, nor in the other IE languages. In the OAssyrian texts from Kültepe šuppiis often used as the first element in personal names, although here we usually find šuppiía-: ${ }^{\mathrm{m}}$ Šu-pí-ah-šu $=$ šuppi- + ḩaššu-; ${ }^{\mathrm{f}} \check{S ̌} u-p i ́-a-a h-s ̌ u-s ̌ a r ~=~ s ̌ u p p i-~+~$ haššuššara-; ${ }^{\mathrm{f}} \check{S}$ и-pì-a-ni-kà = šuppi- + neka-; etc.). In Hittite texts we only find ${ }^{\mathrm{m}}$ Šuppiluliuma- (= šuppi- + lūli- + -umen- /-umn-) and ${ }^{\mathrm{m}}{ }^{\mathrm{S}}$ йuppiuman $/{ }^{\mathrm{m}}$ Šuppimna(= šuppi- + -umen- / -umn-). Note that the one attestation ${ }^{\text {m }}$ Šu-u-up-pí-lu-li-u-ma (KUB 19.10 iv 2) clearly points to a phonological interpretation /sopi-/. Mechanically, šuppi- can hardly reflect anything else than $*_{\text {sup- }}(e) i-$, but this reconstruction cannot be supported by any other evidence.
šupp(iie/a) zin $^{i}$ : see šupp- ${ }^{(t) a r i}$
šuppištuuara- (adj.) 'ornamented(?)': nom.sg.c. šu-up-pí-iš-tu-u_a-ar-aš (OS), acc.sg.c. [šu-up-pí-i] š-tu-ua-ra-an (OS), instr. šu-up-pí-iš-du-ua-ri-it, nom.pl.c. $\check{s ̌ u-u p-p i ́-i s ̌-t u-u a-a-r e-e s ̌ ~(O S)), ~ a c c . p l . ~ s ̌ u-u p-p i ́-i s ̌-t u-u ̨ a-r u-u s ̌ ~(K B o ~} 2.12$ v 12 ( $\mathrm{OH} / \mathrm{NS}$ )).
Derivatives: šuppišduuari- (c.) 'ornamentation(?)' (nom.sg. [š]u-up-pí-iš-du-una-ri-iš (KBo 35.246 obv. 13 (MH/MS)), instr. šu-up-pí-iš-du-una-ri-it (KBo 32.14 ii 43 (MH/MS)), nom.pl. šu-up-pí-iš-du-úa-ri-i-e-eš (KBo 32.14 ii 59 (MH/MS), acc.pl. šu-up-pí-iš-du-ua-ri-uš (KBo 32.14 ii 56 (MH/MS))).

We have to distinguish two stems: an $a$-stem šuppištuuara- that is adjectival and an $i$-stem šuppišduuari- that is nominal. It is difficult to determine what the words mean exactly.

As an adjective, it is used of cups: e.g.

## StBoT 12 iii

(42) LUGAL $\grave{U}$ MUNUS.LUGAL $a-s ̌ a-a n-d a-a[\check{s}] a-r u-u a-a n-z i$ GAL ${ }^{\mathrm{d}}$ IŠKUR šu-up-pí-iš-du-una-ri-it $a-k u-a n-z i$
'The king and queen bow while sitting and drink from the $\check{s}$. cup of the Stormgod';
and of sheep:

KBo 2.12 v
(9) 1 UDU šu-up-pí-iš-tu-ua-ra-an
(10) na-at-ta ar-kán-ta-an
(11) ${ }^{\text {MUNUS }}$ iš-pu-un-na-la-aš da-a-i
(12) $10 \mathrm{UDU}^{\mathrm{HI} . \mathrm{A}} \check{s} u$-up-pí-iš-tu-ua-ru-uš
(13) na-at-ta ar-kán-te-eš
(14) LÚ.MEŠ URU Zi-pa-la-an-da da-an-zi
'The išpunalla-woman takes one $\check{s}$. sheep that has not been mounted. The men of Zippalanda take $10 \check{s}$. sheep that have no been mounted';

KBo 17.43 i
(6) 1 UDU šu-up-pí-iš-tu-ua-ar-aš I-NA ${ }^{\text {DUG }}$ ÚTUL mar-ri-et-t $[a]$
'One $\check{s}$. sheep cooks in a pot').
As a noun, it occurs in the Hittite version of the Hurrian 'Song of Release' (see StBoT 32):

KBo 32.14 ii
(42) te-eš-šum-mi-in ${ }^{\text {LÚ }}$ SIMUG ua-al-li-i_ia-an-ni la-a-hुu-uš
(43) la-a-hu-š=a-an ti-iš-ša-a-it n=a-an šu-up-pí-iš-du-úa-ri-it
(44) da-iš n=a-an gul-aš-ta nu-u=š-ši-e=s-ta ma-iš-ti an-da
(45) la-a-lu-uk-ki-iš-nu-ut
'A smith poured a cup for fame. He poured it and made it right. He provides it with $\check{s}$., ciseled it and made it (the $\check{s} . ?$ ) beam in glow';
ibid.
(54) nu te-eš-šum-mi-i_ia ${ }^{\text {LÚ }}$ SIMUG
(55) hu-u-ur-ta-a-in te-et ua-al-ah-du=i=a-an
(56) ${ }^{\mathrm{d}} \mathrm{IM}-a s ̌ ~ t e-e s ̌-s ̌ u m-m i-i n ~ n u-u=s ̌-s ̌ i ~ s ̌ u-u p-p i ́-i s ̌-d u-u a-r i-u s ̌ ~$
(57) ar-ha ša-ak-ku-ri-e-ed<-du te-eš-šum-mi-iš=kán
(58) an-da a-mi-ia-ri ma-uš-du
(59) šu-up-pí-iš-du-ua-ri-i-e-eš=ma=kán an-da
(60) ÍD-i mu-ua-a-an-ta-ru
'And the smith spoke a curse against the cup: 'May the Storm-god strike him, the cup! May he knock off its $\check{s}$-s! May the cup fall in the ditch! May its $\check{s}$.-s fall in the river!'".

A translation 'ornamented' and 'ornamentation' (thus e.g. CHD Š: 79) would certainly fit the contexts that involve cups. In the case of the sheep, such a translation may be less likely, but certainly not impossible.

It is unclear whether šuppištuuara- has anything to do with šuppi- 'purified' (q.v.). Such a connection is the reason for e.g. Neu (1996 $=\operatorname{StBoT} 32: 146$ ) to translate "glänzende Applikation". Further unknown.
šuppiúašhar ${ }^{\text {SAR }}$ (n.) ‘onion’ (Sum. SUM.SIKIL ${ }^{\text {SAR }}($ ? )): nom.-acc.sg. šu-up-pí-ua-aš-har (KUB 29.7+ rev. 28 (MH/MS)), š[u-up-pí-ua-aš-h]ar (KUB 29.7+ rev. 27 (MH/MS)), šu-u[p-pí-u]a-aš-har (KUB 29.7+ rev. 30 (MH/MS)), gen.sg. šu-up-pí[-...]-aš (KUB 29.7+ rev. 30).

Derivatives: šuppi/aûašhanalli- 'having onions(?)' (dat.-loc.pl. šu[-up-p(i-ua-aš-ha-na-al-li-i_i)a-]aš (KBo 17.11(+) i 11 (OS) // KBo 17.74 i 10 (OH/MS)), šu-up-pí-ua-aš-ḩa-n[a-al-li-į̣a-aš] (KUB 34.120, 5 (OH/NS)), šu-up-pa(-)ua-aš-ḩa$n a-a l-l[i-\ldots]$ (KUB 11.8+9 iii $20(\mathrm{NH}))$ ).

See Rieken (1999a: 312f.) for an extensive treatment of this word. It is likely that this word is to be analysed as a compound of šuppi- 'purified' and uašhar'onion(?)'. The derivative šuppi/aưašhanalli- shows that uašḩar- originally must have been an $r / n$-stem. See at both šuppi- and uašhar for further etymological treatments.
šupl(a)-: see šupp(a)l(a)-
 KUB 5.10 i 10), šu-ú-ri-ta (KBo 5.1 iv 7).

The word šurita, which must be plural as can be seen in KUB 5.10 i (10) šu-ri$t a=u a$ ú-e-ez-za-pa-an-ta 'the šurita have grown weary', denotes objects that are made of wool:

KBo 5.1 iii
(54) $m a-a h-h a-a n=m a$ TÚG-an ša-ra-a-u-an-zi
(55) zi-in-na-an-zi nu SÍG SA 5 an-da
iv
(1) ta-ru-up-pa-an-zi $n=a-a t=\check{s} a-a n A-N A$ TÚG še-er
(2) ti-an-zi šu-ri-ta=ia i-ia-an-zi nu=za ${ }^{\text {LÚ }}$ pa-ti-li-iš
(3) ua-a-tar Ì.DUG.GA da-a-i $n=a-a t=k a ́ n ~ p a-r a-a ~ p e ́-e-d a-a-i$
(4) $n u$ SILA $_{4} u$ ú-e-te-ni'-it kat-ta $a$-an-ša-an-zi KAxU-an
(5) GÍR = $\check{S} U$ ar-ha a-ar-ri nam- $m=a$ - $a n$ Ì.DUG.GA-it

(7) h ha-ma-an-ki ${ }^{\text {SÍG }}$ šu-ú-ri-t $a=m a-a=\check{s}-s ̌ i-i=\check{s}-s ̌ a-a n$
(8) A-NA SAG.DU=ŠU an-da ḩu-u-la-li-ịa-an-zi
'When they finish embroidering the cloth, they wrap up the red wool and place it on top of the cloth and they make šurita. The patili- takes water and fine oil and brings it forth. They wipe the lamb with water and wash its mouth and feet. Then they anoint him with the fine oil and tie the red wool to his feet. The šurita they bind ${ }^{?}$ to its head'.

An exact meaning of this word cannot be established. Formally, the stem could be šurita- or šurit-.
Friedrich (HW: 200) suggests that šurita is the Hurrian plural to šuri-, which he translates as "Geflecht (? ?)". As the latter word denotes a part of the oracle liver, this connection is not very likely. No further etymology.
šurka/i- (c.) 'root': acc.sg. šu-ur-ki-in (KBo 8.130 ii 6), šur-k[i-in] (HT 38 obv. 8), gen.sg. šur-ki-ia-aš (KUB 33.117 i 13), nom.pl. šu-ur-ki-iš ${ }^{H}$ [1.A? ${ }^{[1]}$ (KBo 17.22 iii 10 (OS)), acc.pl. šur-ku-uš (KUB 29.1 iv 16), [šu-u]r-ku-uš (KUB 60.113, 5), šu-ur'-ku[-uš] (KUB 60.113, 6), šu-u-ur-ku-uš (KUB 29.1 iv 14).

Within the paradigm of this word, of which the meaning 'root' is well established, we find forms that belong to an $i$-stem (acc.sg. šurkin, gen.sg. šurkiǐaš) and forms that belong to an $a$-stem (acc.pl. šurkuš). The nom.pl. šurkiš (if correctly read, see below) is indecisive. According to Melchert (1994a: 132), Hitt. šurka/i- is connected with "Lat. surcus", but I have not been able to find
such a word. To my knowledge, in Latin only a word surculus 'twig, sprout' exists, which the Oxford Latin Dictionary derives from surus 'post, stake'. If this latter derivation is correct (and I see no reason why it should not), then a connection with Hitt. šurka/i- becomes impossible. Eichner (1973: 74) suggests a connection with ON svíri 'neck', OE swīera 'neck' < *suérqio-n-, stating that "die Bedeutungsentwicklung läuft über 'Pfahl'", but semantically this seems difficult to me. In my opinion, the alteration between $i$-stem and $a$-stem forms, šurki- / šurka-, could point to a foreign origin of the word.
The reading of the oldest form of this word, in KBo 17.22 iii 10 (OS), is uncertain. Neu (1980b $=\operatorname{StBoT} 25: 208)$ reads $\check{s} u-u r-k i-u s^{\text {M }}\left[{ }^{[E S}\right]$, whereas CHD (L-N: 16) gives $\check{s} u-u r-k i-i \check{s}-s ̌[e-e \check{s}]$. In my view, however, the whole context is to be read as:

KUB 28.8 (+) 291/s (with additions from KBo 17.22 iii 10f.)
(9) la-ba-ar-na-a[(̌̌šu-ur-ki-iš $\left.\left.{ }^{-}\right)^{\mathrm{I} . \mathrm{A}}\right] a-r u-n a-a s ̌ ~ t e-e-g a-a(n)=\check{s}$-še-et
(10) ú-e-mi-ia-a[n-zi la-ba-ar-na-aš (la-ah-hu-ur-n)]u-zi-iala-an-te-š=a
(11) ne-pí-iš[=̌̌e-et $\mathrm{x}-\mathrm{x}-\mathrm{x}$ ú-e-mi-iala]n-zi
'The roots of the labarna will fin[d] his ground on the seas, the leafs [of the labarna will fi]nd [his] heaven [on the ...?]'.

We see that because of the parallellism with lahhurnuzianteš the word 'roots' should be nom.pl. as well (which means that a reading acc.pl. šurkiuš ${ }^{\check{\mathrm{M}}\left[{ }^{\mathrm{ES}}\right]}$ becomes impossible), and cannot have an enclitic possessive pronoun (so $\check{s} u r k i \check{s}=\check{S}[e \check{s}]$ is not likely either). I would therefore suggest to read šurkiš ${ }^{[ }\left[{ }^{\text {L.A? }}\right]$.
šutāie/a- ${ }^{z i}$ (Ic3 > Ic2) '?': 3sg.pres.act. šu-ta-a-i-ez-zi (KBo 5.2 i 61).
This word is hapax and occurs in a broken context:
KBo 5.2 i
$2=\check{S} U \prime] 7{ }^{\mathrm{NA}_{4} p a-a s ̌-s ̌ i-l a-a n ~ I ́ D-a z ~ s ̌ a-r a-a ~ d a-a-i}$
$A-N A 1 \mathrm{DUJG} A 7{ }^{\mathrm{NA}_{4}} p a$-aš-ši-la-an an-da pé-eš-ši-i-ia-zi
$A-N] A 1$ DUG A $7{ }^{\mathrm{NA}_{4}} p a-a s ̌$-ši-la-an an-da
(59) [pé-eš-ši-ịia-zi
]-ni-ia=kán A-NA 1 DUG $M E-E$
(60) [
(61) [
$p e ́-e] s ̌$-ši-i ia-az-zi nu GIŠŠINIG
]x 2 DUG A še-er šu-ta-a-i-ez-zi
'He takes [two times] seven pebbles from the river. He throws seven pebbles into [one ju]g of water, and seven pebbles into another jug of water. [...] in one jug one hundred [... he th]rows, and tamarisk [.... Then] he šutāi-s the two jugs of water.'

Oettinger (1979a: 337) tentatively translates 'volfüllen', which apparently is especially prompted by the formal similarity to šūu- / šūuau- 'full'. This is too uncertain, however, to draw any conclusions from. Formally, the verb seems to belong to the tāie/a-class, which would indicate a (mechanical) reconstruction *sud ${ }^{(h)}$ eh2-ielo-.
šūu- / šūuau- (adj.) ‘full': nom.sg.c. šu-u-uš (KBo 20.8 iv 4, 6 (OS), KBo 10.23 iv $\mathrm{y}+5(\mathrm{OH} / \mathrm{NS})$, KUB 7.1 i $41(\mathrm{OH} / \mathrm{NS})$, KUB 9.28 i 13, iii 23 (MH/NS)), acc.sg.c. šu-u-un (KBo 21.72 i 13 (OH/NS), KUB 1.16 ii 58 (OH/NS), KUB 58.27 iv 10 ( OH/NS), KBo 31.214, 9 (NS)), nom.-acc.sg.n. šu-u-úu (KUB 11.19 iv 22 ( $\mathrm{OH} / \mathrm{NS}$ ), 1256/v, 7ff. (StBot 8: $100^{2}$ ) (OH/NS), KBo 19.132 rev. 14 (MH/NS)), šu-u (KBo 11.12 i $5(\mathrm{OH} / \mathrm{NS})$, IBot $2.123,5(\mathrm{OH} / \mathrm{NS})$, KBo 6.34 iii 12 (MH/NS), KUB 39.57 i 7 (NS), KUB 41.11 obv. 6 (NS)), abl.(?) šu-u-ua-u-az (KBo 38.78, 5 (MS)), acc.pl.c. šu-u-ua-mu-uš (KBo $17.1+$ KBo 25.3 i 26 (OS), StBoT 25.4 i 21 (OS), KBo 17.6 ii 2 (OS)).
Derivatives: see *šumeššar / šumešn-, šumreške/a- ${ }^{z i}$, šunna- ${ }^{i}$ / šunn-, šunnaziiant-, šutāie/a-zi, (ג) šuuāru- and šuue/a- ${ }^{z i}$.

PIE * souh $_{1 / 3}-(o) u$ -
See Weitenberg 1984: 140 for attestations. This word is an $u$-stem adjective, as can be seen by abl. š̄ūuauaz, acc.pl. šūuamuš. So we are dealing with a root š̄ūfollowed by an ablauting suffix $-a u-/-u-$. The root is consistently spelled with plene U, which points to a phonological /so-/. So e.g. acc.pl.c. šu-u-ua-mu-uš = /sóamos/ and abl. šu-u-ua-u-az =/sóauat's/. In nom.-acc.sg.n. we find the remarkable form $\check{s u} u-u-u ́$. In my view, this is to be interpreted as /sóu/. The alternative spelling $\check{s} u-u$ then must represent a contraction from this latter form to
 could either stand for contracted /sós/ and /són/, or for uncontracted /sóus/ and /sóun/.

Within Hittite, this adjective clearly belongs with the verb šunna- ${ }^{i}$ / šunn- 'to fill' which reflects $*_{\text {su-no- }}$-, a nasal-infixed stem of the root ${ }^{\text {s seu }} \boldsymbol{H}$-. This means that e.g. $\check{s} u-u-u a-m u-u \check{s}=/$ sóamos/ must reflect older */sóRamos/ and $\check{s} u-u$ $\dot{u}=/$ sóu/ < */só?u/. As I have shown in § 1.3.9.4.f, there are arguments that the
adjective šūu- / šūuau- ultimately reflects *sóuh $h_{1 / 3}-u-/$ sóuh $_{1 / 3}-$ Ou-, in which first monophthongization took place ( $>$ */só?u-/ and /só?au-/), then the intervocalic laryngeal was lost ( $>\mathrm{OH} /$ sóu-/ and /sóau-/), after which in younger times the new diphthong /ou/ was monophthongized as well ( $>/$ só $-/$ ). For treatment of the root seuh $_{1 / 3^{-}}$, see at šunna- ${ }^{i} /$ šunn-.
šиua- 'to fill': see šuue/a- ${ }^{z i}$
šuйa- 'to push': see šuue/a- ${ }^{z i}$
šuunai- (c.) 'rejection' (formerly 'bird'): nom.sg. šu-una-iš (KBo 26.34 i 15).
This word is hapax in column i of the vocabulary KBo 26.34, of which the Sumerian and Akkadian parts are broken off. It is found in a paragraph that consists of four terms, namely (12) kar-ša-u-ua-ar 'to cut', (13) ua-at-ku-ua-ar 'to jump, to flee, to fly', (14) kap-pu-u-ua-ua-ar 'to calculate', and (15) šu-ua-iš. Otten and Von Soden (1968: 39-40) argued that on the basis of the Sumerian and Akkadian terms that are preserved in colum ii, this paragraph can be identified as the section corresponding to Sum. HUU. The Hittite part of a HUU-section has also been preserved in the small fragment HT 42, where we find obv. (2) MUŠEN-eš [= HुU-eš] 'bird', (3) ua-at-ku-ar 'to fly'. According to Otten and Von Soden, the parallelism between these paragraphs shows that MUŠEN-eš must be equated with $\check{s} u$ - $u a-i s ̌$, which means that $\check{s} u$ - $u a-i \check{s}$ denotes 'bird'. In a footnote $\left(40^{2}\right)$ they suggest an etymological connection with Lat. avis and Skt. váy- 'bird', which has been widely accepted since, albeit with some difficulty. On the basis of the other IE languages (Lat. avis, Skt. váy-, Av. vaii-, Arm. haw 'bird', Gr. aìtoç 'eagle’), the word for 'bird' must be reconstructed *h $h_{2}$ éu-i-s, * $h_{2} u$-éi-m, * $h_{2} u$-i-ós, but the initial $* h_{2}$ - is not visible in Hittite. Moreover, the initial $\check{s}$ - in Hittite is aberrant. Several attempts have been made to overcome these problems, e.g. by reconstructing $*_{s}$ - $h_{2}$ uoi- in which the $* h_{2}$ is lost due to de Saussure effect and the initial $\check{s}$ - is an $s$-mobile (thus e.g. Kimball 1999: 380).
Recently, Cohen (fthc.) has elaborately treated the vocabulary in which $\check{s} u-u a-i \check{s}$ is attested and comes to a quite different conclusion. He convincingly shows that this text cannot be equated with HT 42 and that therefore $\check{s} u-u a-i \check{s}$ cannot be identical to MUŠEN-eš 'bird’. Instead, he rather interprets šu-ưa-iš as a verbal noun in -ai- of the verb šuue/a- ${ }^{z i}$ 'to push away' (comparing e.g. hurtai- from huuart- ${ }^{i}$ / hurt- or linkai- from li(n) $k^{z i}$ ) and suggests that it denotes 'rejection'. With this meaning, Cohen argues, šuuaiš can easily be explained as the Hittite
rendering of Sum. pa-ag $=\mathrm{HU}=$ Akk. ezēbu 'to abandon' as attested in the vocabulary MSL 3, 54, line 7a.
This explanation is far more convincing than Otten and Von Soden's one and makes more sense from a linguistic point of view. We therefore must reject the translation 'bird' and consequently the reconstruction $*_{s}-h_{2} u o i-$. For further etymological treatment of šuúai- 'rejection', see at šuųe/az_ 'to push (away)'.
šuūāie/a- ${ }^{z i}$ (Ic3 > Ic2) 'to spy': 2sg.pres.act. šu-una-i-e-ši (KUB 60.20 rev. 6 (OS)), 3sg.pres.act. šu-ưa-i-ez-zi (OS, often), šu-ưa-ia-az-zi (KUB 29.28 i 9 (OS)), šu-ua-a-ez-zi (KBo 12.48, 4 ( $\mathrm{OH} / \mathrm{NS})$ ), šu-ua-a-i-e-ez-zi (KBo 3.1 ii 51 (OH/NS)), 3pl.pres.act.? šu-ú-ua-i-i-a[n-zi?] (KBo 31.117, 7 (NS)), 1sg.pret.act. šu-ua-ía-nú-un (KUB 29.1 ii 1 (OH/NS)), 3sg.pret.act. šu-ưa-i-et (KUB 17.6 i 24
 29.1 i 52 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 41.23 ii 10 ( OH/NS)), šu-ua-ía (KUB 48.13 obv. 16 (NS)), šu-ú-ua-i (KUB 41.23 ii 10 ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.imp.act. šu-una-at-te[-en] (KBo 12.18 i 7 ( $\mathrm{OH} / \mathrm{NS}$ )).

PIE *su(H)eh2-ie/o- ??
See Oettinger 1979a: 293f. for attestations. The manyfold OS attestations of $\check{s} u$ -ua-i-ez-zi are found in the formula par-na-aš-še-a šu-ua-i-ez-zi that is attested in the Laws. The exact meaning of this formula is not clear (in fact, it is a hotly debated topic), but formally the verbal form šu-ua-i-ez-zi can hardly belong with anything else than šuuaie/a-zi 'to spy'.
This verb belongs to the tāie/a-class, which consists of verbs ending in *-eh ${ }_{2}$-ie/o-. Oetinger (1979a: 386) therefore reconstructs *suah ${ }_{2}$-ie/o- but does not mention any cognates. Kimball (1999: 368) reconstructs *suoh ${ }_{2 / 3} i$-iééló- from a root ${ }^{\text {sueh }}{ }_{2 / 3} i-$ "move quickly, turn, swing" as visible in MHG swāien 'to swing oneself', We. chwim 'movement, rush' under the assumption that " $[t]$ he semantic development would have been "turn", i.e. "turn one's attention to" > "look at"". Semantically as well as formally this does not seem attractive to me, and I would therefore for the time being only mechanically reconstruct šuuãaie/a- as ${ }^{*}$ su(H)eh2-ielo-.
(ג) šuūāru- (adj.) 'full, complete’: nom.-acc.sg.n. šu-ua-a-ru (OS, often), šu-ua$r u$, šu-u-ua-ru (KUB 10.27 i 31 (MH/NS), KUB 36.2b ii 22 (NS)), šu-ú-ua-ru (KBo 19.144 i 12 (NS)), šu-ú-uূa-ru-ú (KUB 12.29, 3 (NS)), abl. šu-ua-ru-az (KBo 19.144 i 15 (NS)), instr. [šu-]ûa-ru-ú-it (KBo 15.25 i 7 (MH/MS)), \& šu-u-ua-ru-it (KUB 44.50 i 10 (NS)).

Anat. cognates: Pal. šuūāru- 'full' (nom.sg.c. šu-ua-ru-u[š], nom.-acc.sg.n. šu-ua-a-ru).

PIE *suH-óru-?
See Weitenberg 1984: 191-194 for a detailed treatment of the semantics of this word. He convincingly concludes that the word means 'full, complete' (and not 'mighty, heavy' as Puhvel 1981a suggests). The few attestations with gloss wedges could point to a non-Hittite origin. A connection with šūu- / šūuauz- 'full' (q.v.) is likely, but the formation is not fully clear. It looks as if šuūaru- reflects *suH-óru-, but I do not know of other similar formations.
šuuaruil- (gender unclear) material to bind reed with: instr. šu-ua-ru-i-li-it (KUB 9.28 iii 20).

The word is hapax in the following context:
KUB 9.28 iii
(18) šu-u-ua-an-te-eš da-an-na-za ki-it-ta
(19) pé-ra-an-n=a KASKAL-ši GI-aš KÁ.GAL ${ }^{T M}$
(20) še-er an-da šu-ua-ru-i-li-it
(21) iš-hi-ía-an-za n=a-aš ar-ha ki-it-ta
'The full ones, the empty one lies. In front of the road, up inside the gate, the reed is bound with šuuaruil- and is layed down'.

It cannot be determined exactly what šuuaruil- denotes. Formally, the word looks like a derivative of the adj. šuuaru- 'full, complete' (q.v.), but this does not easily give a meaningful interpretation of šuuaruil-.
šūuaur-: see šūu- / šūuau-
šuue/a- ${ }^{\text {i }}$ (Ic4) 'to fill': 1pl.pres.act. šu-ưa-u-e-ni (KUB 12.63 obv. 29 (OH/MS)), 3pl.pres.act. šu-(u-)ua-an-zi (NS); part. šu-u-ua-an-t- (NH, often), šu-ua-an-t(NH, often), šu-u-un-ta-an (IBoT 1.36 ii 41 (OH/MS)); impf. 2sg.pres.act. šu-uš$k e-s ̌ i(K U B 31.143$ ii 22 (OS)).

Derivatives: see šūu- / šūuau-, šunna- ${ }^{i}$ / šunn- etc.
Anat. cognates: HLuw. suwa- 'to fill' (1sg.pret.act. su-wa/i-ha (KARKAMIŠ A30h §3), 3sg.pret.act. su-wa/i-ta (TELL AHMAR 5 §2)).

PIE *sHu-ie/o-

See Oettinger (1979a: 295) for attestations. HW (200) cites the verb as šuuāi-, apparently on the basis of 3sg.imp.act. $\check{s} u-u a-a-i[d-d u]$ (KUB 24.10 iii 12 $(\mathrm{OH} / \mathrm{NS})$ ), which form belongs with šuue/a- 'to push (away)', however. Although Oettinger is aware of at least this possibility (1979a: $296^{73}$ ), he cites this verb as šuuae-, apparently because of the fact that he believes that it is a denominative belonging to the hatrae-class, derived from the participle šuuant- 'filled' (o.c.: 296). Personally, however, I do not see why we cannot assume that the stem was šuue/a-, reflecting a *-ie/o-derivative of the root *suH- 'full'. Because a preform *suH-ie/o- would regularly yield $\mathrm{OH} * * s ̌ u i e / a-$ (cf. huianzi 'they run' < *h $h_{2} u h_{1}-i-$ énti), I assume that in this word laryngeal metathesis has taken place: *sHu-ie/owould regularly yield Hitt. šuue/a- as is attested (note that it is thus homophonic with šuue/a- 'to push'). The OS impf. šuške/a-could very nicely reflect the archaic formation *suH-ske/o- or *sHu-ske/o- (cf. Melchert 1997b: 84f. for the view that originally, *-ie/o-derivatives display this suffix in present-forms only, and not in non-present forms like the imperfective in -ške/a-). See šūu- / šu unaufor further etymology.
The hapax šu-u-un-ta-an (IBoT 1.36 ii 41) shows a contraction from šuuant-, just as $t i$-in-ti-eš 'standing', attested on the same tablet (IBoT 1.36 ii 48), which shows a contraction from tiiant-.
šuйe/a- ${ }^{z i}$ (Ic4) 'to push (away), to shove, to cast off': 1sg.pres.act. šu-e-[mi] (KUB 26.77 i 11 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pres.act. šu-ú-ez-zi (KBo 6.2 iv 48 (OS), KBo 16.25 iv 5 (MH/MS)), šu-ú-i-e-ez-zi (KUB 8.81+ rev. 7 (MH/MS)), šu-ú-e-ez[-zi] (KBo 19.4 iv 6 (OH/NS)), šu-ú-ua-a-iz-zi (KBo 6.3 ii $52(\mathrm{OH} / \mathrm{NS})$ ), šu-u[a-a-]iz$z i(\mathrm{KBo} 6.5$ iv 13 (OH/NS)), 3pl.pres.act. šu-ưa-an-zi (KUB 13.7 i 7 (MH/NS)), 1sg.pret.act. šu-uূa-nu-un (KUB 24.14 i 20 (NS)), 3sg.pret.act. šu-ú-e-et (KBo 32.14 ii 2 (MS)), šu-ú-et (KBo 16.25 i 68 (MH/MS)), šu-u-u_a-it (KUB 18.3, 19 (NS)), 2pl.pret.act. šu-u-ua-at-t[e-en] (KBo 12.63 ii 6 (OH/NS)), šu-ua-at-te-en (KUB 4.1 ii 13 (MH/NS)), 3pl.pret.act. šu-ú-er (KUB 36.105 rev. 4 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.imp.act. šu-ua $a-a-i[d-d u]$ (KUB 24.10 iii 12 ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.imp.act. šu-u_a-a-at-tén (KBo 10.45 iv 28 (MH/NS)), šu-u-ua-at-tén (KBo 4.2 i 15 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.imp.act. šu-ua-an-du (KBo 4.2 i 68, $70(\mathrm{OH} / \mathrm{NS})$ ); 3sg.pres.midd. šu-ua-at-ta$r i$ (KUB 13.2 iii 24 (MH/NS)), 3sg.pret.midd. šu-ut-ta-ti (KBo 6.34 iii 17 (MH/NS)), šu-ua-at-ta-at (KUB 30.39 ii 10 (NS)), 3sg.imp.midd. šu-ut-ta-ru (KBo 6.34 iii 21 (MH/NS)), 2pl.imp.midd. šu-ųa-ad ${ }^{\text {? }}$-du-ma-at (text: -an-, KBo 10.45 iv 1 (MH/NS)).

Derivatives: see šuúai-.
IE cognates: Skt. $\operatorname{sav}^{i}{ }^{-}$' 'to impel, to set in motion', OIr. soïd 'turns'.

PIE *sHu-ie/o-
There are three verbs that are formally quite similar: šuue/a- ${ }^{z i}$ 'to push (away), šuue/a- ${ }^{z i}$ 'to fill' and šuuaie/a ${ }^{z i}$ 'to spy'. Oettinger (1979a: 294f.) conveniently gives an overview of the paradigms and the different forms of the three verbs.
For šuue/ $a_{-}^{z i}$ 'to push (away)' we see that the oldest forms show a stem šuuebesides šuua-. In NH times, some forms are inflected according to the highly productive hatrae-class (3sg.pres.act. šuūāizzi, 3sg.pret.act. šuųait and 3sg.imp.act. šuuai $[d d u]$ ).

Oettinger (1979a: 297) convincingly connects šuue/a- ${ }^{\text {zi }}$ with Skt. suváti 'to impel, to set to motion' and reconstructs *suh ${ }_{l}$-é-ti. For Hittite, however, no other thematic verbs are known, so despite the fact that Skt. suváti indeed reflects *suHéti I would rather reconstruct a *-ie/o-formation for Hittite. Because *suH-ie/o- would have yielded $\mathrm{OH} * *$ šuie/a- (cf. ḩuianzi 'they run' < *h $\left.h_{2} u h_{1}-i-e ́ n t i\right)$, I assume that in this word laryngeal metathesis has taken place: *sHu-ie/oregularly yielded Hitt. šuũe/a- as attested. The colour of the laryngeal cannot be seen in Hittite nor in Sanskrit. Note that the middle forms seem to be derived from the unextended root $*_{s H u}$ - šu-ttati and šu-ttaru besides šuu-attari (compare Melchert 1984a: $53^{101}$ ).
šuueri-: see šūeri-

- $\boldsymbol{t}$ (instr.-ending)

See Melchert 1977 for a full description of the instrumental case in Hittite. Although in NH times the only instr.-ending seems to be -it (sometimes spelled -et as well, so possibly /-it/), we find an ending $-t$ in older texts: $i \check{s}-h a-a n-d a$ (OS) 'blood' (vs. NS e-eš-ḩa-ni-it), [g]e-nu-t=a-at=kán (OS) 'knee', ki-iš-šar-at ( $\mathrm{OH} / \mathrm{MS}$ ), ki-iš-šar-ta (MH/MS) 'hand' (vs. NS ki-iš-ša-ri-it), ú-i-ta-an-ta (OS) 'water' (vs. NS ú-i-te-ni-it). If we compare these to other OS instr.-forms like hu-$u$-ma-an-ti-it, hu-u-ma-an-te-et, [iš-]har-ua-an-te-e[t], we can imagine that the original ending was *-t, and that in nouns that end in a stop an epenthetic vowel /i/ was inserted. That this ending /-it/ was spreading in pre-Hittite times already can be seen by forms like pár-ta-ú-ni-t=u-uš (OS) and [ge-]en-zu-i-t=a-at=kán (OS), possibly under influence of $i$-stem forms, where -it is regular (e.g. hal-ki-it (OS)). It should be noted that $a$-stem nouns show the ending -it from the oldest texts onwards (e.g. $k u-u n-n i-t=a(\mathrm{OS})$ of $k u n n a-, s \check{a} a-a-k u-i t(\mathrm{OS})$ of $\check{s} a ̄ k u u a-$ and $\check{s e}$-e-er-hi-it (OS) of $\check{s} \bar{e} r h a-$ ), whereas an ending ${ }^{* *}$-at would certainly have been possible.
Etymologically, it is likely that this ending is in one way or another connected with the abl.-ending $-(\bar{a}) z$ (q.v.), which can be inferred from the fact that in OH texts some pronominal stems use formal instrumentals to express ablative function (e.g. kēt, apēt, etc.). See at $-(\bar{a}) z$ for the argumentation that this ending must reflect *-(ó) $t i$, which indicates that instr. $-t$ goes back to *- $t$.

```
-t (pronominal nom.-acc.sg.n.-ending)
    PIE *-d
```

This ending is occurs in e.g. nom.-acc.sg.n. apāt 'that (one)', =at 'it', kuit 'what', 1-at 'one' (but note that $k \bar{a}-/ k \bar{u}-/ k i-$ 'this (one)' has nom.-acc.sg.n. $k \bar{l}$ ). It is clearly identical to the pronominal nom.-acc.sg.n.-ending ${ }^{*}-d$ as found in several other IE languages: e.g. Skt. tád, Av. cit, Lat. id, quid, etc.
-t (2sg.imp.act.-ending)
PIE *- $d^{h} i$
This ending only occurs in i-it 'go!', te-e-et 'speak!' and the causatives in -nu-, e.g. ar-nu-ut 'you must transport'. It is generally accepted that this ending reflects *- $d^{h} i$, on the basis of cognates like Skt. ihí, Gr. ' $\theta \mathrm{\theta}$ ' 'go!', Skt. krnuhí, Av. kərənuiठi 'make!', Gr. őpvv日ı 'incite!'. Note the use of the zero-grade stem: i-it ~ ihí $\sim{ }^{\prime} \theta \mathrm{c}<h_{1} i-d^{h} i$, ar-nu-ut $\sim$ ő $\rho v v \theta \mathrm{c}<h_{3} r-n u-d^{h} i ́$. This etymology shows that word-final $*_{-i}$ regularly was lost in Hittite, which means that e.g. in the verbal endings of the present we must reckon with a wide-scale restoration of $*-i$. Note that this suffix in principle cannot be used in favour or against the theory that a sequence ${ }^{*} d^{h} i$ should have assibilated in Hittite to $-\check{s}$ - since we possibly are dealing with loss of $*$-i\# before assibilation occurred at all.
$\boldsymbol{- t} / \mathbf{- t t a}$ (3sg.pret.act.-ending of the mi-flection)
PIE *- $t$
This ending, which contrasts with the corresponding hi-ending -s (q.v.), shows two allomorphs. When the preceding verb stem ends in a consonant, we find -tta (e.g. e-ep-ta, e-eš-ta, e-ku-ut-ta, ua-al-ah-ta, etc.), when it ends in a vowel, we find -t (e.g. te-e-et, ar-nu-ut, zi-ke-e-et, etc.). The opinions on the interpretation of the ending -tta differ. E.g. Pedersen (1938: 98) states that e.g. e-eš-ta should be interpreted "/est/" and states: "die Schriebung [mit -tta] erklärt sich aus der Unmöglichkeit, mit den Mitteln der Keilschrift eine auslautende Gruppe von zwei oder drei Konsonanten auszudrücken" (thus also Kronasser 1956: 31). Oettinger believes that the vowel $-a$ - is real here, however. He states (1979a: $9^{6}$ ): "Die Sprachwirklichkeit des anaptyktischen Vokals hinter der Endung *-t wird durch Schreibungen wie li-in-kat-ta (niemals *li-in-ka-at!) 'er schwor', har-ak-ta 'er ging zugrunde' usw. erwiesen. Sie liegt auch in e-ip-ta (niemals *e-pa-at!) 'er ergriff' usw. vor", to which Melchert (1994a: 176) adds that "[t]he reality of the vowel [of -tta] is supported by the spelling e-ku-ut-ta for /ég ${ }^{\mathrm{w}} \mathrm{ta/}$ 'drank', where **e-ku-ut would have been sufficient to spell a real **/eg ${ }^{\mathrm{w}} \mathrm{t} /$ ". An additional argument could be the fact that the instr. of 'hand' is spelled ki-iš-šar-at ( $\mathrm{OH} / \mathrm{MS}$ )
as well as ki-iš-šar-ta (MH/MS), both standing for $/ \mathrm{kiSrt} /$, whereas such an alternation between a spelling $-t a$ and $-a t$ is never found in the case of the 3sg.pret.act.-ending.

All in all, we must assume that the postvocalic variant $-t$ represents /-t/, whereas the postconsonantal variant $-t t a$ represents $/-\mathrm{ta} /$. Etymologically, it is fully clear that Hitt. /-t/ must reflect the PIE secondary 3 sg.-ending *-t. In postconsonantal position word-final $*_{-} t$ is regularly dropped (cf. e.g. nom.acc.sg.n. of stems in *-ent $>$ Hitt. -an), which means that the forms of which the stem ends in a consonant became ending-less. In order to solve this confusing situation, the 3 sg.midd.-ending *-to was taken over, which regularly yielded Hitt. /-ta/ (note that a similar scenario explains the Luwian 3sg.pret.act.-ending -tta $<$ the middleending ${ }^{*}$-to and 3pl.pret.act.-ending -anta $<$ the middle-ending $*$-ento, replacing *-ent that regularly yielded ${ }^{* *}$-an, cf. Yoshida 1991: 369f. and Yoshida 1993). This means that e.g. e-eš-ta 'he was' reflects /Résta/ from virtual *hés-to, replacing $* h_{l}$ és-t and that $e-k u-u t-t a$ 'he drank' $=/$ Rég $\mathrm{w} \mathrm{ta} /$ from virtual $* h_{l} e^{w h}{ }^{w h} t o$, replacing $* h_{l} e ́ g^{w h} t$.
In NH texts we occasionally find that the original distribution between ${ }^{\circ} V-t$ and ${ }^{\circ} C$-ta is getting blurred, e.g. pa-a-i-ta (KBo 3.7 iii $13(\mathrm{OH} / \mathrm{NS})$ ) 'he went', pád-da-it-ta (KBo 23.1 i $20(\mathrm{NH})$ ) 'he ran' (or 'you ran'?, cf. CHD P: 353) and ua-at-ku-ut (Güterbock 1952: first tablet i 17, iii 18, third tablet i 5, iv 21 (NS)) 'he jumped', cf. Kimball 1999: 195.
$\boldsymbol{t a}$ (clause conjunctive particle): $t a(\mathrm{OS}), t=a-a \check{s}(\mathrm{OS}), t=a-a n(\mathrm{OS}), t a-a=\check{s}-\check{s} e$ (OS), etc.

Derivatives: see takku.
PIE *to-

In OH texts, we find three sentence initial conjunctive particles, $n u$, $t a$ and $\check{s} u$, which are used, next to asyndesis, to connect sentences in a semantically neutral way (as opposed to the conjunctives $=$ (i) $a$ 'and, also', $=(m) a$ 'but, and', etc., which have a specific semantic function). The exact syntactic reasons to use asyndesis on the one hand and $n u, t a$ or $\check{s} u$ on the other, and within that last group the choice between $n u$, $t a$ or $\check{s} u$, are not fully clear yet. The most complete description to date is by Weitenberg (1992), who shows for instance that $n u$, $t a$ and $\check{s} u$ are obligatory in sentences that only consist of the verb and an enclitic object in order to avoid topicalization of the verb (e.g. $\check{s}=u s ̌$ tameššer 'they oppressed them', $t=u \check{s}$ tarmaemi 'I fasten them' vs. **tameššer=uš and **tarmaemi=uš), and that the choice between ta and $\check{s} u$ is governed by the
tempus of the sentence: $\check{s} u$ when the verb is preterite, ta when the verb is present. Rieken (1999b) has analysed many OH attestations of $t a$ and argues that this particle is used to mark the last sentence in of a piece of discourse dealing with one topic and therefore can be translated "dann". Nevertheless, many questions regarding the distribution between $n u, t a$ and $\check{s} u$ remain. One of the difficulties in establishing the grammar of the sentence initial conjunctive particles is the fact that the system is clearly in decline: from MH times onwards $t a$ and $\check{s} u$ are not part of the living speech anymore (only ta is used in MH and NH texts in some formulaic sentences), whereas asyndesis has become rare: the particle $n u$ has become the default clause conjunctive.

This unclearness regarding the synchronic use of the conjunctive particles also has a negative impact on their etymology. Nevertheless, Watkins (1963) convincingly shows that Hitt. $n u, t a$ and $\check{s} u$ can functionally and formally be equated with the Old Irish preverbs no, to and se and that $t a \sim t o<* t o$ and $\check{s} u \sim s e$ probably are related to the demonstrative pronoun $*_{\text {so-, }}{ }^{*} t o-$ as attested in the other IE languages (Skt. sá, sá, tád, Gr. ò, ì, тo, etc.).
$-\boldsymbol{t a}$ (instr.-ending): see $-t$

- $\boldsymbol{t t a} \boldsymbol{a}$ (2sg.pret.act.-ending of the hi-flection)

PIE *-th $h_{2} e$
This ending is functionally equal to its corresponding mi-conjugation ending -š. It is clear that from the earlies texts onwards, the hi-ending -tta is spreading at the cost of -š, first in verbs that end in a consonant: e.g. e-ep-ta (MH/MS), har-ap-ta (MS), me-er-ta ( $\mathrm{OH} / \mathrm{MS}$ ). Unfortunately no 2sg.pres.act.-forms of verbs in consonants are attested in OS texts. In NS texts, we even occasionally find that $-t t a$ is found in original $m i$-verbs in a vowel, like pa-it-ta 'you went'. In NS texts, we also encounter forms that functionally are 2 sg.pret.act., but formally are identical to 3sg.pres.act. (e.g. pé-e-da-aš 'you carried’, ša-ak-ki-iš 'you knew', $\check{s} a$-an-na-aš 'you concealed', u-un-ni-eš 'you carried (here)', ú-da-aš 'you brought (here)'), which may show that -tta itself is starting to get lost as well. In NS texts, we encounter half a dozen 2sg.pret.act.-forms of hi-verbs that show an ending -šta (a-uš[-ta] (KBo 5.3 iii $56(\mathrm{NH})$ ), me-mi-iš-ta (KUB 15.5 iii $11(\mathrm{NH})$ ), pí-eš-ta (KBo $11.1 \mathrm{rev} .12(\mathrm{NH})$ ), ši-iš-ta (KBo 3.34 i $23(\mathrm{OH} / \mathrm{NS})$ ), da-iš-ta (KUB 21.27+i 4, 6 (NH)), up-pí-eš-ta (KBo 8.76 rev. 4 (NS)), ua-ar-ri-iš-ši-iš-ta (KUB 31.47 obv. $13(\mathrm{NH})$ ). It is in my view not coincidental that in most of these cases these forms are formally identical to (the NH variant of) the 3sg.pret.act.-
form of these verbs (see at $-\check{s}$ (3sg.pret.act.-ending of the hi-conjugation) and their own lemmas). So instead of regarding these forms as showing a remarkable 2 sg.ending -šta, I just regard them as formal 3 sg.-forms that are used in the function of 2sg.-forms (contra Jasanoff 2003: 119f.). See at $-\check{s}$ (2sg.pret.act.-ending of the $m i$-conjugation) for a similar phenomenon in the mi-conjugated verbs.

See at -tti (2sg.pres.act.-ending of the hi-conjugation) for etymological considerations: -tta likely reflects the PIE 2sg.perf.-ending -th $h_{2} e$ as reflected in Skt. -tha, Gk. - $\theta$ a, TochB -(s)ta.

```
-tta (2sg.pret.midd.-ending): see -tta(ri),-ttat(i)
-tta (3sg.pret.act.-ending of the mi-flection): see -t
-tta (3sg.pres.midd.-ending): see -tta(ri),-ttat(i)
=tta-: see =tti- / =tta- / =tte-
```

$=\boldsymbol{t t a}$ / =ttu (encl.pers.pron. acc.-dat. 2sg.) '(to) you'

Anat. cognates: HLuw. =tu (encl.pers.pron. acc.-dat. 2sg.) 'to you' (=tu-u (ASSUR letter $a \S 4, c$ §5)).

In principle the encl.pers.pron. of 2 sg . is $=t t a$ (e.g. $n u-u=t-t a$ ). Sometimes, however, we find $=t t u$ as well. The form $=t t u$ is consistently found before $=z$, but occasionally in other positions as well. In the Adad-hymne, for instance, we find KBo 3.21 iii (10) $l i$ - $i \check{s}-s \check{s} i=m a-a=d-d u$ ua-ar-aš-nu-an-du'let them assuage you in your liver!', parallel to ibid. (12) $l i-i s ̌-s ̌ i=m a-a=t-t a$ (13) una- $a r$ - $a \check{s}-n u$ - $a n-d u$; ibid. ii (17) $i k-t a-a \check{s}=m a-a=d-d u-u=\check{s}-s ̌ a-a n ~ i r-h a-a z$ 'from the confines of your net; ibid. iii (3) šal-la-an-ni=ma- $a=d-d u-u=\check{s}-s \check{a} a-a[n]$ 'but ... you for greatness'. Sometimes we find $=t t u$ in front of $=k a n$ : $n u-u=d$-du $=k$ án (KUB 12.34 i 9).

Perhaps we are dealing with an original allophonic pair, the distribution of which was determined by the phonetic environment. Nevertheless, the evidence is too scanty to determine this distribution. Phonetically, we could think of e.g. a basic form *tu, the $-u$ - of which would drop in front of $* o$ (cf. tān $<* d u o i o m$ ).
In the other IE languages, the enclitic forms of 2 sg. seems to be *toi for the dat.-gen. (Skt. te, Av. tōi, Gr. tot) and *tu足 for the acc. (Skt. $t v \bar{a}$, Av. $\theta \beta \bar{a}$, Gr. $\sigma \varepsilon$, Dor. $\tau \varepsilon$ ). Especially the latter form seems to fit Hitt. $=t t a /=t t u$, although I do not dare to give an exact reconstruction.
$\boldsymbol{d} \bar{a}^{i} / \boldsymbol{d}$ - (IIa1 $\beta$ ) 'to take, to wed, to decide' (Sum. ME): 1 sg.pres.act. da-a-ah-hé (OS), da-a-ah-hi (OS), da-ah-hi (NS), 2sg.pres.act. da-a-at-ti (OS), da-at-ti (NS), ta-at-ti (KUB 5.9 i $24(\mathrm{NH})$ ), 3sg.pres.act. da- $a-i(\mathrm{OS})$, da-i (rare, NS), ta-e (1x), 1pl.pres.act. tu-me-e-ni (OS), tu-me-ni (OS), da-a-u-e-ni (OS), du-me-e-ni, du-me-ni, du-um-me-e-ni, tu $\psi_{+}$-me-e-ni, tu $u_{+}$-me-ni, tu $u_{+}$-um-me-ni, 2pl.pres.act. da-at-te-$e-n i(\mathrm{OS}), d a-a t-t e-n i$, ta-at-te-ni (NH), 3pl.pres.act. da-an-zi (OS, very often), ta$a n-z i(\mathrm{OS}$, rare), $d a-a-a n-z i$ (NS, rare), 1sg.pret.act. da-a-ah-hu-un (OS), da-ah-hu-un (NS), 2 sg.pret.act. da-a-at-ta (MH/MS), da-at-ta (NS), ta-at-ta, 3s.pret.act.
 12, 13, 14 (MS)), da-at-ta (KUB 23.1 ii 25 (NH), Bronzetafel ii 87 (NH), RS 17.109, 4 (NH)), da-ad-da (KUB 26.43 obv. $10(\mathrm{NH})$ ), 1pl.pret.act. da-a-u-en (OS), da-a-u-e-en, da-u-e-en, 2pl.pret.act. da-a-at-te-en (NH), da-at-te-en (NH), 3pl.pret.act. da-a-er (OS), 1sg.imp.act. ta-li-it (KBo 3.38 rev. 16 (OH/NS)), 2sg.imp.act. da-a (OS), 3sg.imp.act. da-a-ú (OS), da-úu (NH), da-ad-du(NH), 2pl.imp.act. da-a-at-te-en (OS), da-at-te-en (MH/MS), da-at-tén (MH/MS), 3pl.imp.act. da-an-du (MH/MS); 3sg.pres.midd. da-at-ta-ri (MH/NS), da-ad-da$r i(\mathrm{NH})$, ta-at-ta-ri $(\mathrm{NH})$, 3 sg. pret.midd. da-at-ta-at (NH), da-ad-da-at (NH), ta-at-ta-at (NH); part. da-a-an-t- (MH/MS), da-an-t- (NS); verb.noun gen.sg. da-a-$u-u a-a \check{s}$ (NH); inf.I da-u-ua-an-zi (NH), da-a-u-ua-an-zi (NH); inf.II da-a-an-na (MH/MS), da-an-na (MH/MS); impf. da-aš-ke/a- (OS), da-a-aš-ke/a- (NH), da$i \check{s}$-ke/a-( NH ).
Derivatives: see peda- ${ }^{i}$ / ped- and $u d a-^{-} / u d$-.
Anat. cognates: Pal. unclear: 1sg.pret.act. dahha '?', 3pl.pres.act. tenzi '?', 3pl.pret.act. tāzzunta '?', 2sg.imp.act. tāzzu '?' (see also at dāi-i' / di-); CLuw. lā̄'to take' (1pl.pres.act. lu-íun-ni, lu-un-ni, 3sg.pret.act. la-a-at-ta, la-at-ta, 3sg.imp.act. la-a-ad-du, 3pl.imp.act. la-a-an-du, part. [ [ ]a-a-i-im-ma-an (?)), lalā-, lālā- 'to take' (1sg.pres.act. la-la-a-ú-i, 2sg.pres.act. la-la-a-at-ti, 3sg.pres.act. la-la-a-i, la-a-la-i, la-la-i, 3pl.pres.act. la-a-la-an-ti, la-la-an-ti, 3sg.pret.act. la-a-la-ad-da, la-la-a-at-ta, la-la<-at>-ta, 2sg.imp.act. la-a-la, 3sg.imp.act. la-a-la-ad-du, 3pl.imp.act. la-a-la-an-du, inf. la-la-u-na), lalāma/i'itemized list, receipt' (nom.sg. la-la-mi-eš, la-la-mi-iš, coll.pl. la-la-a-ma), lalatta- '(ritual) act of taking (away)' (nom.-acc.sg. la-la-at-ta-an-za, gen.adj.abs. la-la<-at)-ta-aš-šili); HLuw. la(la)-, da- 'to take' (2sg.pres.act. la-si (İSKENDERUN §6), 3sg.pres.act. la-i (KÖRKÜN §11), tà-i (KÖRKÜN §8, KARKAMIŠ A3 §20, KARKAMIŠ A15b, §12, BOROWSKI 3 §9, ALEPPO 2 § 13 , §18, KÖTÜKALE §5, BOYBEYPINARI 1-2 §19, ANCOZ 7 §4, §9), tà-ia (KARKAMIŠ A6 $\S 27, \S 28, \S 30$ ), 3pl.pres.act. tà-ti-i (KARKAMIŠ A11a §27), 1 sg.pret.act. CAPERE(-)la-ha (MARAŞ $4 \S 4, \S 12)$, la-ha (MARAŞ 13 line 2,

BOHÇA §13), tà-ha (KARKAMIŠ A11b+c §30, KARKAMIŠ A7 §3), 3sg.pret.act. tà-ta (TELL AHMAR 1 §12), 3pl.pret.act. /lalanta/ "CAPERE"la-la-ta (MARAŞ 1 §10), inf. "CAPERE"(-)la/i/u-na(-') (BOHÇA §3, §9), "CAPERE" (-)la-na (MARAŞ 3 §8)).
IE cognates: Skt. dádāti, Av. da $\delta \bar{a} i t i, ~ A r m . ~ t a m, ~ G r . ~ \delta i ́ \delta \omega \mu, ~ O L i t h . ~ d u o s t i, ~ L a t . ~$ dō, dăre 'to give', OCS daxъ 'he gave'.

PIE *dóh $h_{3}$-ei, $*$ dh $_{3}$-énti
See Oettinger (1979a: 64-5), Ciantelli (1978), Tischler (HEG T: 5f.) and Neu (1968: 160) for attestations. The oldest forms of this verb show a paradigm dāhhe, dātti, dāi, tumēni, dattēni, danzi for the present and dāhhun, dātta, dāš, dāuen, dātten, dāer for the preterite. Note, however that the derivatives peda- ${ }^{i}$ / ped- 'to bring (away)' and $u d a-^{i} / u d$ - 'to bring (here)' (formed with the prefixes pe- and $u$-) show forms that are more archaic, e.g. petumen and utummen vs. dāuen, petišten vs. dātten, peter and uter vs. dāer, but also petumanzi and utumanzi vs. dāuanzi and utiške/a- vs. daške/a-. All in all, I think that we have to reconstruct an original paradigm dāhhe, dātti, dāi, tumēni, *tištēni, danzi for the present and dāhhun, dātta, dāš, *tumen, *tišten, *ter for the preterite. This means that we find a stem $d \bar{a}$ - in the singular and a stem $d$ - in the plural (in both the present and the preterite).
It should be noted that in NH times, the paradigm has undergone some changes. We then find: dahhi, --, dāi, tumeni, datteni, danzi, dahhun, datta, dā̄̆s, --, datten, dāer, dā, dāu, datten, dandu. These forms are completely regular according to the developments described in § 1.4.9.3: OH /áCCV/ develops into NH /áCCV/.
Already Hrozný (1915: 29) etymologically connected this verb with the PIE root $* d^{2} h_{3^{-}}$'to give'. Although the semantic side of this etymology has received some criticism (but see Tischler HEG T: 7f. for an enumeration of the many scholars who have spoken in favour of a semantic development 'to give' > 'to take'), the formal side has been generaly accepted. The exact interpretation of this formal side has caused some debate, however. Eichner (1975a: 93f., followed by Oettinger 1979a: 500f.) assumes that this verb originally was middle ("sich etwas geben lassen") and that 1 sg.aor.midd. "*d $\partial_{3} h_{2} \dot{a} "$ and 2 sg.aor.midd. "*d $\partial_{3} t h_{2} \dot{a} "$ regularly yielded Hitt. **dahha and ${ }^{* *}$ datta, on the basis of which the paradigm was brought into the active and yielded dāhhi, dātti, dāi, etc. A similar scenario is given by Melchert (1984a: 25) who states that 3 sg.pres.midd. $* d h_{3}$-e/o was reinterpreted as a stem $* d h_{3} e / o-+$ zero-ending, which caused the spread of this 'thematic' stem in the singular, yielding $* d h_{3} e / o-h_{2} e i, * d h_{3} e / o-t h_{2} e i, d h_{3} e / o-e i$. These scenarios seem unattractive to me. I know of no other instance where an
original PIE middle yielded a Hittite active paradigm. The fact that the active and middle are living categories in Hittite makes it difficult to assume that an original middle did not just stay middle but was taken over into the active paradigm. Moreover, the formal sides are difficult: Eichner's assumption that ${ }^{*} \mathrm{Ch}_{3} \mathrm{C}$ vocalises to Hitt. $C \bar{a} C$ is unparalleled, whereas Melchert's construct of a thematic hi-verb would be unparalleled as well (the so-called 'thematic' hi-verbs that are attested (the $\operatorname{tarn}(a)$-class) all go back to a sequence ${ }^{*}{ }^{\circ} \mathrm{CoH}-/{ }^{*}{ }^{\circ} \mathrm{CH}$-).
In my view, we have to take $d \bar{a}-/ d$ - at face value. It is a $h i$-inflecting rootpresent, and just as all hi-verbs it shows original $*_{O}$-grade: $* d o ́ h_{3}-h_{2} e i$, *dóh $h_{3}$-th $h_{2} e i, * d o ́ h_{3}$-ei, *dh $h_{3}$-uéni, *dh $h_{3}$-sténi, *d $h_{3}$-énti. These forms regularly yield dāhhhe, dātti, dāi, tumēni, *zaštēni, danzi. Already in OH times, we find a spread of a secondary stem da- (on the basis of 3pl.pres.act. danzi) in e.g. 2pl.pres.act. dattēni (instead of expected *zaštēni, cf. *dh hhl skée/a-> OH /tské/á-/, $z a-a \check{-}-k e / a$-) and impf. daške/a- (instead of *zaške/a-).
tahhara-: see tuhhara-
${ }^{\text {UZU }}$ dahašti-: see ${ }^{\text {UZU }}$ dānhašti-
$\boldsymbol{t a h} \check{s}$ - (IIIh?) 'to predict': 3sg.pres.midd. ta-ah-ša-at-ta-ri; impf.3pl.pret.act. tah-iš-ker!
IE cognates: ?Skt. dayati 'divides', Gr. סaíoual 'to divide'.

$$
\text { PIE } * d e h_{2}-s-?
$$

This verb is hapax in the following context:
KUB 41.24 rev. (with additions from KUB 15.2 iv 5-9 and KBo 15.11 iv 5-10)
(1) DUB.1.KAM NU.TIL ŠI-P[ÁT ... (ma-a-)an=(ša-an A-NA LUGAL ag-ga-tar)]
(2) ta-ah-ša-at-ta-r[(i na-aš-m=a-at=za=kán Ù $a-u s ̌-z i)]$
(3) $n a-a \check{s ̌}-m=a-a t=\check{s} i \quad\left[\left[\left(\check{S}-T U \mathrm{SU}^{\mathrm{MES}}\right) n a-a \check{s ̌}-m\left(a \operatorname{IS}-T U \operatorname{MUŠEN}{ }^{\mathrm{HIIA}}\right)\right]\right.$
(4) $i$-ši-ía-ah-ta-ri [na-ǎ̌-ma-a=š-ši GIS(KIM-iš ku-iš-ki HUUL-lu-uš)]
(5) ŠA ÚŠ pé-ra-an $k[i-s \check{a} a-r(i) n u(k i-i \operatorname{SISKUR}=S ̌ U)]$
'First tablet. Unfinished. Conjuration[...]. When to a king death is $t$.-ed, -- either he sees it in a dream or it is revealed to him by an entrail- or bird-oracle, or some bad sign has occurred in front of him --, (then) this is the ritual for it'.

From this context it is clear that tahšattari must mean 'is predicted'. A possible other form of this verb can be found in tah-iš-ker!, found in KBo 3.34 iii (14) ...
(i-d)]a-lu hé-en-kán tah-iš-ker! (the reading ker is ascertained by the duplicate KUB 31.38 rev.? 18), if this means '... they predicted an evil death'.

Often, this verb is seen as a variant of takš-zi 'to undertake, to unify' (e.g. Kümmel 1967: 109, Oettinger 1979a: 219), but this is semantically as well as formally unlikely: in the rare cases that $k$ alternates with $h$, we are dealing with words of foreign origin, where an original cluster -šh- or -ȟ̌- occasionally becomes -šk- or -kšs- (cf. Melchert 1994a: 170). The only case of such an alternation in an inherited word is the hapax spelling ha-mi-iš-kán-za vs. 40+x hamešha(nt)-< *h 2 meh $_{1}-$ sh $_{2} \mathrm{O}$-.
A better connection may be PIE * deh $2^{-}$'to allot' (Skt. dayati, Gr. $\delta$ aío $\mu a \mathrm{a}$ 'to divide'). If this connection is correct we are dealing here with an $s$-extension *deh $h_{2}$-s- (compare pahšs- < *peh $\left.h_{2}-s-, p \bar{a} \check{s}-<{ }^{*} p e h_{3}-s-\right)$.
tahhuuai- / tahhui-: see tuhhuuai- / tuhhui-
$\boldsymbol{d a i} \mathbf{-}^{i} / \boldsymbol{t i} \mathbf{-}(\mathrm{IIa} 4>\mathrm{Ic} 1)$ 'to lay, to put, to place': 1sg.pres.act. te-e-eh-hé (OS), te-ehhé (OS), te-e-eh-hi (OS), te-eh-hi (OH/MS), ti-ih-hi (KUB 17.28 i 28 (MH/NS), KUB 19.55+ rev. $42(\mathrm{NH})$ ), 2sg.pres.act. da-it-ti( $\mathrm{OH} / \mathrm{NS}$ ), ta-it-ti (KBo 3.38 obv. $24(\mathrm{OH} / \mathrm{NS})$ ), 3sg.pres.act. da-a-i(OS), da-i(OH/NS), ti-ia-az-zi (ABoT 44 i 50 ( $\mathrm{OH} / \mathrm{NS}$ )), 1pl.pres.act. ti-i-ia-u-e-ni (KBo 3.4 iv 35, $47(\mathrm{NH})$ ), 2pl.pres.act.
 ii 5 (NS)), 3pl.pres.act. ti-an-zi (OS), ti-íia-an-zi (OS), ti-an-ti (KBo 20.33 rev .10 (OS)), 1sg.pret.act. te-eh-hu-un (OH/MS), ti-i-ia-nu-un (KUB 31.71 iii 4 (NH), KUB 22.40 ii 9 (NS)), 2sg.pret.act. ta-it-ta (KUB 33.70 iii 14 (MH/NS)), da-iš-ta (KUB 21.27+ i 4, 6 (NH)), 3sg.pret.act. da-iš (OS, often), ta-i-iš (KBo 18.151 rev. 10, 11 ( $\mathrm{OH} / \mathrm{MS})$ ), $d a-a-i \check{s}(\mathrm{OH} / \mathrm{NS})$, da- $a-i-i \check{s}(\mathrm{KUB} 15.5+$ i $10(\mathrm{NH})$ ), ti-i $i a-$ at (KUB 43.50 obv. 7 (NH), KUB 8.79 rev. 12 (fr.) (NS), KUB 33.118, 11 (fr.) (NS), KUB 14.14 obv. 37 (fr.) (NH)), ti-i-i-ia-at (KUB 22.40 ii 7 (NS)) 1pl.pret.act. da-i-ú-en (MH/MS), da-a-i-ú-en (KBo 15.10 i 32 ( $\mathrm{OH} / \mathrm{MS}$ )), 2pl.pret.act. da-iš-te-en (OS), 3pl.pret.act. da-a-er (OS), da-i-er (OH/MS), da-i-eer (MH/MS), da-e-er (MH/MS), da-a-i-e-er (MH/MS), da-a-i-er (KBo 15.10 ii 30, iii 47 ( $\mathrm{OH} / \mathrm{MS}$ )), ti-i-e-er (KBo 3.1 i 22, $37(\mathrm{OH} / \mathrm{NS})$, KBo 5.8 ii $5(\mathrm{NH})$ ), 2sg.imp.act. da-i (KBo 3.23 obv. 6, 8, rev. 6 (OH/NS)), 3sg.imp.act. da-a-ú (KUB 14.3 ii $57(\mathrm{NH})$ ), 2pl.imp.act. da-iš-tén (MH/MS), ta-iš-tén (Bo 4222 iii 9), $d a$-a-iš-ten (KBo 12.18 i 3 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 4.8 ii 17 (NH)), 3pl.imp.act. ti-an-du (MH/NS); part. ti-i-ia-a-an-t- (MH/MS), ti-i-ia-an-t-; verb.noun ti-ia-u-ua-ar (NH),

$a n-z i$; impf. $z a-a \check{s}-k e / a-$ (OS), zi-ke/a- (OS), zi-ik-ke/a- (OS), ti-iš-ke/a- (NS), ti$e s ̌-k e / a-(N S)$.

Derivatives: tiianna- ${ }^{\boldsymbol{i}}$ / tidianni- (IIa5) 'to lay down (impf.)' (2sg.imp.act. ti-an$n a$ (KUB 20.76 i 17, KBo 30.165 i 10), sup. ti-ia-an-ni-ia-u-ua-an (KUB $43.61 \mathrm{i}^{?}$ 7)), tiiantiiie/a- ${ }^{z i}$ (Ic1) 'to set up, to erect' (3sg.pres.act. ti-i-ia-an-ti-ia-a[z? $\left.{ }^{?}-z i\right]$ (HEG T: 367), 3pl.pres.act. ti-ía-an-ti-ía-an-zi (KUB 29.1 iv 17); inf.I [t]i-ia-an-ti-ia-u-ua-an-zi (HEG T: 367)), see titta- ${ }^{i} /$ titti-, $^{\text {titnu- }}{ }^{z i}$, tešha- and tuzzi-.

Anat. cognates: CLuw. tūua- 'to put, to place' (3sg.pret.act. du-ú-ua-at-ta, 3pl.pret.act. $d u-u ́-u a-a n-d a, 2$ sg.imp.act. $t u-u-u{ }_{c} a-a$, 3pl.imp.act. $d u-u ́-u a-a n-d u$, $d u-u$-un-du); HLuw. tu(wa)- 'to place, to erect' (3sg.pres.act. /tuwai(a)/ tu-wa/i-i-' (SULTANHAN §31), PONERE-wa/i-ia (KARKAMIŠ A13a §3), ${ }^{\text {PONERE }+M I}$ tu-wa/i-i $[a]$ (MARAŞ 7 A ), 1 sg.pret.act. /tu(wa)ha/ PONERE-wa/i-ha (often), "PONERE" tú-wa/i-há (KARKAMIŠ A6 §15), PONERE-u-ha (BOR §3), 3sg.pret.act. /tu(wa)ta/ tu-wa/i-ta (SULTANHAN §9), tu-ta (ERKİLET 2 §2), PONERE-u-ta (BOR §9), 3pl.pret.act. /tunta/ tu-tá (KULULU $4 \S 4$ ), 2sg.imp.act. /tu/ PONERE-u (ASSUR letter e §22), 3sg.imp.act. /tuwatu/ PONERE ${ }^{t u-w a / i-t u}$ (MARAŠ 8 §14), 3pl.imp.act. /tuwantu/ tu-wa/i-tu-u (KULULU 2 §7)); Lyd. $\boldsymbol{c u}(\boldsymbol{v e})-$ 'to erect'? (in facuni- 'to erect' and dacuvers't 'has been erected' ?); Lyc. $\boldsymbol{t a}$ - 'to put, to place' (3sg.pres.act. tadi, ttadi, tddi (?), 3pl.pres.act. tãti, tẽti, 3sg.pret.act. tadẽ, 3pl.pret.act. tãtẽ, tetẽ, 3pl.imp.act. tatu, tãtu, inf. tane, tãne, ttãne, ttãna, impf.3pl.pres.act. tasñti), tuwe- 'to place' (3sg.pres.act. tuweti, 3pl.pres.act. tuwẽti, 3sg.pret.act. tuwete, tuwetẽ, 3sg.imp.act. tuwetu, impf.3pl.pres.act. tusñti).

PIE * $d^{h} h_{l}$-ói-ei $/ * d^{h} h_{l}-i$-énti, * $d^{h} h_{l}$-skélóó-
The oldest forms of this paradigm are tēhhe, daitti, dāi, *tiueni, $[t]$ İšteni, tianzi for the present and tehhun, taitta, daiš, daiuen, daišten, dāer for the preterite. Note that the original strong stem was dai- (with short $-a$-), which is clearly visible in e.g. daiuen and daiš. Only in late MH times, the stem dai- was replaced by dāion the basis of 3 sg.pres.act. dāi, yielding forms like dāiuen and dāiš. In the 1sg.-forms, the stem dai- regularly monophthongized to te- in front of $-h-$. In 3 sg.pres.act. the preform *dái-i yielded /dấi/, spelled da-a-i (with regular loss of intervocalic -i-). Similarly in 3pl.pret.act. *dái-er, which regularly yielded /dấer/, spelled da-a-er (OS). Restoration of the stem dai- yielded MS forms like da-i-eer /dáier/, whereas later on, when the stem dāi- is being generalized, forms like da-a-i-e-er /dáier/ are found. It is often claimed that in OS there still was a difference between dāer 'they took' and daier 'they placed'. This view is based on KBo 22.2 (Zalpa-text) only, where we indeed find da-a-er 'they took' (obv. 5)
besides da-i-er 'they placed' (obv. 16). Since this text has now been recognized as showing MH script and not OH script (cf. Košak 2005d: 112), the difference between dāer and daier in this text can be explained in view of the MH restoration of the stem dai- in the paradigm of dai-/ti-, replacing OH dāer 'they placed'.
The original weak stem is $t i$ - (and not tiila-, as often stated), which is visible in tianzi (which is ti-anzi and not tiia-nzi), tiandu, tiiant-, tiuuanzi and possibly in $[t] \bar{i} s ̌ t e n i$ (if this is the correct reading). Like all dāi/tiiianzi-class verbs, we find here as well generalization of the thematic stem tiie/a- ${ }^{z i}$ in younger times. Because these forms formally fell together with the verb tiie/a- ${ }^{-2 i}$ 'to step', it is not always easy to decide whether a form belongs here or with 'to step'. I have cited in this paradigm only forms of tiie/a- which are used together with the supine, as gathered by Kammenhuber 1955.
The hapax 3pl.pres.act. ti-an-ti (KBo 20.33 rev. 10 (OS)) must be a mistake (compare correct $t i-a n-z i$ in ibid. 7) and does not show non-assibilation of $*-t i$ (compare the wrong interpretation of alleged 3sg.pres.act. e-eš-ti 'he is' under the lemma of $e \check{s ̌}_{-}{ }^{z i} /$ aš-' 'to be').
Already Friedrich (1922: 169) correctly connected dai- ${ }^{i} / t i-$ with the PIE root * $d^{h} e h_{l^{-}}$'to place, to put' (see also at $t \bar{e}_{-}{ }^{z i}$ ), which has been generally accepted since. Nevertheless, the exact formal prehistory of this verb has been severely debated, see Tischler HEG T: 21-3 for an extensive overview of views and reconstructions. The formal interpretation of this verb depends on one's analysis of the dāiltiiianzi-class as a whole. In the recent literature, Oettinger (1979a: 461) regarded this class as reflecting a formation *Cóh $h_{l}$-ei, ${ }^{*} C_{1} i$-énti (although there he assumes that dai- / ti- has been secondarily taken over into this class, a view which he seems to have abandoned later on, cf. 2004: 401), whereas Melchert (1984: 73; 1994a: 65) reconstructs dāi as * $d^{h}$ eh $h_{l} i$-ei. Both reconstructions cannot be correct on formal grounds: the sequence $* V h_{1} i V$ yields $\mathrm{OH} V i V$, compare OH huiaianzi 'they run' $<* h_{2} u h_{1} i e ́ n t i$. As I have argued extensively in Kloekhorst fthc.a, the dāi/tiianzi-class can only be explained as reflecting a formation ${ }^{*} C C$ -ói-ei $/ * C C$-i-énti, i.e. the zero-grade of a root followed by an ablauting suffix *-oi-/-i-. For dai- / ti- this means that we must reconstruct the following $^{\text {. }}$ paradigm:

$$
\begin{aligned}
& \text { * }{ }^{h} h_{1}-o ́ i-h_{2} e i>t e ̄ h h i \\
& \text { * d }{ }^{h} h_{l} \text {-óli-th }{ }_{2} e i>d a i t t i \\
& \text { *d }{ }^{h} h_{1} \text {-ói-ei }>d a \bar{a} i \\
& \text { * } d^{h} h_{l}-i-u \text { uéni }>{ }^{* *} \text { tiueni >> tiiauneni }
\end{aligned}
$$

$$
\begin{array}{lll}
* d^{h} h_{l}-i \text {-sténi } & > & \text { tišteni } \\
* d^{h} h_{l}-i-e ́ n t i & > & \text { tianzi }
\end{array}
$$

In OS texts, the imperfective is spelled $z a-a \check{s}$-ke/a-, $z i-k e / a$ - and $z i-i k-k e / a$-. In my opinion, the spelling za-aš-ke/a-must be more original and represent/tské/á-/. Already within the OH periode the anaptyctic vowel/i/femerged in the cluster /tsk/ (cf. § 1.4.4.4), yielding /tsiké/á-/, spelled zi-(ik-)ke/a-. These forms are important since they must reflect $* d^{h} h_{1}$-skééó- and show that originally the dāi/tiianzi-class verbs did not use the element $-i$ - in the imperfective. Note that the NS forms tiške/a- and tieške/a- are clearly secondarily built on the stem ti(ie/a)-.

In the Luwian languages we find CLuw. tuua-, HLuw. tu(wa)- and Lyc. tuwe(the appurtenance from Lyd. cu(ve)- in my view is far from assured). The generally accepted explanation of this stem *tuue/o- is given by Oettinger (1979a: 483), who assumes that this stem must be reanalysed out of "urluw. *duŭăni 'wir setzen'". This seems entirely ad hoc to me: the 1 pl.-form is much too small a base for such an analogy. In my view, it almost seems as if we are dealing with a suffix $-u$ - in these forms (compare e.g. Skt. dadháu for such an $u$-suffix, cf. Kortlandt 1989: 111) so perhaps originally $* d^{h} h_{l}$-óu-ei, $* d^{h} h_{l}$-u-énti, which was thematicized in younger times to $* d^{h} h_{1}-u e / o$ - (compare $*$ piie/a- 'to give' from original *poi- / *pi-). The Lycian verb ta- seems to preserve the unextended root. Melchert (1994a: 67) therefore assumes that 3sg.pres.act. tadi directly reflects * $d^{h} e ́ h_{1}-t i$, showing the development $*-e h_{1-}>$ Lyc. $-a$-. Morpurgo Davies (1987: 221f.) assumes that a preform * $d^{h} e ́ h_{1}-t i$ should have given Lyc. **tidi, however, and she therefore proposes an intricate mixing between the roots $* d^{h} e h_{l^{-}}$'to place' and $* d e h_{3^{-}}$'to put'.
taiazil-, taidezil- (n.) 'theft': nom.sg. ta-íla-az-zi-il (OS), gen. ta-íla-zi-la-aš (OS), da-ịa-zi-la-aš (OH/MS), ta-i-ez-zi-la-aš (MH/NS), da-i-ia-zi-la-aš (MH/NS).

PIE *teh ${ }_{2}$-io-til-
See Rieken (1999a: 481) for attestations. Most forms show taiazil-, but the one attestation ta-i-IZ-zi-la-aš has to be interpreted /taiet ${ }^{\text {silas/. This word is clearly a }}$ derivative in zzil- of the verb täie/a-zi 'to steal' (q.v.), which also explains the alteration between taiazil- and taiezil-. See Rieken (1999a: 476) for the reconstruction of the suffix $-z i l-$ as $*_{-t i-}+*_{-i l-\text {. See at } t a \bar{i}}^{e} / a_{-}^{z i}$ for further etymology.
$\boldsymbol{t} \bar{a} i e / \boldsymbol{a}{ }^{z}{ }^{z i}(\mathrm{Ic} 3>\mathrm{Ic} 2)$ 'to steal (from)': 3sg.pres.act. ta-a-i-ez-zi (OS, often), ta-i-ez$z i$ (OS), da-a-i-ez-zi (OS), ta-ía $a-a z-z i$ (OS), da-i-e-ez-zi (OS), ta-a-ez-zi (OS), da-$a-i a-a z-z i(\mathrm{MH})$, da-i-ia-zi (KUB 13.9 ii 16 (MH/NS)), da-a-i-ia-zi (NH), ta-a-i-e-ez-zi (NH), ta-a-i-ía-zi (NH), 2pl.pres.act. ta-a-et-te-ni (NH), ta-ia-at-te-ni (NH), 1sg.pret.act. ta-i-ia-nu-un (NH), ta-ia-nu-un (NH), 3sg.pret.act. da-ia-at (KUB 13.9 ii 11 (MH/NS)), da-a-i-i.ia-at (NH), 1pl.pret.act. ta-ía-u-en (NH), 3pl.pret.act. da-i̇a-er (HKM 36 rev. 46 (MH/MS)), da-i-e-er (HKM 57 obv. 17 (MH/MS)); part. da-i̇ia-an-t- (MH/MS); verb.noun da-a-i्2a-u-ua-ar (MH); impf. $d a-a-i$

Derivatives: see taiazil.
IE cognates: Skt. tāyú- 'thief', stāyát (adv.) 'secretly', Gr. тךтá $\omega$ 'to rob', $\tau \eta \ddot{\sigma} \sigma \mathrm{oc}$ 'in vain', OCS tatb 'thief', taiti 'to conceal', OIr. táid 'thief' (*tā-ti-).

PIE *teh 2 -ie/o-
See Oettinger 1979a: 396f. for attestations and treatment. The verb shows a stem tāie/a-, which has already by Hrozný (1917: 54) been compared to Skt. tāyú'thief', Gr. тŋтá $\omega$ 'to rob, etc. This means that tāie/a- must reflect *teh $h_{2}$-ie/o(similar formation in Skt. stāyát 'secretly' and OCS taiti 'to conceal'). This verb is the name-giver of the tāie/a-class, which consists of a few other verbs that go back to *-eh2-ie/o- as well.
 'thief by the Lydians' points to a Lyd. *teju- 'thief', which he reconstructs as *tāiu- and equates with Skt. tāyú- 'thief'. Problematic, however, is the fact that *i should yield Lyd. $d$ (cf. Melchert 1994b). Melchert (1988c: 39) claims that HLuw. ${ }^{* 428}$ tà-ia-t $[i]$ (KARKAMIŠ A24a §13) means 'steals', but this is rejected by Hawkins (2000: 136) because such a meaning would not fit the context. Moreover, the sign tà must be read /da/ (cf. Rieken fthc.), which does not fit * teh $h_{2}$ ie/o- either.
taiezil-: see taiazil-
 6.10 ii 5 ( $\mathrm{OH} / \mathrm{NS}$ )), ta-[e]šs-ti-ia-zi (IBoT 2.131 rev. 7 (NS)), da-iš-ti-ia-iz-zi (KUB 58.91 rev. ${ }^{?} 10$ (NS)), 3pl.pres.act. da-iš-te-ía-an-zi (KUB 31.79 obv. 13 (MH/MS)), ta-[a-i]š-ti-ía-an-zi (IBoT 3.148 ii 55 (MH/NS)), da-a-iš-ti-an-zi (KBo 10.20 iv 6 (NS)), ta-eš-ti-ia-an-zi (IBoT 2.131 rev. 17 (NS)), da-iš-ta-an-zi (KBo 34.267, 3 (NS)), da-iš-ta-a[n-zi] (KBo 24.112+ rev. 2 (NS)), 3pl.pret.act. da-iš-te-i-e-er (KUB 31.79 obv. 9 (MH/MS)); part. nom.-acc.sg.n. ta-a-iš-ti-ía-an
(KBo 10.2 iii 12 (OH/NS)), nom.-acc.pl.n. [ta-a-i]š-ti-an-da (KUB 29.26, 4 (OH/NS)); inf.I da-iš-tum-ma-an-zi (IBoT 3.148 ii 43 (MH/NS)).

Derivatives: taištiiar (n.) '?’ (nom.-acc.sg.? ta-iš-ti-ía-ar (KUB 59.3, 11)), see taišzi-.

PIE $* d^{h} o h_{1}-e s-+* d^{h} h_{1}-o i-/-i-$
See Tischler HEG T: 28-9 for attestations. The oldest attestations belong to the mēma/i-class: tāištai, dāištiiianzi, daištiier (the forms da-iš-te-i्रa-an-zi (KUB 31.79 obv. 13) and da-iš-te-i-e-er (ibid. 9) probably show use of the sign TE for $t i$ (cf. Melchert 1984a: 137)), tãištiiant-. Like all mēma/i-class verbs, in younger times this verb is taken over into the tarna-class (daištanzi and daištummanzi). Besides, we occasionally find forms that show a stem taištiie/a- ${ }^{z i}$ (taeštiiazi) and daištiiae- ${ }^{z i}$ (daištiizaizzi). As I explained under the treatment of the méma/i-class in $\S$ 2.2.2.2.h, its verbs go back to polysyllabic dāi/tiiianzi-class verbs. In this case, too, we therefore can reconstruct a stem *tāištai- ${ }^{i} / t a ̄ i s ̌ t i-$.
Oettinger (1979a: 477) suggests that this verb is of nominal origin and reconstructs a $t$-suffixed $s$-stem: * $d^{h} o h_{1}$-es-t-. This cannot easily account for the inflection, however, and has the disadvantage that we would rather expect that * $d^{h}$ oh $h_{l} e s-t-i$ - would show assibilation of $*-t-$ to $-z$-. Rieken (1999a: 189-90) therefore adapts Oettinger's suggestion: she accepts the explanation of dāiš- as *d'oh $h_{1}$-es- 'which is put upon', but suggests rather that tāištai-/tāišti- is to be seen as a compound of $* d^{h} o h_{1}$-es- $+d a i^{-}{ }^{i} / t i$ - 'to put a load upon'. This analysis is superior in the sense that it perfectly explains the inflection. See at dai- ${ }^{i} / \mathrm{ti}-$ for further etymology.
taišži- (c.) 'hay-barn': acc.sg. ta-iš-zi-in (OS).
PIE $* d^{h} o h_{1}$-es-ti-
This word is semi-hapax in $\S 100$ of the Hittite Laws:
KBo 6.2 iv (with additions from duplicate KBo 6.3 iv 59-62)

(60) $[(n=u$-ušs $=\check{s} a-a n)]$ pa-ra-a h ha-me-eš-ha-an-da ar-[(nu-zi ta-iš-zi-in) $]$
(61) [(EGIR-pa p)]a-q-i ták-ku IN.NU.DA an-da-an [(NU.GÁL nu ta-iš-zi-in

$$
\dot{u}-e-t e-e)] z-z i
$$

'If someone sets fire to a $t$., he will feed his (i.e. the owner's) [co]ws and will bring them to (next) spring. He will pay back the $t$. If there was no hay inside, he will (only) rebuild the $t$. '.

On the basis of this context, we must conclude that taišzi- denotes a hay-barn in which the hay is stored with which the cows are fed during the winter.

Formally, one can hardly deny the resemblance with the verb tāišta- ${ }^{i} / t a \bar{a} i s t i-$ 'to load', but the exact connection is in debate. Some scholars who analyse tãišta/ias tāišt-+ reconstruct taišzi- as *taišt-i-. This view is adapted by e.g. Melchert (1994a: 166) who reconstructs *taiš-t-ti- and reckons with a rule *-stt->-št- (and not $\left./ \mathrm{st}^{\mathrm{s}} \mathrm{t}-/\right)$. These etymologies are now flawed by our reconstruction of $t \bar{a} i s ̌ t a / i-$ as *d $d^{h} h_{1}$-es- $+d a i-^{i} / t i-$. Rieken (1999a: 190) reconstructs $* d^{h} o h_{1}$-es- $d^{h} h_{1}$-ti(assuming the same sound law as Melchert did, namely $*$-stt- $>-\check{s} t$-), but this seems unlikely to me. I would prefer $* d^{h}$ oh $h_{1}$-es-ti-, a -ti-derivative of $* d^{h} o h_{1}$-es'which has been layed down' (in this case = 'hay'). For -ti-derivatives of $s$-stems compare e.g. Pol. dtugość $<* d_{b l g o s t b}<* d h_{1} g^{h}$-os-ti- (cf. Rieken 1999a: 182).
tāiuga-: see under inga-
$\boldsymbol{d} \overline{\boldsymbol{a}} \boldsymbol{k} \boldsymbol{k}^{\boldsymbol{i}}{ }^{\text {/ }}$ dakk- (IIa2) 'to resemble': 3sg.pres.act. da-a-ak-ki (KUB 43.53 i 2 ff. (OH/NS)), ta-ak-ki (KBo 21.19 i 4, 5 (MH/NS), KUB 33.93 iv 31 (NS)), 3pl.pres.act. ták-kán-zi (KBo 17.17 iv 5 (OS), KUB 43.53 i 15 ( $\mathrm{OH} / \mathrm{NS}$ ))); 3pl.pres.midd. ták-kán-ta-ri (KBo 22.6 i $28(\mathrm{OH} / \mathrm{NS})$ ); verb.noun? [tá]k-ku-u-uaar (KUB 3.110, 5 (NS)), ták-ku-ua-ar (KUB 12.52 iii 6 (NS)).

IE cognates: Gr. סокві̃ ‘seems'.

$$
\text { PIE } * d \dot{c}^{\prime} k^{\prime} h_{1}-e i, * d k^{\prime} h_{1}-e ́ n t i
$$

See Tischler HEG T: 31f. for attestations. This verb clearly shows an ablaut dākkvs. takk-. Since Laroche (1963: 71) it is generally connected with Gr. סoкeĩ 'it seems', which is semantically as well as formally appealing. This latter verb is usually further connected with Gr. ס́́коцaı 'to take, to accept, to receive' (with variant $\delta \varepsilon ́ \chi \circ \mu a ı(A t t)$.$) , Skt. dās's 'to offer, to worship', Lat. docēre 'teach' (*'to$ make someone take up something') $<*^{\prime} e^{\prime}$-, but this seems quite unlikely to me for semantic reasons.

Within Hittite, dākki is remarkable because it shows unlenited $-k k$ - after $\bar{a}<* \dot{o}$ (compare e.g. $\bar{a} k i / a k k a n z i$, ištāpi / ištappanzi). When we compare this to the form šākki 'knows', of which I have argued that it must reflect *sókh $h_{1}$-ei, we see that we can reconstruct dākki only as $* d o ́ k h_{1}-e i$ (note that $* d o ́ k h_{2 / 3} e i$ would have yielded Hitt. ${ }^{* *}$ dakkai, according to the tarn(a)-class). In the plural, takkanzi must be phonologically interpreted as /tkánt ${ }^{\mathrm{s}} \mathrm{i} /<{ }^{*} d k h_{1}$-énti (compare e.g. taknāš 'of the earth' /tgnā́s/ $\left.\ll *^{h} d^{\prime} g^{h} m o ́ s\right)$.
${ }^{(f)} \boldsymbol{t a g} \bar{a} n z e p a-$ (c.) 'earth; goddess of the earth' (Sum. KI): nom.sg. ta-ga-an-zi-pa$a \check{s}$ (MH/MS), da-ga-an-zi-pa-aš, da-ga-zi-pa-aš (OH/NS), acc.sg. da-ga-an-zi-pa-an, da-ga-zi-pa-an, gen.sg. ta-ga-a-an-ze-pa-aš (OS), da-ga-zi-pa-aš (NH), dat.-loc.sg. da-ga-an-zi-pí, da-a-ga-an-zi-pí (KUB 9.1 iii 5 (NS)), abl. da-ga-an-zi-pa-az, da-ga-an-zi-pa-za, acc.pl. ta-ga-an-zi-pu-uš, da-ga-an-zi-pu-uš ( $\mathrm{OH} / \mathrm{NS}$ ), da-ga-zi-pu-uš.

PIE * $d^{h} g^{h} \frac{1}{o} m+{ }^{*}$ sepa-
The oldest (OS) attestation of this word is spelled ta-ga-a-an-zi-p ${ }^{\circ}$. In younger texts, the bulk of the forms is spelled da-ga-an-zi-p or ta-ga-an-zi-p. The spelling $d a-g a-z i-p^{\circ}$ occurs a few times only in NS texts, whereas a spelling $d a-a-$ $g a-a n-z i-p^{\circ}$ occurs only once and may not be phonetically real.

The word denotes 'earth' and clearly belongs with tēkan / takn- 'earth' (q.v.). The distribution between the two is that tēkan is neuter whereas tagānzepa- is animate and can function as the ergative of tēkan (as the subject of a transitive verb). Formally, tagānzepa- must be analysed as showing an element tagān (to be equated with the ending-less locative tagān 'on the earth'?) and an element -ze/ipa- / -še/ipa- that seems to function as a suffix that makes female deifications of the basic word (and therefore words in -ze/ipa- / -še/ipa- usually show a determinative ${ }^{\mathrm{d}}$ or $^{\mathrm{f}}$ ). It is generally thought that this element -ze/ipa- / -še/ipaoriginally was a noun that meant 'genie' or the like. It is clear that we find $-z$ -
 -š- elsewhere ( ${ }^{\mathrm{d}} A$ šk $k$ š̌epa- (of āška- 'gate'), ${ }^{\mathrm{d}}$ Hantašepa- (of hant- 'forehead'), ${ }^{\mathrm{d}}$ Išpanzašepa- (of išpant- 'night'), ${ }^{\mathrm{d}} \operatorname{Kam}(m a) r u s ̌ e p a-$-). The status of the vowel is less clear since we find spellings with both $-e-$ as well as $-i-$. A complicating factor is the fact that the sign ZI can be read $z i$ as well as $z e$. If we look at the OS spellings of this suffix, we find ${ }^{\mathrm{d}} \mathrm{H} \mathrm{Ha}-a n-t a-s ̌ e-p{ }^{\circ}(7 \mathrm{x})$, ${ }^{\mathrm{d}} M i-i a-t a-a n-z e ́-p{ }^{\circ}(2 \mathrm{x})$ and ${ }^{\mathrm{d}} I \check{s}$-pa-an-za-še-p ${ }^{\circ}(1 \mathrm{x})$ that show unambiguously $-e-$, and ta-ga-a-an-ZI/E- $p^{\circ}$ (1x), tar-ša-an-ZI/E-p ${ }^{\circ}(5 \mathrm{x})$ with the ambiguous sign ZI. Because of the total lack of unambiguous $-i$-spellings in OS texts (never -ši- $p^{\circ}$ ), I am inclined to read ZI as $z e$ in these cases: ta-ga-a-an-ze-pa-aš and tar-ša-an-ze- $p^{\circ}$, which would mean that these words originally were tagānzepa- and taršanzepa-. In younger texts, the situation is less clear, however, since we then find spellings with -ši- as well ( ${ }^{\mathrm{d}} A \check{s}-g a-\check{s} i-p{ }^{\circ}$ besides ${ }^{\mathrm{d}} A \check{s}-g a-\check{s} e-p^{\circ}$, ${ }^{\mathrm{d}} \mathrm{H} A a-a n-t a-\check{s} i-p{ }^{\circ}$ besides ${ }^{\mathrm{d}} H a-a n-t a-s{ }^{5} e-p{ }^{\circ}$ and ${ }^{\mathrm{d}} \mathrm{Kam}-(m a-) r u-s ̌ i-p^{\circ}$ besides $\left.{ }^{\mathrm{d}} \mathrm{Kam}-(m a-) r u-s ̌ e-p^{\circ}\right)$ while the unambiguous $-z e ́-$ is not found anymore (only ${ }^{\mathrm{d}} \mathrm{Hu} u-r i-i a-a n-\mathrm{ZI} / \mathrm{E}-p^{\circ}$, ${ }^{\mathrm{d}} M i-i a-d a-a n-\mathrm{ZI} / \mathrm{E}-p^{\circ}$, ${ }^{\mathrm{d}} \check{S} u$-ua-an-ZI/E- $p^{\circ}$, da-ga-an-ZI/E- $p^{\circ}$ and tar-ša-an-ZI/E- $p^{\circ}$ ). Melchert's account (1984a:
180) that there was a difference between $-e$ - and $-i$ - that was accentually gouverned (*hanta- + sépa- vs. *dagán + sepa-) seems unlikely to me. Because of the absence of a simplex *še/ipa- (although one could compare the PN ${ }^{\mathrm{m}}$ Ši-pa-LÚ-i- in CTH 81) and because its exact meaning is unclear, etymologizing is too difficult at this point.
takkešš- ${ }^{-i}$ : see takš- ${ }^{z i}$
taki- (adj.) 'other, foreign(?)'; taki- ... taki- 'the one .. the other': dat.-loc.sg. ta-ki-i-ía (OS), ta-ki-ia (OS).

See Tischler HEG T: 38 for attestations. Usually, the word is translated 'other' and is therewith regarded semantically equal to tamai- 'other'. It is striking, however, that all examples of taki- given by Tischler belong either with URU 'city' or with $u d n \bar{e}$ 'land'. Perhaps the difference between taki- and tamai- is that taki- has a connotation 'foreign'.
Kronasser (1966: 210) connects taki- with *da- 'two', implying a reconstruction *duo-gi- vel sim. Although this etymology seems attractive, the interpretation of the suffix -ki- is unclear. Kronasser compares it with "antaki- 'inner room'", but apart from the fact that the stem in fact is antaka- (q.v.), this word is probably of Hurrian origin.
$\boldsymbol{t a k k i s ̌ s ̌ -}{ }^{z i}$ : see takš- ${ }^{z i}$
$\boldsymbol{t a k} \check{k s}^{-{ }^{i}}$ (Ia4) 'to devise, to unify, undertake, to mingle': 1sg.pres.act. tág-ga$a \check{s}[-m i](\mathrm{NH}), 2 \mathrm{sg} . p r e s . a c t . ~ t a ́ k-k i-i s ̌-s ̌ i ~(\mathrm{OH} / \mathrm{NS})$, tág-ga-aš-ši (OH/NS, 1x), 3sg.pres.act. ták-ki-iš[-zi] (OS), ták-ki-iš-zi, ták-ke-eš-zi, ták-ke-e-eš-zi (NH), ták-ki-iz-zi (KBo 6.34 ii 25 (MH/NS)), ták-ki-iš-iz-zi (NH), ták-ke-eš-iz-zi (NH), 2pl.pres.act. ták-ki-iš-te-ni (MH/MS), ták-ke-eš-te-ni (NH), tág-ga-aš-te-ni ( $\mathrm{OH} / \mathrm{NS}$ ), 3pl.pres.act. ták-ša-an-zi (OS), ták-ki-iš-ša-an-zi (NH), ták-ke-eš-ša$a n-z i \quad(\mathrm{NH})$, ták-ke-e-eš-ša-an-zi (NH), 1sg.pret.act. ták-ke-eš-šu-un (NH), 3sg.pret.act. ták-ki-iš-ta (OS), ták-ke-e-eš-ta (NH), tág-ga-aš-ta (OH/NS), 3pl.pret.act. ták-še-er (OS), 3sg.imp.act. tág-ga-aš-du (KBo 26.131 obv. 4 (NS)); 3pl.pres.midd. ták-ša-an-da-ri (MH/NS), 3pl.imp.act. ták-ša-an-ta-ru (MH/NS); inf.I ták-šu-an-zi (OS), ták-šu-una-an-zi; part. ták-ša-an-t-; impf. ták-ki-iš-ke/a(OS).

Derivatives: see takšuunar, takšeššar, takšan, takšatar and takšul.

IE cognates: Lat. texō 'to weave, to put together', OP ham taxša- 'to put together', Gr. té $\chi \sim \eta ~ ‘ s k i l l ’, ~ O H G ~ d e h s a l a-~ ‘ a x e ’ . ~$

PIE *téks-ti, *tks-énti
See Oettinger (1979a: 217) for attestations. The semantic interpretation of this verb is quite difficult. We find, for instance, idālu takš- 'to treat (someone) evil', takšul takš- 'to conclude a peace-treaty', KASKAL-ša takš- 'to undertake a campaign', É-er takšs- 'to allot a house (to someone)', GEŠTIN uetenit takš- 'to mingle wine with water'. Kimball (1999: 258) states that the basic meaning of $t a k s ̌-$ must be 'to put together'.
The oldest attested forms, takkiš[zi], takkišta, takšanzi, takšer, takšuanzi and takkiške/a- (all OS) show a distribution between takš-V vs. takkiš-C (note that -uin takšuanzi does not count as a consonant here, whereas e.g. in harueni it does (see at har $\left.(k)-{ }_{-}^{z i}\right)$ ). Apparently, in the cluster *-ksC- an anaptyctic vowel /i/d (spelled $e / i$ ) emerged: /takiS-/. In younger times, this anaptyctic vowel spread throughout the paradigm, yielding forms like takke/iššanzi and takkeššun. The forms that are spelled ták-ke-e-eš- even seem to show that at one point this anaptyctic vowel received the accent: /takíS-/ or even /tkíS-/. Some NS forms are spelled tág-ga-aš-C (especially found in a NH copy of the Telipinu Edict), which Tischler (HEG T: 41) interprets as another way of breaking the cluster ${ }^{*}$ - $k s C$ with a "Hilfsvokal $a$ " (so /takas-/). I would rather interpret these forms as attempts to spell /taksC-/ (without an anaptyctic vowel), which in my view is an archaizing hypercorrection: the scribe knew that takkeššanzi was the young form that had replaced older takšanzi and therefore analogically replaced correct takke/išC with /taksC-/, spelled taggašC-.
In a $m i$-inflecting verb, it is quite awkward to find a vowel $-a$-, since all $m i-$ verbs show a reflex of original e-grade. Melchert (1994a: 140, on the basis of Oettinger 1979a: 219) therefore hesitatingly suggests that we have to reckon with a development *TéKs-Ci>*takšCi (i.e. *-e->-a-before two obstruents followed by a consonant). This is rejected by e.g. Watkins (1985: 253), however, who therefore must reconstruct $* t o K S$ - with an aberrant $o$-grade. For takšanzi $=$ $/ t \mathrm{ksánt}{ }^{\mathrm{s}} \mathrm{i} /<$ TKss-énti compare e.g. taknāš ‘of the earth’ $=/ \operatorname{tgnā́s} / \ll * d^{h} g^{h}$ mós.

Sturtevant (1930c: 214) etymologically connects takš- with Skt. takṣ- 'to hammer, to build', which has been followed by many scholars who subsequently reconstruct *tek' $p$-. This etymology is problematic, however, in view of the fact that Skt. taks- rather reflects *te-tk', an old reduplication of the root *tek- 'to create'. I therefore rather follow Oettinger (l.c.) who connects takš- with Lat. texō 'to weave, to unify' and OP ham taxša- 'to put together' from *teks-.
takšan- (n.) 'centre, joint, combination'; takšan šārr-- 'to put in half, to divide': ták-ša-an.
Derivatives: takšan (adv.) 'together' (ták-ša-an (OS)).
See Tischler HEG T: 43f. for attestations and treatment. This word is clearly derived from the verb $t a k \check{s}-{ }^{z i}$. See there for further etymology.
takšatar / takšann- (n.) 'plain, level': nom.-acc.sg. ták-ša-tar, gen.sg. ták-ša-an$n a-a \check{s}$, all.sg.(?) ták-ša-an-na.
Derivatives: takšatniïe/a- (Ic1) 'to level' (3pl.imp.midd. ták-ša-at-ni-ia-an-ta$r u$ (KUB 15.34 iii 52 (MH/MS)); impf.2pl.imp.act. ták-ša-at-ni-iš-<ke->et-tén (KUB 15.34 i 45 (MH/MS))), takšanna- ${ }^{\text {i }}$ / takšanni- (IIa5) 'to level' (impf.3sg.pret.act. ták-ša-an-ni-iš-ke-et (KBo 10.2 ii 5 (OH/NS))).

PIE *tks-ótr
See Tischler HEG T: 45f. for attestations. Originally, takšatar must have been a verb.noun of takš- ${ }^{z i}$, and probably have meant 'unification' vel sim. Such an original meaning is not graspable anymore, but a semantic development to 'level, plain' is comprehensible. Note that the two verbal forms that show a stem takšatniie/a- (both in KUB 15.34) must be of Luwian origin, showing the unassimilation of the cluster -tn-, which yielded regular Hittite -nn- in takšannaš and takšanna- ${ }^{i} /$ takšanni-. See takš- ${ }^{z i}$ for further etymology.
takšeššar (n.) 'combination, arrangement, settlement': nom.-acc.sg. ták-še-eš$\check{s} a r=\check{s} e-e t-t=a($ KBo $17.29+\mathrm{KBo} 20.1 \mathrm{i} 6(\mathrm{OS}))$, ták-še-ešs=še-t=a(KBo 20.8 iv 1 ( OS )), ták-še-eš-šar=še-et (KBo $10.28+33 \mathrm{v} 12(\mathrm{OH} / \mathrm{NS})$ ), ták-še-eš-šar (KBo 6.26 iii $8(\mathrm{OH} / \mathrm{NS})$ ), ták-še-eš-š[ar] (KBo 30.82 i $14(\mathrm{OH} / \mathrm{NS})$ ), [tá]k-ši-iš-šar (VSNF 12.14 obv. 10 ( $\mathrm{OH} / \mathrm{NS}$ )).

PIE *tks-é $h_{l} s h_{1} r$
This noun is attested in nom.-acc.sg. only. The one OS attestation ták-še-eš=̌̌e$t=a$ has caused some debate on the original form of this word. E.g. Rieken (1999a: 387-9) states that we have to reckon with an original stem takšeš / takšešn-. Others (e.g. Tischler HEG T: 47) just emend the form to ták-še-eš̌$\check{s ̌ a r}\rangle=\check{s} e-t=a$ on the basis of the multiple other attestations of ták-še-eš-šar. The word clearly is derived from $t a k \check{s}_{-}^{z i}$, see there for further etymology.
takšul- (n.) ‘agreement, settlement, peace(-treaty)': nom.-acc.sg. ták-šu-ul (OS), ták-šu-ú-ul (MH/MS), gen.sg. ták-šu-la-aš (MH/MS), dat.-loc.sg. ták-šu-li.

Derivatives: takšul taǩ̌- ${ }^{-i}$ (Ia4) 'to conclude an agreement', takšul(a)- (adj.) 'friendly' (instr. ták-šu-li-it), takšulae- ${ }^{z i}$ (Ic2) 'to agree, to be friendly, to make peace’ (3sg.pres.act. ták-šu-la-a-ez-zi (MH/MS), ták-šu-la-iz-zi, 1pl.pres.act. ták-šu-la-u-e-ni (MH/MS), 3pl.pres.act. ták-šu-la-a-an-zi (MH/MS), ták-šu-la-an-zi, 2sg.pret.act. ták-šu-la-a-eš (MH/MS), 3sg.pret.act. ták-šu-la-a-it, ták-šu-la-it, 3pl.pres.act. ták-šu-la-a-er (MH/MS), 2sg.imp.act. ták-šu-la-a-i, 3sg.imp.act. ták$\check{s ̌ u-l a-a-i d-d u, ~ 2 p l . i m p . a c t . ~ t a ́ k-s ̌ u-l a-a t[-t e-e] n, ~ 3 p l . i m p . a c t . ~ t a ́ k-s ̌ u-l a-a-a n-d u ; ~}$ part. ták-šu-la-an-t-), takšulatar / takšulann- (n.) 'friendliness, peace’ (nom.acc.sg. ták-šu-la-tar, dat.-loc.sg. ták-šu-la-an-ni).

PIE *tks-úl
This word is clearly a derivative in $-u l-$ from the verb $t a k \check{s}_{-}^{z i}$. The MH attestation ták-šu-ú-ul shows that just as in aššul and uštul / uaštul the accent was on the suffix. See $\operatorname{taks\Sigma ^{z}}{ }^{z}$ for further etymology.
takšuuar (n.) 'friendship(?)': nom.-acc.sg. [tá]k-šu-una-ar (KUB 15.34 ii 20
(MH/MS)), ták-šu-úa-ar (Bo 3234 rev. 8 (MH/MS)).
PIE *teks-ur
See Tischler HEG T: 49 for treatment. This word only occurs inbetween āššiiauuar 'love' and DINGIR ${ }^{\text {MEŠ_-aš āššiiauuar 'love of the gods' and therefore }}$ must denote a similar notion, e.g. 'friendship' or the like. It is clearly originally a verb.noun of the verb takš- ${ }^{z i}$. See there for further etymology.
$\boldsymbol{t a k k u}$ (conjunction) 'if, when': ták-ku (OS).
PIE *to- $k^{w} e$
This conjunction is used in OH times only: from MH times onwards its function is taken over by mān. It is probably made up of the sentence initial conjunction $t a$ and the particle $=k k u$ (see at there own lemmas), and reflects *to $-k^{w} e$. Therewith it is formally identical to Gr. tóte 'then' and OCS takъ 'thus'. This etymology is important as it shows that $* k^{w}$ yields Hitt. $/ \mathrm{k}^{\mathrm{w}} /$ and not $/ \mathrm{g}^{\mathrm{w}} /$ (pace Melchert 1994a: $61)$. Note that in this word the preceding $* o$ does not lenite the following $* k^{w}$, which shows that the $*_{O}$ cannot have been accentuated (see $\S$ 1.4.1 for my view that *ó caused lenition of the following consonant). This coincides with Melchert's views (1998a) that sentence initial conjuntions were inherently unstressed. I assume that in ${ }^{*} t o k^{w} e$ the word-final $* e$ was apocopated, which
means that takku represents /tak ${ }^{\mathrm{w}}$ / (contra Garrett apud Melchert 1994a: 184, who assumes that word-final $* e$ in $* t o k^{w} e$ first was weakened to ${ }^{*} t a k^{w} \partial$, after which */ə/ was coloured to $/ \mathrm{u} /$ due to the preceding labiovelar, which means that takku= $/ \operatorname{tak}^{\mathrm{w}} \mathrm{u} /$ ).
dāla- ${ }^{i}$ /dāli- (IIa5 > IIa1 $\gamma$, Ic1, Ic2) 'to let, to leave, to let in peace': 1sg.pres.act. da-a-la-ah-hi (KUB 13.20 i 24 (MH/NS), KBo 18.136 rev. 16 (NS)), ta-la-ah-hi (KUB 13.20 i 11 (MH/NS)), da-a-lí-ia-mi (KUB 31.84 iii 63 (MH/NS)), da-a-li-ía-mi (KUB 19.6+21.1 i 77 (NH), KUB 21.5+ ii 2 (NH), KUB 23.93, 5 (NS)), da$l i-i \underline{a}-m i(\mathrm{KUB} 14.3$ iii $55(\mathrm{NH})$ ), 2sg.pres.act. da-la-a[t-ti?] (KBo 16.47 i 21 (MH/MS)), da-la-at-ti (KBo 5.4 rev. 32 (NS)), da-a-li-ia-ši (KUB 19.49+ i 55 (NH), KUB 21.16 i $20(\mathrm{NH})$ ), ta-li-i-ia-ši (KUB 40.47 obv. 11 (MH/NS)), 3sg.pres.act. ta-a-la-i (KUB 29.29 obv. 7 (OS)), da-a-la-i (KBo $6.2+$ KBo 19.1 ii 17 (OS), KBo 15.10 iii 60 (OH/MS), KUB 4.47 obv. 26 (OH/NS)), ta-la-a-i (KUB 20.96 ii 24 (OH/NS)), da-a-la-iz-zi (KUB 34.118 ii 8 (MS)), da-a-li-ia-zi (KUB 13.4 i 61, ii 39 (OH/NS)), ta-a-li-a-zi (KUB 13.6+17+19 ii $29(\mathrm{OH} / \mathrm{NS})$ ), $d a-l i-i a-z i(K U B 14.3$ iii $57(\mathrm{NH})$ ), 1pl.pres.act. da-a-li-ia-u-e-ni (KUB 13.35 iv 8 (NS)), ta-a-li-ía-u-e-ni (KuSa I/1.14 obv. 5 (NS)), 2pl.pres.act. da-li-eš-te-ni (KUB 23.82 ii 22 (NS)), 3pl.pres.act. da-a-li-ia-an-zi (KUB 43.55 iv 5 (OH/NS), KUB 22.70 obv. 46, $74(\mathrm{NH})$ ), da-li-an-zi (KBo 10.28+33 i $5(\mathrm{OH} / \mathrm{NS})$ ), da-li-ia$a n-z i(\mathrm{KBo} 4.12$ rev. $10(\mathrm{NH})$, KBo 5.3 ii $4(\mathrm{NH})$ ), ta-li-ía-an-zi (KBo 13.119 iii 17 (NS)), da-a-la-an-zi (KUB 41.54 iii 14 (NS)), 1sg.pret.act. ta-a-la-ah-hu-un (KBo 3.22 rev. 45 (OS)), da-a-la-ah-hau-un (KUB 21.3 i 6 (NH)), da-la-ah-ḩu-un (KBo 10.3 i 5 (OH/NS), KBo 5.8 iii 12, $39(\mathrm{NH})$, KBo 16.8 iii 17, $42(\mathrm{NH})$, KUB $19.6+21.1$ i $76(\mathrm{NH})$, KUB 19.37 iii 40, $45(\mathrm{NH})$ ), da-a-li-i-ia-nu-un (KBo 5.4 obv. 25 (NH), KUB 1.1+ iii 26 (NH), KUB 19.67+64+ i 23 (NH), KUB 21.5+ ii 1 (NH)), ta-a-li-i-ia-nu-un (KUB 26.32 i 15 (NH)), da-li-i_ia-nu-un (KBo 3.3+ ii 3 (NH), KBo 3.6 ii $21(\mathrm{NH})$, KBo 5.13 iv $3(\mathrm{NH})$, KUB 14.3 i 38, ii $33(\mathrm{NH})$, KUB $19.41+31.12$ ii $6(\mathrm{NH})$, KUB $19.66+6.41$ i 16, iv $11(\mathrm{NH})$ ), 3sg.pret.act. ta-a-li$i s ̌$ (KBo 22.2 rev. 14 ( $\mathrm{OH} / \mathrm{MS}$ )), da-a-li-iš (KBo 3.38 rev .31 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 26.71 i 12 ( $\mathrm{OH} / \mathrm{NS}$ )), da-li-iš (KBo 26.136 obv. 14 (MH/MS), KBo 34.49 ii 6 (MH/MS)), da-a-li-eš-ta (KUB 14.1 i 5 (MH/MS)), ta-a-li-eš-ta (KBo 5.6 ii 12 (NH)), da-a-li-iš-t[a] (KUB 14.16 i 11 (NH)), da-li-eš-ta (KUB 14.1+ obv. 5 (MH/MS)), da-a-la-aš (KUB 33.9 iii 8 (OH/NS)), da-a-li-ía-at (KBo 22.11 i 7 (NS), KUB $1.1+$ ii $55(\mathrm{NH})$ ), da-li-ia-at (KUB 1.1 iii $70(\mathrm{NH})$, KUB $1.6+$ iii 36 (NH), KUB 19.23 obv. 11 (NS)), ta-li-ila-at (KUB 19.49 i 3 (NH)), 1pl.pret.act. da-li-ia-u-en (HW: 205), 2pl.pret.act. da-a-li-i_ia-at-tén (KUB 22.70 i 43 (NH)), 3pl.pret.act. da-a-li-e[r] (KBo 15.10 ii 47 (OH/MS)), ta-a-li-e-er (HKM 58 obv. 9
(MH/MS)), da-a-li-e-er (Oettinger 1979a: 488 ${ }^{77}$ ), 2sg.imp.act. da-a-la (KUB 33.5 ii 15 (OH/MS), KUB 33.66 iii 12 (OH/MS), ABoT 65 obv. 12 (MH/MS), KUB $1.16+40.65$ ii 14 (OH/NS)), da-a-li (KUB 8.53 ii 22 (NS)), 3sg.imp.act. da-la-a$u ́$ (KUB 36.55 ii 9 (MH/MS?)), ta-a-li-eš-du (KBo 3.3+ ii 9 (NH)), ta-a-li-iš-du (KUB 19.41 ii 13 (NH)), 2pl.imp.act. da-a-li-iš-te-en (KBo 21.22 rev. 50 ( $\mathrm{OH} / \mathrm{MS}$ )), da-a-li-eš-tén (KBo 32.14 ii 23, 39, iii 6, 20, 34, 54 (MH/MS)), da-li-eš-te-en (KUB 31.101, 8 (MS)), 3pl.imp.act. da-a-la-an-du (Oettinger 1979a: 487); part. nom.-acc.sg.n. da-a-li-ia-an (KBo $3.4+$ KUB 23.125 iv 16 (NH), KBo 4.4 ii $20(\mathrm{NH})$ ), ta-li-i ia-an (KBo $2.6+$ KUB 18.51 i 6, 13 (NH)), da-li-ía-an (KBo 5.3 ii $5(\mathrm{NH})$ ); verb.noun da-lu-mar (KUB 3.94 i 24 (NS)), da-li-ia-u-ar (KUB 3.94 i 16), da-a-li-ia-u-ua-ar (KBo 14.21 i 28, 55 (NS)), ta-li-ia-ua-ar (KUB 18.18, 15 (NS)); impf. da-li-iš-ke/a- (NS), da-liš-ke/a- (NS), da-li-eš-ke/a-, ta-li-eš-ke/a-.

PIE dà + *lh $h_{1}$-oi-ei, $d \bar{a}+* l h_{1}-i$-enti.
The oldest attestations (OS) of this verb, tālai, dālai, tālahhun, tālier, dālišten, show that originally this verb belongs to the mēma/i-class: dāla- ${ }^{i} / d \bar{a} l i-$. As I have explained in the treatment of the $m \bar{e} m a / i$-class in $\S 2.2 .2 .2 . \mathrm{h}$, this class consists of polysyllabic verbs that used to belong to the dāi/tiianzi-class but are gradually being taken over into the $\operatorname{tarn}(a)$-class, having the $m \bar{e} m a / i$-inflection as an intermediate stage. Also in the case of dāla/i- this is visible since we find some specific tarn(a)-class forms in younger (NS) texts: dālanzi, dālaš, dālandu and dālumar. That this verb originally was dāi/tiianzzi-inflected is visible in the fact that in younger (NS) texts we find many forms that show a stem dāliie/a- ${ }^{z i}$. Once, we find a form that shows a stem dālae- ${ }^{z i}$ (dālaizzi (MS)), which is built directly on the original 3 sg .pres.act. dālai. So all in all, despite the wild variaty of forms, we can safely conclude that originally this verb must have shown an inflection *dālai- ${ }^{i}$ /dāli-.
Because of the disyllabity of the stem, this verb cannot directly reflect a PIE root. Therefore, etymological proposals like Kapancjan's connection with Arm. t'olum 'to let, to endure' (1931-33: 63) or Petersen's connection with Lat. tollō 'to bear', Goth. pulan 'to endure', etc. (1937: 210) cannot be upheld anymore. Oettinger (1979a: 488, with reference to Eichner) proposes to connect dāla/i- to $l \bar{a}^{-}{ }^{i} / l-$ 'to loosen, to releave' (q.v.), which semantically is convincing. In his view, we are dealing with a preverb $d \bar{a}-<* d \bar{o}$, which is supposed to be an ablautvariant of Lat. $d \bar{e}$ 'from, away', followed by $l \bar{a}-/ l-$. Problematic, however, is the fact that we have no other examples of $* d \bar{o}$ (or $* d \bar{e}$, for that matter) in Anatolian. Moreover, the second part of dāla/i- cannot be directly equated with $l \bar{a}-/ l$ - since
the former verb belongs to the $m \bar{m} a / i$-class that goes back to the daidtiianzi-class $<* C C$-oi- $/ * C C-i$-, whereas $l \bar{a}-/ l-$ reflects $* l o ́ h_{l}-e i, * l h_{l}$-énti. So, although I do believe that we have to assume some kind of compound of which the second element is cognate with $l \bar{a}-/ l$ - (but showing a different inflection), the exact origin of the first element remains unclear to me. Perhaps we are dealing with a compound like *dó $h_{l}-l h_{l}-(o) i-$ 'to leave it like it was put'.
talli- (adj.) 'pleasant(?)': nom.pl.c. ta-al-li-eš
Derivatives: talliiiěšs ${ }^{z i}$ (Ib2) 'to be pleasant(?)' (2sg.imp.act. tal-li-i-e-eš; part. $d a-a l-l i s ̌-s ̌ a-a n-t-)$.

IE cognates: OCS u-toliti 'to soothe', Lith. tilti 'to become quiet' and OIr. tu(i)lid 'sleeps'.

PIE *tolH-i-?
Hapax in KUB 30.19+ iv (21) ki-i=ua-a=t-ta ta-al-li-eš $a-s ̌ a-a[n-d u]$ 'these (offerings) shall be $t$. to you'. It is quite likely that ta-al-li-eš means 'pleasant' or similar here. Formally, this form can belong with an $i$-stem as well as an $a$-stem adjective. An inner-Hittite cognate could be the verb talliie $\bar{e} \check{S L}^{2} z^{-2 i}$, which is found in the following context:

VBoT 24 iii
(37) an-da =kán e-ḩu ${ }^{\text {d LAMMA }}{ }^{\text {KUš }}$ kur-ša-aš
(38) $n u-u=n-n a-a s ̌=s \check{a}$-an an-da mi-i-e-eš
(39) nu-u=n-na-aš=ša-an an-da tal-li-i-e-eš
'Come inside, o tutelary deity of the $k$ ! Be kind to us! Be $t$. to us!'.
On the basis of this context, talliiēēšs- zi must be translated 'to be pleasant', which would certainly fit ta-al-li-eš, and determines the latter form as an $i$-stem adjective. A meaning 'to be pleasant' could also fit the participle dalliššant- in the following context:

## KUB 31.127 + ABoT 44 iv

(8) $n u=m u$ DINGIR $=I A d a-a l-l i s ̌-s ̌[a-a] n-t i \mathrm{UN}-s ̌ i \mathrm{UD}^{!\text {KAM.HI.A }}-u s ̌$
(9) $i$-da«<-da»-la-e-eš $\mathrm{GE}_{6}$-uš HुUL-e-eš! ma-ni-in-ku-úa-an
(10) le-e tar-na-at-ti
'O my god, may you not release bad days and bad nights in the vicinity of me, a pleasant man!’.

According to Oettinger (1979a: 251) these words may belong with talliie/a- ${ }^{z i}$ 'to pray for', which he connects (o.c.: 346) with OCS $u$-toliti 'to soothe'. Although I do not find the connection with talliie/a- ${ }^{z i}$ very appealing (see there for an alternative etymology), the connection between talli- 'pleasant(?)', talliieešš- 'to be pleasant(?)' and OCS u-toliti 'to soothe' is in my view at least a possibility. LIV $^{2}$ connects OCS u-toliti further with Lith. tilti 'to become quiet' and OIr.
 to reconstruct *tolH-i-.
talliiela- ${ }^{-3 i}$ (Ic1) 'to pray to, to evoke (a deity)': 3sg.pres.act. tal-li-ia-zi (OS), 3sg.pret.act. tal-li-ila-at; part. tal-li-an-t-, tal-li-ila-an-t-; verb.noun gen.sg. tal-li-ía-u-aš; inf.I tal-li-ìa-u-ua-an-zi; impf. tal-li-eš-ke/a-, tal-li-iš-ke/a-.

IE cognates: ON telja, OE talian 'to tell', Gr. סóloc 'list'.
PIE * de/olH-ie/o-?
See Tischler HEG T: 58f. for attestations. The verb denotes the evoking of deities. Within Hittite, this verb is sometimes connected with talli- 'pleasant(?)' and talliīē̌̌š-zi 'to be pleasant(?)' (see under talli-), but this does not make sense semantically. Tischler (1979: 265) rather connects talliie/a- with ON telja, OE talian 'to tell', Gr. סólos 'guile, trick', which is semantically better. If correct, the geminate $-l l$ - in Hittite seems to point to $*-l H-$. We therefore should reconstruct a root *delH-, with Hitt. talliie/a- reflecting *delH-ie/o- or *dolH-ie/o- (a pre-form *dlH-ie/o- is impossible, cf. e.g. pariianzi 'they blow' < *prhienti).
*taluki- / talugai- (adj.) 'long’ (Sum. GÍD.DA): nom.sg.c. GÍD.DA-aš (NS), acc.sg.c. ta-lu-kán (NS), ta-lu-ga-an, nom.-acc.sg.n. ta-lu-ga, gen.sg. da-lu-ga-aš (NS), dat.-loc.sg. da-lu-ga-a-i (OH/NS), abl. da-lu-ga-ia-az (NH), nom.pl.c. ta-lu-ga-e-eš (OS), acc.pl.c. ta-lu-ga-ú-uš (OS), da-lu-ga-uš (OH/MS), ta-lu-ga-uš (MH/MS), da-lu-ga-e-eš (NH), gen.pl. ta-lu-ga-aš, dat.-loc.pl. ta-lu-ga-aš (OS), da-a-lu-ga-u-ua-aš (KUB 27.67 ii 40 (MH/NS)).

Derivatives: talūga (adv.) 'long' (ta-lu-ú-ga (OH/NS)), daluknu- ${ }^{z i}$ ( Ib 2 ) 'to lengthen' (2pl.imp.act. ta-lu-ga-nu-ut-tén (OH/MS)), daluknul- (n.) ‘lengthening' (all.sg. da-lu-uk-nu-la (KUB 12.63+ obv. 30 (OH/MS)), dalukēšs- $z^{i}$ ( Ib 2 ) 'to become long' (3sg.pres.act. da-a-lu-ke-eš-zi (OH/NS), ta-lu-keš-zi (OH/NS), da$l u-k i-i s ̌[-z i](\mathrm{OH} / \mathrm{NS})$, ta-lu-ki-iš-zi (OH/NS); part. ta-lu-ki-iš-ša-an-t- (OH/NS)), dalugašti- 'length' (dat.-loc.sg. da-lu-ga-aš-ti, ta-lu-ga-aš-ti), see zaluknu- ${ }^{z i}$ and zalukēšš- ${ }^{z i}$.

IE cognates: Skt. dīrghá-, GAv. daraga-, OCS dlbgъ, Russ. dólgij, SCr. düg, Lith. ilgas, Gr. סo入ıxó, Goth. laggs, ON langr, Lat. longus 'long'.

$$
\text { PIE * dólug }{ }^{h}-i-
$$

The oldest forms of this word, nom.pl.c. talugā̄̄̌, acc.pl.c. talugaūš and dat.loc.pl. talugaš (all OS) clearly show that it originally was an $i$-stem adjective (so talugaš < *talugaiáš), despite the fact that no form with taluki- is attested. In NS texts, we find some attestations that show specific $a$-stem forms: nom.sg.c. GÍD.DA-aš, acc.sg.c. talugan (both NS), which must be analogical to oblique cases where $*$-aia $a^{-}>-a$ - (e.g. gen.sg. *dalugaš < *dalugaiaš, etc.). The one $u$ stem form dat.-loc.pl. dālugauuaš must be regarded as a mistake (cf. Tischler HEG T: 62). The derivatives daluknu- ${ }^{z i}$, dalukēšš-zi and dalugašti- are derived from the bare stem talug- (without -i-). See at zaluknu- ${ }^{z i}$ for my view that zaluknu- ${ }^{z i}$ 'to lenghten' and zalukēšss- ${ }^{-1 i}$ 'to become long' are cognate with talugin the sense that they reflect the zero-grade stem *dlug- (showing the development *\#Tl-> \#zl-) whereas talug- goes back to *dólug- (cf. the occasional plene spelling $\left.d a-a-l u-k^{\circ}\right)$. The verbs dalugnu- ${ }^{z i}$ and dalukēšs $-{ }^{-2 i}$ have generalized the full grade stem talug-.
Already since Hrozný (1915: 28) this word is generally regarded as cognate with the other IE words for 'long', although the reconstruction of one proto-form is quite difficult. Skt. dì̀rghá-, GAv. daraga-, OCS dlbgъ, Russ. dólgij, SCr. düg, Lith. ilgas all reflect *dlh $g^{h}{ }^{h} \dot{o}$ - (the laryngeal is determined as $* h_{l}$ on the basis of
 $i-g^{h} o$ - or ${ }^{*}$ dolh $_{l}$ ig $^{h} 0$-. Goth. laggs, ON langr, Lat. longus 'long' reflect $*$ dlong $^{h}{ }^{\circ}-$, however $\left(* d l h_{l}\right.$ ong $^{h} o$ - is possible only if one assumes that initial $* d$ - was dropped before the vocalization of $*_{-l}$ - in Germaic, otherwise we would expect PGerm. *tulanga-). Hitt. taluki- then seems to reflect *dólug ${ }^{h}{ }^{i}$ - (note that ${ }^{*} d^{\prime} l h_{1} u g^{h} i$ - is impossible since $* V R h_{l} V>V R R V$, cf. zinnanzi<*tinh ${ }_{l}$ énti, ārri<*h órh $\left.h_{l} e i\right)$. So, all in all, for Hittite we have to reckon with a pre-form *dólug ${ }^{h}-i$ - besides $* d l u g^{h}$ -néu- and *dlug ${ }^{h}$-é $h_{l} s h_{1}$-. The exact relation between $* d(o) l u g^{h}-$, $* d(e) l h_{l} g^{h}$-, *d(o) lig ${ }^{h}$ - and $* d$ long $^{h}$ - is unclear. Perhaps we are dealing with a petrified pair (cf. ModEng. high and dry, safe and sound) of which the first element was *de/ol- and the second element has been eroded to ${ }^{*}$ - $g^{h}$ - only.
For the interpretation of $d a-l u-u k-n u-l a$ as all.sg. of a noun daluknul- see Rieken 1999a: 465f. (pace the reading 3pl.pret.act. da-lu-uk-nu-úr! by CHD P: 158). The noun dalugašti- 'length' has been compared with Pol. dtugość 'length' < PSl. *dlъgostb. If correct, it would show non-assibilation of *-ti- in a cluster *-sti- (cf. Joseph 1984: 3-4).
taluppant-: see at tarupp- ${ }^{z i}$
$\boldsymbol{t a m a ̄ i}$ - / tame- (adj. with pron. inflection) 'other, second': nom.sg.c. ta-ma-iš (OS), ta-ma-i-iš (MH/MS), da-ma-iš (MH/MS), ta-ma-a-iš (OH/NS), da-ma-a-iš, da-ma-a-i-iš, da-ma-i-iš, ta-a-ma-a-i[š] (KBo 12.71, 1 (fr.), 7 (NS)), dax-ma-iš, acc.sg.c. [t] $a-m a-i-i n(\mathrm{OS})$, ta-ma-a-in (MH/MS), ta-ma-in (MH/MS), da-ma-in, da-ma-a-in, dax-ma-in, dax-ma-i-in, nom.-acc.sg.n. ta-ma-i (OS), ta-ma-a-i (MH/MS), da-ma-i, da-ma-a-i, da-a-ma-i (KUB 55.63 ii 10 (NS)), gen.sg. ta-me-e-el, ta-me-el, da-me-e-el, da-me-el, dax-me-el, dat.sg. ta-me-e-da-ni (MH/MS), ta-me-ta-ni (MH/MS), da-me-e-da-ni, da-me-da-ni, da-me-e-ta-ni, da-me-ta-ni, ta-me-da-ni, ta-mi-e-ta-ni, da-me-i-da-ni (HKM 70 obv. 9 (MH/MS)), ta-me-i-da-ni (KUB 26.43 + KBo 22.56 obv. 64), ta-a-me-ta-ni (KUB 13.17 iv 13 (NS)), dax-me-e-da-ni, ta-me-e-da, ta-me-da, ta-me-ta, da-me-e-da, da-me-da, dax-meda, ta-ma-at-ta (KUB 30.10 ii 15 (OH/MS)), abl. ta-me-e-da-az, ta-me-da-za, da$m e-d a-z a$, nom.pl.c. ta-ma-e-eš (MH/MS), acc.pl.c. ta-ma-a-uš (OS), da-ma-uš, da-a-ma-uš (KBo 4.12 obv. 23, 28 (NH)), nom.-acc.pl.n. [t]a-ma-a-e (OS), ta$m a-a-i$, dat.-loc.pl. ta-me-e-da-aš, da-me-e-da-ǎ̌, ta-me-da-aš, da-me-ta-š=a-ǎ̌.
Derivatives: tameuman- (adj.) 'beloging to someone else, strange, different' (nom.-acc.sg.n. ta-me-u-ma-an (OH/NS), [ta-]mi-u-ma-an (OH/NS), da-me-um-ma-an (MH/MS), dax-me-um-ma-an (NS), ta-me-e-u-ma-an (Bo 6109, 4 (StBoT 17: 25)), tameummē̌̌š- ${ }^{z i}$ ( Ib 2 ) 'to become different, to change (instr.)' (3sg.pret.act. ta-me-um-me-iš-ta (NS); part. nom.-acc.sg.n. ta-me-um-mi-i[š-š]aan (NS), $t[a-m e-u] m-m i-e s ̌-s ̌ a ~(N S))), ~ d a m i u m m a h h-{ }^{\text {tta(ri) }}$ (IIIh) 'to change (trans.)' (3sg.pres.midd. da-mi-um-mah-da-ri (NS), 3sg.pret.midd. [da-mi-u]m$m a-a h-t a-a t(N S))$.

PIE * tmh $_{1}$-oi- $/ * \operatorname{tmh}_{1}-e-$ ?
This adjective shows a mixed nominal and pronominal inflection, showing a stem tamāi- besides tame-: tamãiš, tamāin, tamēl, tamēda(ni), tamēdaz, tamaeš < *tamāieš, tamāuš < *tamāiuš, tamāi, tamēdaš.
For etymological considerations it is important to establish whether we are dealing with $/ \mathrm{tam}-/$ or $/ \mathrm{tm}-/$. The first option seems to be required in view of the few attestation $t a-a-m^{\circ}$ and $d a-a-m^{\circ}$. Yet since these forms are found in NS texts only they may not be very probative. If however the word indeed is /tam-/, we could think of a connection with tān 'for the second time' $<*$ duoi-om (cf. e.g. Kronasser 1956: 151-2). Then we should reconstruct *duo-moi-, *duo-me-, although the origin of $*-m$ - is not fully clear to me. If we are dealing with $/ \mathrm{tm}-/$,
however, we could perhaps think of a connection with the IE root *temh $l_{l}$ ' 'to cut' (Gr. $\tau \alpha ́ \mu v \omega$, $\tau \dot{\varepsilon} \mu v \omega$ 'to cut', Lat. temnō 'to despise', MIr. tamnaid 'to cut', etc.), compare e.g. ModEng. separate for the semantics. We should then reconstruct *tmh $h_{l}$ oi-, * $t m h_{l}-e-$, which in my view formally is more appropriate.
The derivative tameuman- is clearly made up of the oblique stem tame- and the appurtenance-suffix -umen- / -umn- (q.v.), cf. Catsanicos 1983: 88.
tamāšš- ${ }^{z i}$ /tame/isuš- (Ia6) 'to (op)press': 1sg.pres.act. ta-ma-a-ǎ̌-mi (KUB 24.15 i 16 (NS)), ta-ma-aš-mi (KUB 24.14 i 16 (NS), KUB 36.35 i 2 (fr.), 14 (NS)), 2sg.pres.act. ta-ma-ǎ̌-ti (KBo 14.15, 4 (NH)), 3sg.pres.act. ta-ma-a-aš-zi (IBoT 1.36 i 34 (MH/MS)), ta-ma-ǎ̌-zi (KUB 32.9 obv. 2 (fr.) (MS), KUB 35.21 rev. 16 (fr.) (MS), KUB 13.4 iii 75 (OH/NS), KUB 12.49 i 10 (NS), KUB 58.34 iv 18 (NS)), da-ma-aš-zi (KBo 4.2 i 42, 44 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 44.61 rev. 25, 31 (MH?/NS)), Luw.? da-ma-aš-ti (KBo 5.9 ii 26 (NH)), [t]a-mi-iš-z[i] (KBo 18.69 rev. 12 (MS)), da $a_{x}-m e-e-e s ̌-z i ~(K U B ~ 12.2 ~ i i i ~(N S)), ~ 3 p l . p r e s . a c t . ~ d a-m e-i s ̌-s ̌ a-~$ $a[n-z i]$ (KUB 29.48 rev. 19 (MH?/MS)), ta-me-ě̌-ša-an-zi (Oettinger 1979a: 122 (MH)), ta-ma-[aš]-ša-an-z[i] (KUB 15.34 i 44 (MH/MS)), da $a_{x}-m a-a \check{c}-5 a-a n-z i$ (KUB 59.34 iii 7 (NS)), 1sg.pret.act. ta-ma-ǎ̌-šu-un (KUB 21.19 iii 32, 33 (NH)), da-ma-aš-šu-un (KBo 3.6 ii 8 (NH), KUB 1.6 ii 17 (NH)), 3sg.pret.act. ta-ma-a-aš-ta (KUB 24.4 obv. 15 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 24.11 rev. 7 (NS)), ta-ma-aš-ta (KUB 24.4 obv. 16 (OH/MS), HKM 6 obv. 6, 7 (MH/MS), KUB 26.75 obv. 8 (fr.) (OH/NS), KUB 24.3 ii 26 (MH/NS), KUB 14.14 rev. 24 (NH)), da $a_{x}-m e-e s ̌-t a$ (KBo 13.68 obv. 11 (NS)), 1pl.pret.act. ta-me-eš-šu-u-en (KBo 3.60 iii 13 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pret.act. ta-me-eš-šer (KBo 22.2 rev. 12 ( $\mathrm{OH} / \mathrm{MS}$ )), da $a_{x}-m[i-i]$ s $^{-}$ šerg (KBo 3.38 rev. 29 (OH/NS)), ta-ma-ǎ̌-šer (KBo 3.4 ii 75 (NH), KBo 16.1 iv 33 (NH), KUB 13.34 i 36 (NS)), ta-ma-aš-ši-er (KUB 33.95 iv 9 (NS)), da $a_{x}-m e-$ eš-ši-er (AT 545 ii 22 (NS)), 3sg.imp.act. ta-ma-a-as̆-du (KUB 33.66 i 16 (OH/MS)), ta-ma-aš-du (KUB 33.93 iii 31 (NS)); 3sg.pres.midd. ta-ma-aš-ta (KUB 5.6 ii 38 (NS)), da-ma-ǎ̌-ta-ri (KUB 15.29 i 12 (NS)), 3sg.pret.midd. ta-ma-ǎ̌-ta-at (KBo 4.6 obv. 25 (NH), KUB 14.10 i 8 (NH), KUB 14.12 obv. 3 (NH)); part. ta-mi-eš-ša-an-t- (KUB 12.43, 10 (OS)), ta-me-eš-ša-an-t- (IBoT 1.36 iii 59 (MH/MS)), ta-me-iš-ša-an-t- (KUB 60.164 ii 10 (NS)), ta-ma-aš-ša$a n-t-($ KBo $3.4+$ KUB 23.125 iii 51 (NH), KUB 23.70 obv. 70 (NS)), da-ma-aš-ša-an-t- (KUB 19.29 iv 5 (NH), KUB 22.70 obv. 81 (NH), CTH 81.E iii 20 (NH)), da $a_{x}-m a-a s ̌-s \check{s} a-a n-t-(K U B 20.2$ iv $14(\mathrm{OH} / \mathrm{NS})$, KUB 5.1 ii 8 , iii $31(\mathrm{NH})$, 1342/v, 5 (undat.)); verb.noun gen.sg. $d a_{x}$-ma-aš-šu-aš (KBo 18.181 rev. 26 (NS)); inf.I ta-ma-aš-šu-ua-an'-zi (IBoT 4.25 rev. 6 (OS?)); impf. da-me-eš-ke/a(KBo 22.1 obv. 1, 19 (OS), KBo 15.32 iv 3 (OH/MS)), ta-me-ě̌-ke/a (KBo 22.1
obv. 3 (OS), KUB 43.62 ii 2 (NS)), ta-me-iš-ke/a- (KBo 14.86 i 5 (OH/NS)), ta$m a-a s ̌-k e / a$ - (KBo 4.2 i 57 (OH/NS), KBo 22.143 i 4 (undat.)), da-ma-aš-ke/a(KBo 14.3 iii 18 (NH)).
Derivatives: see damme/išh $\bar{a}$-.
IE cognates: Gr. $\delta \dot{\alpha} \mu \nu \eta \mu \mathrm{t}$ 'to tame', OIr. damnaim 'to tie up', Skt. damāyáti 'to tame', Lat. domāre 'to tame'.

PIE *dmé $h_{2}-s-t i, * d m h_{2}$-s-énti
In OS and MS texts, this verb is consistently spelled with single $-m$ - $\left(t a-m^{\circ}\right.$ and $\left.d a-m^{\circ}\right)$. In NS texts we encounter numerous spellings with the sign DAM, which at first sight seem to indicate -mm-. Melchert (1991: 126) convincingly argues that in NS texts the sign DAM can be read $d a_{x}$ (besides normal dam), however, and I therefore have adopted that reading here (cf. also išdamašš- ${ }^{z i}$ 'to hear' under the lemma ${ }^{(\mathrm{UZU})}$ ištāman- / ištamin-).
The oldest attestations ( OS and $\mathrm{OH} / \mathrm{MS}$ ) of this verb are ta-ma-a-aš-ta, ta-ma$a s ̌-t a, ~ t a-m e-e \check{s}-s ̌ i r, ~ t a-m a-a-a \check{s}-d u$, ta-mi-eš-ša-an-t-, ta-ma-aš-šu-ua-an-zi, da$m e-e \check{s}-k e / a$ - and ta-me-eš-ke/a-, which clearly show that we are dealing with an original ablaut tamāšš- ${ }^{z i}$ / tame/iš̌s-. This makes this verb unique in Hittite since there are no other $-\bar{a}-/-e / i-$-ablauting $m i$-verbs. Because of its singularity, the ablaut is prone to be analogically altered, and therefore we find aberrancies already in MS texts: 3sg.pres.act. [ $t]$ amišz $[i]$ (MS) and 3pl.pres.act. tama[š]šanzi (MS). In NS texts, we can see that the original ablaut pattern is getting blurred: $-a$ - is spreading in weak-stem forms (tamaššanzi, tamaššant- and tamaške/a-) and $-e$ - in strong stems forms (damē̌̌zi and damešta).
Already since Sturtevant (1932b: 119f.) this verb is generally connected with Gr. $\delta$ á $\mu v \eta \mu \mathrm{t}$, Skt. damāyáti, etc. 'to tame' $<* \operatorname{demh}_{2}$-. This means that tamāšš-/tame/ǐ̌šs- must show an $s$-extension of some kind. The exact nature of this -s- remains unclear. It has been viewed as an aorist-s- (Sturtevant l.c. and followers) or as a present-suffix comparable to the $s$-future of other IE languages (Pedersen 1938: 90, 95f. and followers), but no theory has won general acceptance. It is clear, however, that within Hittite tamā̌šs-/tame/išš- has to be compared with other $s$-extended verbs like kane/išss- ${ }^{z i}$ 'to recognize', kallišš- ${ }^{z i}$ /
 'to wipe' and paȟs - ' 'to protect'.
Despite the fact that the etymological connection with $* \operatorname{demh}_{2}$ - is well accepted, there is no consensus on the exact interpretation of this verb. The first problem lies in the fact that tamāšš-/tame/išš- seems to reflect phonetic /tmVS-/, as if from *dmVh $h_{2}-s$-, whereas the bare root has a full-grade $* d e m h_{2}$. Such a Schwebe-
ablaut is not unparalleled in $s$-extensions, however, compare *mieks- from *meik ${ }^{\prime}$, ${ }^{*} h_{2}$ leks- from $* h_{2}$ elk- and $h_{2}$ ueks- from $* h_{2}$ eug- (cf. LIV ${ }^{2}$ under their respective lemmas). I therefore assume that tamāšš-/tame/ǐ̌š- indeed goes back to *dmVh $h_{2}$-s-.
The second problem lies in the reconstruction of the ablaut-pattern of the protoforms. Because of its uniqueness within Hittite, the synchronic ablaut $-\bar{a}-/-e / i-$ cannot be of secondary origin in the sense that it is the result of a morphologic analogy: there is no model in analogy to which this ablaut could have been created and it therefore must be the result of phonetic developments. In Kloekhorst fthc.f I have extensively argued that the $-e / i-$ of the weak stem tame/išš- must be an anaptyctic vowel /i/ that emerged in the cluster *CRHsV> CRissV (similarly in ǵnh $h_{3}$ sénti $>$ kane/iššanzi 'they recognize', * $h_{2} m h_{1}$ sénti $>$ hane/iššanzi 'they wipe' and *k'lh sénti > gališšanzi 'they call'). So tame/iššanzi

 understand how $-m$ - is restored here on the basis of the strong stem tamāšs where it was regulary maintained, whereas the strong stem that corresponds to hane/iššanzi underwent a development $* m>n$ as well: $* h_{2} o ́ m h_{l}$ sei $\left.>\bar{a} n s ̌ i\right)$. Because of the $\varnothing$-grade in the weak stem, we would a priori assume that the strong stem had ordinary full-grade $* e$ : *dméh ${ }_{2}$-s-ti. This form should have regularly become *tmah̆szz $i$, but because of the absence of $-h$ - in the weak stem $/ \mathrm{tmiS}-/$ it was removed in the singular as well, yielding tamāšzi. All in all, the precise developments must have been as follows: *dmh ${ }_{2}$ sénti $>* d n 2 s a ́ n t i>$ *dnî?sánt ${ }^{s} i \gg{ }^{*} d m i \not ? s a ́ n t t^{s} i$ (with analogical reintroduction of -m-) in analogy to which ${ }^{*} d m a ́\left\{s t t^{s} i\left(<* d m e ́ h_{2} s t i\right)\right.$ was altered to ${ }^{*} d m a ́ ? s t^{s} i$. The regular outcomes of *dmì sánt $^{s} i$ was Hitt. /tmíSántsi i , spelled tame/iššanzi, and the regular outcome of *dmá?st ${ }^{s} i$ was Hitt. /tmásts ${ }^{\text {s }} \mathrm{i}$, spelled tamāšzi. This means that tamāšzi, tame/iššanzi ultimately goes back to a paradigm *dméh $2_{2}-s-t i, * d m h_{2}-s$-énti.
$\boldsymbol{t a m e} \boldsymbol{( n )} \boldsymbol{k}^{\boldsymbol{z}}{ }^{\boldsymbol{i}}$ (Ib3) '(act. trans.) to affix, to attach; (midd. and act. intr.) to stick to, to join, to have an affection for': 1sg.pres.act. ta-me-ni-ik-mi (Bo 3445, 11 (MS)), 3sg.pres.act. da-mi-ni-ik-zi (KBo 17.105 iv 3 (MH/NS)), ta-me-ek-zi (KUB 23.1+ iii 9 (NH)), 3pl.pres.act. ta-me-ni-kán-zi (KBo 20.116 rev.? 10 (MH/NS)), ta-mi-[n]i-kán-[zi] (KUB $25.48+44.49 \mathrm{ii}^{!} 28$ (MH/NS)), ta-me-en-kán-z[i] (KUB 21.34 rev. 11 (NS)), 3pl.pret.act. da-me-in-ker (VBoT 58 i 40 (OH/NS)); 3sg.pres.midd. dam-me-ek-ta-ri (KUB 21.29 iv 9 (NH)), ta-me-ek-ta-ri (KUB 7.41 i 26 (MH/NS), KUB 41.8 i 5 (MH/NS)), da-me-ek-ta-ri (KBo 10.45 i 19 (MH/NS)), 3pl.pres.midd. ta-mi-in-kán-ta-r[i] (KBo 15.35+33 i 4 (MH/MS)),

3sg.pret.midd. ta-me-ek-ta-ti (KBo 42.74, 7 (NS)), ta-me-ek-ta-at (KBo 17.105 iv 4 (MH/MS)), 3sg.imp.midd. te-me-ek-ta-ru (KUB 9.4 ii 2 (MH/NS)); part. da-me-in-kán-za (HT $6+$ KBo 9.125 i 21 (NS)), ta-mi-in-kán-za (KBo 15.28 obv. 12 (MS)), [t]a-me-in-kán (KUB 60.67, 6 (NS)), da-mi-in-kán-ta-a-an (KBo 15.34 ii 30 (OH/NS)), ta-me-en-kán-te-eš ${ }_{17}$ (KUB 48.123 iv 8 (NS)), da-mi-en-kán-te-eš (KUB 4.1 iii 19 (NS)), dam-me-en-kán-du-uš (KUB 24.7 iii 70 (NS)), verb.noun dam-me-en-ku-ua-ar (KBo 18.24 i 6, 16 (NH)), dam-me-in-ku-ua-ar (KUB 24.13 ii 5 (MH/NS)), inf.I [d]a-me-en-ku-ua-an-zi (KUB 23.94, 2 (NS)).
Derivatives: tamenganu- ${ }^{i}$ ( Ib 2 ) 'to make attach(?)' (2sg.pres.act. ta'-me-en$k a_{4}-n u$-ši (KBo 27.60, 7 (NS)), 3sg.pres.act. [ta]-me-in-ga-nu-zi (KBo 35.94 iv 6 (NS)), ta-me-in'-ga'-[nu]-u[z-zi] (VSNF 12.57 iv 27 (NS)); impf.2sg.pres.act. $t[a-$ me-i]n-ga-nu-uš-ke-š[i] (KBo 43.291 obv. 2 (NS)); broken ta-me-en-gạ-nụ[-...] (KUB 13.35 i 26 (NS)), ta-me-en-ga-nu[-..] (KUB 31.99, 22 (NS))
IE cognates: Skt. tañc- 'to pull together, to coagulate', MIr. tēcht 'solidified', ON $p e ́ t t r$ 'close, thick', Lith. tánkus 'dense, frequent'.

PIE *tm-én-k-ti $/ * t m-n-k$-énti
This verb shows a few different stems. In the middle forms, we encounter the stem tame $(n) k$ - (showing the distribution tamek- $C$ vs. tame/ink-V), but in the active forms we find the stems tame(n)k- as well as tameni(n)k- (e.g. tamenikmi, daminikzi). In my view, this latter stem must be regarded as a secondary creation in analogy to the verbs of the type $\operatorname{Carni}(n) k_{-}^{z i}$.

Since Van Brock - Mac Gregor (1962a: 32f.), tame(n) $k^{z i}$ is generally connected with Skt. tanakti (tañc-) 'to pull together, to coagulate' and therefore must reflect the PIE root *temk-. It is remarkable that both Sanskrit (tanak- < *tm-ne-k-) and Hittite (tamenk- < *tm-Vn-k-) show a nasal infix formation, and there has been much debate on the exact formal connection between these two (see Tischler HEG T: 78 for an overview of different opinions). See chapter 2.2.4 for my account of the prehistory of the nasal infixed verbs.
damme/išh $\overline{\boldsymbol{a}}-$ (c.) 'damaging, act of violence, punishment': nom.sg. dam-me-eš-ḩa-aš (NS), acc.sg. dam-me-eš-ha-a-an (MH/NS), dam-mi-iš-ha-a-an (MH/MS), dam-mi-iš-ha-an (OH/NS), dat.-loc.sg. dam-me-eš-hhi (NS).
Derivatives: damme/išha (adv.) 'violently' (dam-me-eš-ha, dam-mi-eš-ha, dam$m i-i s ̌-h a)$, damme/išhae- ${ }^{z i}$ (Ic2) 'to damage' (2sg.pres.act. dam-me-eš-ha-a-ši (KUB 58.73 iii 7 (MH/NS)), dam-me-eš-ḩa-ši (IBoT 3.148 iv 38 (MH/NS)), 3sg.pres.act. dam-mi-iš-ḩa-ez-zi (HKM 46 rev. 17 (MH/MS)), dam-me-iš-hha-a-ez-zi (HKM 25 rev. 21 (MH/MS)), dam-me-eš-ha-iz-zi (ABoT 56 iii 14 (NH)),
dam-mi-iš-ha-iz-zi (KUB 13.7 i 4 (MH/NS), ta-meš-ha-zi (HHCTO 1 obv. 8 (MH/MS)), 3sg.pret.act. dam-me-iš-ha-a-it (KBo 13.33 ii 6 (NS)), dam-mi-eš-ha-a-it (KUB 14.14 obv. 16 (NH)), 3pl.pret.act. dam-me-eš-ḩa-a-er (KBo 3.4 iiii 60 (NH)); 2sg.pres.midd. dam-mi-iš-ha-et<-taı-ri (HKM 80 obv. 6 (MH/MS)), 3pl.pres.midd. dam-mi-iš-ha-an-da-ri (HKM 31 obv. 12 (MH/MS)), 3sg.pret.midd. dam-me-eš-ha-a-it-ta-at (KUB 14.13+ i 29 (NH)); part. tạ-ạm-[m]i-iš-ha-an-t- (KBo 25.25 obv. 4 (OS)), dam-me-eš-ha-an-t-, dam-me-iš-ha-an-t-; verb.noun dam-me-eš-ha-a-u-ua-ar (KBo 13.34 iii 7 (OH or MH/NS)); impf. dam-mi-iš-hi-iš-ke/a- (MH/MS), dam-me-iš-hi-iš-ke/a- (MH/MS), dam-me$e \check{s}-h i-i s ̌-k e / a-$ ), dammešhanu- ${ }^{z i}$ (Ib2) 'to make punish' (1sg.pret.act. dam-me-eš-ha-nu-nu-un (KBo 4.8 ii 13 (NH)); impf. dam-mi-eš-ḩa-nu-u[š-ke/a-] (KBo 18.109 rev. 4 (NS))).

IE cognates: see at tamāšš- ${ }^{z i} /$ tame/iššs-.
PIE * demh ${ }_{2}$-sh ${ }_{2}$ ó-
See Otten 1973: 52 for attestations. This noun and its derivatives are almost consistently spelled with the sign DAM. Although in NS texts this sign can be read $d a_{x}$ as well (see e.g. tamāšš- ${ }^{z i} /$ tame/išš- and ištamašš- ${ }^{z i}$ (under ${ }^{(U Z U)}{ }^{(S ̌ ̌ t a ̄ m a n-~}$ $/$ ištamin-)), its usage in MS texts and especially the OS attestation tạ-am- $[m] i-i s ̌-$ ha-an-ta-an show that all attestations should be read with geminate -mm-. We find spellings with $-i$ - as well as $-e$ - in MS texts already, which points to a phonological interpretation/daMisHa-/.
Already Götze (1930: 179) connected damme/išh $\bar{a}-$ with the verb tamāššz- $z^{i}$ / tame/išš- 'to oppress'. Although this is generally accepted, the fact that damme/išh $\bar{a}$ - shows geminate $-m m-$, whereas $\operatorname{tama} \bar{a} \check{s}^{-2}-{ }^{-2}$ / tame/išš- does not, is significant. As I have shown under the lemma of tamāšss- ${ }^{z i} /$ tame/išš-, this verb has to be phonologically interpreted /tmāS-/, /tmiS-/ and goes back to $* d m e ́ h_{2}-s$ $t i, * d m h_{2}-s$-énti. The noun damme/išh $\bar{a}$ - must be phonologically interpreted $/ \mathrm{taMisHa}$-/, however, with a real vowel - $a$ - between $d$ - and -mm-. This vowel can only reflect a real PIE vowel. I therefore reconstruct $* d e m h_{2}-s h_{2} o ́-$. For the development of ${ }^{*}$ CeRHsC $>$ CaRRtsC compare kallišta /káLista/ 'called' < * kélh $h_{1} s t(o)$.

For the suffix -šha- compare e.g. palzahhha-, hamešha-, tešha-, etc.
dampu- (adj.) 'blunt': nom.-acc.n. dam-pu (OH/NS).
Derivatives: tampuēšš- ${ }^{z i}$ ( Ib 2 ) 'to become blunt (?)' (3sg.pres.act. ta-am-pu-e$e \check{s}-z[i](\mathrm{OH} / \mathrm{NS}), 3$ sg.pret.act. ta-am-pu-e-eš-ta (OH/NS)).
IE cognates: SerbCS topъ 'blunt', Russ. tupój ‘blunt'.

PIE *tomp-u-
See Tischler HEG T: 86f. for attestations. The adj. dampu- occurs two times only, both times in contrast with alpu- (q.v.). From the contexts it is clear that one of these forms must mean 'sharp' and the other 'blunt', but for a long time it has been debated which word meant what. See now Tischler (1.c.) for an overview of the debate on the semantics and its outcome: dampu- means 'blunt'. The most promising etymology is the one given by Popko (1974: 182) who compares it to SerbCS tepъ 'blunt', Russ. tupój 'blunt'. This would mean that dampu- reflects *tomp-u-.
$\boldsymbol{t} \boldsymbol{a} \boldsymbol{n}$ (adv.) 'for the second time, again, subordinately': ta-a-an (OS), da-a-an (MH/MS).
Derivatives: see tāiuga-, tānhašti- and ${ }^{\text {LÚ }}$ duíanalli-.
Anat. cognates: HLuw. twa/i- (adj.) 'two' (acc.pl.c. /twint' i /" "'tu-wa/i-zi (MARAŞ $4 \S 7$ ), 2-zi-i (ASSUR letter $b \S 9$ ), 2-zi/a (TOPADA §19)), twisu (adv.) 'twice' (2-sú (TOPADA §11)); Lyc. kbi- (adj.) '(an)other' (acc.sg.c. kbi, nom.acc.sg.n. kbi, dat.-sg. kbi, nom.-acc.pl.n. kbija, gen.adj.acc.sg.c. kbijehi, gen.adj.acc.pl.c. kbijehis, gen.adj.abl.-instr. kbijehedi), kbihu (adv.) 'twice'; Mil. thisu (adv.) 'twice', tbiplẽ '?'.

PAnat. *du(o) $i$ -
IE cognates: Skt. dvayá- 'twofold, in pairs', Gr. סotoí 'both, two', סotós 'double', OCS $d_{\imath v o j b}$ 'twofold', Lith. $d v e j i ̀ ~ ' t w o ', ~ d v e ̃ j a ~ ' o f ~ t w o ~ k i n d s ' . ~$

PIE *duoióm
This adverb is attested multiple times. Once we find an attestation $t a-a$ UD- $t i$ 'on the second day' (KUB 32.123 iii $5(\mathrm{NS})$ ). It is unclear whether this is a genuin form or has to be emended to ta-a<-an> UD-ti. Already since Hrozný (1919: $116^{5}$ ), tān is connected with the PIE word for 'two'. There is some debate on the exact formation, however. On the basis of the $i$-stem forms Lyc. kbi-, Mil. tbiand HLuw. twi-, I assume that in Hittite, too, we are dealing with an original $i$ stem *dui-. This means that tān must reflect *duoi-om, which corresponds exactly to e.g. Skt. dvayá- 'twofold’, Gr. סotóc ‘double’ etc. For the development *Tuo > Ta, cf. Melchert 1994a: 128.
Tischler (HEG T: 92) cites CLuw. duuān as a possible cognate, but its meaning cannot be determined.
${ }^{\text {GIš}}$ tanau- (n.) a kind of tree: nom.-acc.pl. ta-na-a-ú.

IE cognates: ?OHG tanna 'fir', ?Skt. dhánuṣ- ‘bow'.
PIE * $d^{h} n-o ̂ ́ u ? ?$
This word is hapax on a landgrant: SBo $4(2064 / \mathrm{g})$ obv. 10. The fact that it denotes a tree can be deduced from the determinative GIŠ, but the text does not give a clue as to what kind of tree. Neumann (1961b: 77f.) compares the word with PGerm. *danū̄- ‘fir(tree)' (OHG tanna 'fir'). If Skt. dhánuṣ- 'bow’ belongs here as well, then the etymon is $* d^{h} e n-u$-. If this is correct, Hitt. tanāu would reflect * $d^{h} n$-óu $u$, formally a collective (cf. *ud-ór 'water (coll.)').
${ }^{\text {UZU }} \boldsymbol{d a} \bar{n} h h a s ̌ t i-~(n) ~ ' d o u b l e-.b o n e ’: ~ n o m .-a c c . s g . ~ d a-a-a n-h ̧ a-a s ̌-t i ~(N S), ~ t a-a n-h ̧ a-~$ $a \check{s}-t i(\mathrm{NS}), d a-h a-a \check{s}-t i(\mathrm{NS})$.

PIE *duoiom * $h_{3}$ esth $h_{1}$-ih $h_{1}$
The exact meaning of this word cannot be determined, but it is clear that it denotes some body part (of cows and sheep). Nevertheless, the word is clearly a compound of dān- and hašti- of which the first part is cognate with tān 'for the second time, again' and the second part with haštai- 'bone'. Friedrich (HW Erg. 3: 31) therefore translates 'Doppelknochen'. Starke (1990: 122f.) argues that -hašti- shows the old dual ending nom.-acc.n. -ih $h_{1}$ (see also ${ }^{\text {GIŠ }}$ elzi-). See at haštāi / hašti- for the reconstruction $* h_{3} e^{2} t h_{l^{-}}$, which shows that the nonassimilation of $-t$ - in $* h_{3} e s t h_{1}-i h_{l}$ is due to the following $-h_{l}$-. See at $t \bar{a} n$ and haštai- / hašti- for further etymology.
-ttani (2pl.pres.act.-ending of the mi-flection): see -tten(i)
$\boldsymbol{t a n i n u}$ - $^{\text {i }}$ (Ib2) 'to install, to settle': 1sg.pres.act. ta-a-ni-nu-mi (KUB 14.13 iv 3 (NH)), ta-ni-nu-mi, ta-ni-nu-um-mi, 3sg.pres.act. da-ni-nu-uz-zi, ta-ni-nu-iz-zi, 3pl.pres.act. ta-ni-nu-ua-an-zi, \& ta-ni-nu-an-zi, da-ni-nu-ua-an-zi, 1sg.pret.act. ta-ni-nu-nu-un, 3sg.pret.act. ta-ni-nu-ut, da-ni-nu-ut, Luw. [t]a-n[i]-nu-ut-ta (KUB 31.7 rev. $8(\mathrm{NH})$ ), 3pl.pret.act. ta-ni-nu-er; part. ta-ni-nu-ua-an-t-; verb.noun gen.sg. ta-ni-nu-ma-aš; inf.I ta-ni-nu-ma-an-zi, ta-ni-nu-um-ma-an-zi. PIE * $d^{h}{ }^{o} h_{1}-n i-n e u-$

This verb is occasionally preceded by gloss wedges (e.g. \& ta-ni-nu-an-zi (KUB 56.39 i 12), \& ta-ni-nu-ua-an-zi (ibid. ii 7, iv 27)), which together with the one Luwian inflected from (3sg.pres.act. taninutta), indicates that this verb was used in Luwian as well, or even is of Luwian origin. Formally, the verb is clearly a causative in $-n u$ - of a stem tani- (or tāni-). In my view, this stem tāni- must be
equated with the stem dāni- that underlies Hitt. dānit- 'stele(?)' (q.v.), CLuw. dānit- 'id.' and HLuw. ${ }^{\text {STELE }}$ tanisa- 'id'. The occurrence of this noun in Luwian matches the Luwian connection of the verb taninu-. See at dänit- for further etymology.
dānit- (n.) cult object, 'stele (?)': nom.-acc.pl. ta-a-ni-ta (MH/NS).
Anat. cognates: CLuw. dānit- (n.) 'id.' (nom.-acc.pl. da-a-ni-ta, da-a-ni-i-ta, ta-$a-n i-t a)$; HLuw. ${ }^{\text {STELE }}$ tanisa- (n.) 'stele' (nom.-acc.sg. /tanisan=ts a/ ${ }^{\text {STELE }}$ ta-ni-sà$z a$ (MEHARDE §1, §7), ${ }^{\text {STELE }}$ ta-ni-sà<-za> (SHEIZAR §4), dat.sg. /tanisi/ ${ }^{\text {STELE }_{t a}}{ }^{\text {(Ma }}$ $n i$-si (MEHARDE §3)).

PIE * $d^{h} o h_{1}-n i-d-$
This word is hapax in the following context:
KUB 12.59+10.76 iii
(7) $k u-i \check{s}=u a-r=a-a t ~ u ́-e-t e-e s ̌-k e-e t$

(9) ka-a-ša la-ga-a-ri
'Who put up the huuaši-stones and the tānita? Look: they now have fallen'.
 denotes some stone cultic object, possibly a stele vel sim. According to Starke (1990: 206), Hitt. tānit- is to be equated with CLuw. dānit-. He connects these words further with the "dān-Ritual", assuming a development 'belonging to the $d \bar{a} n$-ritual $>$ ritual object $>$ stele'. Problematic is the fact that the dän-ritual is not securely attested: Starke bases himself on one poorly understood line only.
If tānit- indeed means 'stele', then it should be connected with HLuw. ${ }^{\text {sTELE }}$ tanisa- 'stele'. The basic stem then seems to be *tāni-, which received a suffix -id- in Hittite and CLuwian, but -sa- in HLuwian. Semantically, a connection with * $d^{h} e h_{l^{-}}$'to put, to place' is quite likely and supported by the fact that in the context cited above the verb uetē- is used that goes back to $* d^{h} e h_{1}$-. In CLuwian, we find KUB 35.70 ii (15) [d]a-a-ni-ta du-ú-un-du 'They must put up the dānit-'s!', with the verb tuua- 'to put up' that goes back to $* d^{h} e h_{1-}$ as well. I therefore reconstruct the stem *tāni- as $*^{h} d^{h} o h_{1}-n i$-. For this formation (-ni-suffix with $*_{o \text {-grade in the root) compare OCS branb 'fight', Lith. barnis 'quarrel' < }}$ * $b^{h}$ or-ni-.

See at taninu- ${ }^{z i}$ for the possibility that this verb is derived from the stem $* t \bar{a} n i-$.
dankui- / dankuuai- (adj.) 'black, dark' (Sum. GE 6 ): nom.sg.c. da-an-ku-iš, ta$a n-k u-i s ̌, d a-a n-k u-i-i s ̌, d a-a n-k u-i \underline{1} a-a s ̌, ~ a c c . s g . c . d a-a n-k u-i n$, nom.-acc.n. da-an$k u-i$, dat.-loc.sg. da-an-ku-ua-i, ta-an-ku-ua-i, da-an-ku-i, abl. da-an-ku-ua-ia-az, $d a-a n-k u-u a-i a-z a$, da-an-ku-íia-az, da-an-ku-ua-az, instr. da-an-ku-it, nom.pl.c. ta-an-ku-ua-e-eš, ta-an-ku-e-eš, nom.-acc.n. ta-an-ku-ua, da-an-ku-ua, da-an-ku-ua-i, dat.-loc.pl. ta-an-ku-ua-ǎ̌ (OS), da-an-ku-ua-ía-aš (KBo 40.333, 6).

Derivatives: dankuēšš- ${ }^{z i}$ (Ib2) 'to become black' (3sg.pres.act. da-an-ku-e-eš-zi, 3sg.pret.act. da-an-ku-e-eš-ta; impf. da-an-ku-iš-ke/a-), dankuneške/a- ${ }^{z i}$ (Ic6) 'to make black' (3pl.pret.act. da-an-ku-ni-eš-ker), danku(ua)nu- ${ }^{z i}$ (Ib2) 'to make black' (part. da-an-ku-nu-ua-a[n-t-]; impf. da-an-ku-nu-uš-ke/a-, ta-an-ku-nu[-uš$k e / a-]$, da-an-ku-ua-nu-uš[-ke/a-]), ?dankuianu- ${ }^{z i}$ (Ib2) 'to make black' (impf. [da-an-ku-i]a-nu-uš-ke/a-), dankuuahh- ${ }^{i}$ (IIb) 'to make black' (impf. [da-]an-ku-ua-ah-hi-eš-ke/a-), dankutar (n.) 'darkness’ (nom.-acc.sg. da-an-ku-tar), dankuli- (adj.) 'tin' (nom.sg.c. da-an-ku-li-iš).
Anat. cognates: CLuw. dakkui- (adj.) 'dark(?)' (nom.sg.c. da-ak-ku-ú-i-iš, acc.sg.c. [da-a]k-ku-ú-i-in, dat.-loc.sg. ták-ku-i).
IE cognates: ON døkkr (adj.) 'gloomy, dark of colour', OSax. dunkar, OHG tunkal, OFr. diunk(er) 'dark'.

PIE * $d^{h} n g^{w}-(e) i-$
The bulk of the attestations clearly show an $i$-stem inflection dankui- / dankuuai(sometimes with loss of intervocalic -i-: e.g. tankuuaš < *tankuuaiaš). We only find two forms that seem to show a stem dankuia-, and these are clearly secondary.

Sturtevant (1934) proposed to interpret dankui-, just as parkui- and uarhui-, as
 comparable to Lat. suavis (*sueh ${ }_{2} d u-i h_{2}$-) etc. This view has been widely followed (e.g. most recently Rieken 1999a: 259). As I have shown under parkui- / parkuuai- 'clean, pure', however, this adjective reflects *prk'-i- and must be regarded as a normal $i$-stem. In my view, the same goes for dankui- / dankuuaias well. Since Forrer apud Feist (1924: 130 ${ }^{1}$ ), dankui- is generally connected with the Germanic words for 'dark'. Heidermans (1993: 146, 152, 167) shows that in Germanic we find different formations: ON døkkr, dokkr 'dark' < * d'ong ${ }^{w} o-$,
 'dark' $<* d^{h} n g^{w} r o-$. Yet it is clear that we are dealing with a root $* d^{h} e n g^{w}-$. For Hittite, this means that we can safely reconstruct $* d^{h} n g^{w}-(e) i$-, a normal $i$-stem.
Sturtevant's adduction (1933: 123f.) of Gr. $\delta v o ́ \varphi o \varsigma ~ ‘ d a r k n e s s ' ~ a n d ~ \delta v o ́ \varphi \varepsilon o \varsigma ~$ 'dark' < *dnog ${ }^{w h}$ - is quite interesting, but does not match the Germanic data.

If the interpretation of CLuw. dakkui- as 'dark' is correct, it shows a development PAnat. *-ng ${ }^{w}->$ Luw. $-k k u$-.
tapariie $/ a^{-{ }^{z i}}(\mathrm{Ic} 1>\mathrm{Ic} 2)$ 'to lead, to decide, to rule, to reign': 2 sg.pres.act. ta-pár-ri-ía-ši (KUB 21.1 i $65(\mathrm{NH})$, KUB 26.25 ii 9 , $12(\mathrm{NH})$ ), 3sg.pres.act. ta-pár-ri-ia-iz-zi (Bronzetafel ii 94, iii 73 (NH)), 1pl.pres.act. ta-pa-ri-ia-u-e-ni (KUB 2.2 ii 48 (NS)), 3pl.pres.act. ta-pa-ri-ía-an-zi (KUB 13.4 iv 9 (OH/NS)), 3sg.pret.act. ta-pa-ri-ía-it (KBo 13.101 i 3, 4 (MH/NS)), 2sg.imp.act. ta-pár-ri-ia-i (KBo 8.63 i $10(\mathrm{NH})$, KUB 21.38 obv. $36(\mathrm{NH})$ ), 2pl.imp.act. ta-pár-ri-ía-at-tén (KUB 46.13 iv 8 (NS)); part. ta-pár-ri-ía-an-t- (Bronzetafel ii $36(\mathrm{NH}))$ ).

Derivatives: tapariïa- (c.) 'order, ruling’ (nom.sg. ta-pár-ri-aš (KUB 5.1 iii 93 (NH)), acc.sg. ta-pár-ri-an (KBo 40.13 obv. 10 (NS)), [t]a-pa-ri-ia-an (KBo 18.88 rev. $17(\mathrm{NH})$ ), dat.-loc.sg. ta-pa-ri-ía (KUB 14.7 i 7, 15), ta-pár-ri-ia (KUB 26.1 iii $34(\mathrm{NH})$ ), abl. ta-pár-ri-ia-az (KUB 21.19 ii $8(\mathrm{NH})$ )), ${ }^{\text {LÚ }}$ tapariialli- (c.) 'commander' (nom.pl. ta-pa-ri-íia-li-i-e $-[e] s ̌$ (KUB 31.124 iv 3, 5 (fr.) (MH/MS)), acc.pl. ta-pa-ri-ia-al-l[i-uš?] (KUB 14.1 rev. 39 (MH/MS))).
Anat. cognates: CLuw. tapar- 'to rule, to govern' (2sg.pres.act. ta-pár-ši, 1sg.pret.act. ta-pár-ha, da-pár-ha, 3sg.pret.act. ta-pár-ta, ta-pa-ar-ta, 3sg.imp.act. ta-pár-du, inf. ta-pa-ru-na), taparamman- (adj.) 'ruling, governing (?)' (nom.-acc.pl. ta-pa-ra-am-ma), taparammahit- (n.) 'position of ruling, governing (?)' (abl.-instr. ta-pa-ra<-am>-ma-hi-ta-ti); HLuw. taparia- 'authority' (gen.? /tbarias/ LEPUS+ra/i-ia-sa (KARKAMIŠ A26a 1+2, §a, BOROWSKI 2 line 1), abl.-instr. /tbariadi/: ${ }^{\text {LIGNUM }}$ ta-pa+ra/i-a-ti (KARKAMIŠ Stone Bowl §1), LEPUS+ra/i-ia-ti(-i) (MARAŞ 1 §5, SULTANHAN §41, KÖRKÜN §3), ta-LEPUS+ra/i-ia-ti (BOROWSKI 3 §5), LEPUS+RA/I-ti (IZGIN 1 §9)), tapara/ita- 'authority' (acc.sg. /tbara/itan/: LEPUS+ra/i-ta-na (KARKAMIŠ A14a §4)), taparahit- (n.) 'authority' (nom.-acc.sg. /tbarahi/: LEPUS-pa+ra/i-hi (MARAŞ 4 §8)), tapariiia- 'to decree' (3sg.pret.act. /tbarita/: ${ }^{\text {LIGNUM.CRUS }}$ LEPUS $+r a / i$-ta (TELL AHMAR $1 \quad$ §9), /tbariata/: "LIGNUM" LEPUS+ra/i-ia-ta (TELL AHMAR 1 §19)), tapariiala/i- (c.) 'governor' (nom./acc.pl. /tbarialint ${ }^{\mathrm{j}} \mathrm{i}$ : LEPUS+ra/i-ia-li-zi (JISR EL HADID fr. 3 line 2)), tapariiala- 'to be governor' (3sg.pret.act. /tbarialata/: LEPUS+ra/i-ia-la-ta (KARABURUN §3)).

The Hittite verb shows forms that belong to two stems, namely tapariie/a- ${ }^{z i}$ and tapariiae- ${ }^{z i}$ (although it must be admitted that all forms that I regard as belonging to tapariie/a- ${ }^{z i}$ show the stem tapariia- and therewith in principle could belong with tapariiae- as well). All these forms are attested in NS texts. In MH texts we
find the noun tapariialli-, a derivative in -alli- of the verbal stem tapariie/a-. Note that these forms are spelled with single $-r$-, on the basis of which I assume that single $-r$ - is more original than the spellings with geminate $-r r$ - (cf. § 1.4.6.2.b and e.g. at išp $\bar{a} r_{-}{ }^{i} /$ išpar- for a similar distribution). It is generally thought that the Hittite words are borrowings from CLuwian, where the unextended verbal stem tapar- 'to rule, to govern' is still found.
Throughout Hittitology, many scholars have supposed that Hitt. tapariie/a- and CLuw. tapar- are cognate with labarna- / tabarna-, the title of Hittite kings (q.v.). Most recently, Melchert (2003b: 19) has expressed the assumption "that a Luwian *dabarna- was borrowed as Hittite labarna- at a prehistoric stage when Hittite no longer had initial voiced $d$-. The Hittite word was later (but still prehistorically) altered to tabarna- by association with the Luwian verb tapar(iya)- 'to rule' after $d$ - had also been devioced to $t$ - in Luwian". Moreover, he states that these words must be cognate to MHG tapfer 'brave' that he reconstructs as $* d^{h}{ }_{\partial} b-r o-$. So all in all, Melchert assumes that an adjective $* d^{h}{ }_{\partial} b$-ro- yielded the nominal stem *tapar- 'powerful', from which not only the noun tabarna- 'ruler' has been derived, but also the verb tapariie/a- 'to be powerful'. On the basis of this latter verb, the Luwian verbal stem tapar- was then created due to back-formation. This scenario seems highly unlikely to me. If we look at the Anatolian material objectively, we see that the Luwian verbal stem tapar- 'to rule' must be the origin of all forms. Within Luwian it was the source of e.g. taparamman- 'ruling', taparahit- 'authority', tapariiia- 'authority' and tapariiia- 'to decree'. This latter verb was borrowed into Hittite as tapariie/a- 'to decree, to rule', which was the source of the noun tapariia- 'order' and tapariialli- 'commander'. The Luwian verbal stem tapar- is used unextendedly (taparši, taparha), which means that we must regard it as a root. The only way in which a Luwian verbal root tapar- could be of IE origin is by assuming that this spelling stands for /tbar-/, which reflects a root of the structure $* T b^{(h)} e r$ - (for an initial cluster $* T P$-, cf. the PIE root * $d^{h} b^{h} e n g^{h}$ - 'to make thick, to make firm' as still visible in GAv. dəbqz-, cf. at panku- / pangau-). This contrasts with the fact that the Germanic words (which by the way seems to have a proto-meaning 'heavy, sad', cf. ON dapr 'sad', Norw. daper 'heavy, saddened') reflect a nominal stem in -ro-: * d'ob-ro-. An innerAnatolian connection between tapar- 'to rule' and labarna- / tabarna- is fully gratuitous: the original meaning of the term tabarna- / labarna- cannot be determined because we are dealing with a personal name.

All in all, I reject the connection between tapar-, labarna- / tabarna- and the Germanic words *dapra-. If Luw. tapar- is of IE origin, it must reflect *TPer-, although I know no good cognates. Note that if tapar- indeed would reflect
*TPer-, it shows a different outcome of such an initial cluster than in Hittite, where * $d^{h} b^{h} n g^{h}-(e) u$ - yielded panku- / pankau- 'all, entire', with loss of the initial dental consonant.
dapi- (adj.) 'all, every, each, altogether': acc.sg.c. da-pí- $=a$ (KUB 5.1 i 14, 77, ii 31, 65, 72, iii $74(\mathrm{NH})$ ), nom.-acc.sg.n. da-pí (VSNF 12.108 rev.? 3 (NS), KUB 28.92 i 10 (NS)), gen.sg. da-pí-aš, dat.sg. da-pí-i (KUB 5.1 i 12, 37, 48 (NH), KBo $2.6+$ ii 33, iii 2 (NH), KBo 18.142, 16 (NS)), abl. da-pí-za (KBo 2.9 i 7 (MH/NS)), da-pí-da-az (KUB 12.57 iv 4 (NS)), acc.pl.c. da-pí-uš (KBo 11.14 i 24 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 55.40, 6 (NS)), gen.pl. da-pí-aš (KUB 16.77 iii $11(\mathrm{NH})$ ), dat.-loc.pl. da-pí-aš (KUB 6.45 iii $35(\mathrm{NH})$, KBo $25.180 \mathrm{rev} .10(\mathrm{OH} / \mathrm{NS})$, KBo 40.56 obv. 16 (NS))).

Derivatives: dapiant- (adj.) 'all, every' (nom.sg.c. da-pi-an-za, nom.-acc.sg.n. da-pí-an, nom.pl.c. da-pí-an-te-eš, nom.-acc.pl.n. da-pí-an-da).

We are dealing with two stems, dapi- and dapiant-, which both denote 'all, every, each'. Herewith they are synonymous with hümant-, which is the reason that dapi(ant)- and hūmant- occasionlly are used as duplicates of each other. It should be noted that the stem dapi- does not show ablaut in the suffix like other $i$-stem adjectives. Moreover, the one attestation dapidaz shows a pronominal inflection. The acc.sg.c.-form da-pi-n=a attested several times in KUB 5.1 is remarkable because in this NH composition we would not expect the use of the conjunctive $=a$ (see at $=(m) a$ for the chronological distribution). So perhaps we should regard the syntagm da-pí-n=a $\mathrm{ZI}-a n$ as a petrified expression.
Of the many etymological proposals for dapi(ant)- (see the listing in Tischler HEG T: 127f.) none can be regarded as convincing.
tapuš- (n.) 'side’: gen.sg. ta-pu-ša-aš (KBo 32.14 ii 29), all.sg. ta-pu-ú-ša (KBo 4.2 iii 47, KBo 39.164 r.col. 6, KUB 20.99 ii 18, KUB 31.105, 19, KUB 55.45 ii 12, KUB 55.58 obv. 16, IBoT 2.112 obv. 9, etc.), ta-pu-u-ša (KUB 1.8 iv 19 (NH)), $t a-p u-s ̌ a$ (often), $d a-p u-s ̌ a$ (KBo 5.1 i 33), endingless loc.(?) ta-pu-uš (KBo 13.20, 7, KUB 8.30 obv. 23), abl. ta-pu-uš-za (OS, often), ta-pu-u-uš-za (KBo 30.58 iii 11 (OH/NS)), da-pu-uš-za (KBo 2.29 i 8), ta-pu-uz-za (IBoT 2.4 i 6, KBo 34.152 iii 3).

Some of the forms cited above are used adverbially and then denote 'besides, next to'. The word is difficult to etymologize. Some scholars assume a connection with Hitt. tāpuuašš- 'rib', but this is unlikely. Oettinger (1979a: 553) suggests a
connection with e.g. ON stafr 'staff' $<*$ ste $b^{h}$ - and reconstructs a paradigm *(s)téb ${ }^{h}-u$ os, *(s)t(e) $b^{h}$-us-és (apud Tischler HEG T: 140), which does not seem very appealing to me. Rieken (1999a: 210) assumes that tapuš- represents an $s$ stem extenstion of an original $u$-stem *TéP- $u$-, *TP-éu-, but such an analysis does not have much merit without a good IE comparandum.
tar- 'to speak': see ter- ${ }^{z i} /$ tar $^{-}, t \bar{e}_{-}{ }^{z i}$
$\boldsymbol{t a r r a}-{ }^{\text {tat(ri) }}$ (IIIh) 'to be able; (+ inf.) to can': 1sg.pres.midd. tar-ra-ah-ha-ri (NH), 2sg.pres.midd. tar-ra-at-ta (MH/NS), 3sg.pres.midd. tar-ra-at-ta (NH), 1sg.pret.midd. tar-ra-ah-ha-at (NH), 3sg.pret.midd. tar-ra-at-ta-at (NH), tar-ra-ad-da-at (NH); part. tar-ra-an-t- (NH).
IE cognates: Skt. tiráte, tárate 'to overcome', Lat. trāns 'across, through'.

$$
\text { PIE *terh } 2^{-}
$$

See Neu 1968: 167 and Oettinger 1979a: 298 for attestations. It should be noted that all forms are found in NS texts only.

Since Friedrich HW: 213 this verb is generally regarded as an inner-Hittite cognate of tarhu- ${ }^{z i}$ 'to prevail, to conquer' (q.v.), which reflects *terh $h_{2}$ - $u$ - (and not unextended $*^{\text {terh }_{2}-}$ as is usually thought). Oettinger (1979a: 299) equates 3 sg . tarratta with Skt. tárate, which he reconstructs as *térh ${ }_{2}$-o-to (but note that Skt. tárate must reflect *tér $h_{2}$-e-to). Apart from the fact that in the Rg-Veda the stem tárate is hapax, whereas tiráte $<*$ trh $_{2}$-é-to is attested multiple times, the status of the Hittite 'thematic' middle is quite unclear. Examples like 3sg.pres.midd. uehari besides uehattari and 3sg.pret.midd. uehtat besides uehattat show that the 'thematic vowel' - $a$ - could well be secondary on the basis of the 3 sg.pres.-ending -ari. In the case of tarra- ${ }^{\text {tla(ri) }}$ this is important for establishing the phonetic developments it has undergone. If tarra- reflects *terh ${ }_{2}-O-$, it would show a development *erHV $>$ *arHV, which would contradict the vowel -e- as found in erh- / arah- / arh- 'boundary' < *h $h_{l} e r-h_{2}$ - and šerha- (an object to rinse feet with) $<*^{s e r h} h_{2 / 3}$. If the 'thematic vowel' in tarra- is secondary, however, we could assume that in 1 sg . *térh $h_{2}-h_{2} O, 2 \mathrm{sg}$. *tér $h_{2}-t h_{2} \mathrm{O}$, etc. the sound law $* e R C C>$ $a R C C$ is responsible for the $-a$ - in tarr-. This $-a$ - then spread to 3 sg . *térh $h_{2}-o>$ *terra >> *tarra, which later on served as the basis for the thematic paradigm tarra- ${ }^{\text {tla }}$.

Tischler (HEG T: 147) cites the form tar-ia-an-da-an (KUB $12.63+36.70$ obv. 9) as participle of tarra-, but this is phonetically impossible: a preform $* t^{2} h_{2}$-ientshould have yielded Hitt. **tarhiíant-. Note that its translation "kräftig" is based
on the supposed etymological connection with tarra- only and is not obligatory within the context it occurs in. The verb tarranu- ${ }^{z i}$, which sometimes is regarded as the causative of tarra-, is semantically unclear, and therefore an etymological connection with tarra- cannot be ascertained.
$\boldsymbol{t a r a h h} \boldsymbol{-}^{z i}$ : see tarhu $^{z}{ }^{z i}$
$\boldsymbol{t a r a i}^{\boldsymbol{i}}{ }^{\boldsymbol{i}} \boldsymbol{\operatorname { t a r i }}-(\mathrm{IIa} 4>\mathrm{Ic} 1)$ 'to exert oneself, to become tired': 3pl.pres.act. $t[a-] r i-$ ìa-an-zi (HKM 55 rev. 31 (MH/MS)), 1sg.pret.act. ta-re-eh-ḩu-un (KUB 30.10 rev. 4 (OH/MS)), da-ri-ía-nu-un (KUB 21.19+ iii 37 (NH)), ta-ri-ía-nu-un (KUB 30.33 i 13 (MH/NS)), ta-a-ri-ia-nu-un (KUB 30.36 ii 5 (MH/NS), da-ri-ia-ah-huun (KUB 30.35 i 9 (MH/NS), KUB 14.7 iv $16(\mathrm{NH})$ ), 3sg.pret.act. ta-ra-iš (KUB 36.83 i 20, 23 (MH/NS)), da-ri-ia-at (KUB 21.27 iv 39 (NH)); part. ta-ri-ia-an-t(KUB 24.3 ii 35, 36 (MH/NS)).
Derivatives: tariiaiašha- (c.) 'tirednes, fatigue' (nom.sg. ta-ri-i-ia-aš-ha-aš (KBo 1.42 i 19), da-ri-ia-aš-ha-aš (KUB 31.127+ i 25), tar-ri-ia-aš-ha-aš (KUB 24.3 i 48)), dariianu- ${ }^{z i}$ (Ib2) 'to tire, to make tired' (1sg.pret.act. da-ri-ia-nu-nu-un (here? KUB 7.60 iii 13), 3sg.pres.act. da-ri-ía-nu-zi (KUB 17.29 ii 11, 12), 3sg.pret.act. ta-ri-ia-nu-ut (KUB 31.67 iv 17)).

Note that some of the forms that usually are regarded as belonging here are treated under the lemma dāriie/a- ${ }^{z i}$ (q.v.). For the semantics of tarai- ${ }^{i}$ / tari-, cf. the following contexts:

KUB 30.10 rev.
(3) $n u=m u$ ku-iš DINGIR=IA i-na-an pa-iš nu=mu ge-en-zu
(4) [da-a ... i-n]a-ni pé-ra-an ta-re-eh-hu-un ma-le-ek-kụ-un nu=za nam-ma Ú-UL tar-uh-mi
'May my god, who gave me the illness, [have] pity on me. [ ... ]because of the [ill]ness I have become tired and $m$.-ed. I cannot succeed any longer';

KUB 30.36 ii
(2) ... nu kiš-an te-ez-zi

(4) ha-a-ri-i̇a-aš na-ak-ki-i-i_1a-aš ku-it ú-una-nu-un
(5) ku-it ta-a-ri-ia-nu-un
'He speaks thus: "All you mountains, great and small. Why have I come to the impassable valleys? Why have I wearied myself?"".

Compare also tariįašhaš (KBo 1.42 i 19) which glosses Akk. MA-NA-AH-TUM 'fatigue'.
The oldest form of the paradigm is ta-re-eh-hu-un ( $\mathrm{OH} / \mathrm{MS}$ ). The reading of this word is in debate because of the fact that the sign AH/UH can be read ah, eh, $i h$ as well as $u h$. For instance, Tischler (HEG T: 172) reads this form as ta-ri-ah$h u-u n$ on the basis of two attestations da-ri-ia-ah-hu-un found in NS texts, for instance in

KUB 30.35 i
(7) nu a-pád-da pa-i-ši nu ua $[-a p-p u-] i$ kiš-an me-ma-at-ti
(8) ua-ap-pu=mi-it na-an-x[ ku?-i] t? $u$ ú-ua-nu-un ku-it
(9) da-ri-i्रa-ah-hu-u[n]
'You will go there and will speak to the riverbank thus: "O my riverbank!

I do not find this very attractive, however. I follow Oettinger (1979a: 475) in reading ta-re-eh-hu-un, which, together with 3sg.pret.act. ta-ra-iš (KUB 36.83 i 20,23 , although it must be admitted that this context is not fully clear and that therefore the interpretation of tarais as 'he became tired' is not totally ascertained), points to an original dāi/tiianzi-class inflection. Like the other verbs of this class, tarai- / tari-, too, shows secondary thematization in NH times, yielding the stem tariie/a- ${ }^{z i}$. The two forms dariiahhun must be compared to neiahhun (a cross between nehhun and neianun).
As I have shown in Kloekhorst fthc.a, the dāi/tiiianzi-class verbs go back to a structure ${ }^{*} C C-(o) i-$. In the case of tarai-/tari- this means that we are dealing with *Tr-oi- / *Tr-i-, derived from a root *Ter-. Different etymological proposals have been done, but none is convincing: an inner-Hittite connection with tarra- ${ }^{\text {tua(ri) }}$ 'to be able' (thus Friedrich 1968: 37f.) is impossible as the latter verb reflects *terh $2^{-}$ and ${ }^{*} \operatorname{trh}_{2}$-oi- should have yielded Hitt. ${ }^{* *}$ tarhai-; the connection with Gr. $\delta \rho$ á $\omega$ 'to do' (Tischler 1979: 265) $<* d r e h_{2}$ - is formally impossible as well; a connection with Lith. darýti 'to do' (Tischler l.c.) is semantically improbable as the latter verb is a causative to deréti 'to be fit', which has nothing to do with 'to weary oneself'. All in all, the etymology remains unclear.
$\operatorname{tarh}^{-z i}$ : see $\operatorname{tarh}^{-z} \boldsymbol{z}^{z i}$
$\boldsymbol{t a r h} \boldsymbol{u}^{-z i}$ (Ia4) 'to prevail, to conquer, to be powerful, to be able; (with $=z$ ) to defeat': 1sg.pres.act. tar-uh-mi (OH/MS), 2sg.pres.act. tar-uh-ši (KBo $21.34+$ IBoT 1.7 i 64 (MH/NS)), 3sg.pres.act. ta-ru-uh-zi (KBo 6.2 ii 58 (OS)), tar-uh-zi (StBoT 25.19 obv. 12 (OS), etc.), tar-ru-uh-zi (KBo 20.73 iv 6 (OH/MS), KBo 22.195 iii 8 (OH/MS)), tar-hu-uz-zi (KUB 17.10 i 33 ( $\mathrm{OH} / \mathrm{MS}$ )), ta-ru-uh-za (KUB 43.75 rev. 9 (OH/NS)), tar-hu-e-zi (KBo 38.126, 10 (MS)), 1pl.pres.act. tar-ah-hu-u-e-ni (NH), 2pl.pres.act. tar-uh-te-ni (NH), 3pl.pres.act. tar-ru-uh-ha-an-zi (KUB 7.1 ii 9 (OH/NS)), tar-uh-ha-an-zi (NH), 1sg.pret.act. ta-ru-uh-hu-un (KBo 16.47 obv. 4 (MH/MS)), tar-hu-un (KUB 14.1 rev. 58 (MH/MS)), tar-ah-hu-un (NH, often), 3sg.pret.act. tar-uh-ta (OH/MS), 1pl.pret.act. tar-hu-en (KBo $3.41+$ obv. 19 ( $\mathrm{OH} / \mathrm{NS}$ )), tar-hu-u-en (KBo 22.6 iv 12 (OH/NS)), 3pl.pret.act. tar-hu-e-er (KUB 23.79, 12 (MH/MS?)), tar-hu-er (KBo 32.14 iii 17, 32 (MS)), tar-[hu]-e-er (KUB 17.27 iii 9 (MH/NS)), tar-uh-he-e-er (NH), tar-uh-he-er (NH), 1sg.imp.act. tar-uh-ha-al-lu (KBo 12.58+ obv. 5 (NS)), 3sg.imp.act. tar-hu-du (KBo 4.2 i 54 (OH/NS)), tar-uh-du (MH/NS), tar-hu-id-du (KUB 36.75 iv 10 (MH/MS)), 3pl.imp.act. tar-uh-ha-an-du (KBo 43.273, 7 (undat.)); part. tar-hu-an-t- (Bo 3081 obv. 5 (MS), Bo 6109, 8 (undat.)), tar-uh-ha-an-t- (NH); verb.noun gen.sg. tar-ah-hu-u-ua-aš, tar-ah-hu-aš; sup. tar-ah-hu-u-ua-an (KBo 3.7 iii 25 ( $\mathrm{OH} / \mathrm{NS}$ )); impf. tar-uh-hi-iš-ke/a-, tar-uh-hi-eš-ke/a-, tar-ah-hu-i-iš-ke/a- (Bo 69/969 ii 2 (NS)); broken tar-hu-u[a-...] (VSNF 12.135, 5 (NS)), tarhu [-...] (KUB 33.66 iii 16 (OH/MS)).

Derivatives: tarhuē̌̌š- ${ }^{z i}$ (Ib2) 'to become powerful' (3sg.pret.act. tar-hu-iš-ta (KBo 13.49 ii 4 (NS))), tarhuili- / tarhuilai- (adj.) 'strong, powerful' (acc.sg.c. tar-hu-u-i-li-in (NS), nom.-acc.sg.n. tar-hu-u-i-li (MH/NS), acc.pl. tar-hu-i-la-uš (MH/MS), tar-ḩu-i-li-uš (NH)), tarhuilātar / tarhuilann- (n.) 'heroism, courage' (nom.-acc.sg. tar-hu-i-la-a-tar, tar-hu-i-la-tar, gen.sg. tar-hu-i-la-an-na-aš), tarhuilēšš- ${ }^{z i}$ (Ib2) 'to become powerful' (3sg.pres.act. tar-hu-i-le[-e]š̌-zi (MH/MS?), 1sg.pret.act. tar-ḩu-i-le-e-eš-šu-un (MH/MS)), * ${ }^{\text {d Tarhunna- (c.) }}$ 'Storm-god' (Sum. ${ }^{\mathrm{d}} \mathrm{IŠKUR},{ }^{\mathrm{d}} \mathrm{U}$; nom.sg. ${ }^{\mathrm{d}} \mathrm{I}$ ŠKUR-aš (OS), ${ }^{\mathrm{d}} \mathrm{U}-a s ̌$ (OS), acc.sg. ${ }^{\mathrm{d}} \mathrm{IŠKUR}-a n$ (OS), ${ }^{\mathrm{d}} \mathrm{U}-a n$ (OS), gen. ${ }^{\mathrm{d}} \mathrm{IŠKUR}-n a-a \check{s ̌}$ (OS), dat. ${ }^{\mathrm{d}} \mathrm{I}$ ŠKUR-un-ni (OS)), see tarra- ${ }^{\text {tua }}$.
Anat. cognates: CLuw. ${ }^{\mathrm{d}}$ Tarhuuant- / ${ }^{\mathrm{d}}$ Tarhunt- 'Storm-god' (nom.sg. ${ }^{\mathrm{d}} \mathrm{U}$-an$z a,{ }^{\mathrm{d}} \mathrm{I}$ ŠKUR-an-za, voc.sg. ${ }^{\mathrm{d}} \mathrm{U}-a n,{ }^{\mathrm{d}}$ Tar-huu-un-za, dat.-loc.sg. ${ }^{\mathrm{d}} \mathrm{I}$ ŠKUR-u[n-t]i, gen.adj.acc.pl.c. tar-hu-un-ta-aš-ši-in-za, gen.adj.nom.-acc.pl.n. ${ }^{\mathrm{d}}$ IŠKUR-aš-ša-an-za), tarhunta- '?’ (3sg.pret.act. tar-hu-un-ta-at-ta), tarhuntiti-, a kind of food (Hitt.gen.sg. tar-ḩu-un-ti-ti-ia-aš); HLuw. Tarhunt-, Tarhunza- (c.) 'Storm-god' (nom.sg. /tarhunts/ ${ }^{\text {DEUS }}$ TONITRUS-hu-za (KÖRKÜN §5, BULGARMADEN
§4), /tarhuntsas/ ${ }^{\text {DEUS }}$ TONITRUS-hu-za-sa (KARATEPE 1 §3, KARKAMIŠ A6 §2, SULTANHAN §8, etc.), ${ }^{\text {DEUS }}$ TONITRUS-hu-za-sá (KARATEPE 1 §40, §51, $\S 73$ ), ${ }^{\text {DEUS }}$ TONITRUS-hu-u-za-sa (KULULU 1 §10), acc.sg. /tarhuntsan/ ${ }^{\text {DEUS }}$ TONITRUS- $h u-z a-n a$ (MARAŞ 4 §3, KÜRTÜL §7, BOR §4, NİĞDE 2 line 1, KARKAMIŠ A17a §4), ${ }^{\text {DEUS }}$ TONITRUS-hu-zá-na (SULTANHAN §2), ${ }^{\text {DEUS }}$ TONITRUS-hu-u-za-na-' (KULULU 1 §5), gen.sg. /tarhuntas/ ${ }^{\text {DEUS }}$ TONITRUS-hu-ta-sa (KARATEPE $1 \S 1$, ÇİFTLİK §6), ${ }^{\text {DEUS }}$ TONITRUS-hu-ta-sá (ÇíFTLİK §12, §13), dat.sg. /tarhunti/ ${ }^{\text {DEUS }}$ TONITRUS-hu-ti-i (KARKAMIŠ A6 §20, MARAŞ 11, §8, AKSARAY §5, PALANGA §7), ${ }^{\text {DEUS }}$ TONITRUS-hu-ti (BABYLON 3, BOHÇA §2, KARKAMIŠ A24a 2+3 §11), abl.-instr. /tarhuntadi/ ${ }^{\text {DEUS }}$ TONITRUS-hu-ta-ti (NİĞDE 2 line 2), ${ }^{\text {DEUS }}$ TONITRUS-hu-ta-tí (KARATEPE $1 \quad \S 10$ ), ${ }^{\text {DEUS }}$ TONITRUS-ta-ti-i (KARKAMIŠ A15b §1), gen.adj.abl.-instr. /tarhuntasadi/ ${ }^{\text {DEUS }}$ TONITRUS-hu-ta-sá-ti-i (MARAŞ 1 §5)), tarhunti- (adj.) 'of the Storm-god' (nom.sg.c. ${ }^{\text {DEUS }}$ TONITRUS-hu-ti-i-sa (ÇİFTLİK §5), ${ }^{\text {DEUS }}$ TONITRUS-hu-ti-i-sá (EĞRİKÖY §1) ${ }^{\text {DEUS }}$ TONITRUS-hu-ti-sá (KÜRTÜL §1)); Lyd. ?tarvtalli- ‘of Tarvta’ (nom.sg.c. tarvtallis); Lyc. Trqqñt- 'Storm-god' (nom.sg. Trqqas, Trqas, dat.sg. Trqqñti), Mil. Trqqñt- 'Storm-god' (nom.sg. Trqqiz, dat.sg. Trqqñti, gen.adj. trqqñtasa/i-)
IE cognates: Skt. tū́rvati 'to overcome, to overpower', Av. tauruuaiieiti 'to overcome'.

PIE *terh ${ }_{2}$-u-ti, *trh ${ }_{2}$-u-enti
The verbal forms that I have gathered here under one lemma are usually regarded as belonging to two separate verbs, namely $\operatorname{tarh}^{-z i}$ and $\operatorname{tarhu}^{-z i} / \operatorname{taruh}^{z i}$. Despite the alleged formal difference, these verbs are generally regarded as semantically identical. The existence of a stem tarhu-/taruh- (for the alteration cf. eku-z 'to drink' that is spelled euk- ${ }^{z i}$ as well) is assured by the spellings 3 sg.pres.act. tar-hu-uz-zi ( $\mathrm{OH} / \mathrm{MS}$ ) and ta-ru-uh-zi (OS). The most common spelling of 3sg.pres.act. is tar-AH/UH-zi, however. The sign AH/UH (HZL 332) can in principle be read $a h, e h, i h$ as well as $u h$. A choice between these readings is usually based on the preceding sign: e.g. ta-ru-AH/UH-zi is read ta-ru-uh-zi on the basis of the preceding $r u$; te-AH/UH-hi is read te-eh-hi on the basis of the preceding $t e$. In the case of $t a r-\mathrm{AH} / \mathrm{UH}-z i$, the preceding sign does not give a clue as to how to read the sign, however. Nevertheless, in some cases we are sure that we must read uh. For instance, the OS form tar-AH/UH-zi (StBoT 25.19 obv. 12) is duplicated by tar-ru-uh-zi (KBo 22.195 iii $8(\mathrm{OH} / \mathrm{MS})$ ), which shows that we have to read the first form as tar-uh-zi. In KBo 20.73 iv 6 we first find tar-

AH/UH-zi and later on, in the same line, tar-ru-uh-zi. This latter form confirms that the first should be read tar-uh-zi. A similar case is KBo 4.2 i 52 where we find tar-AH/UH-zi, whereas ibid. 54 has tar-hu-du, which determines the first form as tar-uh-zi. In addition, there is not a single piece of positive evidence for reading tar-AH/UH-zi as tar-ah-zi: spellings like **ta-ra-ah-zi or **tar-ha-zi lack totally (unlike e.g. ua-la-ah-zi 'hits' which determines the spelling ua-al$\mathrm{AH} / \mathrm{UH}-z i$ as $u a-a l-a h-z i$ or pár-ha-zi 'chases' which determines the spelling pár$\mathrm{AH} / \mathrm{UH}-z i$ as pár-ah-zi). Despite these considerations, the form tar-AH/UH-zi is generally transliterated tar-ah-zi (e.g. Tischler (HEG T: 157) states "[e]s ist jedoch traditionell üblich, tar-AH/UH-zi als tar-ah-zi zu transliterieren"). This "tar-ah-zi" then is phonologically interpreted as /tarHt ${ }^{\mathrm{s}} \mathrm{i} /$ (Oettinger 1979a: 221).
If there indeed were a stem $/ \operatorname{tar} \mathrm{H}-/$, we would also expect that forms like 3pl.pres.act. $/ \mathrm{t}(\mathrm{a}) \mathrm{rHant}^{\mathrm{s}} \mathrm{i} /$ or 3pl.pret.act. /t(a)rHer/ were spelled ${ }^{* *}$ tar-ha-an-zi and **tar-he-er (cf. ua-al-ha-an-zi, ua-al-he-er and pár-ha-an-zi, pár-he-er). Yet these are never found: we only find tar-AH/UH-ha-an-zi (besides tar-ru-uh-ha$a n-z i$ ) and tar-AH/UH-he-er (besides tar-hu-er and tar-hu-e-er). The only forms within the whole paradigm that seemingly show an unambiguous stem /tarH-/ are 1sg.pret.act. tar-hu-un and 1pl.pret.act. tar-hu-u-en. However, if we compare these to 1sg.pret.act. ekun and 1pl.pret.act. ekuen from eku-zi 'to drink' or 1pl.pres.act. lahueni from lāhu- 'to pour', we see that tarhun and tarhuen would perfectly fit the stem tarhu- as well.

All in all, we have to conclude that there is no positive evidence in favour of reading the spellings $t a r-\mathrm{AH} / \mathrm{UH}-z i$ as tar-ah-zi and interpreting these as spellings of a stem /tarH-/: all forms that are usually interpreted as showing /tarH-/ could just as well or have to be interpreted as showing the stem tarhu-/taruh-. I therefore reject the existence of a stem /tarH-/ and analyse all forms as belonging with tarhu-/taruh-. Subsequently I have cited all attestations with tar-AH/UH- as tar-uh- in the overview above.

The view that we are dealing with a stem tarhu-/taruh- only is supported by etymological evidence as well. The verb denotes 'to conquer, to prevail, to be powerful' and has since Kuryłowicz (1927: 102) generally been connected with the PIE root $*^{*}$ terh $_{2}$. This unextended root, which was thought to be the predecessor of Hitt. "tarh-", does not mean 'to overpower', however, but 'to cross, to pass through' only (Skt. tar ${ }^{i}$ - 'to pass through', Lat. trāns 'past, over'). This does not fit the Hittite meaning 'to conquer, to overpower'. Such a meaning is only attested in the $u$-present terh $_{2}$-u- that denotes 'to overpower': Skt. túrvati 'to conquer, to overpower', Av. tauruuaiieiti 'to overcome' (*trh $h_{2}$ - $u$-e/o-). So also semantically it has become clear that an analysis /tarH-/ is impossible: there
would be no way to explain its meaning 'to conquer' from PIE * terh $h_{2}$ ' to pass through'. The meaning 'to conquer' is only explicable from PIE $* \operatorname{terh}_{2}$ - $u$ - 'to overpower', which is an additional argument to read all forms with tar-AH/UHas tar-uh-.
The fact that we find the spelling tarhu- as well as taruhh- reminds us of the situation of $e k u u^{z i}$ besides $e u k{ }^{-z i}$ 'to drink' and tarku- ${ }^{z i}$ besides taruk $z^{z i}$ 'to dance'. These latter verbs must be phonologically interpreted as $/ \mathrm{Reg}^{\mathrm{w}}-/$ and $/ \operatorname{tark}^{\mathrm{w}}-/$, also on the basis of the forms akueni, ekun, ekuen (instead of **akumeni, **ekunun and **ekumen) and tarkuuar (instead of **tarkumar) that can only be explained by the fact that the labial feature of $/ \mathrm{g}^{\mathrm{W}} /$ and $/ \mathrm{k}^{\mathrm{w}} /$ does not participate in the sound law *-uи- > -mu-. I therefore assume that the spelling variation between tarhuand taruhh- and the forms 1 sg.pret.act. tarhun, 1pl.pret.act. tarhuen, sup. tarhuuan and verb.noun gen.sg. tarhuuaš point to a synchronic phonological interpretation $/ \operatorname{tarH}^{\mathrm{w}}-/$. See Kloekhorst fthc.c for my view that this synchronic phoneme $/ \mathrm{H}^{\mathrm{w}} /$ (which has a lenited variant $/ \mathrm{h}^{\mathrm{w}} /$ in lāḩu- $/ \mathrm{la}^{\mathrm{w}}-/$ ) must have been a PAnat. phoneme as well because of Lyc. Trqqñt- /trk ${ }^{\mathrm{w}}$ nt-/ < PAnat. $*_{t r} H^{w}$ ent- (see also below).
One of the most important derivatives of the verb tarhu- ${ }^{z i}$ is the name of the Storm-god. In Hittite, this name is almost always spelled with the sumerograms ${ }^{\mathrm{d}} \mathrm{U}$ and ${ }^{\mathrm{d}} \mathrm{I}$ ŠKUR. On the basis of the OS attestation dat.-loc.sg. ${ }^{\mathrm{d}}$ IŠKUR-un-ni (KBo 3.22 obv. 3), it is generally assumed that the underlying Hittite name was Tarhunna-. The exact interpretation of the suffix -nna- is unclear, however. In CLuwian, we find the phonetic spellings voc.sg. ${ }^{\mathrm{d}}$ Tar-hu-un-za and gen.adj. tar-$h\left(u-u n-t a-a \check{s}-s ̌ a / i-\right.$, which, together with nom.sg. ${ }^{\mathrm{d}} \mathrm{U}-a n-z a$ and ${ }^{\mathrm{d}} \mathrm{I}$ ŠKUR-an-za point to an ablauting pair Tarhuuant- / Tarhunt-. These forms point to an original paradigm *trh ${ }_{2}$-u-ént-s, *trh $h_{2}$-u-nt-ós which looks like an original participle (note that this would be the only participle in -ant- in Luwian, where synchronically only participles in -mma/i- can be found). The same paradigm must underly the HLuwian forms, where we find a stem Tarhunt- (nom.sg. /tarhunts/, gen.sg. /tarhuntas/, dat.-loc.sg. /tarhunti/) and a secondary stem Tarhunza- (nom.sg. /tarhuntsas/, acc.sg. /tarhuntsan/). Cf. Eichner 1974: $28^{8}$ for the observation that CLuw. Tarhuant- forms an exact word equation with Skt. tūrvant'overpowering', which is used as an epithet of Indra, Agni and Mitra. The interpretation of Lyc. and Mil. Trqqñt- has been in debate because of the unclear interpretation of the sign $q$. For instance, Starke (1990: 140f.) reads $q$ as $/ \mathrm{k} /<* h_{2}$ and subsequently reconstructs $* t r h_{2}$-ént-. As I have shown in Kloekhorst fthc.c, there is no evidence at all that Lyc. $q$ reflects ${ }^{\prime} h_{2}$ (which instead yields Lyc. $\chi$ when unlenited and $g$ when lenited) and that an interpretation of $q$ as $/ \mathrm{k}^{\mathrm{w}} /<*_{-} h_{2} u$ -
is the only convincing solution. Therefore, Lyc. Trqqñt- must reflect *trh ${ }_{2}$ uent- as well.

The CLuwian verb tatarh- may mean 'to break', cf. the following context:

$$
\begin{aligned}
& \text { KUB } 9.6 \text { iii } \\
& \text { (25) } k u \text {-iš=tar ma-al-ha-ač-ša-ǎ̌-ša-an-za-an EN-ina } \\
& \text { (26) } a \text {-ad-du-ua-la a-an-ni-ti } a=a n \text { DINGIR }{ }^{\mathrm{MES}} \text {-in-zi } \\
& \text { (27) } a \text {-ah-ha na-a-ta-at-ta ta-ta-ar-ha-an-du } \\
& \text { (28) ú-i-it-pa-ni-im=pa=an ú-i-da-a-in-du } \\
& \text { (29) } a=d u-u=[a-a] n \text { an-na-a-an pa-a-ta-an-za du-ú-ua-an-du }
\end{aligned}
$$

'Whoever does evil to the patient, may the gods tatarh- him like reed, may they uidāi- him regarding (his) uñ̄tpani-, and may they place him under their feet'.

It therefore is often equated with Hitt. tarh- ${ }^{z i}$. Since Hitt. tarh- $^{z i}$ does not exist anymore, this equation cannot be upheld either. Semantically, a connection with 'to conquer' is not very appealing either. I would rather suggest a connection with Gr. $\tau \rho \omega \dot{\omega} \omega$ 'to hurt (someone)' < *trh $h_{3}$-ie/o- and reconstruct tatarh- as *te-terh ${ }_{3}$-.
The HLuwian verb tatarh- is attested only in the damaged inscription BEYKÖY (see Masson 1980: 118f.):
(1) [ ]x-x
(2) EXERCITUS $k u$-x tà-tara/i-ha-tà

Masson translates 'L'armée $x$ ne cessait de vaincre'. Because of the broken context, the exact meaning of this inscription cannot be determined. Perhaps, tatarh- is to be regarded as a direct cognate to CLuw. tatarh-.
-tta(ri), -ttat(i) (2sg.midd.-ending)
The endings of the 2 sg . of the middle inflection are $-t t a$, -ttari and -ttati for the present and -ttati, -ttat for the preterite. The distribution between these endings is not fully clear to me (especially between -tta(ri) and -ttati in the present, but compare Yoshida 1987), but it is clear that the common element is -tta. This -tta clearly must be compared with 2sg.midd.-endings in the other IE languages like TochA -tār, TochB -tar, and OIr. -ther. In view of the 2 sg.perf.-ending *-th $h_{2} e$, these probably reflect $*$ - $t h_{2} O$.
-tta(ri), -ttat(i) (3sg.midd.-endings)

Anat. cognates: CLuw. -ttar(i), -dari (3sg.pres.midd.-ending): a-na-a-it-ta-ri, hal-ti-it-ta-ri, ha_-a-aš-ši-da-ri, ku-la-ni-it-tar, pal-pa-ti-it-ta-ri, pa-ap-ti-it-tar.

PIE *-to
In the 3 sg.midd., we find two sets of endings: pres. $-a(r i)$, pret. $-a t(i)$ vs. pres. $-t t a(r i)$, pret. -ttat $(i)$. Sometimes it is stated that the distribution between these endings corresponds to the distribution between $m i$ - and $h i$-endings in the active, but this is incorrect. On the basis of the active inflection of a given verb, it cannot be predicted whether it will use $-a(r i) /-a t(i)$ or $-t t a(r i) /-t t a t(i)$ as 3 sg.midd.ending. For instance, halziiia(ri), lahuūāri, lagāri and pahša(ri) correspond to the hí-inflecting actives halzai- ${ }^{i}$ / halzi-, lāhu- ${ }^{i} / l a h u-, l a \bar{k}-{ }^{i} / l a k-$ and pahšs-${ }^{i}$, whereas e.g. eša(ri) and karša correspond to the mi-inflecting actives eš- ${ }^{z i} / a s ̌-$ and $k a r s ̌-z i$. Usually, a verb is consistent in its 'choice' for either the ending -a(ri)/-at(i) or -tta(ri) / -ttat(i), but sometimes we encounter both (e.g. karša besides karštari or šuppari besides šuptari) and occasionally even a combination of the two (e.g. $\check{s} u p p a t t a r i)$. These are rare cases, however. For instance, the verb eš- ${ }^{-(r i)}$ 'to seat oneself' shows the ending $-a(r i)$ throughout the Hittite period, whereas e.g. $k i^{-{ }^{\text {Ha(ri) }}}$ consistently shows -tta(ri). This does not necessarily reflect the PIE state of affairs, as is visible from the fact that eša(ri) < * $h_{l}$ é $h_{l} s-o$ corresponds to Skt. áste and Gr. $\tilde{\eta} \sigma \tau \alpha \mathrm{t}$ from *héh $h_{l}$ s-to. On the other hand, Hitt. kitta(ri) reflects *kéei-to just as Skt. séte and Gr. кعıtaı, whereas its CLuwian cognate züìari reflects *kéi-o just as Skt. sáye.

The endings -tta(ri) / -ttat(i) occur in all classes of the middle, except in class IIIf (tukkāri-class). In the present, there is no clear distribution between -tta and -ttari (cf. arta besides artari, both OS). In the preterite, too, there is no clear indication of a chronological distribution between -ttati and -ttat (unlike in older -ati vs. younger -at). OS forms like kištanziattat and luktat may even indicate that the original ending was -ttat and that -ttati was created in analogy to -ati.
As we saw above, the endings $-t t a(r i) /-t t a t(i)$ have well-established IE cognates like Skt. -te, Gr. -tot (both from *-to-i), Lat. -tur, TochAB -tär, OIr. -thir (from *-to-r(i)), Goth. -da, etc. The origin of the element -r- in Hitt. -ttari, Lat. -tur, TochAB -tär and OIr. -thir is still unclear.
tariie/a- ${ }^{z i}$ 'to become weary': see tarai- $^{i} /$ tari-
dāriie/a- ${ }^{z i}$ (Ic1) '?': 3sg.pret.act. da-a-ri-i_1a-at (KUB 4.12 i 7), 1pl.pret.act. da-a-ri-ía-u-en (KUB 24.9(+) i 25); part. da-ri-ía-an-te-eš (KUB 1.8 iv 8 (NH)) // da-

Some of the forms that in my view belong here are usually regarded as belonging to tarai- ${ }^{i}$ / tari- 'to exert oneself' (especially dẵriianteš (KUB 1.1+ iv 21 with several duplicates)), while others have been translated as 'to call upon a god' (especially dāriiat (KUB 4.12 i 7)) and therefore treated as cognate to ter- ${ }^{z i} /$ tar'to speak'. This is in my opinion incorrect. In the following two contexts, dāriie/a ${ }^{z i}$ seems to denote an action performed on an ill person in order to heal him:

KBo 4.12 i
(5) $A-N A$ P $A-N I A-B U=I A=m u$ kap-pí-in DUMU-an HUL-lu
(6) GIG.GIG-at $n u=m u=k a ́ n ~ A-B U=I A A-N A{ }^{\mathrm{m}} M i-i d-d a n-n a-A . A$ GAL DUB.SAR ${ }^{\text {MEŠ }}$
(7) ŠU-i da-a-iš $n=a-a \check{s}=m u=k a ́ n ~ a n-d a d a-a-r i-i \underline{i} a-a t$
(8) $n u=m u=k a ́ n$ GIG- $a z$ TI-nu-ut
'(When I was) a little child to my father, a bad disease struck me. My father trusted me to the hand of Middanamuua, the Head of Scribes, who anda d.-d me and saved me from the disease';

KUB 24.9(+) i
(23) $\left[^{\mathrm{MUNUS}}\right]$ ŠU.GI $A$-NA ALAM ${ }^{\mathrm{HIIA}}$ te-ez-zi ú-ûa-at-ti-en=ua iš-šu-u-en=una ku-e $n u=u \quad a=n a-\check{s}=a-[a t]$
(24) [EGIR]-pa pé-eš-ti-en UM-MA DUMU.LÚ. $\mathrm{U}_{19} . \mathrm{LU}=m a \operatorname{Ú}-U L=$ úa nam-ma ma-az-zu-u-e-ni
(25) $n=a$-an=ua da-a-ri-i_a-u-en nu=ua $i-n a-[a n] a-n i-$-i $a-u$-e-en $n u=u a-r=a-a t=z a$ EGIR-pa
(26) [na] $m$-ma da-a-at-tén $n=e-e=z$ pé-e-da-at-te-en
'The Old Woman speaks to the figurines "Come, you who we have made, and give it back to us!". Then the mortal speaks "We do not dare anymore. We have d.-ed him and treated the illness. Take it back and carry them away!"".

Although it cannot be denied that a meaning 'to call upon a god' is possible in these context, there is no indication at all that we are here dealing with praying.
Another context is less clear:
KBo $3.6++$ iii
(60) $[\ldots n u=z] a{ }^{\mathrm{d}}$ IŠTAR GAŠAN $=I \cdot I A$
(61) pa-ra-a ha-an-da-a-tar $a$-[(pí-ía=ia)] me-ek-ki te-ek-ku-uš-ša-nu-ut
(62) $\left.n u^{\mathrm{m}} \mathrm{U}^{\prime} r-h i-{ }^{\mathrm{d}} \mathrm{U}-u p-a \check{s} B E-L U\left[{ }^{\mathrm{HI} . \mathrm{A}} k u-i-e-e s ̌ ~ k u\right)\right]-u{ }_{2} a-p i ́ a r-h a u-i-i-i a-a t$
(63) $n u-u=\check{s}$-ma-aš ${ }^{\mathrm{d}} I S ̌ T A R ~ G A S ̌ A N=I A ~[(U ̀-a t ~ i)] n-n a-r a-=u-u a-a=\check{s}-m a-a \check{s}$ da-a-ri-ía-an-te-eš
(64) KUR.KUR ${ }^{\text {MEŠ URU }}$ KÙ $. \operatorname{BABBAR}^{I I}=m a=u[(a=k a ́ n ~ h ̧ u-u-m)] a-a n-t a{ }^{\mathrm{d}}$ IŠTAR $A-N A$ ${ }^{\mathrm{m}} \mathrm{H}$ a-at-tu-ši-li
(65) EGIR-an-da ne-i-i[ $[a-n u-u] n$
'And there as well My Lady Ištar let her providence show abundantly. The lords that Urhi-Tešup then had sent away, to them My Lady Ištar appeared in a dream: "You are purposely $d .!$ But I, Ištar, have returned all Hatti-lands back to Hattušili"".

Although I do not know exactly how to translate dāriịanteš here, a translation 'exerted' does not seem fitting to me.

All in all, the meaning of dāriie/a- ${ }^{z i}$ cannot be ascertained, but it is clear that appurtenance of these forms to either tarai- ${ }^{i} /$ tari- or $_{\text {ter }}{ }^{z i} /$ tar- is unlikely.
${ }^{\text {TúG }}$ tarriianali- (c.) 'cloth that has been woven three times(??)': nom.sg. tar-ri-i_ia-na-liš (KBo 18.181 obv. 14, rev. 3, 8, 22), tar-ía-na-liš (KBo 18.186 l.edge 4).

PIE *tri-ino-no-li- ??
On the basis of the formal connection with ${ }^{\text {LÚ }}$ tarriiianalli- 'functionary of the third rank', it has been assumed that this word, which must denote a cloth because of the determinative TÚG, should be interpreted as 'cloth that has been woven three times' vel sim. See ${ }^{\text {LÚ }}$ tarriianalli- and teri- for further etymology.
${ }^{\text {LU }}$ tarriianalli- (c.) 'functionary of the third rank': nom.sg. tar-ri-į्a-na-al-li-iš (MH/MS), dat.-loc.sg. tar-ri-ía-na-al-li (MH/MS).

PIE *tri-io-no- + -alli-
This word is hapax in the following context:
IBoT 1.36 i
(36)
... $a-p a-a-s \check{s}=a p a-r a-a$ da-me-ta-ni
(37) ${ }^{\text {LÚ }}$ ME-ŠE-DI te-ez-zi $a-p a-\check{s}=a$ pa-ra-a ${ }^{\text {LÚ tar-ri-íia-na-al-li te-ez-zi }}$
(38) ${ }^{\text {LÚ }}$ tar-ri-ia-na-al-li-iš $=m a{ }^{\text {LÚ }}$ du-íla-na-al-li te-ez-zi
(39) ${ }^{\text {LÚ }}$ du-ia-na-al-li-iš=ma A-NA UGULA $10 M[E]-S ̌[E-D] I$ te-ez-zi
'He passes it on to the other guard. That one passes it on to the one of third rank, the one of third rank passes it on to the one of second rank, and the one of second rank tells it to the Chief of ten guards'.

On the basis of this context, tarriianall- can be determined as 'functionary of the third rank' (besides ${ }^{\text {LÚ }}$ duianalli- 'functionary of the second rank' (q.v.)), and likely contains a reflex of the PIE numeral *trei- 'three'. Since the word for 'three' in Hittite shows the stem teri- (q.v.), it has been assumed that tarriianallimust show a Luwian variant, tarri-. The idea is then that Luw. tarri- shows geminate -rr- because of Čop's Law and therefore must reflect PAnat. *téri(which also yielded Hitt. teri-). For the origin of this PAnat. *téri-, see at teri-.
$\boldsymbol{\operatorname { t a r }} \boldsymbol{( k )} \boldsymbol{u}^{\boldsymbol{z i}}$ (Ia4) 'to dance': 3sg.pres.act. tar-uk-zi (KBo 17.43 i 9 (OS)), tar-ú-zi (KBo 30.103 obv. 6 (OH/MS)), ta-ru-u[k-zi] (KBo 17.99 i 6 (OH/MS)), tar-ku-zi (NH), tar-ku-uz-zi (NH), 3pl.pres.act. tar-ku-an-zi (OS), tar-ku-ua-an-zi (OS), tar-ku-u-ua-an-zi (NH), 3pl.pret.act. tar-ku-e-er (MH/NS); verb.noun tar-ku-uaar (KUB 4.1 ivb 40 (MH/NS)); inf.I tar-ku-ua-an-zi (KUB 7.19 obv. 8, KUB 11.34 iv 17 , KBo 23.97 i $11(\mathrm{NH})$ ); impf. [ta]-ru-uš-kán-zi (KBo 17.36+ i 10 (OS)), ta-ru-u[š-kán-zi] (ibid. 20 (OS)), tar-ku-iš-ke/a-(OH/MS), tar-ú-i-eš-ke/a( $\mathrm{OH} / \mathrm{NS}$ ), tar-ú-iš-ke/a-, tar-ú-eš-ke/a-, tar-ú-ui $i_{5}-e s ̌-k e / a-$, tar-ú-i-iš-ke/a-, tar-ku-eš-ke/a-(NH).
Derivatives: ${ }^{\text {LÚ }}$ taruešgala- (c.) 'dancer(?)’ (nom.sg. tar-ui $i_{5}-e s ̌$ '-ga-la-aš (KUB 3.94 i 21 (NS))).

IE cognates: Lat. torquēre 'to turn', TochB tärk- 'to twist around', Skt. tark- 'to turn'.

PIE * térk ${ }^{w}$-ti $/ *$ trk $k^{w}$-énti
Usually, the verbal forms cited under this lemma are treated as two separate verbs, namely tarku- ${ }^{z i}$ and taru- ${ }^{z i}$. The stem tarku-, which is occasionally spelled taruk- as well (cf. eku- ${ }^{z i} \sim e u k_{-}^{z i}$ 'to drink' and tarhu- ${ }^{z i} \sim$ taruhh $_{-}{ }^{z i}$ 'to conquer'), has since Benveniste (1962: 125) generally been connected with TochB tärk-'to turn' and Lat. torquēre 'to turn' and reconstructed as *terk ${ }^{w}$-. The alteration between tarku- and taruk- points to a synchronic phonological form /tark ${ }^{\mathrm{w}}-/$. This also explains the inf.I tarkuuanzi and verb.noun tarkuuar, which do not show haplography from ${ }^{* *}$ tar-ku-ua-ua-an-zi and **tar-ku-ua-ua-ar (contra Otten 1973: 53), but are rather the result of the fact that the labial element of $/ \mathrm{k}^{\mathrm{w}} /$ does not participate in the sound law *-uи->-mu-. So tarkuuanzi and tarkuuar can be interpreted as perfectly regular /trk ${ }^{\mathrm{w}}$ uánt $^{\mathrm{s}} \mathrm{i} /$ and /tárk ${ }^{\mathrm{w}}$ uər/.

The interpretation of the stem taru- $^{z i}$ has caused much debate. In some contexts, the verb taru- clearly denotes 'to dance', e.g.

KUB 25.37 i
(6) ${ }^{\text {LÚ }}$ MUHALDIM ma-ah-ha-an tar-u $i_{5}-i \check{s}$-ke-et nu $a-p a-a-a \check{s}-\check{s}=a$ QA-TAM-MA
(7) $[$ tar-u $] i_{5}-i \check{s}-k e-u$-an da-a-i pé-di=in $a-a=\check{s}-s ̌ a-a n ~ u a-a h-n u-u s ̌-k e-e z-z i ~$
'When the cook has danced, he as well starts to dance in the same manner. He keeps on making himself whirl on (his) place'.

Oettinger (1979a: 226) argues that taru- rather means 'to rage', however. This interpretation is primarily based on the inf.-form tar-ua-u-ua-an-zi (KUB 12.62 obv. 11, 13), but Tischler (HEG T: 245) convincingly interprets this form as belonging to a verb taruuae- ${ }^{z i}$ 'to turn to wood; to fix, to fasten' (see under the lemma tāru-). Another context in which Oettinger proposes to translate 'to rage' is KBo 10.23 iii (3) nu pár-ša-ni-li tar-ú-i-eš-kán[-zi] "sie toben wie Panther", which contrasts with CHD's translation 'and they dance dressed in leopard's skins' (P: 186). All in all, we have to conclude that taru- ${ }^{z i}$ means 'to dance' only (cf. Melchert 1994a: 61: "there is not a shred of evidence for [translating taru- as] 'to rage'"). Therefore, Oettinger's etymologic interpretation (1979a: 226, based on Knobloch 1959: 35 and repeated thus by Tischler o.c.: 236) of taru- as reflecting an $u$-extension of a root *d'er- 'sexuell herumtoben' (Gr. Өópvv ${ }^{h}$ aı 'to leap, to mount', which rather reflects $* d^{h} e r h_{3^{-}}$, cf. $\mathrm{LIV}^{2}$ ) is unconvincing.

Having the meaning 'to dance', taru- strongly resembles tarku-, of course (Melchert (l.c.): "tarku- and taru- are synonymous, being used in virtually identical contexts"), which would point to an etymological connection between the two. Laroche (1958: $197^{5}$ ) assumes that taru- is the Luwian variant of tarku-. Melchert (1.c.) follows this suggestion and assumes that PIE $* k^{w}$ unconditionally yielded PAnat. * $g^{w}$, which on the one hand gave Hitt. $-k^{w}$-, but on the other Luw. -u-. Oettinger (1979a: 225) convincingly speaks against a Luwian origin of taruhowever: "jedoch kommt - abgesehen davon, daß taru- ${ }^{\text {mi }}$ stets wie ein genuin heth. verbum behandelt wird (kein Glossenkeil, Ableitung ${ }^{\text {LÚ }}$ taruešgala- usw.) taru ${ }^{\text {mi }}$ bereits in ah. Sprache vor und kann somit kaum luwisch sein". Moreover, Melchert's claim that PIE $* k^{w}$ unconditionally yielded PAnat. $* g^{w}$ in wordinternal position is incorrect (cf. takku $<* t o k^{w} e$, nekku $<* n e k^{w} e$, but also the existence of Luwian $/ \mathrm{k}^{\mathrm{w}} /$ in CLuw. mannakuna/i- 'short', nakkušša/i- 'scapegoat', (pap)parkuua(i)-'to cleanse', e.a.).

In my view, we must compare the situation of tarku- ${ }^{z i}$ besides taru- ${ }^{z i}$ to the verbs har(k)- ${ }_{-}^{z i}$ 'to have, to hold' (hark- besides har-) and ištar(k)- ${ }^{z i}$ 'to ail' (ištarkbesides ištar-). Of these latter two verbs, I have argued that they show loss of $* k$ in a cluster $*-R k C$-. The loss of $* k$ in this position was phonetically regular, but in the paradigm of $i s ̌ t a r(k)-, * k$ is largely restored on the basis of forms in which $* k$ was regularly retained (*-RkV-), whereas in har $(k)$ - the old situation was preserved because of its frequent use. In the case of the pair tarku- ~ taru- I believe we are dealing with a similar phenomemon. This view is strengthened by the fact that taru- is found with endings that start in a consonant only (-zi and $-s ̌ k e / a$-). If this proposal is correct, it would show that we have to reckon with the following line of events: *terk $k^{w} t i>*^{*} \operatorname{tar}^{w} t^{s} i>$ Hitt. $^{\prime}$ tárut $^{s} \mathrm{i} /$, spelled $\operatorname{tar}-u ́-z i$; and *trk ${ }^{w}$ sḱe/o- > *tr? ${ }^{w}$ ske/a-> OH /truske/a-/, spelled taruške/a- (OS) (note that NH tarue/iške/a- seems to stand for /truiske/a-/, which cannot be regularly from OH /truske/a-/: either we must assume that the NH variant /-iske/a-/ of the impf.suffix -ške/a- (q.v.) has been used here, or we must assume that this form stands for /trwiske/a-/, which would indicate that OS taruške/a- is to be interpreted as /trwske/a-/ < *tr? ${ }^{w}$ ske/a-). This means that in the case of har(k)- and ištar(k)- we are dealing with $*_{2}$ erk-ti>*har?st $i>$ Hitt. $^{s} /$ hart ${ }^{\mathrm{s}} \mathrm{i}$ /, spelled har-zi.

Note that Oettinger (1979a: 224) cites a form 3sg.pret.act. tar-ku-ua-a-iš-ta (KUB 24.97 i 11), but this should be read tar-ku-ųa $a-u s ̌-t a$ 'he looked angrily' (see under tarkuuant-).
tarkuuant- (adj.) 'looking angrily': nom.-acc.pl.n. tar-ku-ua-an-ta, tar-ku-ua-an$d a$.

Derivatives: tarkuиa (adv.) 'angrily' (tar-ku-ua), targulliiauuar (n.) 'furious look' (nom.-acc.sg. tar-gul-li-i_ia-u-ua-ar), tarkuualliie/a- ${ }^{z i}$ (Ic1) 'to look angrily’ (impf.1sg.pret.act. tar-ku-ua-al-li-iš-ke-nu-un).
IE cognates: Lat. torvus (adj.) 'grim, looking grimly', Gr. tá $\rho \beta$ oç 'fright, dread', Skt. tarjati 'to threaten'.

PIE * trg ${ }^{w}$-ent-
Since Szemérenyi (1942: 395f.) and Neumann (1971: 262) this adjective is generally connected with Lat. torvus 'looking grimly' < *torg ${ }^{w}-o-$. In Hittite, we seem to be dealing with a petrified participle of a further unattested verb *tarku'to look grimly' which reflects *terg'- (also in Skt. tarj- 'to threaten').
${ }^{\text {(GIŠ) }}$ tarma- (c.) 'nail, peg, pin' (Sum. ${ }^{\text {GIŠ }} \mathrm{GAG}$ ): nom.sg. tar-ma-aš (OS), abl. tar$m a-z a$ (here? KBo 26.94 obv. 7), acc.pl. tar-mu-uš.

Derivatives: tarmae ${ }^{z i}$ (Ic2) 'to nail, to hammer, to fasten down' (1sg.pres.act. tar-ma-e-mi (OS), tar-ma-a-e[-mi] (OS), tar-ma-a-mi (KUB 17.28 i 8 (NS)), 3sg.pres.act. tar-ma-a-iz-zi, tar-ma-iz-zi, 1pl.pres.act. tar-ma-a-u-e-ni (KUB 17.28 i 16), 3pl.pres.act. tar-ma-a-an-zi (KBo 22.249 iv $^{?} 3$ ), 1sg.pret.act. tar-ma-a-nu-un, 3sg.pret.act. tar-ma-a-it (KBo 39.8 ii 20 (MH/MS)), 1pl.pret.act. tar-ma-a-u-en (KBo 12.129, 7), 3sg.imp.act. tar-ma-ad-du (KBo 10.45 iii 21 (MH/NS)); part. tar-ma-a-an-t-, tar-ma-an-t-; impf. tar-ma-i-iš-ke/a-, tar-mi-iš-ke/a-).

Anat. cognates: CLuw. tarma/i- (c.) 'nail, peg' (nom.sg. tar-mi-iš, abl.-instr. tar-ma-ti, gen.adj.nom.pl.c. tar-ma-a-aš-ši-in-zi), tarmattar / tarmatn- (n.) 'nailing, fastening' (nom.-acc.sg. tar-ma-at-tar, Hitt.gen.sg. tar-ma-at-na-aš), $\boldsymbol{\operatorname { t a r m }}(\boldsymbol{a}) \boldsymbol{i}$ - 'to nail, to fasten down' (3sg.pret.act. tar-mi-ta, 3pl.imp.act. tar-ma-in$d u$, part. tar-ma-i<-im>-mi-iš, impf.3pl.imp.act. tar-mi-iš-ša-an-du).
IE cognates: Gr. tó $\rho \mu$ oç 'hole or socket in which a peg is stuck; projecting peg or pivot'.

PIE *tor-mo-
The noun tarma- and its derivative tarmae- ${ }^{z i}$ are attested in OS texts already. Tischler HEG T: 185 cites a stem tarmi- as well on the basis of two attestations, which I rather interpret as a separate word (see at tarmi-). Many different etymologies have been proposed: see Tischler (1.c.) for an overview. In my view the best proposal is by Frisk (1960-1972: 880, 913), who connects tarma- with Gr. tóp $\mu$ ос 'peg' (although his proposal to connect PGerm. *parma- 'gut' seems semantically unattractive to me). For Hittite, we can reconstruct *tormo-, but *trmo- is in principle possible as well. The derivative tarmae- must reflect *t(o)rmo-ie/o- (with -o-ie/o- as all hatrae-class verbs).
Kimball (1999: 381) assumes that the root was *terh $l^{-}$on the basis of Gr. tह́рет $\rho$ ov 'borer, gimlet', which means that in *torh ${ }_{l}-m o->$ Gr. tó $\rho \mu \circ \varsigma$ the 'de Saussure-effect' must have taken place (i.e. loss of a laryngeal after $*_{o \text {-grade). In }}$ Hittite, such an effect is invisible as $*-h_{l^{-}}$would have been lost in this environment anyway.
tarmi- (c.) symptom of a disease: nom.sg. tar-mi-iš.
This word occurs twice in one text only:
KUB 8.36 iii
(1) $[m a-a-a n] a n-t u-u h-s ̌[a-a n] ~ h u-u-u a-a h-h[u-u r-t i-i n]$
(2) pa-ah-hu-e-na-aš e-ep-zi na-aš-ma SÚ-U[H-A-LU]
(3) $n u-u h-h a-r i-i t-t i ~ m e-m i-i-i a-a s ̌=m a-a=s ̌-s ̌ i=k a ́ n ~[N U . G A ́ L] ~] ~$
'When (a feeling) of burning seizes the throath of a man, or a cough convulses? (him) and he loses his voice, or a $t$. strikes (him)';
ibid.
(11) ma-a-an an-tu-uh-ša-an tar-mi-iš una-al-ah-zi
'When a $t$. strikes a man'.

It clearly denotes a certain symptom of a disease. Therewith this word cannot be identical to tarma- 'nail, peg, pin' (q.v.). Further unclear.
tarna- (c.) 'head, skull; a small measure': nom.sg. tar-na-aš, acc.sg. tar-na-$a(n)=\check{s}-s \check{a} a-a n$, abl. tar-na-a(z)=š-ši-it, tar-na-a(z)=š-še-et, dat.-loc.pl. tar-na-$a(\check{s})=\check{s}-m a-a \check{s}$.

IE cognates: TochB tarne 'crown of the head, summit'.
PIE *trno- or * $d^{h}$ rno-
Within the IE languages, TochB tarne 'crown of the head, summit' evidently is cognate. Van Windekens (1963: 42f.) compared this word to Skt. dīrṇa- 'cracked' (referring to ModHG Scheitel from scheiden 'to split' as a semantic parallel), but since TochB $t$ - cannot reflect $* d$ - (which would have yielded $t s$-) this comparison is formally impossible. So on the basis of the Hittite and Tocharian forms, we should reconstruct $*$ trno- or $* d^{h} r n o-$. Adams (1999: 281) adduces Yazgulmani tern 'crown of the head', which then would point to $* t$-.
$\boldsymbol{t a r n a}^{\boldsymbol{i}}$ / tarn- (IIal $\gamma>\mathrm{Ic} 2$ ) 'to let (go), to allow, to leave (something)': 1sg.pres.act. tar-na-ah-hé (OS), tar-na-ah-hi (OS), 2sg.pres.act. tar-na-at-ti (MH/MS), tar-na-ši (KBo 4.2 i 25, ii 21, iii 8 (OH/NS), KUB 19.49+ i 56 (fr.), 57 (fr.) (NH)), 3sg.pres.act. tar-na-i (OS), tar-na-a-i (OS), tar-na-iz-zi (KUB 28.4 i 25b (NS)), 1pl.pres.act. tar-nu-me-ni, tar-nu-um-me-e-ni (NH), tar-nu-um-me-ni, tar-nu-um-ma-ni (KBo 2.8 i 15 (NS)), 2pl.pres.act. tar-na-at-te-ni (MH/MS), tar-na-te-ni, 3pl.pres.act. tar-na-an-zi (OS), 1sg.pret.act. tar-na-ah-hu-un (OS), tar-na-ah-hu-u-un (1x), 3sg.pret.act. tar-na-aš (OS), tar-ni-eš-ta (KUB 13.34 iv 14 (NS)), tar-ni-iš-ta (KUB 1.1+ iv 49 (NH)), 1pl.pret.act. tar-nu-mé-en (KBo 3.45 obv. 10 ( $\mathrm{OH} / \mathrm{NS}$ )), tar-nu-um-me-en, tar-nu-en (KBo 3.60 iii 7 ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.pret.act. tar-na-at-te-en (NH), 3pl.pret.act. tar-ni-er (MH/MS), tar-ner, 2sg.imp.act. tar-na (KUB 17.10 iii 24 (OH/MS)), tar-ni, 3sg.imp.act. tar-na-ú,
tar-na-a-ú, tar-na-ad-du (HKM 45 obv. 17 (MH/MS)), 2pl.imp.act. tar-na-at-tén (MH/MS), tar-ni-iš-tén (KUB 6.45+ i 32 (NH), KUB 6.46 i 33 (NH)), 3pl.imp.act. tar-na-an-du (MH/MS); 3sg.pres.midd. tar-na-at-ta-ri (NH), tar-na-ta-ri, 3sg.pret.midd. tar-na-at-ta-at (MH/MS), 3pl.pres.midd. tar-na-an-ta-ri ( $\mathrm{OH} / \mathrm{MS}$ ); part. tar-na-an-t- (OS); verb.noun tar-nu-mar, tar-nu-um-mar (NH), gen.sg. tar-nu-um-ma-aš (KUB 20.29 vi 3); inf.I tar-nu-um-ma-an-zi; impf. tar-ši-ke/a- (KUB 23.72 ii 41 (MH/MS)), tar-ši-ik-ke/a- (HKM 46 rev. 26 (MH/MS)), tar-ni-eš-ke/a- (KUB 13.4 iii 23 ( $\mathrm{OH} / \mathrm{NS}$ )), tar-ni-iš-ke/a- (KUB 22.61 iv 23 (NS)), tar-na-aš-ke/a- (KUB 30.28 i 27 (NS)), tar-<na->aš-ke/a(KUB 24.9 ii 42 ( $\mathrm{OH} / \mathrm{NS}$ )).

Derivatives: tarnatt- (c.) 'ration, portion' (Sum. HुA.LA (?); nom.sg. tar-na-az ( $\mathrm{OH} / \mathrm{NS}$ ), acc.sg. tar-na-at-ta-an (OS), gen.sg. tar-na-at-ta-aš (OH/NS), nom.pl. tar-na-at-te-eš (NH), dat.-loc.pl. tar-na-at-ta-ǎ̌ (MH/MS)), tarnattalla- (c.) 'partner, sharer' (case? tar-na-at-ta-al-la-aš(-)x[...] (KBo 17.71+ ii 9 (OS))).
IE cognates: TochAB tärk- 'let go, to let, to allow'.

$$
\text { PIE * } \operatorname{tr} k^{\prime} k^{\prime}-n o ́-h_{1 / 3}-e i, * \operatorname{tr}^{\prime} k^{\prime}-n-h_{1 / 3} \text {-énti }
$$

This verb is the name-giver to the hi-inflected $\operatorname{tarn}(a)$-class, which is characterized by an ablaut tarna- vs. tarn-. This inflection is quite stable throughout the Hittite texts. Only in younger times we find an occasional transition into the hatrae-class (tarnaši (NS), tarnaizzi (NS), tarnaddu (MH/MS)).

The etymological interpretation of this verb is in debate. The $\operatorname{tarn}(a)$-class consists of verbs that reflect a structure ${ }^{*} \mathrm{CoH}-,{ }^{\circ} \mathrm{CH}$-, either reduplicated roots (*Ce-CoH-ei, *Ce-CH-enti) or nasal-infixed verbs (*CR-no-H-ei, *CR-n-H-enti). See at malla- ${ }^{i}$ / mall-, padda- ${ }^{i}$ / padd-, harra- ${ }^{i}$ / harr-, iškalla- ${ }^{i}$ / iškall- and išparra- ${ }^{i}$ / išparr- for the view that verbs of a structure $* \mathrm{CoCh}_{2 / 3}$-ei, $* \mathrm{CCh}_{2 / 3}$-enti end up in the $\operatorname{tarn}(a)$-class as well. In the case of tarna- / tarn-, we are clearly dealing with a nasal-infixed verb of the structure *Tr-no-H-ei, *Tr-n-H-enti.
Oettinger (1979a: 155, going back to Hrozný 1919: $77^{9}$ ) derives tarn(a)- from the root * terh $_{2^{-}}$'to cross, to pass through', but this is formally as well as semantically improbable. From a formal point of view, we would expect that * tr-no- $h_{2}$-ei would yield Hitt. **tarnahhi and not tarnai. Oettinger's claim that the original stem tarnahh- is still visible in the one attestation part. tarnahhant- in KBo 3.45 obv. (2) nư=za tar-na-ah-ha-[a]n har-zi, which he calls a "Reliktform", must be refuted because this line is rather to be read [u] $a-a-t a r-n a-a h-h a-[a] n$ har-zi 'he has instructed', with the participle of ua ${ }^{2} t a r n a h h-{ }^{i}$ 'to instruct'. From a semantic point of view this etymology is problematic because I do not see at all
how an original meaning 'to cross, to pass through' could develop into 'to let (go), to allow'.
A semantically much better proposal was offered by Benveniste (1932: 142), who connected $\operatorname{tarn}(a)$ - with TochAB tärk- 'to let go, to let, to allow', which forms a present tärnā- (TochA) ~ tärkana- (TochB). This means that for Tocharian we have to reconstruct a root $* t / d^{h}$ erKH- (note that $* d$ - should have given ${ }^{* *} t s a ̈ r k$-) that shows a present-formation ${ }^{*} t / d^{h} r K-n-H$-. If we want to connect these forms with Hitt. tarn(a)-, we have to assume that in the pre-form * $t / d^{h} r K-n o-H-$, the $*-K$ - was dropped. Such a loss is known from the verbs $\operatorname{har}(k)-$ ${ }^{z i}$, ištar $(k)_{-}{ }^{z i}$ and $\operatorname{tar}(k) u_{-}{ }^{z i}$ (q.v.), which show that a sequence $*-R k C$ - yields Hitt. $*_{-} R C$-. This applies to the fortis velars $\left({ }^{*} k^{\prime}, * k\right.$ and $\left.*^{w}\right)$ but does not work for the lenis velars $\left(* g^{\prime(h)}, * g^{(h)}\right.$ and $\left.* g^{w(h)}\right)$, cf. for instance hargnau- 'palm, sole' < *h $h_{2}$ erǵ-nou-. So the velar must have been $* k$ or * $k$. Because it is against PIE root constraints to have both an 'aspirated' and a 'voiceless' stop in one root, the initial dental consonant cannot have been $* d^{h}-$, but must have been $* t$-. The rootfinal laryngeal must be either $* h_{1}$ or $* h_{3}$, since $* h_{2}$ would have left a trace (**tarnahi, cf. above). So all in all, if the Tocharian and the Hittite forms indeed are cognate, which is semantically as well as formally very probable, we have to reconstruct a root $* \operatorname{ter}^{\prime} k^{\prime} h_{1 / 3^{-}}$with a present formation $* \operatorname{tr} k^{\prime} k^{\prime}-n-h_{1 / 3^{-}}$(cf. $* g^{(w)} r e n t h_{2^{-}}$ and its present $* g^{(w)} r n t-n e-h_{2^{-}}>$Skt. grathnáti 'to knot' for a similar root structure).
The imperfective shows the forms tar-ši-ke/a- (MH/MS), tar-ši-ik-ke/a(MH/MS), tar-ni-eš-ke/a- (OH/NS), tar-ni-iš-ke/a- (NS) and tar-na-aš-ke/a(NS). The forms taršike/a- and taršikke/a- have to be phonologically interpreted as /trìské/á-/, tarniške/a- and tarneške/a- as /trniské/á-/ and tarnaške/a- as /trnaské/á-/. Of these three, /triske/a-/ must be the most archaic one as it is totally aberrant within the paradigm of $\operatorname{tarn}(a)$-. Its archaicity is supported by the fact that it is the oldest attested form (MS texts already). In my view, it reflects the original imperfective $* \operatorname{tr}^{\prime} k^{\prime} h_{l / 3}$-skééó- without the present-suffix -n- (compare duuaraške/a- < *d ${ }^{h} u r h_{l}$-skéló- from the nasal present duuarni- ${ }^{z i} /$ duuarn- 'to break' $<{ }^{*} d^{h} u r-n(e)-h_{1}-$, or zikke/a- $<* d^{h} h_{l}$-skéé/ó- from the $*$-oi-present $* d^{h} h_{l^{-}}$ (o) $i^{-}>$dai- $^{i} / t i-$ 'to put'). The phonetic development must have been
 after which *trh $h_{1 / 3}$-skééó- regularly yielded Hitt. /triské/á-/ (compare *pri-prh $l_{1-}$ ské/ó- > Hitt. /pripriské/á-/, pa-ri-ip-ri-iš-ke/a- 'to blow (impf.)' and *h $h_{1} r h_{l}$-skééó$>$ Hitt. /?ríské/á-/, a-ri-iš-ke/a-, a-re-eš-ke/a-'to consult an oracle (impf.)'). Only later on, this imperfective was replaced by /trniske/a-/ (on the basis of the weak
stem *trni-), and later on even by /trnaske/a-/ (on the basis of the strong stem tarna-).
tarš- 'to become dry' or 'to make dry': 3pl.pres.act. tar-ša-an-zi (KBo 46.200 obv. 5 (NS)); part.nom.-acc.sg.n. tar-ša-an, part.nom.-acc.pl. tar-ša-an-ta; inf.I tar-šu-u-ua-an-zi (KUB 55.27, 6 (NS)); verb.noun tar-še-eš-šar (KUB 43.56 iii 22 (NS)).

IE cognates: Skt. tarṣ- 'to become thirsty', Gr. тépoouaı 'to become dry', Lat. torre $\bar{o}$ 'to dry, to roast', OHG derren 'to make dry', OHG durst 'thirst'.

PIE *ters-
This verb is not well attested. The only finite form, taršanzi, is attested in a broken context only. The exact meaning of tarš- is not fully clear either. Often, it is translated 'to roast, to dry' (e.g. Tischler HEG T: 219 "trocknen, dörren, rösten").
The most common context in which this verb occurs is in the pair taršan mallan 'roasted? / dried? and milled' (cf. CHD L-N: 126 for this translation), said of grains. In my view, a meaning 'roasted' is quite unlikely here: why would one roast grain before milling it? Furthermore, a meaning 'dried' is supported by the comparable pair ḩātan mallan 'dried and milled' (of hāt- ${ }^{i}$ / hat- 'to become dry'). The only place where a meaning 'roasted' at first sight seems favourable is ${ }^{\text {UZU }}$ tar-ša-an, attested in the quite broken context KBo 30.43 ii 11. Although one is tempted to translate 'roasted meat', e.g. Oettinger (1979a: 453) translates it as 'Dörrfleisch'. Tischler (HEG T: 220) even assumes that ${ }^{\text {UZU }}$ taršan denotes a body part and is to be separated from this verb. All in all, I conclude that taršantmeans 'dried' only, and that there is no evidence for a meaning 'roasted'.
Oettinger (1979a: 452f.) convincingly connects this verb with the PIE root *ters- 'to be(come) dry'. He remarks, however, that on the basis of taršant'dried' we have to assume that the basic verb was transitive and cannot directly reflect the intransitive root *ters- but must go back to the causative formation *tors-éie- 'to make dry' (Skt. tarṣáyati, Lat. torrēo and OHG derren 'to dry (something)'). On the basis of his reconstruction *tors-eie-, he assumes that taršis hi-conjugated. In my view, all these reasonings are unnecessary. The part. hātant- means 'dried' as well (and is even used in the same contexts as taršant-) but is derived from the intransitive verb hāt- / hat- 'to (become) dry' (q.v.). This means that we can assume just as well that tarš- was intransitive and meant 'to become dry' too. If so, then it could directly reflect PIE *ters-. A choice between these two scenarios can only be based on a context in which we find a finite form
of tarš- that is used either transitively or intransitively and on the basis of which we can determine the inflection ( $m i$ - or $h i$-).
taršanzepa- (c.) an object in the temple, a sort of room divider to separate the entrance section from the real temple sanctuary: gen.sg. tar-ša-an-ze-pa-aš (OS), abl. tar-ša-an-ze-pa-az (OS), dat.sg. tar-ša-an-zi-pí, tar-ša-zi-pí (1x).

Although attested many times, it still is not fully clear what this word denotes. The word is spelled with the sign ZI that in principle can be read $z i$ as well as $z e$. The formation of the word resembles tagānzepa- (q.v.), which means that taršanzepa- is to be analysed as taršan- + ze/ipa-. At the lemma of tagānzepa- I have argued that the element ze/ipa- probably was -zepa- in OH times, which was altered to -zipa- in younger times. In the overview above I therefore have cited the sign ZI as $z e$ in the OS attestations and as $z i$ in the younger attestations. The origin of the element taršan- is unclear. Connections with tarš- 'to become dry' or tarša- 'shoot' are semantically not very compelling. No further etymology.
${ }^{\text {(GIŠ) }} \boldsymbol{t} \bar{a} r u-$ (n.) 'wood' (Sum. GIŠ): nom.-acc.sg.n. ta-a-ru (OS), GIŠ-ru (OS), gen.sg. GIŠ-ru-ua-aš (MH/NS), GIŠ-ru-aš (NS), GIŠ-aš, dat.-log.sg. ta-ru-ú-i (OS?), GIŠ-ru-i (NS), erg.sg. GIŠ-ru-ua-an-za (KBo 32.14 iii 69 (MH/MS)), abl. [ta-] ạ-ru-az (OH/NS), GIŠ-ru-ua-az, GIŠ-ru-ua-za, GIŠ-ru-za (MH/NS), instr. GIŠ-ru-it (MH/NS), nom.-acc.pl. GIŠ ${ }^{\text {HI.A }}-r u(\mathrm{OH} / \mathrm{MS})$, GIŠ-ru $u^{\text {HI.A }}(\mathrm{MH} / \mathrm{NS})$, dat.loc.pl. GIŠ-ru-ua-aš (NS), GIŠ-ru-aš, GIŠ-aš; case? tar-ua-aš (KUB 39.55, 3), GIŠ-ru-an (KUB 15.31 iii 39).
Derivatives: taruuae- ${ }^{z i}$ (Ic2) 'to fix (magically), to fasten' (part. GIŠ-ru-an-t-, GIŠ-ru-ua-an-t-; inf.I tar-ua-u-ua-an-zi, GIŠ-ru-an-zi), GIŠ taruāli- (n.) 'pestle(?)' (nom.-acc.sg. tar-ua-li, tar-ua-a-li, tar-ua-al-li), see allantaru- 'oak'.
Anat. cognates: CLuw. ${ }^{\text {GIš̌ }}$ tāru- (n.) 'wood' (nom.-acc.sg. ta-a-ru, [da]-ru-ša, gen.adj.nom.-acc.pl.n. da-ru-ua-aš-ša), dāruš- (n.) 'statue' (nom.-acc.sg. da-a-ru$u s ̌-s ̌ a, t a-a-r u-u s ̌-s \check{a}$, ALAM-ša, erg.sg. ta-ru-ša-an-ti-iš, erg.pl. [ta-ru-ša]-an-ti-in-zi), taruui(ia)- 'to turn to wood (vel sim.)' (3sg.imp.act. [ta-]ru-u-i-it-ta-ru); HLuw. *taru- (n.) 'wood' (nom.-acc.sg.n. LIGNUM-sa (KARKAMIŠ A11b+c §33)), tarwi(ia)- 'wooden beam(?)' (abl.-instr. "LIGNUM"-wa/i-ia-ti (KARKAMIŠ A11a §18)), tarut- (n.) 'statue' (nom.-acc.sg. "LIGNUM" ta-ru-sa (ALEPPO 2 §8), "STATUA" $t a-r u$-sá (MARAȘ 3 §3), "STATUA" tá-ru-sa (KARKAMIŠ A25 §7), ${ }^{\text {STATUA }}$ ta-ru-sá (KARKAMIŠ A7 §6), STATUA-ru-sa (KARKAMIŠ A1 $a$ §28), STATUA-ru-sá (TELL TAYINAT 2 fr. 11 §ii, KIRÇOĞLU §2), dat.-
loc.sg. "STATUA" $t a-r u-t i$ (MARAŞ 14 §7), STATUA-ru-ti-i (KARKAMIŠ A1a §31, MALPINAR §5, §26), ta-ru-ti(-i) (KULULU lead strip 2 §1, §2, §5), dat.loc.pl. ta-ru-tà-za (KULULU lead strip 2 §3)).

PAnat. *tāru-
IE cognates: Gr. סópv 'wood', Skt. dà́ru 'wood', OE trēo(w) 'tree', OCS drěvo 'tree'.

PIE * dóru-
This word was first identified as 'wood' and etymologically connected with PIE *dóru- by Ehelolf (1933: 7), which has since then received general acceptance. It is unclear whether the ablaut visible in Skt. dáru, drós < *dór-u, *dr-éu-s has survived in Hittite as well. The plene spelling in ta-a-ru must reflect *dóru, but whether attestations with $t a-r u$ - reflect a zero-grade $* d r$ - $u$ - cannot be determined.
The basic meaning of the Hittite word is 'wood', but a meaning 'tree' may still be visible in the word allantaru- 'oak', which seems to be a compound of Sem. allan- 'oak' and Hitt. tāru-, which then here could denote 'tree'.

See Tischler HEG T: 244f. for an extensive treatment of the verb taruae- ${ }^{z i}$, which he translates "'(magisch) fixieren; anpflocken"". Especially his interpretation of inf.I tar-ua-u-ua-an-zi (KUB 12.62 obv. 11, 13) is attractive (contra Oettinger 1979a: 224f., who interpreted this word as belonging with taru-, which he therefore translated 'to rage', cf. $\operatorname{tar}(k) u_{-}{ }^{z i}$ 'to dance').
According to Hoffner apud Friedrich HW Erg. 3: 33, the hapax ta-a-ru-ma-ki$i\left[n^{?}\right]$ (KUB 8.62 i 6), which possibly denotes a bird, is to be analyses as tāru-uaki-'wood-biter' (second element derived from uāk-' / uakk- 'to bite'), cf. 'woodpecker'.

In Luwian, we find two derivatives, CLuw. daruš- 'statue' and HLuw. tarut'statue' (the HLuwian nom.-acc.sg. tarusa shows the $t$-less nom.-acc. with the secondary ending -sa, compare words in -ahit- with nom.-acc.sg. -ahisa). Starke (1990: $428^{1555}$ ) saw the hapax \& tar-ua-aš-ši-iš (KBo 2.4 ii 4) as a genitival adjective in -ašša/i- of taru- but see Tischler (HEG T: 247-8) for the fact that this word must be identical to \& taruanašši-, an adjective describing fruit dishes (so possibly tar-una<-na -aš-ši-iš), of which a connection with tāru- is far from ascertained.
$\boldsymbol{t a r u} \mathbf{- ~}^{z i}$ : see $\operatorname{tar}(k) u-{ }^{z i}$
-ttaru (3sg.imp.midd.-ending).

Anat. cognates: CLuw. -ttaru (3sg.imp.midd.-ending): pa-ah-hi-it-ta-ru, ša-aš-la-at-ta-ru.

This ending clearly is a secondary formation, replacing the $-i$ of 3 sg.pres.midd.ending -ttari (q.v.) by the imperetival -u (q.v.).
taruhh ${ }^{-3 i}$ : see tarhu $^{z i}$
$\boldsymbol{t a r u k} \boldsymbol{k}^{-{ }^{i}}$ : see $\operatorname{tar}(k) u^{-z^{i}}$
tarupp - $^{\text {i }}$ ( $\mathrm{Ib} 1>\mathrm{Ic} 1$, Ic2) 'to collect, to unite, to plaid together; (midd.) to collect oneself, to be finished': 1sg.pres.act. ta-ru-up-pí-ia-mi (KBo 11.11 i $2(\mathrm{NH})$ ), 3sg.pres.act. ta-ru-up-zi (IBoT 2.96, 10 (OH/NS)), ta-ru-up-za (NH), ta-ru-up$p a-i z-z i$ (HT 1 iii $11(\mathrm{NH})$ ), da-ru-pa-iz-zi (KUB 9.31 iii 22 (NH)), 3pl.pres.act. ta-ru-up-pa-an-zi (IBoT 2.94 vi 13 (OH/NS), KBo 5.1 iv 1 (MH/NS)), 1sg.pret.act. ta-ru-up-pu-un (KBo $19.90+3.53$ obv. 10 (OH/NS), KBo $3.46+$ KUB 26.75 obv. 40 ( $\mathrm{OH} / \mathrm{NS}$ ), 3sg.pret.act. ta-ru-up-ta (KUB 26.77 i 17 ( $\mathrm{OH} / \mathrm{NS}$ ), often (NH)), ta-ru-up-pi-ia-at (KUB 27.27 ii 28 (NS)), 3pl.pret.act. da-ru-up-pé-e-e[r] (KBo 22.1 obv. 2 (OS)), ta-ru-up-pé-er (often, MH/MS), 2sg.imp.act. ta-ru-up (KBo 3.23 obv. 3 (OH/NS), KUB 29.1 ii 44 ( $\mathrm{OH} / \mathrm{NS}$ )), da-ru-up (KUB 31.115, 7 ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.imp.act. ta-ru-up-tén ( $\mathrm{OH} / \mathrm{NS}$ ); 3sg.pres.midd. ta-ru-up-ta-ri (often, NH), ta-ru-up-da-ri, ta-ru-up-ta-a-ri (NH), ta-ru-up-ta, ta-ru-piš-ta (KBo 11.11 i 9 (NH), for interpretation see Tischler HEG T: 240), 3pl.pres.midd. ta-ru-up-pa-an-ta-ri, 3sg.pret.midd. ta-ru-up-ta-at (MH/MS), 3pl.pret.midd. ta-ru-up-pa-an-ta-ti (MH/MS), ta-ru-up-pa-an-ta-at (NH), 3sg.imp.midd. ta-ru-up-ta-ru (KUB 29.1 ii 46 (OH/NS)), [ta-ru]-up-da-aru (NH), 3pl.imp.midd. ta-ru-up-pa-an-ta-ru (NH); part. ta-ru-up-pa-an-t(MH/MS), da-ru-up-pa-an-t- (MH/MS); verb.noun ta-ru-up-pu-ar (KBo 1.42 iii 49), gen.sg. [ta-]ru-up-pu-u-ua-aš (KUB 12, $16 \mathrm{i}^{?}$ 13); inf.I ta-ru-up-pu-ua-an-z[i] (KBo 10.36 iii 11); impf. ta-ru-up-pí-eš-ke/a-.
Derivatives: taruppeššar / taruppešn- (n.) ‘collection’ (nom.-acc.sg. ta-ru-up-pé-eš-šar (KBo 1.42 ii 15), dat.-loc.sg. da-ru-up-pí-iš-ni (KUB 19.49 i 57)), taruppiianu ${ }^{z}{ }^{z i}(\mathrm{Ib} 2)$ 'to bring together, to collect' (3sg.pres.act. da-ru-up-pi-ia$n u-z i\left(\right.$ IBoT 2.129 i 22)), taruppiiahh- ${ }^{i}$ (IIb) '?' (3sg.pret.act. ta-ru-pí-ía-ah-ḩa-aš (KUB 9.11+ i 16 (OH/NS)), ta-ru-up-pí-ía-ah-hi-iš (KUB 9.11+ i 17 ( $\mathrm{OH} / \mathrm{NS}$ ))), taruppahh- ${ }^{i}$ (IIb) '?' (3sg.pret.act. ta-ru-up-pa-ah-hi-iš (Bo 3947, 13 (OH/NS))).

The bulk of the attestations show a stem tarupp- ${ }^{z i}$ (the few cases with single $-p-$ are clearly simplified spellings). Occasionally in NS texts we find the stems taruppiie/a- ${ }^{z i}$ and taruppae- ${ }^{z i}$.
The etymological interpretation of this verb is quite unclear. Often, tarupp- is connected with Lat. turba 'turmoil, multitude', Gr. túp $\beta \eta$ 'noise' and ON borp 'village' (first proposed by Holma 1916: 36). This is not only formally improbable (*tur- vs. Hitt. *Tru-; *b vs. Hitt. ${ }^{*} p$ ), but semantically unlikely as well: Lat. turba means 'multitude, large group', but this meaning has clearly developed from 'disorder, chaos', which is the opposite of Hitt. tarupp- 'to collect, to unite, to plaid together'.

Oettinger's proposal (1979a: 229) to connect tarupp- with Gr. Өópußoc 'the confused noise of a crowded assembly' is not convincing either: again Gr. $\beta$ does not correspond to Hitt. -pp- (Oettinger's explanation that in Hittite *b was replaced by $* p$ in analogy to other verbs ending in -upp- is totally $a d h o c$ ), and the semantic side shows the same problems as the connection with Lat. turba.

If tarupp- is of IE origin, it can hardly reflect anyhting else than *Treup-. Problematic, however, is the fact that an initial sequence ${ }^{*} \operatorname{Tr} V$ - in Hittite seems to yield *TerV- (e.g. teripp->*trep-, teri- < *tri-). Perhaps this development took place in front of frontvowels only (otherwise we cannot explain tarai- ${ }^{i}$ / tari- or taranzi 'they speak' < *tr-énti). If so, it would mean that the epenthesis in *Tr $V^{\text {front }}$ took place after the monophthongization of $e u$ to $u$. So mechanically, I reconstruct tarupp- as *Treup-ti, *Trup-énti. I must admit that I have not been able to find a convincing cognate, however.
Tischler (HEG T: 243) cites the form ta-ru-up-pí-en-za (KUB 42.42. i 10 (inventory)) as a participle of tarupp-. Because of the broken context, the meaning of the word cannot be determined and therefore a connection with tarupp- cannot be proven.
Otten \& Siegelová (1970: 36) cite the forms ta-lu-up-pa-an-da-an and ta-lu-up-pa-an 'plaid together':

KUB 2.6 iv
(6) $n u=z a$ iš-hhu-uz-zi-in
(7) SÍG BABBAR SÍG SA ${ }_{5} a n-d a$
(8) ta-lu-up-pa-an-da-an da-a-i
'He takes a band plaid together from white and red wool';

KBo 11.11 iii
'one cloth that has been plaid together'.
If these forms are really to be seen as variants of taruppant-, they would show an occasional development of $-r$ - to -l- (cf. Melchert 1994a: 171).
${ }^{(U Z U)}$ tašku(i)- (c.) 'thigh bone' (not 'testicle'!): nom.sg. ta-aš-ku-uš (KUB 9.4 i 12, 28 (MH/NS), KUB 9.34 ii 30 (MH/NS)), gen.sg. ta-aš-ku-ưa-[aš] (KUB 9.4 i 28 (MH/NS)), dat.-loc.sg. ta-aš-ku-i (KUB 9.4 i 12 (MH/NS)), ta-aš-ku-ưa-ía (KUB 9.34 ii 30 (MH/NS)), da-aš-ku-u[a]-ịa (KBo 21.105 obv. 3), nom.pl. [ $t] a \underline{-}$ aš-ku-eš (KBo 24.55 obv.? 7).

The bulk of the attestations of this word occur in the Ritual of Tunnauiia: KUB 9.34 ii 22ff, with dupl. KUB 9.4 i 1 ff . In this ritual body parts of a ram are used to lift the sickness of the body parts of a sick person. The different body parts used are mentioned in a top-down order, which enables us to determine the (approximate) meaning of some of these body parts. In Kloekhorst 2005a, I have given a detailed treatment of this text, and suggested that the word tašku(i)-might denote 'thigh-bone' (situated between hupparattiiiati- 'pelvis' and hāpū̄sa((̌š))-'shin-bone') and not 'testicle' as was assumed by Alp 1958. Another text in which tašku- is found in an enumeration is the following:

KBo 24.55 obv.?

| (2) [ | K]I.MIN |
| :---: | :---: |
| (3) [ | $-i] s \check{\mathrm{GABA}}=K A$ |
| (4) [ | $] \mathrm{x} \mathrm{SI}{ }^{\text {HI. }}=K A$ KI.MIN |
| (5) [ | $K A] R-S ̌ I=K A$ ŠÀ $=K A$ KI.MIN |
| (6) [ | ]x hu-up-pa-ra-aš=te-eš ge-nu-u=t-t[e-et] |
| (7) [ | $t] a$-aš-ku-eš=te-eš GİR=KA |
| (8) [ | ]x |

'[ ... li]kewise. [ ... ] your breast [ ... ] your horns likewise. [ ... ] your [be]lly, your heart likewise. [ ... ] your pelvis?, yo[ur] knee(s) [ ... ], your [t]ašku's, your feet [...]'.

Although the fragment is small, I think it sheds some light on the meaning of tašku-. In line 5 we find weak body parts, '[be]lly' and 'heart'. Line 6 contains joints: 'pelvis'' and 'knee(s)'. Line 7 contains [ $t$ ]aškueš and 'feet'. In my view,
this stronlgy indicates that tašku- cannot mean 'testicle', but is likely to denote a limb from the lower half of the body. I therefore stick to my suggestion 'thighbone'.

The dat.-loc.sg.-form taškuuai̊a seems to derive from an -i-stem taškui- (e.g. Weitenberg 1984a: 271), which could be the source of gen.sg. taškuuaš (< *taškuíaš) and dat.-loc.sg. taškui as well. The nom.sg. taškuš, however, shows a genuine $u$-stem tašku-. Tischler (HEG T: 255) therefore assumes that the form taškuuaia is a scribal error, but if the form dašku[u]aia (KBo 21.105 obv. 3, broken context, with Hurrian from line 4 onwards) really belongs to tašku- as well, taškuuaia must be a real form. In that case one might wonder whether the three attestations of nom.sg. ta-aš-ku-uš (all in the Tunnauiia-ritual, which is notorious for its corrupt forms) could be errors for *ta-aš-ku-iš, although this would be difficult to defend. The other Hittite word that possibly means 'thigh', šakut(t)a(i)- (q.v.) is connected with Skt. sakthi- < *sok ${ }^{w} t H-i$-. If tašku(i)- would reflect * $\operatorname{tosk}^{w}(-i)$-, it would be at least remarkable to find the same phonemes in these two words.
daššu- / daššaul (adj.) 'strong, powerful; heavy; well-fed; difficult; important' (Sum. DUGUD, Á.GÁL): nom.sg.c. da-aš-šu-uš (often), acc.sg.c. da-aš-šu-un (KUB 30.45 iii 10), nom.-acc.sg.n. ta-aš-šu (KUB 23.72 ii 54 (MH/MS)), da-aš$\check{s} u$ (often), $d a-a-a \check{s}-\check{s} u($ KBo 22.260 obv. 18 (NS)), gen.sg. [d] $a[-a \check{s}-\check{s}] a-u-u[a-a \check{s}]$ (KUB 2.1 iv 40), dat.-loc.sg. ta-aš-ša<-uヶ-i (KBo 3.8 iii 10), abl. da-aš-ša-u $a-a z$, $d a-a s ̌-s \check{a}-u-u a-a z$, nom.pl.c. da-aš-ša-u-e[-eš] (KUB 36.106 obv. 9 (OS)), da-aš-ša-u-e-eš (often), acc.pl.c. da-aš-ša-mu-uš (KBo 26.25 iv 9), da-aš-ša-uš (KUB 8.53 ii 25), nom.-acc.pl.n. da-aš-ša-u-ua (KUB 17.7 ii 18, KUB 33.98+ iii 6), da$a \check{s}-s ̌ a-u{ }_{c} a(K U B 19.9$ i 21), dat.-loc.pl. da-aš-ša-u-ǎ̌ (KUB 33.84+, 6, 27)).
Derivatives: daššuuant- (adj.) 'strong' (nom.sg.c. da-aš-šu-ųa-an-za (HT 1 ii 27, KBo 22.107 i 14), daš(ša)nu- ${ }^{z i}$ (Ib2) 'to make strong' (1sg.pres.act. da-aš-ša-
 2pl.imp.act. [ta-aš(-ša)-n]u-ut-ta-ni (KUB 23.72 ii 54 (MH/MS)); 2sg.imp.midd. ta-aš-ša-nu-uh-ḩu-ut (KUB 23.77+ obv. 35 (MH/MS)); part. da-aš-ša-nu-ua $t$-, da-aš-nu-ua-an-t-; verb.noun ta-aš-nu-mar; impf. da-aš-ša-nu-uš-ke/a-, ta-aš$n u-u s ̌-k e / a$-), daššěšs ${ }^{z i}$ (Ib2) 'to become heavy, to become pressing' (2sg.pret.act(?) da-aš-še-eš-ta (KBo 4.10 i 40), 3sg.imp.act. da-aš-ši-iš-du (KUB 43.38 rev. 28)), daššuŭatar (n.) 'might(?)' (nom.-acc.sg. da-aš-šu-ua-tar (Bo 68/235 i 1)), *taššiie/a- ${ }^{z i}$ (Ic1) 'to be heavy, to make heavy, to press' (only in derivatives taššizatar (n.) a kind of disease (nom.-acc.sg. ta-aš-ši-ia-tar),
taššiizuar (n.) a kind of disease (nom.-acc.sg. ta-aš-ši-ía-u-ua-ar) and taššiiama(c.) a kind of disease (acc.sg. ta-aš-ši-íla-ma-an)).

IE cognates: Skt. dáṃsas- 'miraculous power', daṃs- 'to have miraculous power', Gr. $\delta \iota \delta$ á $\sigma \kappa \omega$ 'to learn'.

PIE *de/oNs-u-
See Weitenberg 1984: 146 and Tischler HEG T: 259f. for attestations. The word clearly is a $u$-stem of a stem dǎ̌š-, which is found thus in dǎ̌( $\check{s} a) n u-{ }^{z i}$ (compare
 in spelling), daššěšs- ${ }^{z i}$ and, if this interpretation is correct, in *taššiie/a- ${ }^{z i}$, a further unattested verb that served as the basis for several words for diseases.
The judgement of the etymology of this word has been largely determined by one's view on the development of the clusters *-ns- and *-ms-. For a long time it was thought that $*_{-n s-}$ yielded Hitt. -nz-, primarily on the basis of the interpretation of šumanza-, allegedly 'binding', as reflecting *suh ${ }_{l}$-mén-s. Since this word, which actually is (Ú) sumanzan-, now has been identified as '(bul)rush' the etymological connection with Gr. $\dot{\cup} \mu \eta \dot{\nu}$ and a reconstruction *suh mén-s has to be given up. This means that the only good examples for the development of *ns are the following words: anzāǎ 'us' reflects *ns-ós and shows that *(C)nsV> (C) anzV; -uaš (gen.sg. -ending of verb.nouns in -uar) reflects *-uen-s and shows that *Vns\# > Vš. To my knowledge, no good example for *VnsV exists (note that genzu- 'lap' reflects *'genh $h_{l}$-su- where the presence of a laryngeal is crucial as it blocks the assimilation). For ${ }^{*}$-ms- there are more examples. On the basis of ḩanzana- 'black' < *h $h_{2} m s o n o-$ and hanzāǎša- 'offspring' < *h $h_{2} m s o ́ s i o-~ w e ~ c a n ~$ assume that $* C m s V>C a n z V ~(c f . ~ a l s o ~ M e l c h e r t ~ 1994 a: ~ 121), ~ w h e r e a s ~ h a ̄ a s ̌ s a-~$ 'offspring' < * $h_{2}$ ómso- and haš̌šu- 'king' < * $h_{2}$ emsu- show a development $* V m s V$ $>V \check{s ̌ s} V$ (note that $\bar{a} n s ̌ i ~ ' w i p e s ' ~ r e f l e c t ~ * h_{2} o ́ m h_{1}$ sei, again with a crucial laryngeal that blocks the assimilation to -š̌s-). Let us, with this in mind, look at the proposed etymologies for daššu-.

Kellogg (1925: 28) proposed a connection with Gr. $\delta a \sigma$ v́s 'thickly wooded, hairy, shaggy' and Lat. dēnsus 'dense' that reflect *d(e)ns-u-. This etymology has been criticized for its awkward semantics. An alternative etymology was put forward by Juret (1941: 51), who connected the word with Skt. dámsas'miraculous power', which indeed seems semantically more likely. Skt. dámsasis generally regarded a derivative from the verb damss- 'to have miraculous power', which $\mathrm{LIV}^{2}$ reconstructs as *dens- 'to become skilled' ( $\sim \mathrm{Gr}$. $\delta \iota \delta$ á $\sigma \kappa \omega$ 'to learn'), although I do not see any reason the specifically reconstruct $-n-$ : all forms mentioned in LIV ${ }^{2}$ could reflect $*$ dems- as well. Weitenberg (1984: 146) follows

Juret's suggestion, but is forced to reconstruct *d(o)msu-, because in his opinion *d(o)nsu-should have given ${ }^{* *} d a n z u$ - As we saw above, this latter assumption has no ground anymore, and therefore we can reconstruct both $-n$ - as well as $-m$ It must be noted that a reconstruction $* d N s-u$ - is not possible, since this should have given $* *$ danzu-, whereas both $* d e N s-u$ - and $* d o N s-u$ - would have yielded daššu- as attested.

Starke (1990: 252f.) has argued that the hapax taššiiaman, a disease, must be of Luwian origin and reflects a neuter stem taššiiam(m)an, on the basis of which he claims that in Luwian a verb taššii- must have existed. In my view, there is not a shred of evidence that taššiiaman is of Luwian origin, however: it occurs in a Hittite context, and is grammatically regular. Moreover, a stem tašš- is not found in any genuine Luwian text.
tašuuant- (adj.) 'blind’: nom.sg.c. da-šu-ưa-an-za (KBo 24.9 i 5 (MS), KUB 36.12 ii 12 (NS)), ta-aš-ua-an-za (KBo $6.25+13.35$ iii 3 (OH/NS), KUB 12.62+ rev. 7, 8 (NS)), ta-aš-u ua-za (KUB 12.62+ rev. 12 (NS)), dat.-loc.sg. [d]a-šu-ua$a n-t[i]$ (KBo 14.104, 8 (NS)), nom.pl.c. da-šu-ua-an-te-eš (KBo 21.6 obv. 10 (NS)).

Derivatives: dašuuahh ${ }^{-i}$ (IIb) 'to make blind' (3sg.pres.act. da-šu-ua-ah-hi (KBo 6.2 i 9, 11 (OS)), ta-šu-ưa-ah-hi (OS), 1pl.pres.act. ta-šu-ưa-ah-hhu-u-e-ni (KUB 31.44 ii 11 (MH/NS)), da-šu-ua-hu-ua-ni (KUB 31.42 ii 13 (MH/NS)), 3pl.pres.act. ta-šu-ưa-ah-ḩa-an-zi (KBo 18.49 rev. 4 (MH/MS), HKM 14 obv. 14 (MH/MS), HKM 16 obv. 17 (MH/MS), KUB 13.9 ii 18, iv 6 (MH/NS)), 3sg.pret.act. [d] a-aš-úa-ah-ta (KBo 16.9, 2 (NH)), ta-šu-ua-ah-t[a] (KBo 14.11, 9 (NH)), 3pl.pret.act. da-šu-ua-ah-he-er (KBo 6.34+ i 20 (MH/NS)), 3pl.imp.act.
 (KBo 6.34+ iii 8 (MH/NS)), ta-aš-úa-ah-ha-an-du (KUB 44.4+ KBo 13.241 rev. 28 (NS)); part. nom.sg.c. ta-šu-ưa-ah-ḩa-an-za (KUB 13.9 ii 12, 14 (MH/NS)).

We find the spellings da-šu-ūa-, ta-šu-ua- as well as ta-aš-ūa-, all denoting /tasua-/. The etymological interpretation has been in debate. Sturtevant (1933: 105) proposed a connection with Skt. támas- 'darkness', támisrā- 'dark night' and reconstructed ${ }^{\text {tmons-uent-. The Skt. words, however, clearly reflect } * \text { temH- }}$ (e)s-, from a verb *temH- 'to faint, to become dark'. Phonetically, it is quite improbable that a pre-from *tmH-s-uent- would have given Hitt. tašuant- (we would expect $* * /$ tniSuant $-/$, spelled ${ }^{* *}$ tane/iššuuant-, cf. § 1.4.4.3). Nevertheless, the etymology has been widely followed (e.g. Kimball 1999: 328: *te/omh ${ }_{2} s$ -went-).

Szemerényi (1956: 77) connected the word with a root * $d^{h} e m$ - which is visible in OIr. deim 'black, dark', OE dimm 'dark'. This is phonetically equally problematic: a preform $* d^{h} m s u e n t-$ probably would have given $* *$ danzuuant-, whereas $* d^{h}$ e/omsuent- should have given $* *$ daššuuant-.
Melchert (1994a: 70) states: "Hitt. daš(u)want- 'blind' need not reflect *d(e) $m h_{2} s$-went- 'dark', but is better derived from *das-went- 'lacking', to the root of Skt. dásyati 'lacks' (for the meaning cf. Ital. orbo)". LIV ${ }^{2}$ and Mayrhofer (1986-2002: s.v.) take Skt. das- as reflecting $*_{s}{ }^{w} e s\left(h_{2}\right)$ - (so from Skt. jas-), however.
Rieken (1999a: 232f.) rejects all etymologies that assume an original nasal, because "wie auch immer man den tašuuant- zugrundeliegenden $s$-Stamm ansetzt, schwundstufig oder hochstufig, mit oder ohne Laryngal, in keine Fall ist bloßes $s$ zu erwarten". She follows a proposal by Juret (1940/41: 51), who connects the word with ModEng. dusk (but -sk is problematic), Lat. fuscus 'dark brown' and Skt. dhváṃsati 'to fall to dust', and reconstructs * dhuos-uent-. Although this preform indeed would regularly yield Hitt. tašuant- (with *Tuo > ta- like in tān < *duoiom), it is problematic that Skt. dhvamss- goes back to *d'uens- (also visible in PGerm. *dunsta- 'dust'), with a nasal. All in all, none of the proposed etymologies can account for tašuuant- without problems regarding the phonetic development.
-ttat (2sg.pret.midd.-ending): see -tta(ri), -ttat(i)
-ttat (3sg.pret.midd.-ending): see -tta(ri), -ttat(i)
$\boldsymbol{t a t t a r a e}^{-3}$ (Ic2) '?’: 3pl.pres.act. ta-at-ta-ra-a-an-zi (KUB 9.15 iii 6 (NS)).
IE cognates: ?Lat. terō 'to rub', ?Gr. тعíp $\omega$ 'to rub'.
PIE * to-tr $\left(h_{l}\right)$ - ??
This verb is hapax in the following context:
KUB 9.15 iii
(5) nu=kán É DINGIR ${ }^{L I M} p a-r a-a$ ša-an-ḩa-an-zi
(6) da-ga-an-zi-pu-uš ta-at-ta-ra-a-an-zi
(7) $n u$ É DINGIR ${ }^{L I M}$ an-dur-za a-ra-ah-za hur-ni-ía-an-zi
'They sweep the temple and $t$. the earth (pl.) and they sprinkle the temple inside (and) outside'.

Because of the plene $-a$ - in $-\overline{a n z i}$ it is likely that this verb belongs to the hatraeclass. On the basis of the duplicate KBo 12.114 iii 4 , where we find $[\mathrm{K}] \mathrm{I}^{\mathrm{HIAA}}-u s ̌$ ták-ša-an-zi 'they unify the earth (pl.)', Tischler (HEG T: 273) assumes that tattarae- means something like 'to smooth (out)'.
Since the verbs of the hatrae-class are usually derived from o-stem nouns, we would in this case have to assume that tattarae- is derived from a further unattested noun *tattara-. Nevertheless, because of the high productivity of the hatrae-inflection in NH times, it is also possible that tattarae- originally belong to another class. This assumption is necessary if one wants to follow Kapancjan's etymology (1931-33: 24), who proposed to connect tattarae- with Lat. terō 'to rub', Gr. $\tau \varepsilon$ íp $\omega$ 'to rub', which reflect *ter $\left(h_{l}\right)$ - (see $\mathrm{LIV}^{2}$ for the possible $-h_{l}$-). If this is correct, then we have to reconstruct $* \operatorname{to}-\operatorname{tr}\left(h_{l}\right)$-.
-ttati (2sg.pret.midd.-ending): see $-t t a(r i),-t t a t(i)$
-ttati (3sg.pret.midd.-ending): see $-t t a(r i),-t t a t(i)$
tatrant- (adj.) 'agitated, aggressive (cow); sharp-edged (stone)': nom.sg.c. ta-at-ra-an-za (KUB 2.2+ ii 55), acc.sg.c. ta-at-ra-an-ta-an (IBoT 1.36 ii 65).
Derivatives: tatrahh- ${ }^{\boldsymbol{i}}$ (IIb) 'to incite, to stirr up' (3sg.pres.act. da-at-ra-ah-hi (KUB 31.103 obv. 16), 3sg.pret.act. ta-at-ra-ah-ha-aš (KUB 23.11 iii 6 (MH/NS)), ta-at-ra-ah-ta (KUB 19.9 i 24).
IE cognates: Skt. dar- 'to crack, to scatter', Gr. $\delta \varepsilon \varepsilon \rho \omega$ 'to skin, to flay(?)', Goth. dis-tairip 'to tear up', Lith. dirti 'to tear, to flay(?)', OCS dbrati 'to tear'.

PIE *do-dr-ent- ?, *do-dr-eh2- ?
These words seem to be derived from a further unattested stem * tatr (a)- (compare the situation of dašuuant- 'blind' and dašuuahh-- 'to make blind' that are both derived from a further unattested stem *dašu-). The meaning of the verb tatrahhis quite clear in e.g. the following context (although the form itself is rather damaged here):

KUB 19.9 i
(23) EGIR-az=ma KUR ${ }^{\text {URU }}$ Iš-hu-pí-it-ta-aš $[k u-r] u-r i-a h-t a$

$d a-[p i ́-a n-d a]$
(25) ku-ru-ri-ah-he-er
'From the back, the land Išhupitta became hostile and incited all the countries. All the countries became hostile'.

Gamkrelidze \& Ivanov (1984: $307=1995$ : 266) saw tatrahh $h$ - as a reduplication of "tarh-" 'to conquer'. This is impossible for several reasons. First, the meanings 'to incite' and 'to conquer' do not have much in common. Secondly, the verb "tarh-" does not exist but in fact is tarhu- ${ }^{-i}$ (q.v.), which makes a connection with tatrahh $h$, which is derived from $\operatorname{tatr}(a)$-, formally impossible.
If the stem $* \operatorname{tatr}(a)$ - is of IE origin, it can only reflect a reduplication $* T o-T r$ Melchert's connection (1984a: 33) with PIE *der- 'to cut, to split' (Skt. dar-, Gr. $\delta \dot{\varepsilon} \rho \omega$, Lith. derù, etc.) therefore is formally better. Nevertheless, we must remain cautious: the proposed semantic connection between 'hostile, aggressive' and 'to cut, to split' is nothing more than a possibility.
$\boldsymbol{t}_{\mathbf{e}^{-z^{i}}}$ (Ia1: suppletive with $t e r^{-z} /$ tar-, q.v.) 'to speak, to state': 1 sg.pres.act. te-e$m i(\mathrm{OS}), t e-m i(\mathrm{MH} / \mathrm{MS}), 2 \mathrm{sg}$. pres.act. te-ši (OS), 3sg.pres.act. te-e-ez-zi (OS), te$e z-z i(\mathrm{OS}), 1$ pl.pres.act. ta-ru-e-ni (OS), 2pl.pres.act. tar-te-ni (MH/MS, often), te-e-te-ni (KUB 13.3 ii $8(\mathrm{OH} / \mathrm{NS})$ ), 3pl.pres.act. ta-ra-an-zi (OS), da-ra-an-zi, 1sg.pret.act. te-e-nu-un (KBo 26.136 obv. 17 (MS)), te-nu-un (KUB 1.16 ii 3 ( $\mathrm{OH} / \mathrm{NS}$ )), 2sg.pret.act. te-e-ě̆ (HKM 48 obv. 17 (MH/MS)), 3sg.pret.act. te-e-et (KUB 17.10 i 28 (OH/MS), KBo 15.19 i 25 (NS)), te-et (MH/MS, often), 3pl.pret.act. te-re-er (HKM 63 obv. 16 (MH/MS), HKM 94 rev. 9 (MH/MS), KUB 33.60 rev. 14 ( $\mathrm{OH} / \mathrm{NS}$ )), 2sg.imp.act. te-e-et (KUB 30.10 i $4(\mathrm{OH} / \mathrm{MS})$ ), teet (MH/MS, often), 3sg.imp.act. te-e-ed-du (KUB 30.10 i 26 (OH/MS)), te-ed-du (KUB 30.10 i 28 ( $\mathrm{OH} / \mathrm{MS}$ )), 2pl.imp.act. te-et-te-en (OS), te-et-tén (KBo 13.114 iv 4 (MH/NS)), te-e-tén (KUB 13.3 ii 28, iii 42 (OH/NS)), 3pl.imp.act. da-ra-an$d u$ (KBo 3.40 rev. 11 ( $\mathrm{OH} / \mathrm{NS}$ )); part. ta-ra-an-t-, da-ra-an-t-, ta-ra-a-an-t(MH/MS); impf. tar-ši-ke/a- (OS), tar-ši-ik-ke/a- (KUB 14.1+ obv. 34 (MH/MS)), tar-aš-ke/a-.
IE cognates: OCS děti 'to do, to say', Skt. dhā- 'to put', Gr. tí $\theta \eta \mu$ ' 'to put', etc.

$$
\text { PIE * } d^{\dagger} \dot{e} h_{1}-t i
$$

This verb is suppletive: on the one hand we find forms that show the stem $t \bar{e}-$ and on the other forms that show the stem ter- ${ }^{-i}$ / tar- (see there for its own etymological treatment). Already since Hrozný (1915: 29) this verb is connected with especially OCS děti 'to do, to say' < PIE * $d^{h} e h_{1}$-, which has been generally accepted since.

We would expect that in Pre-Hittite this verb showed an ablaut $* d^{h} e h_{l^{-}} / * d^{h} h_{l^{-}}$. This ablaut is still visible in verbs that are derived from $* d^{h} e h_{l^{-}}$, namely pehute- ${ }^{i}$ / pehut- 'to lead (there)', unate- ${ }^{z i}$ / unat- 'to bring (here)' and uete- ${ }^{z i}$ / uet- 'to build'. If we compare forms like 3pl.pres.act. pehudanzi (OS), 3pl.pret.act. uuater (OS), 3pl.imp.act. uuadandu (MH/MS), part. uetant- (OS) and inf.I uedumanzi (MH/MS), we must assume that the original paradigm of $t \bar{e}$ - also contained 1pl.pres.act. *tumēni, 3pl.pres.act. *danzi, 3pl.pret.act. *ter and 3pl.imp.act. *dandu. We see that these forms are identical to the corresponding forms of the verb $d \bar{a}^{-}{ }^{i} / d$ - 'to take' $<* d e h_{3^{-}}$(although 3pl.pret.act. *dh $h_{3}$-ér $>*$ ter itself was replaced by dó $_{3}{ }_{3}-\bar{e} r>d \bar{a} e r$ in pre-Hittite times already: the form *ter is still visible in peter and uter, however). This probably was the reason why they were removed from the paradigm of $t \bar{e}_{-}^{-z i}$ and subsequently replaced by forms of the verb ter- ${ }^{z i} /$ tar-. For 2pl.pres.act. we would expect that $* d^{h} h_{1}-t h_{l} e ́+n i$ yielded */t ${ }^{5}$ téni/, spelled *za-te-e-ni, (or perhaps */təténi/, spelled *ta-at-te-e-ni as still visible in uuatatten (MH/MS)?). This form is replaced by tarteni, but in a NS texts, we find tēteni as well, probably analogically created on the basis of 2pl.pret.act. tetten $<{ }^{*} d^{h} e h_{1}-t h_{1} e+n$.
$=t t e-$ : see $=t t i-/=t t a-/=t t e-$
tēkan / takn- (n.) 'earth’: nom.-acc.sg. te-e-kán (OS, often), te-e-ga-a(n)=š-še-it (KBo 17.22 iii 11 (OS)), te-kán (often), gen.sg. ták-na-aš (OS, often), ták-na-a-aš (MH/MS), dat.-loc.sg. ták-ni-i (often), ták-ni (rare), ták-na-i (KUB 24.9+ ii 22 ( $\mathrm{OH} / \mathrm{NS}$ )), ending-less loc.sg. ta-ga-a-an (OS, often), ta-ga-an (OS, rare), da-a-ga-an (KUB 43.17, $6(\mathrm{NH})$ ), ta-a-ga-an (KUB 34.120, $7(\mathrm{NH})$ ), da-a-ga-a-an (KUB 40.46, 9 (NH)), all.sg. ta-ak-na-a (KBo $17.1+$ KBo 25.3 iii 8 (OS)), ták$n a-a$, ta-a-ak-na-a (KUB 29.30 iii 13 (OS)), abl. ták-na-a-az (KUB 43.23 rev. 17), ták-na-az, ták-na-za.

Derivatives: see ${ }^{(\mathrm{f})}$ tagānzepa-.
Anat. cognates: CLuw. tiiiamm(i)- 'earth' (nom.sg. ti-i_ia-am-mi-iš, ti-ía-am-me$i \check{s ̌}$, acc.sg. ti-i्2a-am-mi-in, ti-i_ia-am-me-in, dat.-loc.sg. ti-íia-am-mi, erg.sg. ti-ia-am$m a-a n-t i-i s ̌$, gen.adj.nom.sg.c. ti-ia-am-ma-aš-ši-iš, gen.adj.nom.pl.c. ti-íla-am-ma-aš-ši-in-zi); HLuw. takam- 'earth' (dat.-loc.sg. "TERRA" ta-ka-mi-i (SULTANHAN §39)).

PAnat. *déǵ-m, *dǵ-em-, *dǵ-m-ós
IE cognates: Skt. kṣăs (f.), gen.sg. jmás, Av. zam-, Gr. $\chi \theta \omega ́ v$ (f.), TochA tkaṃ, TochB keṃ, Alb. dhe, Lat. humus, OIr. dú (gen. don), Lith. žẽmé, OCS zemlja 'earth'.
$\mathrm{PIE} * d^{h} e^{\prime} g^{h}-m,\left(* d^{h} \dot{g}^{h}-e ́ m-m\right), * d^{h} \dot{g}^{h}-m-o ́ s$.
It has been clear since Friedrich (1924-25: 122 ${ }^{2}$ ) that Hitt. tēkan / takn-belongs with the other IE words for 'earth'. Details regarding the reconstruction are in debate, however. On the basis of Skt. kṣás (f.), gen.sg. jmás ~ Gr. $\chi \theta \dot{\omega} v$ (f.), the old reconstruction of 'earth' was $* g^{h} \chi^{h} o ́ o m$, $* g^{h} \delta^{h} m$-ós (with a PIE phoneme 'thorn'). On the basis of Lith. žẽmé, OCS zemlja another ablaut-variant *g' ${ }^{h} \partial^{h} e m-$ can be reconstructed. With the discovery of TochA tkam, it became clear that the initial cluster was not $* g^{h} \partial^{h}$ - originally, but rather $* d^{h} \dot{g}^{h}$-. So we have $* d^{h} g^{h} \bar{o} m$, $* d^{h} g^{h} e m$ - and $* d^{h} g^{h} m$-. With the adduction of Hitt. tēkan, which must reflect * $d^{h} e g^{h}$-, it became clear that we are not dealing with a root $* d^{h} g^{h} e m$-, but rather with a root $* d^{h} e g^{h}$ - followed by a suffix -em-.
The next question is how to reconstruct the original paradigm. Since Schindler (1977: 31), tēkan is usually reconstructed 'holodynamically' as *d ${ }^{h} e^{\prime} g^{h}-\bar{o} m$, * $d^{h}$ ég ${ }^{h}$-om-m, * $d^{h} g^{h}-m$-és. In this sense it would be comparable to the word for 'hand', which is often reconstructed 'holodynamically' as well: * $g^{h}$ és-ōr, * ${ }^{h} h$ és-or-m, ${ }^{*} g^{h} s$-r-és (cf. Rieken 1999a: 280). As I show in detail under its own lemma, the Hittite paradigm of keššar- does not go back to these reconstructed forms, however. In my view, it rather shows nom.sg. keššar < *g' ${ }^{h}$ és-r (cf. Gr. रeíp < ${ }^{*} \chi \varepsilon h \alpha \rho<*^{h}{ }^{h}$ és-ror), acc.sg. kiššeran $<*^{\prime} g^{h} s$-ér-m and gen.sg. kišraš < $*^{h}{ }^{h} s$-r-ós. I therefore want to propose that we have to reconstruct a similar paradigm for 'earth' as well: nom.sg. $* d^{h} e^{\prime} g^{h}-m$, acc.sg. $* d^{h} g^{h}$-ém-m, gen.sg. $* d^{h} g^{h}-m$-ós.
Let us first look at the development of nominative and accusative. In Hittite, 'earth' is a neuter word, with nom.-acc.sg. tēkan. From the Sanskrit and Greek evidence it is clear, however, that the PIE word for 'earth' was feminine. In PIE, non-neuter words of the structure ${ }^{*} C C-\overline{e ́} R,{ }^{*} C e ́ C-\bar{o} R$ and ${ }^{*} C e ́ C-R$ originally where asigmatic: they did not carry the nom.-ending -s. In Hittite, however, an ending $-s$ became obligatory for all commune words, and $-s$ was being added to old asigmatic nominatives, e.g. hasterza 'star' < *h $h_{2}$ stér $+-s$, hāaraš 'eagle' < * $h_{3}$ ér-ōn $+-s$ (cf. Weitenberg 1995). If a word did not have an ending $-s$, it was eventually reinterpreted in Hittite as neuter (which is the reason that diphthongstems (especially in $-\bar{a} u$-) often show neuter as well as commune forms in the oldest texts already). In the case of $*^{\prime} g^{h} e s r$ we still find an asigmatic nom.sg. keššar in OH texts (which is therefore occasionally reinterpreted as neuter). The accusative-form $*^{\prime} g^{h} s$-ér-m, which was replaced by $* g^{h} s$-ér-om (regular introduction of the $o$-stem ending $*_{\text {-om }}$ in consonant-stem, replacing $*-m$, cf. at the lemma -an) yielded Hitt. kiššeran, on the basis of which the nominative was thematicized as well, yielding kišširaš and kiššaraš in MH times (cf. Weitenberg
1995). In the case of 'earth', we find a different development, however. The PIE forms * $d^{h}{ }^{\prime} g^{h} m$, * $d^{h} g^{h}$ émm regularly developed into pre-Hittite *déǵm, *dǵém (with simplification of *-emm $>*$-em). Because the nominative did not have an ending $-s$ and formally looked like an accustive of a consonant-stem, and because the original accusative had become intransparent, the noun was reinterpretated as a neuter and the nominative form *déǵm underwent the replacement of *-m by *-om, yielding nom.-acc.sg.n. *déǵ-om. This *déǵ-om then regularly yielded Hitt. /tégan/, spelled têkan. It must be noted that because of the fact that this word is not an original neuter, it does not have a regular 'ergative': whenever it is necessary to use an animatized variant of 'earth' (e.g. as the subject of a transitive verb), the commune word ${ }^{(\mathrm{f})}$ tagānzepa- (q.v.) is used.
The interpretation of the oblique cases is more clear. They are predominantly spelled ták- $n^{\circ}$ or $t a-a k-n^{\circ}$, showing plene spelling of the vowel of the ending (ták$n a-a-a \check{\text { s. }}$ ták-ni-i, ták-na-a). The only spelling that shows $t a-a-a k-n^{\circ}$ must, despite the fact that it is attested in an OS text, be regarded as a mistake, which is supported by the fact that the vowel of that form's ending is spelled plene as well: ta-a-ak-na-a. It is clear that taknāš must go back to $* d^{\prime} g^{h}-m$-ós. Note that -m- is replaced by $-n$-, which must have happened in analogy to the nom.-acc.sg. *déǵom > *dégon on the basis of which *dǵmós > *dǵnós. This secondary replacement must therefore have been quite recent. Because taknā̆s goes back to *dǵnós, I phonologically interpret taknāš as /tgnás/. Note that in the initial cluster /tgn-/ no anaptyctic vowel has developed (compare pattai- ${ }^{i} /$ patti- $^{-}{ }^{*}$ pth $h_{1}$-oi-, which must represent $/$ ptai- $/$ ). The endingless loc.sg. tagān (of which the occasional plene spellings of the first $-a$ - can be disregarded: e.g. $d a-a-g a-a-a n$ can hardly be a phonetically real spelling) must reflect $* d^{h} g^{h} \frac{1}{o} m$ and therewith is formally to be equated with Gr. $\chi \theta \dot{\omega} v$ and, mutatis mutandis, Skt. ksấs. The reconstruction of ${ }^{*} \bar{o}$ is necessary because $d^{h}{ }^{h} g^{h} \delta \dot{m}$ would have yielded ${ }^{* *}$ tagūn (cf. kūn < *Kóm 'this (acc.sg.c.)').
The interpretation of the Luwian words is quite difficult. On the one hand we find CLuw. tiiamm(i)- 'earth' and on the other HLuw. ta-ka-mi-i 'on the earth'. Although it is clear that PAnat. *g sometimes disappears in Luwian, the exact conditions of this loss are unclear. Certain examples of loss seem to be *ges-r-o> CLuw. iš(ša)ra/i-, HLuw. istra/i- 'hand', *'gim-ro-> CLuw. im(ma)ra/i- 'open country', Hitt. nekna- ~ CLuw. *nāna/i- ‘brother’, HLuw. nanasri- ‘sister’. Certain examples of retention seem to be *ǵodmr-> CLuw. katmarši(i̇ia)- 'to defecate', *'gut-> CLuw. kuttašra/i-, HLuw. kutasra/i- 'orthostat' (cf. Melchert 1994a: $254-5$ for examples). Although the evidence is scanty, we seem to be dealing with loss of $* g$ before front vowels (with raising of a following *e to $i$,
which seems to point to a development *ǵe- > *ie->*ii->i-), word-internally before a consonants (or, at least, ${ }^{*} n$ ) and retention before back-vowels (compare Kimball 1994c). For tiiamm(i)-, Melchert (l.c.) assumes a development PAnt. *dgém- > *diém-, after which Čop's Law caused gemination of -m-: tiicamm(i)-. Although I largely agree with this reconstruction (I believe that this indeed is the only way in explaining geminate -mm-), I do not accept the fact that Melchert explains the difference with PAnat. *ǵesr-> išra/i- (which shows *ǵe->i- versus -iia in tiiamm(i)-) due to absence of Čop's Law in the latter. In my view, we have to reconstruct *ǵésro- and *dǵémo-. That the first form yielded išra/i- (and not iilašra/i-) can only be explained by the fact that here we are dealing with
 **dii- was blocked by the preceding $d$-, after which *dié- $>$ diela-. With the interpretation of tiiiamm (i)- as reflecting $* d^{h} g^{h}$-em-, we now have evidence for this ablaut-grade in Anatolian as well, despite the fact that in Hittite it is not directly attested.

HLuw. ta-ka-mi-i is a special case. The normal HLuwian word for 'earth' is ${ }^{\text {TERRA }}$ taskuira/i-. The dat.-loc.sg.-form ta-ka-mi-i, which is hapax in SULTANHAN $\S 39$, is therefore probably a petrified form of the original word for 'earth'. Because of the fact that it shows retention of *g', it cannot be equated with CLuw. tiiamm(i)- like that. Melchert (1994a: 253) therefore reconstructs it as reflecting *dégom- (and subsequently phonologically interprets the word as /taggami/), in which Čop's Law is supposed to have yielded geminate -gg- that did not fall victim to loss in Luwian. As I argued above, I do not believe that the paradigm of $* d^{h} e g^{h}-m$ - ever contained a form $* d^{h} e ́ g^{h}$-om (apart from the very late pre-Hittite rebuilding from *déǵm $\gg$ *déǵgom $>$ tēkan). In my view there are two possible interpretations. On the one hand, we can assume that $t a-k a-m i-i$ is to be equated with Hitt. dat.-loc.sg. $\operatorname{takn\overline {u}}$ and reflects *dǵm-éi (which would mean that we have to phonologically interpret the word as $/ \mathrm{tgmi} /$ ). If correct, it would show that in a cluster *dǵm-, *ǵ was retained in Luwian. It would also still show -m-, and be more archaic in that respect than Hitt. taknī. On the other hand, we can equate $t a-k a-m i-i$ with Hitt. tagān, and assume that it reflects $* d^{h} g^{h} \bar{o} m+-i$, with retention of PAnat. *g' in front of back-vowel. This reconstruction would mean that $t a-k a-m i-i$ is to interpreted as /tgāmi/.
Quite recently, Melchert proposed to interpret CLuw. inzagān as denoting 'things inhumated' and reflecting "a hypostasis of a univerbated prepositional phrase *en $d^{h} g^{h}{ }^{h} \frac{\bar{O}}{}$ m 'into the earth'" (2003a: 148). According to him, the fact that $* d^{h} g^{h}$ - yields CLuw. -zg-here, shows that the concept of the 'thorn' still has to be regarded as a PIE phenomenon, but then rather has to be interpreted as affrication
of dentals before other stops. Apart from the fact that I think that HLuw. ta-ka$m i-i$ shows that $* d^{h} g^{h}$ - yields Luwian /tg-/ (if $* g$ is not lost in front of a frontvowel), and that therefore this reconstruction formally cannot be correct, the semantic side of this interpretation is improbable as well. If we look closely at the contexts in which inzagān occurs, we see that a translation 'inhumated' is hardly likely:

KUB 35.54 ii (with additions from the parallels KUB 35.52 and KBo 29.2 ii)
(27) $[\mathrm{x}-\mathrm{x}-\mathrm{x}]$ KÙ.BABBAR GUŠKIN NUM $\left.[(\mathrm{UN})]^{\mathrm{H}}\left[\mathrm{I}^{\mathrm{IA}}\right)\right]$ hu-u-ma-an
(28) [( $\left.\left.{ }^{\text {GIS }} h a-a h-\right)\right] r a-a n{ }^{\mathrm{GIS}}{ }_{m u-u ́-i-l a-a n}{ }^{\text {GIŠ }}$ in-ta-lu-zi
(29) $[\mathrm{x}-\mathrm{x}-\mathrm{x}-] \mathrm{x}{ }^{\mathrm{GIS}}$ ti-id-du-ut-ri kat-t $[a]$ hi-ik-zi
(30) $n=a$-aš-ta an-da ki-iš-ša-an me-ma-i
(31) za-a-ú-i zi-i ia-ar NUMUN ${ }^{\mathrm{HI} . \mathrm{A}}-n a[p] u-u-n a-a-t a$
(32) in-za-ga-a-an una-aš-h̆ a $a=$ (a) ta [BE-]ÈL SÍSKUR
(33) ${ }^{\text {GIS }} h a-a t-t a-r a-a-t i$ ha-at-ta[-r]i-it-ta
(34) ${ }^{\text {GIS }}$ tu-u-ra-a-ti=pa=(a)ta tu-u-r[a-a-a]t-ta
(35) $a=(a) t a$ im-ra-aš-ša $\langle-a n){ }^{\mathrm{d}}{ }^{\mathrm{I}}$ ŠKUR-u[n-t] i pa-ri
(36) ta-ra-a-u-i-it-ta
' $[\mathrm{xxx}]$ of gold and silver, all the seeds, a rake ${ }^{\text {? }}$, a munila-, a shovel', a X (and) a tiddutri he presents down, and he speaks thus: "Here lie down all the seeds, inzagān, (and) the sacralized objects. The ritual patient has hattari-ed them with a hattara- and has $t \bar{u} r a$-ed them with a $t \bar{u} r a$-. He has delivered them to the Storm-god of the Open Country."'.

According to Melchert, inzagān and uašḩa are appositions to NUMUN ${ }^{\text {HI.A }}$ 'seeds' and he therefore translates 'here lie down the seeds, the inhumated things, the sacralized objects'. It is quite awkward, however, to assume that although in the description of the action it has been told that objects of gold and silver, all the seeds and several agricultural implements are presented, in the words spoken after this action no reference is made to these golden and silver objects or to the agricultural implements anymore. I therefore would rather propose that uašha refers to the golden and silver objects (assuming that these are regarded as 'sacralized objects'), whereas inzagān then must refer to the several agricultural implements. In this way, we can translate: 'Here lie down the seeds, the tools and the sacralized objects'. The other context in which inzagan- occurs,

KBo 29.6 obv.
(25) i-in-za-ga-an-za=pa ku-una-ti-in ša-pí-ia-im-ma-an $a-u ́-i-d u-u=a-[a s ̌=t a]$ (26) una-aš-ku-li-im-ma-a-ti ma-al-ha-aš-ša-aš-ši-[iš EN-aš]
'Just as the inzagan- is šapiiaimma-, may the ritual patient come away from the $\sin$ ',
does not shed any additional light to its meaning, also because the meaning of šapiiaimma/i- is unclear. Nevertheless, it does not speak against a translation 'tool'. All in all, I conclude that there is no reason to interpret inzagan- as 'inhumated' and to subsequently reconstruct it as *en $d^{h} g^{h} \bar{\partial} m$.

URUDU/GIštēkan 'pick-axe (?)' (Sum. $\left.{ }^{(G I S ̌ / U R U D U)} \mathrm{AL}(?)\right)$ : case? te-e-kán (KUB 32.115 i 9).

IE cognates: Skt. téjate 'is sharp', OSax. stekan 'to stab', Gr. $\sigma$ tí $\omega$ 'to stab'. PIE *téig-o-?

Hapax in KUB 32.115 i (9) [...-p]í-iš URUDU te-e-kán URUDU MAR, which is compared by Laroche (1949-50: 20f.) with instances where we find ${ }^{\text {(GIŠ/URUDU) }}$ AL 'pick-axe' besides ${ }^{(\text {GIŠ/URUDU) }}$ MAR 'spade' (e.g. KUB 9.3 i 7, KUB 7.41 i 5f.). He therefore assumes that tēkan is the Hittite reading of ${ }^{(\text {GIŠ/URUDU) }} \mathrm{AL}$. According to Laroche, another attestation is found in

KUB 24.9+ ii
(18) $n=a$-aš $a-r a-a h-z a ~ p a-i z-z i ~ m a-a n-n i-i n-k u-u a-a h-h i ~ G \check{s ̌}$ te-e-kán pád-da-a-i (19) nu=kán a-ni-ur-aš $\mathrm{KIN}^{\mathrm{HIIA}}$ an-da da-a-i
'She (the ${ }^{\text {MUNUS ŠU.GI) goes outside and in the neighbourhood she digs } t \text {. and }}$ puts the equipment of the ritual in there'
but Tischler (HEG T: 301) plausibly argues that we should rather read tēkan 'earth' here, as can be seen from the duplicate $452 / \mathrm{u}$ where tekan is written without the GIŠ-determinative, and that we should translate 'she digs up earth'. Tischler, however, gives other possible attestations of ${ }^{\text {GIŠ/URUDU }}$ tēkan, viz. 448/u, (3) $1{ }^{\text {URUDU }} t[e-e-k a ́ n]$, and KUB 12.53, (4) [ $\left.{ }^{\text {GIŠ? }} t e-e-k\right] a ́ n ~ G I S ̌ M A R, ~ b u t ~ o f ~ c o u r s e, ~$ these can only function as indirect evidence. So, all in all, we are stuck with one real attestation only, viz. KUB 32.115 i 9 , which is in a broken context. This makes the reality of the word dubious. Perhaps the word is there to be read as tēkan 'earth'. If URUDU tēkan indeed means 'pick-axe', however, we should follow

Laroche's proposal (1.c.) to connect tēkan with the root *(s)teig- 'to stab, to be sharp', which would make sense formally as well as semantically.
tekri- (c.) 'deposition (?)': nom.sg. te-ek-ri-iš, dat.-loc.sg. te-ek-ri.
IE cognates: Gr. ह̋סıkov 'threw away', Khot. dīsśs'- 'to throw'.
PIE *deik-ri-?

The word occurs a few times only. In the vocabularies KBo 26.20 and KBo 26.11 (duplicates of each other), of which the Sumerian and Akkadian parts have been broken off, we find te-ek-ri-iš being mentioned besides markiiauuar 'rejection':

KBo 26.10 iv
(8) mar-ki-i $a-u-u a-a r$ 'rejection'
(9) [h]a-te-ša-an-za 'being dried up'
(10) $[t] e-e k-r i-i s ̌$
(11) $[a] n$-da=kán im-pa-hu-ua-ar 'making a burden'
(12) [an-]da=kán im-pa-hुu-ua-ar 'making a burden'

KBo 26.11 rev.?
(6) mar-ki-ia-u-ua-ar 'rejection'
(7) ḩa-te-eš-ša-an-za 'being dried up'
(8) tẹ-ẹk-rị $[-i s ̌]$

The only real context in which this word is found is the following:
KBo 5.6 iii
$\ldots \mathrm{I} \mathrm{R}=\mathrm{I} A=m a=$ un $a$ nu-u-u $a-a$-an pa-ra-a da-ah-hi
(15) $n u=u a-r=a-a n=z a=k a ́ n{ }^{\text {LÚ }} M U-T I=I A$ i-ina-mi te-ek-ri=[u] $a$ na-ah-mi
'I (= the queen of Egypt) do not want to take one of my subjects and make him my husband. I fear for tekri-'.

In this last context, tekri- has since Kronasser (1966: 225) generally been translated 'Befleckung' (see, most recently, Rieken 1999a: 211: 'Ich furchte mich vor Befleckung'). On the basis of this translation, an etymological connection with Gr. тék $\mu \alpha \rho$ 'sign' has been proposed (Neu apud Tischler HEG T: 302), which would point to a reconstruction *tek-ri-. In my view, a translation 'Befleckung' does not really make much sense. The queen states that she does not want to marry one of her own subjects out of fair for tekri-. I do not think she fears smearing of her good name, but rather that as soon as her future husband has
become the new king, she will be deposed off as queen by him. A translation 'deposition' would also much better fit the surrounding terms in the vocabularies (especially markiiauuar 'rejection').
This new suggestion does not fit the etymology cited above. I would rather suggest a possible connection with the root *deik'- 'to throw away' (Gr. हैסıкov 'threw away', Khot. diśśś- 'to throw': cf. $\mathrm{LIV}^{2}$ ), and reconstruct *deik-ri'*throwing away $>$ deposition'. For the formation of abstracts in -ri- with the fullgrade vowel, compare ešri-, edri-, auri-, etc. Note that this interpretation makes a connection with tekkuššiie/a- ${ }^{z i}$ impossible on semantic grounds (pace Rieken 1999a: 210-1).
$\boldsymbol{t e k k u s ̌ s ̌ i j e / a - ~}{ }^{z i}$ (Ic1 > Ic2) 'to show, to present (oneself)': 3sg.pres.act. te-ku-uš-ši-ez-zi (KBo 25.1b, 2 (OS)), te-ek-ku-uš-ši-[ez-zi] (KUB 43.38 rev. 10 (MH/MS)), te-ek-ku-uš-ši-e[z-zi] (KUB 43.38 rev. 12 (MH/MS)), te-ek-ku-uš-ši-i-ez-zi (KBo 23.103 i 4 (NS)), te-ek-ku-uš-ši-į $a-a z-z i(K B o ~ 13.20, ~ 8(O H / N S)), ~ t e-e k-k u-u s ̌-s ̌ i-$ ia a-ez-zi (HKM 46 obv. 14 (MH/MS)), 1sg.pres.act. te-ek-ku-uš-ša-mi (KBo 5.3+ i $11(\mathrm{NH})$ ), 3sg.pret.act. te-ek-ku-uš-ši-e-et (KBo 3.60 i $5(\mathrm{OH} / \mathrm{NS})$ ),
Derivatives: tekkuš(ša)nu- ${ }^{\boldsymbol{z}}$ (Ib2) 'to (make) show, to reveal, to (make) present someone' (2sg.pres.act. te-ek-ku-uš-ša-nu-ši (KBo 5.3 i 29), 1pl.pres.act.ti-ik-ku-uš-nu-um-me-e-ni (KUB 31.44 ii 5), te-ek-ku-uš-nu-ma-ni (KUB 31.42 ii 8), 1sg.pret.act. te-ek-ku-uš-ša-nu-nu-un (KBo 5.3+ i 5), 3sg.pret.act. te-ek-ku-uš-nuut (KUB 14.20 i 19), te-ek-ku-uš-ša-nu-ut (KBo 3.5+ ii 16), te-ek-ku-<<nu->>-uš-$\check{s}[a-n u-u t]$ (KBo 16.1 iii 17), te-ek-ku-uš[-ša-nu-ut] (KUB 1.1+ iv 19), te-ek'-ku-uš'-nu'-ut (text: te-et-ku-nu-uš-ut KBo 4.4 ii 77), 3pl.pret.act. te-ek-ku-uš-nu-er (KBo 2.5 iv 15), 2sg.imp.act. te-ek-ku-uš-nu-ut (KUB 7.8 ii 21, iii 10); impf. te$e k-k u-u s ̌-n u-u s ̌-k e / a$ - (KUB 7.5 iv 8, KUB 13.2 ii 18); broken te-ek-ku-uš-nu-an[(-)..] (KUB 19.29 i 11)), tekkušš $\overline{s ̌ s ̌ \Sigma^{z}}{ }^{z i}$ (Ib2) 'to become visible' (3sg.pret.act. te-ek-ku-uš-še-eš-ta (KBo 4.12 obv. 12 (NH))).

IE cognates: Av. daxš- 'to teach', daxšta- 'sign'.

$$
\text { PIE } * d e k^{w} s-i e / o-
$$

The bulk of the attestations show a stem tekkuššiie/a- ${ }^{z i}$. Only once, we find a form that belongs with a stem tekkuššiiae- ${ }^{z i}$ (although in an MS text), and once we find a form that shows a stem tekkuššae- ${ }^{z i}$ (in an NH text), both according to the productive hatrae-class inflection. The causative is spelled te-ek-ku-uš-nu- as well as te-ek-ku-uš-ša-nu-, for which compare e.g. šaš(ša)nu- ${ }^{z i}$ (under šěšz- ${ }^{z i} /$ šaš'to sleep') and $a \check{s}(\check{s} a) n u^{-i}$ 'to take care of' (see under $a s ̌ n u u^{z i}$ ).

According to Götze (1951: 471 ${ }^{12}$ ), tekkǔ̌šiie/a- is to be compared with Av. daxš- 'to teach' and daxšta- 'sign', which would point to a root * $d e k^{w} s$ - 'to show' (note that initial $* d^{h}$ - is not possible as it is against the PIE root constraints to have an 'aspirated' as well as a 'voiceless' stop in one root). Semantically as well as formally, this etymology is very convincing. Nevertheless, Watkins (1969a: 229), proposes to see tekkušš- as an $-u$-s-derivative of $t e k k$-, which he connects with Gr. ték $\mu \alpha \rho$ 'sign'. This tought is followed by Rieken (1999a: 210-1), who connects tekkuššiie/a- to Hitt. tekri- (q.v.) as well. As I have shown under the lemma of tekri-, which is usually translated 'Befleckung', but which I interpret as 'deposition', a connection between tekri- and *tek- is quite unlikely. For tekkuššiie/a-, a connection with *tek- would semantically work, but the formal aspect is difficult: I cannot explain why *tek-us-ie/o- would yield Hitt. tekkuššiie/a- with geminate -š̌s-. Moreover, derivation of an -us-stem seems quite unattractive to me. I therefore stick to Götze's proposal and reconstruct $* d e k^{w} s$ -ie/o-. For gemination of -s- in this phonetic environment, compare *no-nog ${ }^{w h}-s-$ ielo- > nanakuššiie/a- ${ }^{z i}$ 'to become dark'. The fact that in this word $*$-e- remains $-e-$, wheras e.g. *teks- > takš-, must be due to the fact that as an unextended miverb, *teks- always contained the sequence $*-e K s C$-, in front of which $* e>a$, whereas in *dek s-ie/o-, the $*_{i}$ did not function as a consonant, and ${ }^{*} e K s V$ remained $e K s ̌ V$.
Note that this etymology is an important argument in favour of the view that PIE $* k^{w}$ yielded PAnat. $* k^{w}$ and was not unconditionally lenited to PAnat. * $g^{w}$ (contra Melchert 1994a: 61).
-tten (2pl.pret.act.- and 2pl.imp.act.-ending of the mi-flection): see -tten(i)
-tten(i) (2pl.act.-ending of the mi-flection): pres.: ${ }^{\circ} V t-t e-e-n i(\mathrm{OS}),{ }^{\circ} V t-t e-n i(\mathrm{OS})$, ${ }^{\circ} C$-te-e-ni (OS), ${ }^{\circ} C$-te-ni (OS), ${ }^{\circ} V t-t a-n i(M H / M S), ~{ }^{\circ} C$-ta-ni (MH/MS); pret./imp. ${ }^{\circ} V t$-te-en (OS), ${ }^{\circ} \mathrm{C}$-te-en (OS), ${ }^{\circ} V$ t-tén (MH/MS), ${ }^{\circ} \mathrm{C}$-tén (MH/MS).

The normal ending of 2 pl . is -tteni/-ttani in the present, -tten in the preterite and - tten in the imperative. Some verbs also use an ending -šten(i), -štani in the 2 pl ., and as I have shown in detail in Kloekhorst fthc.d, the distribution between -tten(i) and -šten(i) clearly indicates that -šten(i) is the original ending of the hiconjugation whereas -tten(i) must have been the original ending of the miconjugation. Already in pre-Hittite times, the mi-ending -tten(i) is taking over the position of -šten( $i$ ) until in NH times the ending -tten( $i$ ) is virtually the only one left to indicate 2 pl .

In the present, we find -tteni as well as -ttani (just as -ueni and -uani and -šteni and -štani). Melchert (1994a: 137-8) has noticed that the variant with $-a$ - occurs when the verb's stem is accentuated (e.g uuatettani $=/$ ?uadétani/). He therefore regarded the forms with $-a$ - as the regular outcome of unaccentuated *-tteni, *-ueni and *-steni.
It is clear that etymologically the ending -tteni must reflect the primary 2 pl.ending $*_{-}$th $h_{l}$ (Skt. -tha, Gr. - $\tau$, OCS -te, Lith. -te, Goth. $-b$ ) as well as the secondary 2 pl.-ending *-te (Skt. -ta, Gr. -te, OCS -te, Goth. $-b$ ).
tepšu- / tepšaul- (adj.) 'something little; some kind of (by-product of) grain (comparable to malt) that does not yield any plant': nom.sg.c. te-ep-šu-uš (KUB 17.10 iii 17 (OH/MS), HKM 116 ii 7 (MH/MS)).

Derivatives: *tepšaúatar / tepšaúann- (n.) 'poverty(?)' (dat.-loc.sg. te-ep-ša-u-ua-an-ni (KBo 3.34 ii 12 ( $\mathrm{OH} / \mathrm{NS}$ )), [ $t]$ e-ep-ša-úa-an-ni (KBo 3.36 obv. 19)), tepšanu ${ }^{-3}$ (Ib2) 'to make $t$ '' (2sg.pres.act. te-ep-ša-nu-ši (KUB 24.3 ii 53 (MH/NS)), tepšaūěšs- ${ }^{z i}$ (Ib2) 'to become t.' (3sg.pres.act. te-ep-ša-u-e-eš-zi (KUB 29.11 ii 11 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.imp.act. te-ep-ša-u-e-eš[-du] (KUB 17.10 iii 20 (OH/MS), HKM 116 ii 11 (MH/MS))).

PIE * $d^{h} e^{h}{ }^{h}-s u$ -
The word itself occurs in one context only, of which we have two variants (parallel texts, not copies):

KUB 17.10 iii


(15) ma-a-ah-ha-an ua-ar-nu-ú-e-er ${ }^{\mathrm{d}}$ Te-li-pínu-ua-aš-š=a kar-pi[-iś]
(16) kar-di-mi-ia-az úa-aš-tu-ul ša-a-u-ar QA-TAM-MA u_u-ra-a[-nu]
(17) ma-a-ah-ha-an te-ep-šu-uš Ú-UL=an gi-im-ra pé-e-d[a-an-zi]
(18) $n=a$-an NUMUN-an i-ia-an-zi $U$ Ú-UL=m=a-an NINDA-an $i-i a-a[n-z i n=a-a n ~ I-N A]$

(20) ua-aš-du-ul ša-a-u-ưa-ar QA-TAM-MA te-ep-ša-u-e-eš-[du]
'Telipinu was angry, his inmost self smoldered (like) firewood. Just like this firewood they burned, may the wrath, anger and rage of Telipinu likewise be burned. Just as $t$. They do not bring it to the field and use it as seed. They do not make it into bread and carry it into the storehouse. May the wrath, anger and rage of Telipinu likewise become $t$.-ed';

## HKM 116 ii

(1) $\left[\mathrm{DINGIR}^{L}\right]^{U M ?}$ TUKU.TUKU-u-an-za $\mathrm{ZI}=\check{S} U$
(2) [ka-r]a-az=še-iš ua-ra-an pa-ah-hur la-ap-ta
(3) [nu ]ki-i pa-ah-h̆ur GIM-an ú-i-te-ni-it
(4) $[k i-i s ̌-t] a-n u-n u-u n$
(5) $\left[\mathrm{DINGIR}^{L}\right]^{I M ?}$ kar-pí-iš TUKU.TUKU-az
(6) [ua-aš-du-ul š]a-a-u-ua-ar QA-TAM-MA ki-iš-ta-ru
(7) $[m a-a-a h-h a]-a n ~ t e-e p-s ̌ u-u s ̌ ~ U ́-U L=a n ~ A . S ̌ A ̀-n i ~$
(8) $[p e ́-e-d a]-a n-z i ~ n=a-a n ~ N U M U N-a n ~ i-i ́ a-a n-z i$
(9) $[U ́-U L=m=a-a n]$ NINDA-an $i-i$ ia-an-zi $n=a-a n ~ I-N A ~ E ́ ~{ }^{\text {NA }}{ }_{4} K I S ̌ I B$
(10) $[t i-a n-z i n]=a-a n=s ̌ i ~ k a r-p i ́-i s ̌$ TUKU.TUKU- $a z$
(11) [una-aš-du-ul ša-a-u]-ua-ar QA-TAM-MA te-ep-ša-u-e-eš[-du]
'The deity was angry and his innermost self blazed (like) burning fire. Just as I extinguished this fire with water, may the wrath, anger and rage of the deity likewise be extinguished. Just as $t$. They do not bring it to the field and use it as seed. They do not make it into bread and carry it into the storehouse. May the wrath, anger and rage of Telipinu likewise become $t$.-ed'.

In 1928, when the second passage cited above was still un-excavated, Götze (1928: 72) compared the first context with

## KUB 40.16+ ii (StBoT 22: 6f.)

(31) ke-e-da-ni=ma A-NA DIM 4 GIM-an ha-aš-ša-tar=še-et NU.GÁL
(32) Ú-UL=an A.ŠÀ-ni pé-e-da-an-zi $n=a$-an NUMUN-an
(33) $i$-en-zi $U$ Ú-UL=m=a-an NINDA $i$-en-z $i$
(34) $n=a-a n I-N A$ É ${ }^{\mathrm{NA}_{4}} \mathrm{KIŠIB} t i-a n-z i$
'Just as this malt has no offspring, and they do not bring it to the field and use it as seed and they do not make it into bread and carry it into the storehouse ...'
and proposed to read KUB 17.10 iii $16-17$ as (16) [... nu ki-i DIM $_{4}$ ] (17) ma-a-ah-ha-an te-ep-šu-uš ... 'just as this malt is $t$.'. On the basis of this addition, tepšuhas generally been translated as an adjective denoting 'sterile', 'dry', 'nicht kiemfähig'. With the newly found parallel text in HKM 116 ii 7f., however, we can now see that an addition before māhhan is incorrect: the sentence clearly starts with [māhh]an tepšuš. In both KUB 17.10 and HKM 116, we now have to translate 'Just as tepšu-. They do not bring it to the field and use it as seed...'.

This indicates that tepšu- is a noun that denotes some kind of (by-product of) grain (comparable to malt) that does not yield any plant.

The derivatives of tepšu- may shed some further light on its meaning. Compare the following context:

## KBo 3.34 ii

(8) ${ }^{\mathrm{m}}$ A-aš-ga-li-i $a-a \check{~ U R U}{ }^{\mathrm{U}} \mathrm{Hu} u$-ur-mi $\mathrm{EN}-a \check{s}$ e-eš-ta
(9) $k u-u a-a t-t=a \quad k u-u a-a t-t=a$ LÚ-eš. 17 e-eš-ta $\check{s}=a-n=a-a \check{s}-t a \quad a t-t i=m i$
(10) pa-ak-nu-er $\check{s}=a$-an ar-nu-ut $\check{s}=a-a n{ }^{\text {URU }}$ An-ku-i IR-DI
(11) $\check{s}=a$-an ${ }^{\text {URU }}$ An-ku-i=pát ${ }^{\text {LÚ }}$ AGRIG-an i-e-et šar-ku-uš LÚ-eš ${ }_{17}$ e-eš-ta
(12) $a-k i-i s ̌=m=a$-aš te-ep-ša-u-una-an-ni ${ }^{\text {URU }} K u-z u-r u-u ́-i$
(13) $k a-a k-k a_{f}-p u-u s ̌$ ma-ra-ak-ta ${ }^{\mathrm{URU}!} A n-k u-u{ }_{1} a k a-a k-k a_{f}-p i ́-i s ̌$
(14) ma-ak-la-an-te-eš
'Āšgaliia was lord in Hurmi, and what a man he was. They denounced him to my father, and he deported him and brought him to Ankuuaa and in Ankuuxa he made him a governor. He was a powerful man, but he died in $t .$. In Kuzuruuxa he butchered kakkapa's, in Ankuua the kakkapa's were emaciated'.

Here, tepšauuanni is often translated as 'in poverty'. The verb tepšanu- ${ }^{z i}$ is found in the following context:

KUB 24.3 ii
(51) $n=$ a-at $A$-NA ${ }^{\mathrm{d}} \mathrm{UTU}^{\text {URU }} A$-ri-in-na kat-ta-una-a-tar
(52) nam-ma ki-ša-a-ru nu=za $\mathrm{DINGIR}^{L U M}$ tu-el $\check{S ̌ U M=K A}$
(53) le-e te-ep-ša-nu-ši
'And this (hostility against Hyatti) shall forthwith become a cause of revenge for the Sun-goddess of Arinna. O, goddess, do not $t$. your name!',
but the duplicate KUB $24.4+$ KUB 30.12 ii 9 has $n u=$ za tu-e $e^{!}$-el! (text: tu-el-e) $\check{S} U M=K A$ 〈le-e〉 te-ep-n[u-]uš-ke-ši 'do not diminish your name!'. The verb tepšau $\bar{e} \check{S ̌}^{5}-{ }^{z i}$ is found in

KUB 29.11 ii
(11) ták-ku ${ }^{\text {d }}$ SÎN SI ZAG=ŠÚ GAM KI-i ne-ia-an KUR-e-aš BURU ${ }_{14}$-aš
te-ep-ša-u-e-eš-zi
'when the right horn of the moon is bowed downwards to the earth, the crop of the land will $t$ '.

Its duplicate KUB 8.6 Vs 11 has te-pa-u-e-eš-zi, however: 'the crop will diminish'.
On the basis of these contexts, we must conclude that tepšanu- ${ }^{z i}$ means 'to diminish (trans.)', tepšaūēšs $z^{-i}$ 'to diminish (intr.)', which makes it likely that the original abstract meaning of tepšu- is 'something little'. The concrete meaning 'some kind of (by-product of) grain (comparable to malt) that does not yield any plant' that we have established on the basis of the contexts cited above must have developed out of this.
Etymologically, it is in my view quite likely that tepšu- is cognate with the adjective tēpu- / tēpau- 'little, few'. Because this latter reflects * $d^{h} e b^{h}-(e) u$-, we must reconstruct tepšu- as * $d^{h} e^{h} b^{h}-s u$-, showing the same nominalizing suffix *-su- as visible in genzu- 'lap' < *'génh ${ }_{l}$-su-. See at tēpu- / tēpau- for further etymology.
tēpu- / tēpaü- (adj.) 'little, few’: nom.sg.c te-e-pu-uš (KBo 25.23 rev .6 (OS)), te-pu-uš (KUB 6.12 rev. 10b, KUB 8.30 obv. 21, KBo 13.20, 6), acc.sg.c. [te-]e-puun (KBo 21.68 i 5), te-pu-un (KUB 7.2 i 10), nom.-acc.sg.n. te-e-pu (KBo 6.2 iv 42, 46, 47 (OS)), te-pu (KBo 6.2 iv 43 (OS), etc. (often)), [ $t] i-e-p u$ (KBo 25.23 rev. 7 (OS)), $z[e-] e-p u($ KBo $16.71++$ iii 7 (OS)), gen.sg. te-pa-u-ua-aš (KUB 2.1 ii 40), dat.-loc.sg. te-pa-u-e (KUB 33.106 ii 5), te-e-pa-u-e (KUB 43.64,5), te-pu (KBo 38.47 obv. 5), abl. te-e-pa-u-ua-az, te-pa-u-ua-az, te-pa-u-ua-za, instr. te-pa-u-i-it (KBo 23.28 i 57), te-pu-it (KBo 15.37 i 25), nom.pl.c. te-e-pa-u-e-eš (KUB 14.11 iii 42), tẹ-e-pạ-u-ẹ?-ẹš (KBo 6.5 iv 26), te-pa-u-eš (KUB 14.1 obv. 48), nom.-acc.pl.n. te-e-pa-u-uа (ABoT 56 iii 28), te-pa-u-ua (KUB 22.70 obv. 83).

Derivatives: tepnu- ${ }^{z i}$ (Ib2) 'to diminish, to despise' (1sg.pres.act. te-ep-nu-ummi (KUB 21.37 obv. 21), 3sg.pres.act. te-ep-nu-zi (Bronzetafel iii 72, iv 18, KBo 4.10 rev. 13), te-ep-nu-uz-zi, 3pl.pres.act. te-ep-nu-ua-an-zi (КВо 3.3 ii 27), 1sg.pret.act. te-ер-пи-пи-иn, 3sg.pret.act. te-ep-nu-ut, 3pl.pret.act. te-ep-nu-er; part. nom.-acc.sg.n. te-pa-nu-ua-an (KUB 16.16 rev. 2); verb.noun te-ep-nu-mar, te-ер-nu-um-mar; inf.I te-ер-пи-та-an-zi (KUB 21.15 i 14), te-ер-nu-um-ma-an$z i$ (Bronzetafel ii 77, iii 27); impf. te-ep-nu-uš-ke/a- (KUB $24.4+$ KUB 30.12 ii 9, KBo 3.4 i 24, ii 13)), tepaūěšs- ${ }^{z i}$ (Ib2) 'to become little' (3sg.pres.act. te-pa-u-e$e s ̌-z i ~(K U B ~ 8.6 ~ o b v . ~ 11), ~ 3 s g . p r e t . a c t . ~ t e-p a-u-e-e s ̌-t a ~(K B o ~ 4.2 ~ i i i ~ 42), ~ t e-e-p a-u-~$ $e$-eš-ta (KBo 2.5 i 6), 1sg.imp.act. te-pa-u-e-eš-ša-al-lu (Tischler HEG T: 317); part. [t]e-pa-u-e-eš-ša-an-za (KUB 19.29 iv 18), te-e-pa-u-e-eš-ša-an-za (KBo 4.4 iii 23, KUB 13.33 iii 9); impf.1sg.pres.midd. te-pa-u-e-eš-ke-eh-ha-a-ri (KUB
33.105 i 2), tepaunahh- ${ }^{i}$ (IIb) 'to make little' (3sg.pret.act. te-pa-ua-ah-da (KUB 14.3 i 13, KBo 13.74, 6), 3pl.imp.act. te-pa-ua-ah-ha-an-du (KBo 13.74, 7)).

IE cognates: Skt. dabhrá- 'little, small, deficient', dabhnóti 'to deceive, to hurt', ádbhuta- 'unerring, wunderful', GAv. dəbənao- 'to deceive'.

$$
\text { PIE } * d^{h} e ́ b^{h}-u-
$$

This noun and its derivatives are predominantly spelled $t e-e-p^{\circ}$ and $t e-p^{\circ}$ (both in OS texts already). Twice, we find an aberrant spelling, namely $[t] i-e-p u$ (OS) and $z[e-] e-p u$ (OS), but these can hardly be anything else than scribal errors.

This adjective, which has to be phonologically interpreted /tébu- / tébau-/ has since Marstrander (1919: 150) generally been connected with Skt. dabhrá- 'little, small, deficient'. At the same time Hrozný (1919: $146^{4}$ ) connected Hitt. tepnu-zi with Skt. dabhnóti 'to deceive', which goes back to * $d^{h} e b^{h}$-neu- (but note that GAv. dəbənao- = /dbnao-/ shows the most archaic formation, namely $* d^{h} b^{h}$-neu-). A $u$-stem, as in Hitt. tēpu-, is found in Skt. á-dbhu-ta- 'unerring, wunderful' (* $n_{0}$ $d^{h} b^{h}-u$-to-) as well. See at tepšu- / tepšau- for a nominal derivative reflecting * $d^{h} e b^{h}-s u$ -
$\boldsymbol{t e r} \boldsymbol{r}^{\boldsymbol{z}} / \boldsymbol{t a r}$ - (Ia3: suppletive with $t \bar{e}_{-}{ }^{z i}$, q.v.) 'to speak, to state': 1sg.pres.act. te-e$m i(\mathrm{OS})$, te-mi (MH/MS), 2sg.pres.act. te-ši (OS), 3sg.pres.act. te-e-ez-zi (OS), te$e z-z i$ (OS), 1pl.pres.act. ta-ru-e-ni (OS), 2pl.pres.act. tar-te-ni (MH/MS, often), te-e-te-ni (KUB 13.3 ii 8 (OH/NS)), 3pl.pres.act. ta-ra-an-zi (OS), da-ra-an-zi, 1sg.pret.act. te-e-nu-un (KBo 26.136 obv. 17 (MS)), te-nu-un (KUB 1.16 ii 3 ( $\mathrm{OH} / \mathrm{NS}$ )), 2sg.pret.act. te-e-eš (HKM 48 obv. 17 (MH/MS)), 3sg.pret.act. te-e-et (KUB 17.10 i 28 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 15.19 i 25 (NS)), te-et (MH/MS, often), 3pl.pret.act. te-re-er (HKM 63 obv. 16 (MH/MS), HKM 94 rev. 9 (MH/MS), KUB 33.60 rev. 14 ( $\mathrm{OH} / \mathrm{NS}$ )), 2sg.imp.act. te-e-et (KUB 30.10 i 4 ( $\mathrm{OH} / \mathrm{MS}$ )), teet (MH/MS, often), 3sg.imp.act. te-e-ed-du (KUB 30.10 i 26 (OH/MS)), te-ed-du (KUB 30.10 i 28 ( $\mathrm{OH} / \mathrm{MS}$ )), 2pl.imp.act. te-et-te-en (OS), te-et-tén (KBo 13.114 iv 4 (MH/NS)), te-e-tén (KUB 13.3 ii 28, iii 42 (OH/NS)), 3pl.imp.act. da-ra-an$d u$ (KBo 3.40 rev. 11 ( $\mathrm{OH} / \mathrm{NS}$ )); part. ta-ra-an-t-, da-ra-an-t-, ta-ra-a-an-t(MH/MS); impf. tar-ši-ke/a- (OS), tar-ši-ik-ke/a- (KUB 14.1+ obv. 34 (MH/MS)), tar-aš-ke/a-.

Anat. cognates: Pal. tarta- 'curse' (acc.sg. ta-ar-ta-an); CLuw. tātariiiamman(n.) 'curse' (nom.-acc.sg. da-a-ta-ri-íia-am-ma-an, da-a-ta-ri-íia-ma-an, ta-ta-ri-am-ma-an, ta-ta-ri-ía-am-ma-an, ta-a-ta-ri-i-am-ma-an, ta-ta-ar-ri-ía-am-ma-an,
 ma, ta-a-ta-ri-i्2a-am-ma, ta-ta-ar-ia-am-ma, ta-ta-ar-ri-i्2a-am-na,
gen.adj.nom.sg.c. da-a-ta-ri-ía-am-na-aš-ši-iš, ta-ta-ri-i_ia-am-na-aš-ši-iš, ta-ta-ar-ri-ia-a-am-na-aš-ši-iš, $[t a-(a)-t] a-r i-i a-a m-m a-n a-[a \check{s ̌-s ̌ i-i s ̌], ~ a c c . s g . c . ~ t a-t a-r i-~}$ ia-am-ma-na-aš-ši-in, ta-at-ri-ía-am-na-aš-ši-in, ta-ta-ri-am-na-ǎ̌-ši-in, ta-ta-ri-ía-am-na-aš-ši-en, acc.pl.c. ta-a-ta-ri-íia-am-ma-na-aš-ši-in-za, ta-ta-ri-į्a-am-ma-aš-ši-in-za, abl.-instr. da-a-ta-ria-am-na-aš-ša-an-za-ti, ta-a-ta-ri-ía-am-ma$n a-a \check{s}-s ̌ a-a n-z a-t i, \quad$ ta-tar-ri-i्2a-am-na-aš-ša-an-za-ti, ta-ta-ri-ía-am-ma-<ašs-ša$a n-z a-t i) ;$ HLuw. tataria- 'to curse' (3sg.imp.act. ${ }^{\text {LOQUI }}$ tá-tara/i-ia-tú (TELL AHMAR $2 \S 19$, ALEPPO $2 \S 14$ ), ${ }^{\text {LOQUI }}$ tá-tara/i-ia-tu (KARKAMIŠ A2+3 §21), part.nom.sg.c. ${ }^{\text {LOQUI }}$ ta-tara/i-ia-mi-sa (KARKAMIŠ A2+3, §24)); Lyd. kan-tro'to trust someone with, to dedicate' (1sg.pres. kantoru, 3pl.pres. kantrod, 3sg. or pl.pret. [ka]ntrol).
IE cognates: Lith. tar̃ti, tarýti 'to speak, to say', Gr. тєто $\bar{\eta} \sigma \omega$ 'will say clearly'. PIE *tér- / tr-énti

This verb is used in suppletion with $t \bar{e}_{-}^{z i}$ (q.v.) and denotes 'to speak, to state'. The distribution between the two stems is that strong-stem forms usually show the stem tē- (e.g. tēmi, tēši, tēzzi), whereas weak-stem forms show tar- (tarueni, tarteni, taranzi). This is probably because the expected weak stem of the verb $t \bar{e}-$,, * $t$-, had already early phonetically merged with the weak stem of $d \bar{a}^{-}{ }^{i} / d$ - 'to give'. Note that the only form in which this distribution between $t \bar{e}$ - and tar-does not apply, is 3pl.pret.act. terer, which unambiguously shows that the stem tarbelongs to an original ablauting paradigm ter- ${ }^{z i} /$ tar-. This verb therefore should be cited as ter $_{-}{ }^{z i} /$ tar- and not as tar $_{-}{ }^{z i}$ as one often can find.
Already Petersen (1933: 17) connected ter- / tar- with Lith. tar̃ti, tarýti 'to speak, to say', Gr. єعтор $\eta \sigma \omega$ 'will say clearly', on the basis of which we must reconstruct a root *ter-. Oettinger (1979a: 109) proposes a reconstruction $* d^{h} e r$ "*festhalten > aussagen", which is primarily based on his claim that the spellings with initial DA point to an etymological $* d$ or $* d^{h}$. Apart from the fact that especially in OS texts we often find spellings with the sign TA (e.g. 3x ta-ra-an$z i$ ), a connection between the spelling of the initial stop and the etymological nature of that stop has never been proven.
Note that the verb dāriie/a- ${ }^{z i}$ that usually is translated 'to call upon the gods' and seen as a derivative of ter $_{-}^{z i} /$ tar- in fact seems to have a different meaning and therefore hardly can be cognate. I have treated it under a separate lemma. The fact that ter- ${ }^{z i} /$ tar- and dāriie/a- have to be separated also weakens the connection between the former verb and Luw. tätariia- 'to curse', which not only semantically remains far (unless one assumes a development *'to state with emphasis' (vel sim.) > 'to curse'), but formally is quite different from ter- ${ }^{z i} /$ tar-
as well, also because the single spelling of $-t$-, which points to etymological *- $d^{(h)}$-, does not fit the reconstruction *ter-
The imperfective shows tar-ši(-ik)-ke/a- =/trsìké/á-/ as well as tar-aš-ke/a- = /trské/á-/. The latter form is the phonetically expected outcome of *tr-ské/ó-, whereas according to Kavitskaya (2001: 284) /trsiké/á-/ is analogical after the imperfectives $z i-i k-k e / a$ - /tsiké/á-/ from dai- $/ t i-$ 'to put, to place' and $a z-z i-k e / a-$ /?dsìké/á-/ from $e d^{z}{ }^{z i} / a d-$ 'to eat', which were analysed as showing a suffix /-siké/á-/.

## terauartanna: see tierauartanna

terepp- ${ }^{z}{ }^{i} /$ teripp- (Ia5) 'to plough': 3sg.pres.act. te-ri-ip-zi (VBoT 58 i 30), 3pl.pres.act. te-ri-ip-pa-an-zi (Bo 6250 obv. 8, KUB 31.57 i 11 (fr.)); part. te-ri-ip-pa-an (KUB 18.20 obv. 10); inf.I te-ri-ip-pu-u-ua-an-zi (KUB 31.57 i 14, KBo 6.28 rev. 23 (fr.), KBo 18.82 rev. 5 (fr.)); impf. te-ri-ip-pí-iš-ke/a- (KUB 13.1 iv 24).

Derivatives: ${ }^{\text {A.s.à }}$ tere/ippi- (n.) 'ploughed field' (nom.-acc.sg.(?) te-ri-ip-pí (KUB 33.65 iii 2), abl. te-ri-ip-pí-ia-az (VBoT 24 iii 26), nom.-acc.pl. te-ri-ip-pí (KUB 9.34 iii 16 (MH/NS)) // te-ri-ip-pi ${ }^{\text {HIA }}$ (KUB 9.4 ii 32 (MH/NS)), dat.loc.pl. te-ri-ip-pí-ia-aš (KUB 13.1 iv 2, HKM 54 obv. 6)), A.šà tere/ippiíe/a- ${ }^{z i}$ (Ic1) 'to plough' (3sg.pret.act. te-ri-ip-pi-ia-at (HKM 54, 20 (MH/MS)); part. te-<ri-sip-pí-ia-an (HKM 55 obv. 7 (MH/MS))).
IE cognates: Gr. $\tau \rho \varepsilon ́ \pi \omega$ 'to turn', Lat. trepō 'to turn', Skt. trapate 'is ashamed'.
PIE *trép-ti $/ *$ trp-énti
All forms are spelled te-RI-IP-, which in principle can be read te-ri-ip- as well as te-re-ep-. Convention has it to cite these forms as teripp-, however, although we must bear in mind that terepp- is equally possible. The basic form is the verb tere/ipp- ${ }^{z i}$, from which the noun ${ }^{\text {A.S.À }}$ tere/ippi- 'ploughed field' has been derived. This latter noun was the source of the verb ${ }^{\text {A.ŠÀ }}$ tere/ippiie/ $a-{ }^{z i}$ as is visible from the use of the determinative A.ŠÀ (so, tere/ippiie/a-is not a mere -ie/a-derivative of tere/ipp- ${ }^{z i}$ ).
Hitt. tere/ipp- ${ }^{z i}$ is quite generally connected with Gr. $\tau \rho \varepsilon ́ \pi \omega$ 'to turn', Lat. trepit 'turns' etc. that reflect a root *trep- (cf. e.g. Milewski 1936: 42 and Braun 1936: 391). This would mean that in *trep- an anaptyctic vowel $-e$ - arose between $t$ and $r$, a phenomenon also known from teri- 'three' < *tri-. Some scholars assume that this anaptyctic vowel secondarily received the accent due to which the unaccentuated *-e- weakened to $-i-$, /térip-/, but this is not necessarily the case: if
te-ri-ip- is to be read te-re-ep- an interpretation /terép-/ is equally possible. Moreover, one could argue that the anaptyctic vowel in fact was a phonetic phenomenon of synchronic Hittite (/tr $\left.V^{\text {front } / ~ i s ~ p h o n e t i c a l l y ~ r e a l i z e d ~ a s ~[t e r ~} V^{\text {front }}\right]$ ), which would make way to a phonological interpretation $/$ trépt $^{\mathrm{s}} \mathrm{i} /$.
Usually it is assumed that tere/ipp- is a non-ablauting verb, but see § 2.2.2.1.f for my view that te-ri-ip-zi/te-ri-ip-pa-an-zi in fact stands for /trépt ${ }^{\mathrm{s}} \mathrm{i}$ /, /tripánt ${ }^{\mathrm{s}} \mathrm{i}$ /, the regular outcomes of an ablauting pair *trép-ti/*trp-énti. I therefore cite this verb under the lemma terepp- ${ }^{z i}$ / teripp-.
Morpurgo Davies (1987: 217) suggests that the HLuwian words starting with tara/i-pa- and tara/i-pi- may be cognate to Hitt. tere/ipp- ${ }^{\text {zi }}$, although she admits that the fact that the meaning of these words is unclear makes this a rather preliminary suggestion.
teri- (card.num.) 'three': nom.pl.c. 3-e-eš (KBo 17.58 i 5 (OS), IBoT 1.36 ii 35, iii 13 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 15.31 i 6 (MH/NS)), 3-i-e-eš (KUB 10.55, 12 (undat.)), acc.pl.c. 3-uš (KBo 21.85 i 48 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 9.31 i 11 ( $\mathrm{MH} / \mathrm{NS}$ )), nom.acc.pl.n. 3-e (KUB 9.30 iv 7 (NS), IBoT 1.2 iii 10 (NS), 355/t r. 8 (NS), Bo 2692 v 23 (NS)), gen.pl. te-ri-i $a-a s ̌$ (KUB 43.60 i 9 (OH/NS)), 3-aš (IBoT 2.5 r. 5 (NS)), dat.-loc.pl. 3-ta-aš (1175/u r.col. 7 (NS)), abl.pl. 3-az (KUB 20.78 iii 6 (OH/NS), 617/p, 11 (MH/NS)).
Derivatives: teriỉa- (ord.num.) 'third' (nom.sg.c. te-ri-aš (KBo 16.49 iv 2)), teriialla- 'three-drink(?)' (case? te-ri-i_ia-al-la (KBo 5.1 iv 35) // 3-ía-al-la (Bo 4951, 15)), teriiala- (c.) 'third(?) > mediator(?)' (nom.sg. [t]e-ri-ia-la-aš (KBo $17.1+$ ii 56) ), teriian (adv.) 'at the third time' (te-ri-ia-an-n=a (KBo 20.40 v 8$)$, [te-ri-i] $a-a n-n=a($ KBo 3.18 rev. 7, KBo 27.126, 10) // 3- $n=a($ KBo 3.16 iii 3), 3an (KUB 2.10 iv 33, KBo 9.79, 6, 888/z rev. 8)), *teriiankiš(?) (adv.) 'thrice' (3$k i-s \check{=}=a-a=s ̌-m a-a \check{s}(\mathrm{KBo} 17.1+25.3$ i 3 (OS)), 3-iš (KBo $17.1+25.3$ i 3 (fr.), 4, 5 (OS), StBoT 25.4 iii 45, iv 31 (OS), HT 95, 8, 9 (OS), KBo 17.74 ii 2, 8 (OH/MS?), $3=\check{S} U(\mathrm{OS}))$.
Anat. cognates: CLuw.: see ${ }^{\text {Lútarriianalli- and }}{ }^{\text {TÚG }}$ tarriilanali-; HLuw. t(a)risu (adv.) 'three times' ("3" tara/i-su-u (KARKAMIŠ A6 §19)); Lyc. trisñne 'three year old(??)', trppeme 'threefold(??)'; Mil. trpplẽ '?', trisu 'thrice'.
IE cognates: Skt. tráyas, Av. Orāiiō, Gr. $\tau \rho \varepsilon i ̃, ~ L a t . ~ t r e ̄ s, ~ O I r . ~ t r i ̄, ~ t r i, ~ O N ~ p r i ́ r, ~$ Goth. prins (acc.pl.m.f.), Lith. trys, OCS trbje, TochA tre, TochB trai 'three', Lith. (dial.) trisù (adv) 'the three of them'.

PIE *trei- / *tri-; *tri-io-

See Tischler HEG T: 320f. for attestations. Only once the numeral 'three' is spelled phonetically, namely as gen.sg. teriiiaš. On the basis of this form and derivatives, it is clear that the stem must be teri-. We therefore can assume that the paradigm (all plural forms) must have been nom.c. *teriiēš, acc.c. *teriuš, nom.-acc.n. *terie, gen. teriīaš, dat.-loc. *teriietaš, abl. *teriiedaz.
If we compare the Hitt. stem teri- with its Luwian counterpart tarri- (attested in the noun ${ }^{\text {LÚ }}$ tarriianalli- 'functionary of third rank' (q.v.) and possibly in ${ }^{\text {Túg }}$ tarriianali- 'cloth that has been woven three times (??)' (q.v.)), we have to reconstruct PAnat. *téri- to explain the geminate -rr- in Luwian (Čop's Law). The exact interpretation of PAnat. *téri- is difficult, however. E.g. Eichner (1992: 69) assumes that it must go back to a PIE ablaut variant *téri-. Because all other IE languages show a full grade *trei- only, this is not very likely, however (unless we would assume that *trei- goes back to *tr-ei- (with an *-ei-suffix), which has an ablaut variant *ter-i-: this option cannot be excluded in view of the ordinal numbers Skt. tritíya-, OPr. tīrts 'third' < *tr-ti- and Lith. trẽěías, OCS tretii 'third' $<* t r$-eti-, which show the reality of a root $* \operatorname{tr}$ - without $-i$-). It might be better to compare teri- with the verb terepp $z^{-i}$ 'to plough' (q.v.) which is generally reconstructed as *trep-. Apparently, in terepp- an -e- emerged in the initial cluster $*$ tr-. Although not all initial cluster $* T r$ - show an anaptyctic vowel -e- (e.g. taranzi 'they say' $<*$ tr-énti, tarupp- $<*$ Treup-(?)), we might have to conclude that in $* \operatorname{Tr}^{\text {front }}$ an anaptyctic vowel emerged between $* T$ and $-r$ - in prePAnatolian times already. This anaptyctic vowel then could receive the accent, which yielded, in the case of 'three', PAnat. *téri-, which is the predecessor of Hitt. teri- and CLuw. tarri-. Note that teriia- 'third' $<$ tri-io- differs from tariianzi 'they become weary' (see under tarai- ${ }^{i} /$ tari-) $<* d^{(h)} r$ - - -énti in the sense that - $i$ - apparently did not count as a fronted vowel, whereas $-i$ - did.
The PIE inflection of 'three' probably was nom. *tréi-es, acc. tréi-ms, gen. *triom. This should regularly have yielded Hitt. **terēš, **tereiuš, **terian. I am wondering to what extent it is possible that the OS attestation 3-e-eš in fact still stands for /terēs/ < *treies, with the synchronic stem teri- (out of the oblique cases) being introduced only later on, yielding secondary /teriiēs/, spelled 3-i-eeš.

Note that HLuwian tara/i-su-u 'three times' and Mil. trisu 'thrice' can be directly equated with Skt. loc.pl. triṣú and Lith. trisù 'the three of them < *with three (people)'.
In Lycian we find a stem tri- of which it is not fully clear whether it can reflect PAnat. *teri-. We also find a stem teri- (gen.sg. terihe) of which Melchert (1993a: 70; 2004a: 63, referring to Eichner 1993: 239ff.) states that it may mean
'three'. He therefore translates terihe as 'of a third (person)'. This interpretation seems to be based on etymological considerations only, however, and has the disadvantage that we then would have to assume two different outcomes of PAnat. *teri- in Lycian. I therefore reject this translation.
teripp ${ }^{z i}$ : see terepp- $^{z i} /$ teripp-
teriške/a- ${ }^{z i}$ (Ic6) 'to insult(?)': 3pl.pres.act. te-ri-iš-k[án-zi] (KUB 17.4, 10).
This word is hapax in the following context:

KUB 17.4
(7) ... ú-i-i[(̌̌-ke-u-ua-an-za)]
(8) KÙ.BABBAR-an-za an-da pár-na- $a=\check{s}-$ ša pa-it KÙ.BABBAR-an-za $\operatorname{IN}\left[\mathrm{IM}^{\mathrm{HILA}}\right.$-ar EGIR-p(a an-ni-i=š-ši)]
(9) me-mi-iš-ke-u-ua-an da-a-iš pé-ra-an $a-a \check{s}-k i=z a$ DUMU[( $\left.\left.{ }^{\text {MEš }} k u-e-d a-a \check{s}\right)\right]$
(10) kat-ta-an ḩa-az-zi-ik-ke-nu-un nu=mu te-ri-iš-k[án-zi]
'Silver went to his house crying, and began to speak the words to his mother: "The boys whom I struck down before the gate, they keep on $t$.-ing me"".

Hoffner (1988: 149-51) interprets this form as a variant of taraške/a-, taršike/a-, the imperfective of ter- ${ }^{z i} /$ tar- 'to speak'. This would mean that teriškanzi here meant 'they keep on saying (bad things) to me'. This is possible, but far from ascertained.
tešhala- (c.) 'dream, sleep’ (Sum. Ù): nom.sg. te-eš-ha-aš (KUB 13.4. iii 17 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 30,10 rev. 18 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 33.84, 7 (MH/NS)), ti-eš-ḩa-aš (KUB 15.36 obv. $12(\mathrm{NH})$ ), acc.sg. te-eš-ȟa-an (KUB 4.47 obv. 5 (OH/NS)), abl. $t e-e s ̌-h a-a z$ (KUB 9.22+ iii 30, 35 (MS), KUB 41.29 iii 2 (OH/NS), KUB 14.8 ii 36 (NH), KUB 22.70 obv. 17 (NH)), instr. te-eš-hi-it (KBo 17.65 rev. 18 (MS), ABoT 17 iii 6 (NS), KBo 11.1 obv. 42 (NH), KUB 14.10+ iv 17 (NH)), acc.pl. te$e s ̌-h u-u s ̌$ (KUB 24.9+ ii 23 (OH/NS), KUB 17.1 ii 15, 20 (NS), KUB 4.47 obv. 4 ( $\mathrm{OH} / \mathrm{NS}$ )).

Derivatives: zašhai- / zašhi- 'dream' (acc.sg. za-aš-ha-in (often), dat.-loc.sg. za-aš-hi-ia (often), za-aš-hé-ia (KUB 30.10 obv. 25 (MH/MS)), za-az-hi-i (KBo 4.2 iii 46 (NH), KUB 43.50 obv. 8, IBoT 2.112, 8 (fr.) (NH)), abl. za-aš-hni-ia-za (KUB 43.55 ii 1), za-aš-hi-ia-az, za-aš-hé-az (KUB 24.4+ i 12 (OH/MS)), instr. $z a-a s ̌-h i-i t(K B o 5.1$ i 43), acc.pl. za-aš-hi-mu-uš (KUB 7.5 iv 6)), tešhalli- (adj.)
'sleepy(?)' (acc.sg.c. te-eš-ḩa-al-li-in (KUB 36.35 iv 10)), tešhaniiela- ${ }^{z i}$ (Ic1) 'to appear in a dream' (3sg.pret.midd. te-eš-ha-ni-ia-at-ta-at (KBo 16.52, 9, KUB 21.8 ii 15 (fr.)); impf. te-eš-ha-ni-iš-ke/a- (KUB 16.55 iv 8, KBo 4.2 iii 46), te-eš-ha-ni-eš-ke/a- (KBo 16.98 ii 10)).
Anat. cognates: CLuw.: see duntarriiiašha-.
IE cognates: ON dási 'slow', MHG daesic 'dumb', ON dasa-sk 'to become weary', ModEng. daze.

PIE * $d^{h} e h_{1}-s h_{2} o-$ and $* d^{h} h_{l}-s h_{2} o i-$
Of the word tešha- 'dream, sleep', we find the derivatives tešhaniie/a- ${ }^{z i}$ 'to appear in a dream' and tešhalli- (adj.), if the latter indeed denotes 'sleepy' (its meaning cannot be assuredly determined from the context). The noun zašhai- (zazhai-) 'dream' is clearly related to tešha-. I have cited it as a derivative here, but this is more a matter of convenience: I rather regard zašhai- as an independent formation that made use of the same elements as tešha-. The comparison of tešha- with zašhai- shows that the latter should be interpreted /tsHai-/. If in tešh $a$ - we indeed find the suffix -šha- (as in dammešha- < *demh ${ }_{2}-$ sh $_{2} o ́-$, hamešha- < *h ${ }_{2}$ meh $_{1^{-}}$ $s h_{2} O_{-}$, palzahha- < *plth $h_{2}-$ sh $_{2} O_{-}$) and in zašhai- the same suffix enlarged with -i-, we see that the one form shows a root /te-/ whereas the other has /t-/. This alteration can only be explained by assuming a root structure $* T e h_{1}$.
Čop (1971: 66-70) connected these words with ON dási 'slow', MHG daesic 'dumb' < *dēsa- and ON dasa-sk 'to become weary', ModEng. daze < *dasa-, which he analyzed as $*^{h} \overline{e^{\prime}}$-sHo-, $*^{d^{h}} \partial$-sHo-. Although the formal and semantic side of this comparison look convincing, it cannot be excluded that (some of) these Germanic words are of substratum origin (compare ModDu. duizelen 'to grow dizzy', beduusd 'taken aback', bedeesd 'timid', with a number of vowel alternationes). Oettinger (1979a: 124, without referring to Čop, so perhaps independently) similarly reconstructs $* d^{h}{ }^{\prime} h_{1}-s h_{2} O-$, of which he states that it originally meant "Hineinsetzung" or "Einsagung", which is followed by e.g. Rieken (1999a: $381^{1916}$ ). If correct, then zašhai- must reflect $* d^{h} h_{l}-s h_{2} o i$ - (original paradigm ${ }^{*} C e ́ C-o ̄ i(s), \quad{ }^{*} C C$-i-ós, cf. Weitenberg 1979: 289), showing generalization of the zero grade from the oblique stem.
${ }^{(U Z U)}$ tēta(n)- (n.) 'breast, teat': nom.-acc.sg. te-e-ta-an (FHL 32, $10(\mathrm{OH} / \mathrm{NS})$ ), te-$e-d a-a n\left(K B o \quad 10.9\right.$ rev. ${ }^{?} 8(\mathrm{OH} / \mathrm{NS})$ ), ti-e-ta-a(n)=š-še-it (KBo 14.98 i 16 ( $\mathrm{OH} / \mathrm{NS}$ )), te-ta-an (KUB 35.2 (+) 4 iii 1 (NS)), all.sg. te-e-da (KBo 3.34 i 23 (OS)), abl. te-da-na-az (KUB 35.2 (+) 4 ii 14 (NS)).

Anat. cognates: CLuw. tittan- (n.) 'breast, teat' (nom.-acc.sg. ti-i-ta-an (Hitt. context: HT $6+$ KBo 9.125 i 23), dat.-loc.sg. ti-i-ta-ni), titaimma/i- (adj.) ‘suckling' (nom.sg.c. ti-ta-i-im-me-iš (KBo 2.1 i 40), ti-i-ta-i-me-iš (KBo 2.1 i 33)); Lyc. tideime/i- 'son, child' (nom.sg. tideimi, acc.sg. tideimi, gen.sg. tideimi, dat.sg. tideimi, nom.pl. tideimi, acc.pl. tideimis, gen.pl. tideimẽ, dat.-loc.pl. tideime), tidere/i- 'collacteus' (nom.sg. tideri).
IE cognates: Skt. dháyati ‘sucks’, Latv. dêju 'to suck', Gr. Өŋ́ $\sigma \alpha \tau 0$ 'sucked’.

$$
\text { PIE } * d^{h} e h_{l} i-t o-
$$

The Hittite word shows $a$-stem (all.sg. tēda) as well as $n$-stem forms (abl. tedanaz). Because the $a$-stem form tēda is attested in an OS text, we would normally assume that the $a$-stem inflection is original, but because in CLuwian we find an $n$-stem as well, tītan- (although Melchert 1993b: 228 states that the Luwian $n$-stem must be regarded as secondary because of the verb tit(a) $i$ - to suckle' seen in titaimma/i-), this case may be different. Tischler (HEG) treats several isolated words that he regards as cognate as well. E.g. ti-i-ta-an-ta[-x] (KBo 29.3 i 6) is interpreted by him (HEG T: 384) as "säugend" (taken over by CHD Š: 276), but I do not see any contextual indication for this. In KUB 5.9 i 4, Tischler (HEG T: 392) reads "ti-ti-iš-ša-al-li-in" which he translates as "Säugling, Kleinkind". Again there is no contextual evidence for such a translation. Moreover, the handcopy of the text quite clearly shows that this form
 which cannot be separated from the verbal form \& ti-ša-in-ta in ibid. 5. The verbal form ti-it-ti-iš-ke-ez-zi (KBo 14.98 i 16) is interpreted by Tischler (HEG T: 344) as showing the Luwian verbal stem 'to suckle' on the basis of GÙB-lan teta $(n)=\check{s}$ šet 'her left breast' in the preceding line. Nevertheless, the geminate -ttdoes not fit the single $-t$ - visible in Hitt. tēta(n)- and CLuw. tītan- and titaima/i-, so I would rather interpret this form as belonging with titta- ${ }^{i} /$ titti- 'to install':

KBo 14.98 i
(16) $[\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-h \underline{h}] u^{?}-u n$ GÙB-la-an ti-e-ta-a(n)= =̌̌-še-et
(17) $[\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-] \mathrm{x}$ DUMU.MUNUS ti-it-ti-iš-ke-ez-zi
'[She ...-s] her left breast [and] installs her daughter [to it]'.
The CLuwian adjective titaimma/i- is only attested in the syntagm anniš titaimmeš, which is interpreted by Melchert (1993b: 228) as 'nurturing mother', but which Tischler (HEG T: 344) translates as "Mutter (und) saugendes (Kind)", which is preferable in view of the identical Lycian noun tideime/i- that denotes
'son, child'. Starke (1990: 229) cites the verb underlying tataimma/i- as "*titii-/tataii-", stating that "[a]uf den -ii-Stamm des Verbums weist lyk. tidime $(/ i)$ - neben tideime( $/ i$ )-". Although we indeed find the form tidimi once $(119,3)$, it can in my view not compete against the 124 times that this word is attested with the stem tideim-. Just like we come across one form spelled tidemi $(68,2)$, which is generally emended to tidesi>mi, I think that the unique and aberrant form tidimi should be emended to tideesimi. This means that in Lycian there is no evidence for a verbal stem "titiii-". Tischler (HEG T: 343) cites the verb is *titiia- as well, referring to the form tittiškezzi. As we saw above, this form cannot belong here. All in all, the verb underlying CLuw. titaimma/i- and Lyc. tideime/i- cannot have been *tidiia-, but must have been PLuw. *tidei- or *tidoi-. This is important for the etymology as we will see below. The Lycian noun tidere/i- is translated 'collacteus' in Melchert 2004a: 66, with the remark "[c]ompound of *tide- 'teat' + *are/i- 'companion'".

All in all, we are dealing with a Hitt. noun tēta(n)- 'teat' and a Luw. noun tītanand verb *tide/oi- 'to suckle'. It has been proposed that these words should be compared with e.g. Gr. $\tau i ́ \tau \theta \eta$, Lat. titta 'breast' and regarded as Mediterranean $^{\prime}$ Wanderwörter (see the references in Tischler HEG T: 345), but in my view an etymological connection with the PIE root $* d^{h} e h_{l}(i)$ - 'to suck (milk)' is more likely. As we saw above, some scholars assume a verbal stem *titiia- and therefore reconstruct a reduplicated formation $* d^{h} i-d^{h} h_{1}-i e / o-$ (e.g. Tischler HEG T: 343). Apart from the fact that the -ie/o-suffix cannot explain the Luwian verb, the initial syllable cannot account for Hitt. $t \bar{e}$-.
I would like to propose that Hitt. tēeda- and Luw. tīta- go back to $* d^{h} e ́ h_{1} i-t o-$ 'that what is suckled' (with lenition of $*-t$ - due to the preceding accentuated long vowel), of which a verbal derivative ${ }^{2} d^{h}$ eh $_{l} i$-to-ie/o- yielded PLuw. *tidoii-, the regular preform of CLuw. titai- and Lyc. tidei-.
$\operatorname{teth}^{-}{ }^{\boldsymbol{a}}:$ see tith- ${ }^{a}$
-tti (2sg.pres.act.-ending of the hi-conjugation): e.g. a-ak-ti 'you die' (OS), a-ut-ti 'you see' (OS), da-a-at-ti 'you take' (OS).
Anat. cognates: CLuw. -ttiš (in $a z-z a-a \check{s}-t i-i s ̌$ 'you eat' and ú-ut-ti-iš 'you drink')?

$$
\text { PIE } *-t h_{2} e+-i
$$

Originally, -tti is the 2sg.pres.act.-ending of the hi-conjugation, but from MH times onwards it is used in the $m i$-conjugation as well. First in stems that end in
-š- or another consonant (e.g hapti 'you join' (MH/MS) (from happ- ${ }^{z i}$ )), and later on also in stems ending in a vowel (e.g. [ar]nutti (NH)). Just as the older hiendings 1 sg.pres.act. -hhe is replaced by -hhi and 3sg.pres.act. -e by $-i$ (probably on the basis of $-i$ as found in the $m i$-conjugation endings $-m i,-s ̌ i,-z i$ ), it is likely that $-t t i$ is a secondary form that replaced older $*$-tte. Such an ending is not attested itself, however (note that 2 sg.pres.act. ua-ar-〈ri->iš-ša-at-te 'you help' (KUB 23.1 ii 35 ) is from the time of Tuthaliia IV and therefore probably shows the NH mixing up of the signs TE and TI (cf. Melchert 1984a: 137) instead of an archaic ending -tte).
This ending -tti (or better: *-tte) is generally connected with the PIE 2sg.perf.-
 $*_{-t} h_{2} e$ regularly yielded Pre-Hitt. *-tta, which was enlarged by ${ }^{*}-i$ ('presentic' $-i$ ), which regularly yielded *-tte. This *-tte eventually was replaced by -tti in analogy to the $-i$ as found in the $m i$-conjugation.
$=\boldsymbol{t t i} \mathbf{-} /=\boldsymbol{t t a} \boldsymbol{a}-/=\boldsymbol{t t e}$ - (encl.poss.pron. 2sg.) 'your (sg.)': nom.sg.c. $C=t i-i s ̌$ ( $\mathrm{OH} / \mathrm{MS}$ ), $C=t e-e s ̌(\mathrm{OH} / \mathrm{NS})$, acc.sg.c. $C=d a-a n(\mathrm{KUB} 29.1$ i 16 (OH/NS), KUB 57.63 ii 21, 22 (NS)), $C=t i-i n(N H)$, nom.-acc.sg.n. ut-ne- $e=t[e-e t]$ (KBo 25.122 iii 2 (OS)), $C=t e-e t(\mathrm{OH} / \mathrm{NS}), C=t i-i t(\mathrm{OH} / \mathrm{NS})$, gen.sg. $C=t a-a \check{s}$, dat.-loc.sg. $V=t-t i(\mathrm{KUB}$ 1.16 iii 30, 31 ( $\mathrm{OH} / \mathrm{NS}$ ), VBoT 1, 9 (MH/MS), kat-ti-i=t-ti (KUB 20.7, 13 $(\mathrm{OH} / \mathrm{NS})$, KUB $9.27+$ KUB 7.8 i $52(\mathrm{MH} / \mathrm{NS})), V=t i(k a t-t i=t i(\mathrm{MH} / \mathrm{MS}$, often), $k u-u s ̌-s ̌ a-n i=t i(K B o 1.42$ i $24(\mathrm{NH}))$ ), $V=d-d i(\mathrm{KUB} 29.1$ ii $25(\mathrm{OH} / \mathrm{NS}))$, all.sg. $V=t a\left(\mathrm{KUB} 1.16\right.$ iii 72 ( $\mathrm{OH} / \mathrm{NS}$ )), abl.-instr. ${ }^{\circ} a z=t i-i t(\mathrm{OH} / \mathrm{NS}),{ }^{\circ} a z=t e$-et $(\mathrm{OH} / \mathrm{MS})$, nom.pl.c. $C=t e-e s ̌(\mathrm{OH} / \mathrm{NS}), C=t i-i \check{s}(\mathrm{OH} / \mathrm{NS})$, acc.pl.c. $C=t u-u \check{s}(\mathrm{OS})$, dat.-loc.pl. $C=t a-a \check{s}(\mathrm{MH} / \mathrm{NS})$.
PIE *-ti-, *-to-, *-te-

The original paradigm of this possessive pronoun seems to be nom.sg.c. $=t t i s$, acc.sg.c. $=t t a n$, nom.-acc.sg.n. $=t t e t$, gen.sg. $=t t a s ̌$, dat.-loc.sg. $=t t i$, all.sg. $=t t a$, abl.-instr $=t t i t$, nom.pl.c. $=t t e s ̌$, acc.pl.c. $=t t u s ̌$, dat.-loc.pl. $=t t a s ̌$. For the original distinction between nom.-acc.sg.n. $=$ ttet and abl.-instr. $=t t i t$ see Melchert 1984a: 122-6. This means that we are dealing with an ablauting stem $=t t i-/=t t a-/=t t e-$. This vocalization can hardly reflect anything else than PIE $*_{-i-}$, *-o- and $*_{-e-}$, but an exact explanation for the distribution of these vowels is still lacking (cf. also $=m i-/=m a-/=m e-\quad$ my', =šši- / =šša- / =šše = 'his, her, its', =šummi- / =šumma- / =šumme- 'our' and =šmi- / =šma- / =šme- 'your (pl.); their'). Whether this particle originally had -tt- or $-t$ - is rather obscure: we find $V=t[e t]$ (utne $\bar{e}=t[e t])$ in an OS text, and both $V=t i(k a t t i=t i)$ and $V=t t i(p i p p i=t t i)$ in MS
texts. Despite the OS attestation of single $-t$ - (but after a long accentuated vowel!), I assume that this stem originally had $-t t$-, just as its enclitic pronoun counterpart $=t t a /=t t u$ '(to) you'.
It is clear that this possessive belongs with $z \bar{l} k / t u$ - 'you (sg.)' $<* t i h_{l}, t u$ - and the enclitic pronoun $=t t a /=t t u$ '(to) you'. Direct comparison to e.g. Gr. tróc, Lat. tuus, Lith. tãvas (dial.) 'your' < *teuo- and Skt. tvá-, Av. $\theta \beta a-$, Gr. oóc 'your' < *tuo- is improbable as there is no trace of $-u$ - in Hittite. So I assume that $=t t i-/$ $=t t a-/=t t e-$ is not derived from the oblique stem *teu- 'you', but rather from the unextended root $* t$-, which is still visible in nom.sg. ${ }^{t}$-ih $h_{l}$ besides obl. ${ }^{t} t$-(e) $u$ (see under $z \bar{l} k / t u$-).
tierauartanna (adv.) 'for three rounds': ti-e-ra-ua-ar-ta-an-na (KBo 3.2 obv. 65), ti-e-ru-ur-ta-an-na (KBo 3.2 lower edge 2), ti-e-ru-u-ur-ta-an-na (KBo 3.5+ iii 17), ti-e-ra-u-ur-ta-an! (KBo 3.5+ ii 37), ti-e<-rar-ua-ar-ta-an-na (KUB 1.11+ iv 35).

This word occurs in the Kikkuli-text only (cf. Kammenhuber 1961a). It is spelled in various ways: we find tierauartanna, tieraürtan as well as tierurtanna. It is remarkable that all forms are spelled with ti-e-, which must stand for /tie-/ (compare the difference between ti-e-ez-zi /tiét' $\mathrm{i} /$ 'stands' and te-e-ez-zi /tét ${ }^{\mathrm{j}} \mathrm{i}$ / 'states'). Nevertheless, this word is generally cited as terauartanna. The variation between -uartanna and -urtanna is remarkable as well, just as between tier- and tiera-. So it seems that these spellings stand for $/ \operatorname{tier}(\mathrm{a}) \mathrm{u}(\partial)$ rtanna/. The word is generally seen as an adaptation of Indic *tri-uartana- 'three-round', just as aikauartanna 'for one round' (*Haika- 'one'), panzauartanna 'for five rounds' (*panća- 'five’), šattaúartanna 'for seven rounds’ (*sapta- 'seven’) and nauartanna 'for nine rounds' (*naua- 'nine'). The exact development of *tri- to $\operatorname{tier}(a)$ - is unclear to me, however.
${ }^{\text {GIŠ }}$ tiiieššar / tiiuešn- (n.) 'forest(?)' (Sum. ${ }^{\text {GIŠTIR-šar (?)): nom.-acc.sg. ti-i-e-eš-šar }}$ (KUB 33.66 iii 5, KUB 31.100 rev. ${ }^{?} 16$, KUB 13.28, 6, KUB 57.30, 9, 15), dat.loc.sg. ti-i-e-eš-ni (706/v, 5), GIŠTIR-ni (KUB 17.10 iv 12), all.sg. ${ }^{\text {GIŠ TIR-na }}$ (KUB 29.1 i 52), dat.-loc.pl. ${ }^{\text {GIŠ }}$ TIR $^{\text {HI.A }}-n a-a \check{s}$ (KUB 20.10 iii 12).

PIE * $d^{h} h_{1}-i-e ́ h_{l} s h_{1}-r$ ?
See Tischler HEG T: 354 for an overview of the attestations of this word. The phonetically spelled attestations of this word are found in broken contexts only, on the basis of which its meaning cannot be independently determined.

Nevertheless, the consistent use of the determinative GIŠ 'wood' indicates that the word has something to do with wood. On the basis of the fact that tiīéěšar / tiieš̌n- is the only word ending in -šar / -šn- that is found with the determinative GIŠ, it has been argued that we should equate it with the sumerogram ${ }^{\text {GIŠTIR }}$ 'forest' that is sometimes phonetically complemented with -šar / -šn- (nom.acc.sg. GIŠTIR-šar (KBo 1.53, 2), dat.-loc.sg. GIŠTIR-ni (KUB 17.10 iv 12)). Although circumstantial, this reasoning has gained many support and ${ }^{\text {GIŠ }}$ tiiéēššar is quite commonly translated 'forest'.
Formally, tiiiēššar looks like a deverbative in -ēššar of dai- ${ }^{i}$ /ti- 'to put, to place' (see hukeššar 'slaughtering' from huek- ${ }^{z i}$ / huk- 'to slaughter' for the fact
 may be

KUB 33.66 iii
(5) ${ }^{\text {GIš }}$ ti-i-e-eš-šar da-iš $n=a[-\ldots]$
(6) $n=a$-aš ${ }^{\mathrm{URU}} L i-i h-z i-n a-a z a-a p-p a[p a-i t ?]$
'He placed(?) the forest and he[...] and he [came(?)] back from the city Liḩzina'.

Although it is quite unclear what ${ }^{\text {GIš }}$ tiiiēěšar dai- means, we perhaps are allowed to interpret this syntagm as a figura etymologica. If correct, it would mean that tiilēššar reflects *d ${ }^{h} h_{1}-i-e ́ h_{l} s h_{1}-r$.
tiije/a- ${ }^{z i}$ (Ic1 > Ic2) 'to step, to go stand, to place oneself, to set in': 1 sg.pres.act. $t i-$ ía-mi (MH/MS), 2sg.pres.act. ti-ía-ši (NH), 3sg.pres.act. ti-ez-zi (OS), ti-e-ez-zi (OS), ti-i-ez-zi (OS), ti-i-e-ez-zi (OS), ti-i-ia-zi (NH), ti-i-i-ia-az-zi (NH), ti-ia-iz-zi (NH), 1pl.pres.act. ti-ia-u-e-ni (NH), 2pl.pres.act. ti-ia-at-te-ni, [ti-ia-]at-ti-ni (KUB 19.49 iv 33), 3pl.pres.act. ti-an-zi (often OS), ti-en-zi (often OS), ti-i-en-zi (1x, OS), ti-i-in-zi (1x, OS), ti-ía-an-zi (1x OS, often NH), 1sg.pret.act. ti-ina-nuun (MH), ti-i-i-ia-nu-un (NH), 2sg.pret.act. ti-i_ia-at, ti-i-i-ia-at, 3sg.pret.act. ti-i-e-et (OS), ti-e-et, ti-ia-at (NH), ti-i-i-ia-at, 1pl.pret.act. ti-i_ia-u-en (NH), 2pl.pret.act. ti-ía-at-tén (NH), 3pl.pret.act. ti-e-er (NH), ti-i-er (NH), ti-i-e-er (NH), ti-i-ía-er, 2sg.imp.act. ti-ia (MH/MS), ti-i-i_ia (NH), 3sg.imp.act. ti-ia-ad-du (MH/MS), 2pl.imp.act. ti-i-ia-at-tén (MH/MS), 3pl.imp.act. ti-ia-an-du (NH); 3sg.pres.midd. $t i-i=-[(r i)]$ (KUB $30.11+$ KUB 31.135 obv. 8 (MH/MS) with addition after KUB $36.75+$ i 42 (NH)); part. ti-an-t-, ti-i-ia-an-t-, ti-in-t- (IBoT 1.36 ii 48); verb.noun $t i-i$
inf.II ti-i_ia-an-na (KUB 22.70 rev. 63, KBo 5.6 iv 8); impf. $t i-i s ̌-k e / a$-, ti-eš-ke/a-, ti-iš-ši-ke/a- (KBo 3.34 iii 4).

Derivatives: tiiatar / tiiaiann- (n.) '?’ (dat.-loc.sg. ti-ía-an-ni (KBo 13.261, 6)).
Anat. cognates: CLuw. t $\overline{\boldsymbol{a}}-$ 'to come to stand' (3sg.pres.act. ta-a-i, 3sg.pret.act. $t a-a t-t a$, $d a-a-a d-d a$, 2pl.pres.midd. da-a-ad-du-ua-ar); HLuw. ta- 'to come to stand' (3sg.pres.act. /tai/ ${ }^{\text {CRUS }}$ ta-i (BOROWSKI 1 §1), ta-i (SULTANHAN §39, HİSARCIK 1 §3), CRUS-i (often), /taia/ ta-ia (KARATEPE $1 \S 48$ Hu.), CRUS$i a$ (CEKKE §22, KARATEPE $1 \S 48$ Ho.), 3sg.pret.act. CRUS-ta (IZGIN 1-2 §3), "CRUS"-ta (EĞRİKÖY §3), 3pl.pret.act. CRUS-ta (KARKAMIŠ A5a §5), 3sg./pl.imp.act. "CRUS" ta-tú (GELB §5), 3pl.imp.act. "CRUS"-tu (KULULU 2 $\S 6)$ ); verb.noun dat.-loc.sg.? CRUS-wa/i+ra/i? (KARKAMIŠ A5a §9)), tanu- 'to set up, to erect, to establish' (1sg.pres.act. "CRUS" $t a-n u$-wa/i-wa/i-i (KARKAMIŠ A6 §19), 1sg.pret.act. ta-nu-wa/i-ha (SULTANHAN §2, §10), ta-nu-wa/i-ha-' (KULULU §1, §5), CRUS-nu-wa/i-ha (KARKAMIŠ A1a §23, §26, §27), "CRUS"-nu-wa/i-ha (MARAŞ 14 §4), CRUS-nu-ha (QAL’AT EL MUDIQ §3, KARKAMIŠ A31 §4), CRUS-nu-ha-á (RESTAN §3), 3pl.pret.act. CRUS-nu-wa/i-ta (KULULU 3 §6), CRUS-nu-ta (TİLSEVET §5), gerund CRUS-nú-wa/i$m i-i-n a$ (SULTANHAN §3)), taza- 'to stand (impf.)' (3sg.imp.act. "CRUS<"> $t a-z a-$ $t u$ (KARATEPE 1 §74)).

PIE * (s) th $h_{2}$-ie/o-
This verb inflects according to the -ie/a-class and is in the OH period formally clearly distinct from the verb dai- ${ }^{i} / t i-$ 'to place, to put' (q.v.), except in 3pl.pres.act. tianzi (although the secondary form ti(i)enzi only occurs in the paradigm of tiie $/ a-{ }^{z i}$ ). In younger times, the verb dai-/ti- secondarily gets thematicized and starts to formally fall together with the verb tiie/a- ${ }^{z i}$ more and more.
From the beginning of Hittite studies it has been in debate whether tiie/a- ${ }^{z i}$ should go back to the PIE root * $d^{h} e h_{l^{-}}$'to put' or *steh $h^{-}$'to stand'. The former root would be possible in view of the meaning 'to place oneself' and the NH merger of tiie/a- ${ }^{z i}$ with $d a i^{-}{ }^{i} / t i-$, which clearly must reflect $* d^{h} e h_{1}$-. An etymological connection with ${ }^{*}$ steh $_{2}$ - would much better fit the meaning 'to step, to go stand', however, which cannot easily be derived from an original meaning 'to put, to place'. Moreover, Morpurgo Davies (1987) has shown that the Luwian languages possess a verb $t \bar{a}$ - that means 'to come to stand' and that is used in similar contexts as Hitt. tiie/a-. Because Luw. tā- quite obviously must reflect *(s)teh $2^{-}$(note that *(s)tó $h_{2}$-ei regularly should have given Luw. **tāhi, but probably has lost its - $h$ - in analogy to all other forms of the paradigm where $* h_{2}$ is
dropped in preconsonantal position, yielding attested $t \bar{a} i)$, which would mean that tiie/a_- ${ }^{z i}$ ultimately goes back to $*(s) t_{2}$-ie/o- (for the $s$-mobile, compare e.g. TochAB $t \bar{a} k$ - 'to be (subj. and pret.)' < *(s)teh $2_{2}$-). Of course, it cannot be denied that all NH forms that show the secondary stem tiie/a- ${ }_{-}{ }^{i}$ instead of the original $h i$ inflected stem dai- ${ }^{i} / t i$ - in principle reflect a virtual $* d^{h} h_{1-i}$ ie/o-, but this form never existed as such in pre-Hittite times.
tiie/a- ${ }^{z i}$ (Ic1) 'to bind(?)': 2sg.imp.act. ti-ía (KBo 3.40+ rev.' 13, 14, 15).
Derivatives: tiiamar / tiiaman- (n.) 'cord, string' (nom.-acc.sg. ti-ia-mar (KBo 17.23 obv. ${ }^{?} 6$ (OS), KUB 17.28 iv 50 (MH/NS)), ti-ía-am-mar (KUB 39.71 iv 17 (NS)), instr. ti-ia-am-ma-an-da (KUB 9.28 iii 15 (MH/NS), ti-ia-am-ma-an-ta (KBo 19.132 rev. ${ }^{?} 5$ (MH/NS))).
IE cognates: Gr. $\delta \dot{\varepsilon} \omega, \delta i \delta \eta \mu u$ 'to bind', Skt. $d \bar{a}-,{ }^{\circ}$ dyati 'to bind'.

$$
\text { PIE * } d h_{1}-\dot{C} e ́ / o ́-
$$

The interpretation of the 2 sg .imp.act.-form tiia found in the Soldier's Song in the Puhanu-Chronicle is quite unclear:

> KBo 3.40+ rev.!
(13) $n u-u=z-z a ~ i s ̌-[h] a-m a-i-i \check{s}-k e-e z-z i i^{\mathrm{URU}} N e-s ̌\left[a-a s^{\text {KI }} \mathrm{TÚ}^{\mathrm{H}}\right]^{\mathrm{IA}} \mathrm{URU}_{N e-s ̌ a-a s^{\text {KI }}}$

TÚ $\mathrm{G}^{\mathrm{HI} . \mathrm{A}} \mathrm{ti-i-a}-a=m-m u t i-i a$
(14) nu-u=m-mu an-na-aš=ma-as̆ kat-ta ar-nu-ut ti-ia[-a=m-mut]i-ia $n u-u=m-m u$
$u$-ua-ač=ma-aš kat-ta ar-nu-ut
(15) $[t]-i-\underset{a}{a}-a=m-m u[t] i-i a$
'He begins to sing: "The clothes of Neša, the clothes of Neša, $t$. me, $t$. ! Bring me down my mother's, $t$. me, $t .!$ Bring me down my nurse's', $t$. me, $t$ !!".

Formally, tiia seems to belong with tiie/a-i 'to step, to go stand' (q.v.), but this does not give a sound translation: tiie/a- 'to step' is not transitive, which would mean that in the first line ${ }^{\text {URU }}$ Nešaš $\mathrm{TUG}^{\mathrm{HI} . \mathrm{A}}$ cannot be the object of tiia, but rather has to be the subject. But if ${ }^{\text {URU }}$ Nešaš TÚ $G^{\text {H.A.A }}$ is subject, the number is wrong: ${ }^{\text {URU }}$ Nešaš TÚG ${ }^{\text {HI.A }}$ is plural, whereas tiia is singular. Moreover, a translation 'clothes of Neša, step towards me, step!' is at least not very probable.
Often, tiia has been interpreted as belonging with $d a i^{-} / t i-$ 'to put, to place' and a translation 'the clothes of Neša, put (them) on me, put!' has been given. Although semantically better, the formal side of this interpretation is improbable. The 2 sg.imp.act. of dai-/ti- is always dai, and never tiia.

Melchert (1983: $14^{30}$ ) therefore rather suggests a connection with the element tiiia- as found in tiizamar 'cord, string', which would mean that tiia means 'bind': "the clothes of Neša, bind (them) on me, bind!". This noun tiiamar was connected by Eichner (1974: 57) with Gr. $\delta \varepsilon ́ \omega, \delta i ́ \delta \eta \mu \mathrm{t}$ 'to bind’, Skt. dā- 'to bind' < *deh $h_{l^{-}}$, which implies a reconstruction $* d h_{l}-$-ié $e ́ o ́-$.
titta- $^{\boldsymbol{i}} /$ titti- (IIa5) 'to install, to assign': 3sg.pres.act.(?) ti-it-ta-i (KBo 19.162 iv 12), 3pl.pres.act. ti-it-ti-i-ia-an-z[i] (KUB 36.114, 22), [t]i-it-ti-i-ia-an-z[i] (KUB 15.11 ii 31); part. $t i-i t-t i-a n-t-(\mathrm{OS})$, $t i-i t-t i-i a-a n-t-$; impf.3sg.pres.act. $t i-i t-t i-i s ̌-$ $k e-e z-z i$ (KBo 14.98 i 16).

PIE * $d^{h} i-d^{h} h_{1}$-oi-ei, $* d^{h} i-d^{h} h_{1}-i$-enti
This verb is predominantly attested with its participle, tittiiiant- 'put in, installed'. For its meaning, compare KBo 6.3 ii (37) ták-ku LÚ GIš [(TUKUL ḩar-)]ak-zi LÚ IL-KI ti-it-ti-i̇a-an-za nu LÚ IL-KI te-ez-zi ... 'If a man who has TUKULobligations disappears, (and) a man who has $I L K U$-obligations is assigned (in his place), and the man owing $I L K U$-services declares ...' (transl. CHD Š: 3). Finite forms of this verb are rarely attested. We only find 3pl.pres.act. tittiianzi in the broken contexts KUB 36.114, 22 and KUB 15.11 ii 31, on the basis of which its meaning cannot be assured, and a possible 3sg.pres.act. in KBo 19.162 iv (11) ma-a-an [...] (12) GIŠ-ru ti-it-ta-i 'when [...] he installs' the wood'. If this latter form indeed belongs here, it shows that the verb does not show a stem tittiie/a-, as is often cited, but must either belong to the dāi/tiianzi-class (tittai- ${ }^{i}$ / titti-) or to the méma/i-class (titta- ${ }^{i} /$ titti-). As I argued at the treatment of the méma/i-class in § 2.2.2.2.h, the verbs of this class derive from original dāi/tiiianzi-class verbs with a polysyllabic stem. I therefore assume that this verb belongs to the mema/iclass as well and cite it as titta $^{-}{ }^{i} /$ titti- .

Semantically, titta-/titti- 'to install, to assign' clearly belongs with dai- ${ }^{i} / t i-$ 'to place, to put'. Also formally, this connection goes well, especially now we know that titta-/titti- originally goes back to *tittai- ${ }^{i} /$ tittti-. I therefore assume that it $^{2}$ virtually reflects a reduplicated stem $* d^{h} i-d^{h} h_{1}-o i-/ * d^{h} i-d^{h} h_{1}-i-$. See at $d a i{ }^{-} / t i-$ for further etymology.
In KUB 59.47 rev.' iii 10, a 3pl.pres.act. ti-it-ti-ia-an-zi is attested, but this form is duplicated by hu-it-ti-ia-an-zi 'they pull' in KUB 7.46 iv 7 . This means that $t i-$ $i t-t i-i a-a n-z i$ must be a scribal error (omission of the right vertical wedge of the
 an-zi. Note that Tischler (HEG T: 391) is incorrect in stating that "[w]egen der Gleichsetzung mit huittiya- 'ziehen' [...] wird man auch tittiya- als transitives

Bewegunsverb [...] auffassen": there was no equation between these verbs: we are merely dealing with a scribal error.
tittanu- ${ }^{z i}$ : see titnu- $^{z i}$
tith- $^{a}$ (IIIe > IIa1 $\gamma$ ) 'to thunder': 3sg.pres.midd. ti-it-ha (KBo 17.11 i 9 (OS), KUB 34.123+ i 1, 28 ( $\mathrm{OH} / \mathrm{NS}$ )), te-e-et-ha (KUB 32.135 i 3, $10(\mathrm{OH} / \mathrm{MS})$ ); 3sg.pres.act. te-et-ha-i (often, e.g. KUB 25.23 i 8 (NH), KBo 22.222 iii 9 (NH)), te-et-ha-a-i (e.g. KUB 43.73, 4 (NH)), 3sg.pret.act. te-et-ha-aš (KUB 43.55 v 13 (NH), te-et-hi-et (KUB 19.14, $11(\mathrm{NH})$ ); verb.noun gen.sg. te-e-et-hu-u-ua-š=a (KUB 32.135 i 8 (OH/MS)), te-et-hu-u-ua-aš (KUB 22.27 iv 25 (NS)); sup. te-et-hu-u-ua-an (KBo 42.6 obv. ${ }^{?} 11$ (NS)); impf. ti-it-hi-iš-ke/a- (KUB 17.10 ii 34 ( $\mathrm{OH} / \mathrm{MS}$ )), te-et-hi-iš-ke/a- (KBo 10.17 iv $10(\mathrm{NH})$ ), te-et-hi-eš-ke/a- (KBo 31.83 ii 3 (NS), KUB 33.106 i 7 (NS), VBoT 73 iv $2(\mathrm{NS})$ ).
Derivatives: tetheššar / tethešn- (n.) 'thunder' (Sum. BÚN; nom.-acc.sg. te-et-he-eš[-šar] (KUB 19.14, 14), gen.sg. te-et-hé-eš-na-aš (KBo 40.60 ii 22), [(te-eth) ]é-e[(š-na-aš)] (KBo 17.11+ iv 36 (OS)), te-et-hé-eš-na-a[̌̌] (KUB 34.123+ iv 43), [te]-et-hé-eš-na-aš (KBo 40.60 ii 19), te-et-he-eš-na-aš (KUB 5.7 i 12), te-et-hुi-iš-na-aš (KUB 6.46 ii 14), te-et-he-eš-ša-na-aš (KBo 4.11 l.edge), erg.sg. te-et-he-eš-na-an-za (KUB 33.106 i 8), te-et-ȟe-eš-na-za (KUB 33.106 iv 21)), tethima- (c.) 'thunder' (nom.sg. te-et-hi-ma-aš (KUB 7.13 obv. 18), acc.sg. te-et-hi-ma-an (KUB 17.35 ii 12), acc.pl. [t]e-et-hi-ma-aš (KUB 6.45 iii 11), [te-et]-hुi$m u-u s ̌$ (KUB 33.103 iii 3), [t]e-et-hi-im-mu-uš (KUB 28.5+ iii 6), nom.-acc.pl.n. te-et-hi-ma (KBo 17.85, 6)).

The oldest attestations of this verb are spelled $t i-i t-h^{\circ}$ ( OS and $\mathrm{OH} / \mathrm{MS}$ ), whereas we find te-e-et- $h^{\circ}$ in an OH/MS text, and te-et- $h^{\circ}$ in NS texts. This must be due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before a cluster containing $-\underline{-}$ - as described in $\S$ 1.4.8.1.d. Often, this verb is cited as tetha- (e.g. Tischler HEG T: 347) or even tethai- (HW: 222), but this is incorrect. In the oldest texts (OS and MS), we find middle forms only (3sg.pres.midd. titha and tetha), in which $-a$ is the ending, and not part of the stem. Only in NH times, the verb was taken over into the active, and was brought into the $\operatorname{tarn}(a)$-class, showing a stem tetha- ${ }^{i} /$ teth-. Once, we find a form that seems to show a stem tethiie/a- ${ }^{z i}$ (3sg.pret.act. te-et-hi-et).
From an Indo-European point of view, a stem tith- is difficult to explain, expecially because of the cluster -th-, since we know that $* \mathrm{Ch}_{2} V>$ Hitt. $C V$ (e.g. *plth $h_{2}$-eno- > paltana-). The only way to explain the cluster -th- is by assuming that it was secondarily restored, but this means that we should find a scenario by
which the $-h$ - could be restored. If from IE origin, tith- could hardly reflect anything else than a reduplicated form $* T i-T_{2 / 3^{-}}$, but because of the reduplication, we would expect that the root $*-T h_{2 / 3}$ - shows zero-grade throughout the paradigm. Moreover, the only possible corresponding full-grade stem would be $* T i-T e h_{23^{-}}$, in which the laryngeal would regularly drop as well. This means that there is no scenario by which the laryngeal could have been analogically restored and that we either have to think of a foreign or of onomatopoetic origin (cf. Eg. tḥn 'thunder').
Some scholars have proposed an etymological connection with Lat. tonāre 'to thunder', Skt. stan ${ }^{i}$ - 'to thunder' $<*(s)$ tenh $2^{-}$, but these are formally uncompelling. For instance, Oettinger (1979a: 514) unconvincingly reconstructs *te-tñ $h_{2}$-o- $t>$ *tetah(h) at $>$ tethat, "mit ungewöhnliche Synkope".
tittiie/a-: see titta- $^{-}$/ titti-
titnu- $^{{ }^{j}}$ (Ib2) 'to install, to seat, to put': 1sg.pres.act. ti-it-ta-nu-mi (MH/MS, often), ti-it-ta-nu-um-mì (KUB 16.31 iv 18 (cf. Van den Hout 1995: 266)), 3sg.pres.act. ti-it-ta-nu-uz-zi, ti-it-ta-nu-zi, 1pl.pres.act. ti-it[(-nu-um-me-e-ni)] (KUB $12.50+$ KUB 17.27 ii 9) // [(ti-it-)]nu'-um-me-e-ni (KUB 58.74 obv. 9)), 2pl.pres.act. ti-it-ta-nu-ut-te-ni (KUB 31.105, 13 (MH/MS)), 3pl.pres.act. [ti-i]t-ta-nu-an-zi (HHT 75 (Bo 4767), 5 (OS?)), ti-it-ta-nu-an-zi (MH/MS, often), ti-it-ta-nu-ua-an-zi (KUB 29.44+ iii 36, KUB 59.17 obv. 18, KBo 13.161 iii 9), ti-it-nu-an-zi (KBo 19.150 obv. 5 (OH/NS)), ti-it-nu-ua-an-zi (KUB 55.38 ii 3 (NS)) 1sg.pret.act. ti-it-ta-nu-nu-un (often), ti-it-nu-nu-un (KUB 19.27 obv. 4 (NH)), 3sg.pret.act. ti-it-ta-nu-ut (MH/MS, often), ti-it-nu-ut (KUB 30.10 ii 7 (OH/MS), KBo 32.14 lower edge 70 (MH/MS), KUB 14.1+ rev. 40, 43 (MH/MS)), 1pl.pret.act ti-it-ta-nu-um-me-en (KUB 17.18 iii 5, KUB 60.161 ii 8), 3pl.pret.act. ti-it-ta-nu-e-er (HKM 52 rev. 37 (MH/MS), KUB 13.3 iii 34 (OH/NS)), ti-it-ta-nu-er (KBo 18.49 rev. 10, KBo 16.10, 6), 3sg.imp.act. ti-it-ta-nu-ud-du (Bronzetafel ii 93), 2pl.imp.act. ti-it-ta-nu-ut-te-en (KUB 23.77 rev. 63 (MH/MS), KUB 23.68 rev. 26 (MH/NS)), ti-it-ta-nu-ut-tén (HKM 65 obv. 9 (MH/MS)), 3pl.imp.act. ti-it-ta-nu-an-du, ti-it-ta-nu-ua-an-du; part. ti-it-ta-nu-ua-an-t-; verb.noun ti-it-ta-nu-mar (KUB 16.31 iv 19); inf.I ti-it-ta-nu-ma-an-zi (KBo 5.9 ii 36, KBo 19.66 i 37); impf. ti-it-ta-nu-uš-ke/a- (MH/MS), ti-it-nu-uš-ke/a- (KUB 14.1+ rev. 33 (MH/MS), HKM 47 obv. 11 (MH/MS)).

PIE * $d^{h} i-d^{h} h_{l}$-neu-

Although this verb is predominantly spelled $t i-i t-t a-n u-$, we find spellings with $t i-$ $i t-n u$ - as well (from $\mathrm{OH} / \mathrm{MS}$ onwards), which point to a phonological interpretation /titnu-/. Semantically, the verb clearly belongs with dai- ${ }^{i} / \mathrm{ti}$ - 'to
 $d^{h} h_{1}-n e u$-. If titnu- is a direct derivative of titta- $^{i} /$ titti-, it would show that the suffix $-n u$ - in principle uses the unextended stem (in this case without the suffix *-oi-). See at $d a i-{ }^{i} / t i$ - for further etymology.
tu-: see $z \bar{l} k / t u$ -
-ttu (3sg.imp.act.-ending of the mi-flection)
Anat. cognates: Pal. -du (a-aš-du 'he must be'); CLuw. -ddu / -du (e.g. a-ri-ía$a d-d u$ 'he must raise', $i-d u$ 'he must go'); HLuw. -tu (e.g. pi-ia-tu 'he must give, pa-tu 'he must go'); Lyc. -tu (qasttu 'he must destroy', tuwetu 'he must place').

This ending originally belongs to the $m i$-inflecion only and contrasts with the corresponding hi-ending -u (q.v.). From the late MH period onwards, we see that $-t t u$ is used with hi-verbs as well, especially when the stem ends in a consonant (e.g. $a k-d u$ instead of original $a-k u$ 'he must die', ha-aš-du instead of original ha-$a-s ̌ u$ 'she must give birth', ha-az-za-du instead of original ha-a-du 'he must become parched', etc.). The fact that in verbs ending in a vowel the ending is always spelled with geminate $-t t$ - or $-d d$ - points to a phonological form /-tu/. It is remarkable that in OS texts, the ending is consistently spelled with the sign TU (e.g. e-ě̌-tu), in MH/MS texts we find spellings with TU as well as DU (compare e.g. e-eš-du (KUB 14.1+ obv. 20, rev. 14) with e-eš-tu (ibid. obv. 29, 31)) and in NH texts we only find spellings with DU.
This ending is also found in the other Anatolian languages. Note that in CLuwian, we find two variants, namely $-d d u$ besides lenited $-d u$, e.g. in $i-d u$ 'he must go' $<{ }^{*} h_{l} e ́ i-t u$. This means that in Hittite we are dealing with generalization of the unlenited variant, as is the case with all verbal endings in Hittite.

Etymologically, the ending /-tu/ can be compared directly with the Sanskrit 3sg.pres.imp.-ending -tu. Compare especially cases like Hitt. e-eš-tu ~ Pal. $a$-aš$d u \sim$ CLuw. $a-a s ̌-d u \sim$ HLuw. á-sa-tu ~ Skt. ástu < PIE *h $h_{l}$ s-tu 'he must be’ and Hitt. e-ez-du $\sim$ Skt. attu $<{ }^{*} h_{1}$ éd-tu 'he must eat'.
$=\boldsymbol{t t u}$ (encl. pers.pron.) 'you': see $=t t a /=t t u$
tuekk- / tukk-, tuekka- (c./n.) 'body, person, self; (pl.) body parts, limbs' (Sum. NÍ.TE): nom.sg.c. NÍ.TE-aš (KBo 1.42 iv 31 (NS)), acc.sg.c. tu-ek-ka-a(n)=m-ma-an (KUB 30.10 obv. 14 (OH/MS)), nom.-acc.sg.n. tu'-e-kán (KBo 1.51 rev. 11 (NS)), gen.sg. tu-ug-ga-aš (KUB 30.10 obv. 9 (OH/MS)), dat.-loc.sg. tu-e-ek-ki (KBo 39.8 iii 7 (MH/MS), KUB 29.7 + KBo 21.41 ii 24, 38, 48 (MH/MS), KBo 5.2 i 8 (MH/NS), KUB 7.5 iv 3 (MH/NS), KUB 17.2+ i 15 (NS)), tu-ek-ki (KUB 33.66 ii 16 (OH/MS), KUB 7.5 iv 19 (MH/NS), KUB $30.31+32.114$ i 19 (NS)), erg.sg. tu-ek-kán-za (KBo 6.2 ii 54 (OS)), abl. [tu-ug? $-g] a-a z=(\check{s})$-mi-it (StBoT 25.7 iv 7 (OS)), tu-ug-ga-az (KUB 17.10 iii 10 (OH/MS), KBo 26.132, 3 ( $\mathrm{OH} / \mathrm{NS}$ )), tu-ug-ga-za-a=š-ši-it (KBo 13.99 iii 13 (NS)), tu-e-eg-ga-az (KBo 32.14 ii 1 (MH/MS), KUB 43.34, 11 (NS)), du-eg-ga-az (KBo 34.62 rev. 12 (MS)), tu-eg-ga-az (KUB 24.9 i 47 (OH/NS)), nom.pl. [tu-]e[-e]k-ke-e-eš (KBo $15.10+$ i 17 ( $\mathrm{OH} / \mathrm{MS}$ )), tu-ek-ke-eš (KUB 34.91 i 8 (NS)), tu-e-eg-ga-aš (VBoT 58 i 24 ( $\mathrm{OH} / \mathrm{NS}$ )), acc.pl. tu-e-ek-ku-uš (KBo 24.1 i 17 (MH/MS), KUB 14.1+ obv. 82 (MH/MS), KUB 35.61 1.col. 4 (NS)), tu-ek-ku-uš (KBo 39.8 iv 18 (MH/MS), KUB 36.55 ii 22 (MH/MS), KUB 7.55 i 7 (NS)), tu-i-ik-ku-uš (KUB 7.1 i 40 ( $\mathrm{OH} / \mathrm{NS}$ )), gen.pl. tu-u-eg-ga-aš (KUB 15.32 i 1 (MH/NS)), dat.-loc.pl. tu-e-eg-ga-aš (KBo 17.65 iv 44, 47 (MH?/MS), KUB 15.34 ii 28 (MH/MS)), tu-e-eg-ga-(š)=ša-ma-aš (KBo 32.19 iii 48 (MH/MS)), tu-e-ek-ka ${ }_{4}$-aš (KUB $7.53+$ 12.58 i 56 (NS)), tu-eg-ga-aš (KBo 39.8 i 48, ii 6, 28, 36 (MH/MS)), tu-ek-ka $a_{4}$-aš (KUB 13.20 i 30 (MH/NS)), tu-ú-i-ig-ga-aš (KUB 7.1 i 31 ( $\mathrm{OH} / \mathrm{NS}$ )).

Anat. cognates: Lyc. tukedri- 'statue' (acc.sg. tukedri, acc.pl. tukedris).
IE cognates: Skt. tvác- (f.) ‘skin’.
PIE *tuék, *tuék-m, *tuk-ós
When used in the singular, this word denotes 'body', but also 'self' (<*'one's body'). When used in the plural, it denotes 'body parts, limbs'. It sometimes is duplicated by the sumerogram NÍ.TE, e.g. tu-u-eg-ga-aš (KUB 15.32 i 1) // NÍ.TE ${ }^{\text {MEŠ }}$-aš (KUB 15.31 i 1). The spelling tu-IG- in principle is ambiguous, since the sign IG can be read $i k$ as well as $e k$. On the basis of the many spellings $t u$-e-IG-, I assume that $t u$-IG- has to be interpreted /tuek-/. A spelling with plene $-i$ - is found twice on one NS tablet only ( $t u-i-i k$ - and $t u-\dot{u}-i-i k$-), and therefore can be disregarded.
We find neuter as well as commune forms. In KBo 1.51 rev. 11, Akk. [ RA-MA-] $N U$ 'self' is glossed by Hitt. tu-e-kán, which can only be a neuter nom.acc.sg. This neuter form may correspond to the occasional neuter adjectives used with NÍ.TE (e.g. NÍ.TE=ŠU hu-u-ma-an (KUB 7.16 v 14 )) and is supported by the OS attestation of erg.sg. tuekkanza, which is only necessary with a neuter
word. On the other hand, acc.sg. tu-ek-ka-a(n)=m-ma-an (in an OH/MS text) must be regarded as commune (if it were neuter, we would expect **tuekkan=mit). Also in the plural, we find many commune forms (nom.pl.c. tuekkēš, acc.pl.c. tuekkuš, from $\mathrm{OH} / \mathrm{MS}$ texts onwards), but also sometimes neuter forms (NÍ.TE hu-u-ma-an-da (KUB $7.53+12.58$ iii 2), NÍ.TE ${ }^{\text {MEŠ }}$ hu-u-ma-an-da (KUB 55.66 iv 4)).
The forms that show tukk- (gen.sg. tuggaš (OH/MS) and abl. tuggaz (OH/MS)) indicate that this word originally showed ablaut. Such an ablaut is unexpected in a normal $o$-stem word, however.
The questions regarding gender and ablaut can be solved by looking at the word's etymology. Already since Petersen (1933: 18), it is generally connected with Skt. tvác- (f.) 'skin'. In Sanskrit, this word is a root noun (nom.sg. tvák, acc.sg. tvácam, gen.sg. tvacás, dat.-loc.sg. tvací), which, together with the ablaut found in Hittite, must reflect the PIE situation. I therefore reconstruct nom.sg. *tuék, acc.sg. tuék-m, gen.sg. *tuk-ós. Note that the reconstruction of the nom.form without $*_{-s}$ is necessary to explain the Hittite confusion about the gender. Because of the absence of the ending $*-s$, this word was occasionally reinterpreted as neuter in Hittite, with the acc.sg. *tuék-m >> *tuék-om (replacement of acc.sg.-ending *-m by thematic ${ }^{*}$-om) $>$ tuekkan being used as its nom.-acc.sg. (cf. a similar confusion in the case of keššar 'hand' < nom.sg.f. $*^{\prime} g^{h} \operatorname{esr}$ (q.v.)). Later on, on the basis of the commune forms in the plural and of the thematic acc.sg. tuekkan, a new commune nominative tuekkaš was created (attested as NÍ.TE-aš).

A verbal use of the root *tuek-, which must have meant 'physical appearance' or similar, is visible in Hitt. tukk-äri 'to be visible' (q.v.) as well.
tuel, tuedaz: see $z \bar{l} k / t u$ -
$\boldsymbol{t u h h a e -}{ }^{z i}$ (Ic2) 'to produce smoke': 3sg.pres.act.(?) túh-ha-a-iz-zi (KUB 17.17, 7 (MH/NS)), 2sg.pret.act. túh-ḩa-a-it (KUB 33.118, 17 (NS)), 3sg.pret.act. túh-ḩa-a-it (KUB 33.118, 12, 14 (fr.) (NS)); 3sg.pres.midd. túh-ḩa-it-ta (KUB 7.41 i 10), 3pl.pret.midd. túh-ḩa-an-da-at (KBo 10.24 iii 12), túh-ḩa-an-t[a-at] (KBo 10.5 iii 2); impf. [tú]h-hi-eš-ke/a- (KUB 33.118, 11 (NS)).

Derivatives: tuhhima- (c.) 'smoke' (acc.sg. túh-hi-ma-an (KUB 33.118, 12, 17, 20)), tuhhiiatt- 'smoking out(?)' (instr. tu-uh-hi-i्रa-at-ti-it (KBo $7.14+$ KUB 36.100 i 6 (OS)).

IE cognates: Gr. Өv́ $\omega$ 'to offer', Lat. suffiō 'to smoke', ORuss. duti 'to blow', TochAB $t u$ - 'to light'.

PIE * $d^{h} u h_{2}$-o-ielo-
The verb tuhhae- ${ }^{z i}$ is consistently written with the sign TAH, which can be read túh as well as tah. On the basis of tu-uh-hi-ia-at-ti-it (KBo $7.14+$ KUB 36.100 i 6 (OS)), it has been assumed that we should read tuhhae-, but it must be remarked that the connection between the words tuhhae- and tuhhiiatt- in principle has not been proven yet. The verb is mainly found in one text, viz.

KUB 33.118
(8) $n u-u=\check{s}-s ̌ a-a n$ UD.KAM ${ }^{\mathrm{HI} . \mathrm{A}}-u s ̌$ [pa-a-er? ...]
(9) [nu? IT]U $1^{\mathrm{KAM}} p a-i t$ ITU $2^{\mathrm{KAM}} t i-i a-a\left[t \mathrm{ITU} 3^{\mathrm{KAM}}\right.$ ITU $\left.4^{\mathrm{KAM}}\right]$
(10) [ITU] $5^{\text {KAM }}$ ITU $6^{\text {KAM }}$ ITU $7^{\text {KAM }}$ ITU $8^{\text {KAM }} t i-i a-\left[a t ~ n u{ }^{\text {HUR.SAG }} U a_{a}-a-s \check{s} i-i t-t a-a s ̌\right]$
(11) [tú]h-hi-eš-ke-u-una-an ti-in $[a-a t]$
(12) [ $\left.{ }^{\mathrm{HUR} . \mathrm{S}}\right]^{\mathrm{AG}} U a_{a}-a$-ši-it-ta-aš túh-ha-a-it [tú] h-hi-ma-an- $\mathrm{x}-\mathrm{x}-\mathrm{x}[.$.

(14) [tú] h-ha-a-it nu-u=š-ši HUR.SAG ${ }^{\text {MEŠ }}$ hu-u-ma-an-te-eš ú-una-an-na
(15) [p] $a-a$-er ${ }^{\text {HUR.SAG }} U a_{a}-a$-ši-it-ta $\operatorname{HUUR} . \mathrm{SAG}^{\text {MEŠ }}$ hu-u-ma-an-te-eš
(16) [me-]mi-iš-ke-u-una-an da-a-er ${ }^{\text {HUR.SAG }}{ }^{U} a_{a}$-ši-it-ta $\left[k u u^{?}-\right] u\left[a-a t=u a^{?}\right]$
(17) [tú]ȟ-ha-a-it DUMU-an-na-za=una=za túh-hi-ma-an Ú-UL ša-ak-ti
(18) $U$ Ú-UL $=a n=t a ́=k$-kán ${ }^{\mathrm{d} G u l-a s ̌-s ̌ e-e s ̌ ~ g u l-a s ̌-s ̌ e-e r ~} U ́-U L=m=a n=[t a ́]=k-k[a ́ n]$
(19) [AM]A-ač še-er ha-aš-ta ${ }^{\text {HUR.SAG }} U a_{a}-a-s \check{s} i-i t-t a-a \check{s} d[a-p] i$-aš HUUR.SAG ${ }^{\text {MEšs }}[-a \check{s}]$
(20) [EG]IR-pa me-mi-iš-ke-u-ua-an da-a-iš DUMU-an-n[ $a-z] a=u a-a=z ~ t u ́ h-h i-m a-a n$
(21) Ú-UL I-DE Ú-UL=an=mu=kán ${ }^{\mathrm{d}}$ Gul-aš-še-eš gul-aš-še-er
(22) $U$ Ú-UL=m=a-an=mu-u=š-s̆a-an AMA=IA še-er h ha- $a$ - $a \check{\text { š-t }} \mathbf{t}$
'The days [went by ...]. The first month went by and the second month set in. The third month, the fourth month, the fifth month, the sixth month, the seventh month and the eighth month s[et in and Mount Ūāšitta] began to tuhheške/a-. Mount Uā̃itta tuhhae-ed. Kumarbi heard the tuhhima- in the [city ${ }^{?}$ ]. Mount Uāšitta tuhhae-ed, and all the mountains went to see. All the mountains began to say to Mount Uāšitta: "Mount Uāšitta, [w]h[y] did you tuhhae-? From your childhood onwards you did not know tuhhima-. The Fate-goddesses did not decree it for you and your mother did not give birth to it for you". And Mount Uāšitta began to reply to all the mountains: "From my childhood onwards I did not know it. The Fate-goddesses did not decree it for me, and my mother did not give birth to it for me".

Otten (KUB 33: iii) calls this text "Erzählung vom Kreißen des Berges Vāšittas", and Friedrich (1947: 293) states that "da das Verbum tuhhāi- am Ende der Aufzählung steht, muss es das Ende des Schwangerschafts bezeichnen und "kreissen, in die Wehen kommen" bedeuten" (this translation also in HW: 226). It should be noted, however, that in Hittite texts the period of pregnancy is always ten months, so that the eigth months' period mentioned here cannot have to do with being pregnant. Laroche (1956: 75) connects tuhhae- with the hapax noun tuhhiiatt- and translates the latter as 'étouffement' (KBo 7.14 + KUB 36.100 i 6: nu tu-uh-hi-ica-at-ti-it a-ak-ti 'you will die of $t$.'). He also cites KUB 24.7 i (26) nu É-er túh̆[-hi-ma-az-z]a (27) píd-du-li-ía-az-za e-eš-ša-an-zi '(les servants) soignent la maison dans l'étou[fement] et l'angoisse' (cf. CHD P: 366: 'and they do the house-work with gr[oanin]g and anguish'), but it should be noted that this addition is far from assured (I will therefore leave this context out of consideration). Laroche's translations have been taken over by Friedrich in his HW Erg. 1: 21 as 'keuchen, Atemnot haben'. Also Oettinger (2001: 463) translates tuhhima- as 'Keuchen, Atemnot' and even cites a form tuhtuhhima- in KBo 27.32, (3) túh-túh-hi-mi-eš=t[e-eš] (note that Oettinger's interpretation of the context is incorrect: (3) [...] túh-túh-hi-mi-eš-t[e-eš ...] (4) [...]x $n u=u a-r=a-a n$ $i \check{s}-d a_{x}-m[a-a \check{s}-\ldots]$ is translated by Oettinger as "(3) deine tuhtuhhima (Pl.)[ (4)... hört[(e)(n)] ihn[ ", but the enclitic personal pronoun $=a n$ in line 5 cannot refer to the plural form tuhtuhhimeš, as =an is sg. only). Perhaps tuhtuhhima- belongs with tuhtuhhiie/a- ${ }^{z i}$ (q.v.).
In my view, the translations as given above are not really convincing. I would rather propose a different interpretation. In the first context cited above (KUB $33.118,11 \mathrm{f}$.), the interpretation of the noun tuhhima- depends on the verb ištamašta (KUB 33.118, 13). If ištamašta really means 'heard' here, then tuhhima- must denote something that can be heard. If ištamašta meant 'heard of', however, then tuhhima- could mean something else as well. In my view, it is almost impossible not to connect tuhhae- ${ }^{z i}$ and tuhhima- with some vulcanic activity like smoking, spitting lava or similar: this is much more likely than assuming that mountains were crying or coughing.
The possible derivative tuhhiiatt- is hapax in the following context:
KBo 7.14 i
(3) [
(4)

(6) [ ]x-iš-ke-mi nu tu-uh-hi-ía-at-ti-it a-ak-ti
'You must go [...] and speak to the man of Hašši: "I will go [...], come to meet me. But if you will not come, I will keep on [...]-ing you like a bear (acc.) and you will die of tuhhiiatt-"".

The idea of this comparison is that if the man of Hašši does not come to the speaker, but stays inside his city, the speaker will perform an action on him that is also used for bears that do not come out of their holes but stay inside. In my view, the verb in the lacuna therefore probably meant something like 'to smoke out'. For tuhhiiatt-, this means that it probably denotes something related to this smoking out: 'suffication because of smoke', 'smoke-intoxication' or perhaps more simply 'the act of smoking out'. I therefore would propose to translate: 'But if you will not come, I will keep on [smoking] you [out] like a bear and you will die of (this) smoking out'.
Another interesting context is:
KUB 7.41 i
(9) nu ki-iš-ša-an me-ma-i ták-na-a-aš ${ }^{\mathrm{d}} \mathrm{UTU}-i k i-i u\left[t^{?}\right.$-tar ${ }^{?}$...]
(10) da-aš-ke-u-ua-ni ki-i É-er ku-ua-at túh-ha-it-t[a ...]
(11) ša-ra-a ne-pí-ši ku-una-at ša-ku-eš-ke-ez-[zi]
'He said thus: "O Sun-goddess of the Earth, we keep taking [...] this m[atter'].
Why does this house tuhhae-? Why does it(?) continually look up to heaven?".
CHD Š: 55 translates tuhhaitt $[a]$ as 'gasps', but I do not see any positive clues for it. A translation 'smokes' is equally possible.
So, all in all, I am not satisfied with the translations 'to cry' or 'to cough, to be breathless', but would rather interpret tuhhae- as 'to smoke'. This makes the etymological connection with PIE * $d^{h} u e h_{2}$ - 'to smoke', which was uttered already by Oettinger (1979a: 373) with the assumption that the root $* d^{h} u e h_{2}$ - originally meant "hauchen", semantically much more understandable.
Since tuhhae- ${ }^{z i}$ belongs to the hatrae-class, we have to derive it from a noun *tuhha-, which must go back to an $o$-stem noun $* d^{h} u h_{2}-O$ - (a verbal derivative of a noun $* d^{h}(e ́) u h_{2}$-eh $2^{-}$(thus in Oettinger (l.c.), followed by Rieken 1999a: 108) should have yielded a tāie/a-class verb).
The noun tuhhima- shows the suffix -ima- (so $* d^{h} u h_{2}-i-m o-$ ), on which see Oettinger 2001. Although tempting, it cannot be directly equated with PIE * ${ }^{h} u h_{2}-m o-$ in Skt. dhūmá-, Lat. fūmus, Lith. dúmai, etc. 'smoke'. For another descendant of the root * $d^{h} u^{-} h_{2}$, see antuuahhaš- / antuhš-.
tuhhara- (c.) '?’: Luw. nom.pl. túḩ-ha-ra-an-zi, Luw. acc.pl. tứh-ha-ra-an-za. PIE * $d^{h} u h_{2}$-ero-?

This noun occurs a few times only and is clearly Luwian, as we can see by its Luwian endings. It is spelled with the sign TAH, which can be read tah as well as túh. Tradition has it to cite tahhara-, but that seems to be an arbitrary choice. The contexts in which it occurs are the following:

KUB 35.143 ii
(10) $[n=a-a s ̌-t] a$ an-da túh-ha-r[(a-an-zi)]
(11) $[(m a-a l-u)] a-r a-a n-z i[(u ́-r a-) a n-t a]$
//
KUB 35.145 ii
(2) $[n=a-a s ̌-t(a$ an-da túh-ha-r)]a-an-zi ma-al-ua-ra-an-zi ú-ra[-an-ta]
'The $t .-\mathrm{s}$ and $m$.-s are burning';
KUB 17.15 ii
(8) $[(n=a-a s ̌-t a ~ a n-d)] a$ túh-h $a-r a-a n-z i$
(9) $[($ ma-al-ua-ra-an-)z]i ki-iš-ta-nu-nu-un
'I have extinguished the $t$.-s and $m$.-s'.
Since the taluhhara-'s are clearly things that are being burned, we may ask ourselves whether there could be a connection with PIE * $d^{h} u e h_{2}$ - 'to smoke'. If so, then we should read tuhhara-. See also tuhhae- ${ }^{z i}$.
tuhbs $\breve{-}^{\text {afi }}$ (IIIc $>$ Ib1, IIa1 $\gamma$ ) '(trans.) to cut off, to separate; (intr.) to be cut off, to be separated': 3sg.pres.midd. tu-uh-ša (KBo 25.73 1.col. 7 (OS), KBo 30.158, 8 (OH?/MS), KBo 30.174, 20 (NS)), túh-ša (KBo 30.29, 4 (OS)), túh-uh-ša (KBo 25.36 ii 7 (OS), KBo 30.77 iii 15 (OH/NS), KUB 20.59 i 17 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 20.99 ii 3 ( $\mathrm{OH} / \mathrm{NS}$ ), VSNF 12.12 i 7 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 4.9 ii 22, 31 (NS), KBo 39.86 v 13 (NS), KUB 59.27 ii 7 (NS)), tu-uh-ša-ri (KUB 29.29 obv. 4, 5 (OS)), tûh-ša-ri (VSNF 12.10 iv 21 ( $\mathrm{OH} / \mathrm{MS}$ )), túh $h-u h-s ̌ a-r i ~(K B o ~ 39.8 ~ i i ~ 10(M H / M S)), ~$ túh-ša-a-ri (KUB 55.28 iii 10 (fr.), 11 (MH/NS)), 3pl.pres.midd. tu-uh-ša-an-ta (KBo 6.3 ii 10 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pret.midd. túh-hu-uš-ta-at (KBo 39.8 i 41 (MH/MS)), túh-hu-uš-ta-ti (KBo 20.82 i 14 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.imp.midd. túh-uḩ-ša$r u$ (KBo 39.8 ii 13 (MH/MS)), tûh-ša-ru (Bo 3097 obv. 6 (NS)); 3sg.pres.act. túh-
$u h-h u-u s ̌-z i(K U B 32.113$ ii 15 (OH/MS)), túh-hu-uš-zi (KBo 4.2 i 29, 36, 38 (NH)), túḩ-ša-i (KUB 15.42 iii 18, 31 (NS)), túh-h $u$-ša-a-i (KUB 28.105 i 7 (NS)), 3pl.pres.act. túh-ša-an-zi (KUB 17.10 i 39 ( OH/MS), KBo 6.5 iii 5 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 6.3 iii 13 ( $\mathrm{OH} / \mathrm{NS}$ )), túḩ-uh-ša-an-z[i] (KBo 13.155, 7 (NS)), túh-hu-iš-ša[-an-zi] (KBo 6.5 iii 9 (OH/NS)), 3sg.pret.act. túh-še-it (KBo 18.151 rev. 8 (OH/MS)), 1pl.pret.act. tưh-šu-me-en (KBo 15.10 ii 26 ( $\mathrm{OH} / \mathrm{MS}$ )), 2pl.imp.act. túh-ša-at-t[én] (HKM 34, 9 (MH/MS)), 3pl.imp.act. túh-uh-ša-an-du (KBo 39.8 i 41 (MH/MS)), túh-ša-an-du (HKM 31 obv. 11 (MH/MS)); part. túh-hu-uš-ša-an-te-eš (KUB 8.1 iii 2 ( $\mathrm{OH} / \mathrm{NS}$ )), túḩ-ša-an-t- (KBo 15.10 ii 27, iii 9, 19 (fr.) ( $\mathrm{OH} / \mathrm{MS}$ )), túh-uh-ša-an-t- (KBo 39.8 i 48 (MH/MS), KBo 9.114, 12 (MS)); verb.noun. gen.sg. túh-šu-u-ûa-aš (KUB 38.12 i 23 (NS)); inf.I túh -ḩu-šu-an-zi (KBo 6.2 iii 21 (OS)), [tú] ḩ-šu-una-an-zi (HKM 37 obv. 14 (MH/MS)), túh̆-šu-u-ua-an-zi (KBo 6.3 iii 24 (OH/NS)), túh-šu-ưa-a[n-zi] (KBo 6.6 i 30 (OH/NS)); inf.II túh-ša-an-na (KUB 9.28 ii 3 (MH/NS)); impf. [túh]-uh-ḩi-eš-ke/a- (KUB $44.8+58.22$ i $15(\mathrm{OH} / \mathrm{NS})$ ).

Derivatives: tuhšanna- ${ }^{i}$ / tuhšanni- (IIa5) 'id. (impf.)' (3sg.pres.act. túh-ša-an$n a-i$ (KBo 15.10 ii 24, KUB 29.24, 5), túh-ša-an-na[-a]-i (KBo 15.10 iii 10), 3pl.imp.act. túh-ša-an-ni-i $a-a n-d u$ (KBo 20.73 iv 11), [tú] $h-s ̌ a-a n-n i-a n-d u$ (KUB 35.146 iii 11); 3sg.pret.midd. túh-uh-ša-an-na-at-ta (KBo 9.114 iii 12)).

See Neu 1968: 175f. for an overview of attestations and a semantic treatment. Note that he does not distinguish between tuȟ̌s-a(ri) 'to cut, to separate' and tuhhhuš- ${ }^{z i}$ 'to end' (q.v.).

The verb is spelled in quite a few different ways, of which we find the variants $t u-u h-s^{\circ}, t u ́ h-s^{\circ}, t u ́ h-u h-s^{\circ}$ and túh-hu-šo in OS texts already, to which túh-hu-ušand even túh-uh-hu-uš- can be added from MS texts. The forms with túh-uh-šo are often transliterated $t u h^{u l h}-s^{\circ}$ as if the sign UH does not have a function here. In my view, the sign UH just indicates that we are dealing with a geminate -hh-, in the same way as it is expressed in the spelling túh-hu-uš-. The attestation of NS túh-hu-iš- indicates that we probably are dealing with a stem /tuH ${ }^{\mathrm{w}} \mathrm{s}$-/ that in NH times occasionally was realized as [tuH ${ }^{\mathrm{w}} \mathrm{is}$-].

Originally, this verb probably was middle only (in contrast to the homophonic tuhhušz- ${ }^{z i}$ 'to end), but from MH times onwards it was taken over into the active as well.
Despite the fact that I have treated $t u h h u s_{-}{ }^{z i}$ 'to end' under a separate lemma, it is clear that both verbs must derive from a same origin (for the semantics compare ModEng. cut out 'to stop').

Sturtevant (1928c: 161) compared Gr. $\delta \varepsilon ́ \omega$, Hom. $\delta \varepsilon$ ví $\omega$ 'to lack, to miss', but this is semantically as well as formally improbable (*deuh ${ }_{2} s$ - would have given Gr. ${ }^{* *} \delta \varepsilon(F) \dot{\alpha}(\omega)$. If this verb is of IE origin, it would reflect $* T e u h_{2} s$ - (but note that a final cluster $-u h_{2} s$ - is against PIE root constraints, so perhaps an $s$-extenstion *Teuh $2_{2}$-s-?) or $*$ Tueh $_{2} s$ - (with generalization of zero-grade). Unfortunately, I know of no convincing cognates.

The inner-Hittite connection with tuhhueššar 'sponge(?)' (q.v.) is based on the many contexts where we find tuhhueššar tuȟ̌s- 'to cut the sponge', but this probably is coincidental: semantically, a connection between 'to cut, to separate' and 'sponge' is difficult to explain.
$\boldsymbol{t u h s ̌}$ - $^{z i}$ 'to end': see tuhhušz- ${ }^{z i}$

## tuhšalau

The word túh-ša-la-u (HKM 34 obv. 9) cited by Alp (1991: 180, 320: 'Ernte(?)') and Tischler (HEG T: 414), does not exist: we should rather read

tuhtuhhiiela- ${ }^{z i}$ (Ic1) 'to brandish(?)': 3pl.pres.act. túh-túh-hi-ía-an-zi (KUB 30.36 iii 14).

PIE * $d^{h}$ euh $h_{2}$ ??
The verb is hapax in KUB 30.36 iii (13) ${ }^{\text {GIŠ }}$ TUKUL= $i a-a=s ̌-m a-a \check{s}{ }^{\text {KUš }} A-R I-T U M$ (14) EGIR-an túh-túh-ḩi-įa-an-zi nu te-ez-zi i-it-tén i-it-tén $\mathrm{UH}_{7}$-uš $\mathrm{UN}^{\mathrm{MES}}$-uš 'They $t$. against them the weapon behind a shield, and he says "Go, go, you bewitched people!"'. Note that in principle this form can be read tah-tah-hi-ia-an$z i$ as well. Tischler HEG T: 414 translates "schwingen(?)", but this is just a possibility. Perhaps the hapax túh-túh-hi-mi-eš (or tah-tah-hi-mi-eš) in KBo 27.32, 3 (see also at tuhhae- ${ }^{z i}$ ), of which the meaning is unclear, belongs to this verb. If "schwingen" is a correct translation, we could think of a connection with PIE * dheuH- "rasch hin- und herbewegen, schütteln" (cf. LIV ${ }^{2}$ : Skt. dhav ${ }^{i}$ - 'to shake', ON dýja 'to shake', Gr. $\theta \mathrm{v} \varepsilon \dot{\varepsilon} \omega$ 'to storm, to move fast'). The -hh- in Hittite then would point to $* h_{2}: * d^{h} e u h_{2}$ -
tuhhuēššar / tuhhuešn- (n.) 'sponge(?)': nom.-acc.sg. túh-ḩu-eš-šar (OS), túh-hu-e-eš-šar, tưh-hu-i-šar (OS), túh-hu-u-e-eš-šar, túh-ḩu-u-eš-šar, abl. túh-hu-iš$n a-a z$, instr. túh̆-h̆u-eš-ni-it, túh̆-hu-i-iš-ni-it (1x).

$$
\operatorname{PIE} * d^{h} u h_{2}-u-e ́ h_{l} s h_{1}-r
$$

This word is always spelled with the sign TAH, which can be read túh as well as tah̆ (so tahhueššar is equally possible). Tradition has it to cite this word as tuhhueššar, however, probably on the basis of the obsolete etymological connection with tuh̆š- (e.g. Kronasser 1966: 104, who wrongly translated tuḩ̌s- as "sich kultisch reinigen"). The exact meaning of tuhhuēššar is not fully clear. On the basis of a formal similarity with tuhhuuai- / tuhhui- 'smoke', it is often translated 'incense' (e.g. CHD P: 92), but this is not self-evident from the contexts in which this word occurs:

KUB 20.99 ii
(6) ${ }^{\text {LU}}$ MUHALDIM túh $h-h u-i-i s ̌-n i-i t{ }^{\mathrm{NA}_{4} h u-u-u-s ̌ i-i} a$ EGIR-pa
(7) šu-up-pí-ah-hi
'The cook cleans at the huuaši-stone with a $t$. ';
KUB 41.40 i
(18) [UGULA ${ }^{\text {L }}$ ] ${ }^{\text {ÚMEŠ MUHALDIM GAL-it ua-a-tar har-z }[i]}$
(19) [ $t] a$ A-NA QA-TI LUGAL ua-a-tar pa-ra-a
(20) $[t] u ́ h-h u^{-h} u$ š-ni-it $3=S ̌ U ~ l a-h u-u-u a-a-i$
'The Head of the cooks holds water in a cup, and he pours water over the hand of the king three times with a $t$.' (note that Tischler HEG T: 415 explains this sentence thus: "der König hält also $t$. in der Hand, und der Chefkoch gießt ihm Wasser darüber");

KUB 20.59 i

(12) h har=zi nu-u=š-ša-an ua-a-tar
(13) la-a-hu-u-ua-an $a n-d a=m a=k a ́ n$
(14) túh-hu-eš-šar ki-it-ta
'The Head of the cooks holds an empty cup. Water is poured into it, and a $t$. is placed in it';

KBo 4.13 ii
(7) UGULA ${ }^{\text {LÚ.MEŠ MUHALDIM túh-ḩu-eš-šar LUGAL-i pa-ra-a e-ep-zi }}$ LUGAL-uš=kán túh-uh-ša
'The Head of the cooks holds the $t$. out in front of the king. The king cuts off (from it)';

VSNF 12.10 iv
(16) [GAL $\left.{ }^{\text {L }}\right]^{\text {U.MEŠ }}$ MUHALDIM iš-ta-na-ni pa-ra-a túḩ-ḩu-eš-ni-it
(17) [š] $u$-up-pí-ia-ah-h $i$ GAL ${ }^{\text {LÚ.MEŠ }}$ MUHALDIM túh-hu-i-šar
(18) $[A-N] A$ LUGAL-i pa-ra-a e-ep-zi LUGAL-uš=kán

pa-ra-a
(20) [e-]ep-zi nu-u=š-ša-an túh-hu-iš-na-az'
(21) $[k u]$-it túh̆-ša-ri $n=a-a t \mathrm{x}-\mathrm{x}$ kat-ta da-a-i
'The Head of the cooks cleans in front of the altar with a $t$. The Head of the cooks holds the $t$. out in front of the king. The king cuts (it). The Head of the cooks [...] and holds (it) out in front of the king. And he lays down what he cuts off of the $t .^{\prime}$;

KUB 24.14 i
(5) nu túh-ḩu-e-eš-šar $\check{S} A \mathrm{UZ}_{6} p a-a n-k u r{ }^{\mathrm{NA}_{4}}$ IM.BABBAR
(6) kal-uis-iš-na-an ${ }^{\text {SAR }}$ ta-pal-ku-uš-ta-na-an ${ }^{\mathrm{SAR}}$
(7) ha-ah-ḩa-ši-it-ti-in ${ }^{\text {SAR }}$ e-u-ua-an ${ }^{\text {GIŠ }}$ ha-aš-du-e-er
(8) ku-e-el im-ma GIŠ-ru-ưa-aš ḩa-ah-ȟal-la-aš a-li-il
(9) nu ki-i ḩu-u-ma-an A-NA ZÍD.DA ŠE iš-ni me-na-ah-ḩa-an-da im-mi-ía-mi
'And (I take) tuhhuēššar, the udder of a nanny goat, gypsum, kaluisisna-herb, tapalkuštana-herb, hahhhašitti-herb, barley, brush-wood, (and) the blossom of whatever tree or bush, and all this I mix together with the barley meal dough'.

On the basis of these contexts, we see that tuhhueššar is used for cleaning, is especially associated with cooks, can be cut, can be used to pour water with and is used in purification substances. I therefore want to suggest that it denotes a sponge. Etymologically, a connection with tuhhuuai- 'smoke' is possible if we assume that sponges were named after the fact that they seem to contain air (note that the root $* d^{h} u^{\prime} h_{2}$ - from which tuhhuuai- is derived can mean both 'smoke' and 'breath').
tuhhui-: see tuhhuuai- / tuhhui-
$\boldsymbol{t u h h u s ̌ - ~}{ }^{i}$ (Ib1) 'to end': 3sg.pres.act. túh-ḩu-uš-zi (KBo 20.39 l.col. 16 (OS), KBo 15.33 iii 15, KUB 41.9 rev. 5), 3sg.pret.act. túh-ȟu-uš-ta (KBo 17.11+ iv 35 (OS), KBo 24.5 ii 8 , KBo $20.72+$ ii 6 , iii 15 , KBo 7.66 ii 10, KBo 30.25 i 24, KBo 30.57 rev. 18, KBo 30.109 rev. 1, KUB 59.45, 10, VSNF 12.28 iv 4, KBo 17.31, 7, KBo $20.69+25.142$ obv. ${ }^{?} 5$, KUB 55.42, 9 ), túh-h $u$-u-uš-ta (KUB $41.26+20.29$ iv 25), túh-hu-iš-ta (KBo 14.101, 3, KBo 29.70 i 23, KBo 26.156 obv. 2 (fr.)), túh-hu-e-eš-ta (KUB 57.79 iv 12),

Often, this verb is equated with $t u h \check{S}_{-}{ }^{a(r i)}$ 'to cut, to separate' (e.g. Neu 1968: 175, Tischler HEG T: 411f.) and the form túh-hu-uš-ta 'has ended' is then interpreted as 3 sg.pres. of the middle. The fact that there is a consistent semantic difference between túh-huu-uš-ta 'has ended' and 3sg.pres.midd. tu-uh-ša, túh-ša, túh $-u h-s ̌ a$ 'he cuts' asks for a different treatment, however. Oettinger (1979a: 527) therefore distinguishes two verbs, namely $t u h \check{L}^{-1 a}{ }^{1 a}$ zu Ende sein, fertig werden' and tuȟš- ${ }^{a(r i)}$ 'abschneiden, trennen', both middle. In my view, we should rather interpret tuhhušta as 3sg. preterite of an active verb, however. My assumption is based on the corresponding present form, 3sg.pres.act. tuhhušzi 'ends' as found in the following contexts:

```
KBo 15.33 iii
```



```
(14) ... \(m a-a-a h-h a-a n=m a\)
(15) \(\check{S} A\) DINGIR \(^{L I M} u k\)-tu-u-ri ŠA HA.LA ḩu-ke-eš-šar túh-h \(u-u s ̌-z i\)
(16) \(n u=z=(\check{s}) a\)-an ma-a-an \({ }^{\text {LÚ }}\) EN E E \(^{T M M}\) ku-it-ki \(A\)-NA DINGIR \({ }^{L I M}\) ma-al-ta-an
(17) har-zi ma-a-an Ú-NU-TUM ku-it-ki ma-a-an GU 4 UDU
(18) \(n u-u=\check{s}-s ̌ a-a n U ́ U-N U-U T\) I-NA NINDA.ÉRIN \({ }^{\text {MEŠ }} t i-a n-z i\)
```

'The cooks butcher on the altar. (...) When the god's regular sacrifice of the portion ends, and if the owner of the house has vowed something to the god, be it some implement or an ox or sheep, they place the implement on the soldier's bread';

KUB 41.9 rev.
(5) [ ... ]ma-ah-ha-an=ma h hu-ke-eš-šar túh-hu-uš-z[il ...]
'If the sacrifice ends ...'.

Moreover, the interpretation of tuhhušta as an active form explains the absence of **tuhhuštari.

On the basis of the attestations tuhhuišta and tuhhuēšta, both denoting [tuH ${ }^{\mathrm{w}}$ ista], I assume that we phonologically have to interpret this verb as $/ \mathrm{tuH}^{\mathrm{w}} \mathrm{s}-/$. Despite the fact that I have treated tuhhuš- ${ }^{-i}$ 'to end' and $t u h \check{s}-{ }^{\text {a(rii) }}$ 'to cut off, to separate' separately, I do believe that it is likely that they go back to the same origin (cf. ModEng. cut out 'to stop'). As I have stated under tuh̆s- arri), I have not been able to find good IE comparanda.
tuhhuš- ${ }^{\text {a(ri) }}$ 'to cut off, to separate': see tuhšs- ${ }^{\text {a(ri) }}$
 iii 17), tu-h̆u-ši-ída-i[t] (KBo 16.8 iii 21, KBo 8.34, 3), tu-hुu-uš-ši-íc-it (KBo 2.5 i 2), tu-u-hu-ši-ịa-it (KUB 19.13 i 30), 1pl.pres.act. tu-u-ha-ši-íia-u-e-ni (KUB 19.13 i 16).

Anat. cognates: CLuw. tahušiía- 'to keep silent/quiet(?)' (1sg.pret.act. ta-hu-ši-


This verb is consistently spelled with single $-h$ - (e.g. Tischler's citing (HEG T: 421) as "tuhhusiya-" is incorrect). Its CLuwian counterpart, tahušiia- (which is attested in Hittite texts but must be Luwian because of the ending -hha and the use of gloss wedges), is spelled with $-a$-. The alteration Hitt. tuhuš- vs. CLuw. tahuš- may indicate that the first vowel is anaptyctic and that we are dealing with phonological/thusia-/.
It is difficult to etymologize this verb. It is generally acknowledged that laryngeals are lost after stops (e.g. paltana- $\boldsymbol{*}^{*}$ plth ${ }_{2}$ eno-, 2sg.pret. - tta $<*_{-}$th $_{2} e$ ), which means that a preform $* t h_{2} u$ - should yield Hitt. $t u$-. Oettinger's connection (1979a: 326) with Skt. tūṣṇ̂̀m 'quietly', which must reflect *tuHs-, implies that a preform ${ }^{*} t u h_{2} s$ - yielded PAnat. ${ }^{*} t u H s$-, which was metathesized to $* t H u s$ - after the period that $* t h_{2} V>t V$. All in all, I would remain sceptical about this etymology.
tuhhuuai- / tuhhui- (c.) 'smoke': nom.sg. tứh-ḩu-iš (KUB 17.10 iv 21 ( $\mathrm{OH} / \mathrm{MS}$ ), KUB 33.36 ii 5 (OH/MS)), túh-hu-u-ua-iš (KUB 5.24 ii 16 (NS)), acc.sg. túh-huin (KBo 8.35 iii 6 (MH/MS)), túh-ȟu-i-in (KBo 12.89 iii 8, 17 (MS)), túh̆-hu-úain (KBo 10.2 iii 40 ( $\mathrm{OH} / \mathrm{NS}$ )), túh-hu-u-ua-in (KUB 24.5+ obv. 14 (NS)), instr.? túh-hu-i[t] (KUB 2.4 ii $4(\mathrm{OH} / \mathrm{NS})$ ).

PIE * dhué $h_{2}-u-\bar{o} i-s, * d^{h} u h_{2}-u$-ói-m, *d $d^{h} u h_{2}$-u-i-ós

The meaning 'smoke' is assured by the fact that in the bilingue KBo 10.1 / KBo 10.2, túh-hu-ua-in (KBo 10.2 iii 40) corresponds to Akk. qú-ut-ra 'smoke' (KBo 10.1 rev. 23). All forms are written with the TAH-sign, which can be read tah as well as túh: so a reading tahhuıai- as well as tuhhuuai- is possible. Traditionally, this word is transcribed tuhhuuai-.
Within the paradigm, we find forms that show a stem tuhhui- as well as tuhhuuai-. The oldest attestations (MS) all show tuhhui-, whereas tuhhuuai- is found in NS texts only (but once in an OH/NS-text). For instance, Tischler (HEG $\mathrm{T}: 418$ ) therefore concludes that tuhhui- is the original form. Nevertheless, it is difficult to explain the forms with tuhhuuai- then: diphthong-stems are rare and unproductive. I therefore think that it is better to regard this word as an original diphthong-stem tuhhuuai- / tuhhui- that must go back to the structure *CéC-ōi-s, *CC-ói-m, *CC-i-ós (cf. Weitenberg 1979).

Already since Petersen (1937: 210f.), this word is generally connected with the PIE root $* d^{h} u h_{2^{-}}$'to produce smoke, to breath'. Since all other IE languages only show reflexes of this root in the zero-grade, the only evidence for a full-grade form is found in Hitt. antuuahhaš- 'human being' if this indeed reflects *hin$d^{\text {d }}{ }^{\prime}$ ueh $_{2}$-os- 'having breath inside'. This means that for tuhhuuai- / tuhhui- we have to assume a paradigm $* d^{h} u e ́ h_{2}-u-o ̄ i-s, * d^{h} u h_{2}$-u-ói-m, $* d^{h} u h_{2}$-u-i-ós, in which the stems tuhhuuai- and tuhhui- were generalized on the basis of the oblique cases. The fact that between the root $* d^{h} u h_{2^{-}}$and the suffix -oi- another suffix, $-u$-, is found can be compared to e.g. šāklāi-<*séh $k$ k-l-ōi-.
${ }^{\text {LÚ }}$ duíanalli- (c.) 'second in rank': nom.sg. du-ía-na-al-li-iš (IBoT 1.36 i 39), dat.loc.sg. du-ía-na-al-li (IBoT 1.36 i 38).
IE cognates: Skt. dvayá- 'twofold, in pairs’, Gr. סotó 'both, two’, סotós 'double', OCS dzvojb 'twofold', Lith. dvejì 'two', $d v e ̃ j a ~ ' o f ~ t w o ~ k i n d s ' . ~$
PIE *dui-īo-no-

This word is hapax in the following context:
IBoT 1.36 i
... $a-p a-a-\check{s}=a \operatorname{pa-ra-a~da-me-ta-ni~}$
(37) ${ }^{\text {LÚ }}$ ME-ŠE-DI te-ez-zi $a-p a-\check{s}=a$ pa-ra-a ${ }^{\text {LÚ }}$ tar-ri-i-ia-na-al-li te-ez-zi
(38) ${ }^{\text {LÚ }}$ tar-ri-i $a-n a-a l-l i-i s ̌=m a{ }^{\text {LÚ }}$ du-ía-na-al-li te-ez-zi
(39) ${ }^{\text {LÚ }}$ du-ía-na-al-li-iš=ma $A$-NA UGULA $10 M[E]-S ̌[E-D] I$ te-ez-zi
'He passes it on to the other guard. That one passes it on to the one of third rank, the one of third rank passes it on to the one of second rank, and the one of second rank tells it to the Chief of ten Guards',
on the basis of which duianalli- can be determined as 'the one of second rank'. Because tarriianalli- 'third of rank' must be a Luwian form (in Hittite, we would expect **teriia-) from *tri-io-no- + -alli-, it is likely that duianalli- is Luwian, too, and reflects *dui-io-no- + -alli- (note that a reconstruction *duio- is unlikely as we would expect that here intervocalic *-i- would disappear). See $t \bar{a} n$ for other descendants of PIE * $d u(o) i$ ' 'two'.
$\boldsymbol{t u k}:$ see $z \overline{\boldsymbol{l}} k / t u-$
$\boldsymbol{t u k} \boldsymbol{k}^{\text {-äri }}$ (IIIf) 'to be visible, to be seen; to be important': 3 sg .pres.midd. du-ug-ga-$a-r i$ (KUB 23.72+ ii 15 (MH/MS)), du-uk-ka ${ }_{4}$-a-ri (KUB 55.43 i 4, 9, iii 1 (MH/MS), KUB 29.1 ii 10 (OH/NS), KUB 59.43 i 3 (NS)), tu-ug-ga- $a-r i(K B o$ 17.65 obv. 22 (2x) (MS)), tu-uk-ka ${ }_{4}$-a-ri (KBo 21.74 iii 5 (NS), KBo 22.230, 7 (NS), KBo 40.369, 4 (NS), KUB 8.38 iii 6, 19 (NS)), du-uk-ka4-ri (KUB $29.7+$ KBo 21.41 ii 45 (MH/MS), KBo 4.9 i 10 (NS), KUB 9.32 i 7 (NS), KBo 4.1+ rev. $11,30(\mathrm{NH})$ ), du-ug-ga-ri (KUB 17.28 iii 25 (MH/NS)), tu-uk-ka ${ }_{4}-r i$ (KBo 30.186 rev. 19 (NS), KUB 55.48 i 13 (NS)), 3pl.pres.midd. du-uk-ka $a_{4}-a n-d a-r i$ (KBo 21.76, 14 (NS)), 3sg.pret.midd. $d u-u k-k a_{4}-a-t i$ (KUB 41.18 ii 8 (MS?)), tu$u k-k a_{4}-a-a t(\mathrm{KBo} 4.12$ obv. 18 (NH)), tu-ug-ga-at (KBo 5.3 ii 25 (NS)).
Derivatives: tukkē̌̌̌̌- ${ }^{z i}$ (Ib2) 'to become important(?)' (3sg.pres.act. du-uk-ki-iš$z i$ (KUB 5.6 ii 61), tu-uk-ki-iš-zi (KUB 8.53 ii $2 / / \mathrm{KBo} 10.47 \mathrm{c}$ iv 28)).
IE cognates: Skt. tvác- 'skin', Hitt. tuekk-/ tukk-.
PIE *tuk-ó-ri

This verb is consistently spelled with geminate $-k k$ - and $-g g$-, never with single $-k-$. It is therefore unclear to me why e.g. Tischler (HEG T: 426) cites this verb is $d u g(g)-$. It denotes 'to be visible', but also 'to be important', especially in the syntagm $\bar{U} L$ tukkāri 'it is not important'. It is quite likely that this latter meaning developed out of the former (*'it is not visible' > 'it does not have to be taken into account').
A much cited etymology is the one given by Mudge (1931: 253) (followed by e.g Oettinger 1976b: 113), who connected the verb with $* d^{h} e u g^{h}$ - 'to be of use'. Apart from the fact that the semantic connection is rather weak, the formal side is difficult as well: $* g^{h}$ cannot explain the geminate $-k k$ - in Hittite (note that

Oettinger assumes that $-k k$ - was secondarily taken over from "rhyming" uakkāri 'to be lacking'; perhaps this etymological connection is the reason for Tischler to cite $d u g(g)$-, suggesting that the geminate is not to be taken seriously). Schindler (1972: 36f.) connects tukk- with Hitt. tuekk(a)- / tukk-'body' (q.v.) and Skt. tvác'skin', however, and postulates a root *tuek- 'to be visible'. Formally as well as semantically this etymology is preferable (note that Oettinger's rejection (1976b: $144^{17}$ ) of this etymology on the basis of the presumption that etymological $* t u$ cannot be spelled with the sign $d u$ - in Hittite and that therefore a connection between $d u-u k-k a_{4}-a-r i$ and $t u-e k$ - $k a$ - is impossible, is falsified by the attestation abl. du-eg-ga-az 'body' (KBo 34.62 rev. 12)). We therefore have to reconstruct $t u k k \bar{a} r i$ as $* t u k-o ́+r i$.

The verbal forms tukkišzi and dukkišzi are given here as belonging to a verb $t u k k e \overline{s ̌ s ̌-}{ }^{z i}$ (following Tischler 1.c.), but it must be admitted that the meaning of these forms is not quite clear from the contexts.
tuliiia- (c.) 'gathering, assembly': acc.sg. tu-li-ía-an (KBo 3.1 ii 34, 51), gen.sg. $t u-l i-i \underline{C} a-a s ̌$ (KUB 9.34 i 33, iv 12, KUB 6.45 iii 11, KUB 6.46 iii 50, KUB 21.19 iv 10), tu-li-ía[-aš] (KUB 21.19 iv 25), tu-u-li-ia-aš (KUB 33.110, 5), dat.-loc.sg. tu-li-ía (KBo 6.3 iii 21, KBo 4.10 obv. 50, KUB 6.45 iii 12, KUB 23.77a obv. 11, KBo 8.35 ii 9, KBo 5.4 rev. 55, KUB 21.1 iv 39 , KUB 21.4 iv 9, Bronzetafel iii 79, KUB 21.19 iv 18,19 , KUB 4.1 ii 2, KUB 17.30 iii $^{?} 4$ ), tu-u-li-ía (KUB 6.46 iii 51), tu-ụ́-li-ịa (KUB 21.1 iv 39), tu-ú-lị-i[a] (KUB 21.5 iv 45), dat.-loc.pl. tu-li-ịa-aš (KBo 22.1, 16 (OS)).
Anat. cognates: CLuw. tūliiiašša/i- (adj.) 'belonging to the assembly' (nom.sg.c. $t u-l i-i \underline{C} a-a s ̌-s ̌ i-i s ̌$, nom.-acc.sg.n. $t u-u ́-l i-i-i-i a-a s ̌-s ̌ a-a n, t u-u ́-l i-i \underline{i} a-a \check{s ̌-s ̌ a-a n, ~ a b l .-i n s t r . ~}$ $t u-u ́-l[i-i$

PIE *tuH-l-io-?
This word is usually spelled without a plene vowel, although we twice find a plene spelling with the sign $U$ and twice a plene spelling with the sign Ú. In CLuwian, this word is almost always spelled with Ú, however, which may indicate that the Hittite spellings with Ú are to be regarded as Luwianisms. For Hittite, this would mean that we should assume that tu-u-li-ia- is the correct spelling, and that we are dealing with /tolia-/. Duchesne-Guillemin (1947: 80) connected this word with the PIE root *teuH- 'to swell' that shows an $l$-extension in e.g. Lith. tū̀las 'many', tūu $\tilde{e} ~ ' m a s s ', ~ O P r . ~ t \bar{u} l a n ~ ' m a n y ' . ~ I f ~ t h i s ~ c o n n e c t i o n ~ i s ~$ justified (formally as well as semantically it is possible), then we should reconstruct *tuH-l-io-.
-ttuma: (2pl.pres.midd.-ending): see -ttuma(ri)
${ }^{\text {Étūmantiinatt- (c.) a kind of building, 'ear-building(??)': dat.-loc.sg. tu-u-ma-an-ti- }}$ ia-at-ti (KUB 17.24 ii 11).

This word is hapax, and its identification as a building can be made on the basis of the use of the determinative É only: it is unclear exactly what kind of building is meant. Because of the formal similarity, one is inclined to compare it with CLuw. tum(m)ant- 'ear', for which see at ${ }^{(\text {UZU })}$ ištāman- / ištamin- 'ear'.
-ttuma(ri), -ttumat(i) (2pl.midd.-endings)
Anat. cognates: CLuw. -(d)duuar(i) (2pl.midd.pres.-ending): az-tu-u-ua-ri, ma$a z-z a-a l-l a-s ̌ a-d u-u a-r i, d a-a-a d-d u-u a-a r$.

In the middle paradigm we find the following endings of the 2 pl : - ttuma and -ttumari for the present and -ttumati and -ttumat for the preterite/imperative. When attached to a stem ending in a vowel, these endings are usually spelled with geminate -tt- or -dd-: hannaddumati, huiadduma, iinadduma, iinaddumat, kiddumati, šarradduma, paiškettuma, zaḩhiiadduma, zahhiizaddumat. The few cases with single -t- or -d- (e-eš-ke-du-ma-at (KUB 12.63 obv. 5), ha-an-na-d[u$m a-a t]$ (KBo 10.45 iii 36), ha-an-na-du-ma-ti (KUB 41.8 iii 8), ha-a[š-š]i-ik-ki-du-ma-at (KBo 39.8 i 35) and šar-ka-li-i̇a-tu-ma-ri (KUB 1.16 ii 49)) in my view all should be regarded as simplified spellings. Spellings with geminate -mm- are attested in NS texts only and must be compared to the common fortition of OH $/ \mathrm{m} /$ to $\mathrm{NH} / \mathrm{M} /$ as described in $\S$ 1.4.7.1.c.

In the present, we find -ttuma as well as -ttumari, reminding us of e.g. 1sg.pres.midd. -hha besides -hhari, 2sg. -tta / -ttari, 3sg. -a/-ari and -tta / -ttari, etc. Although the endings -ttuma and -ttumari are not attested often enough to really establish a distribution, it is likely that -ttuma originally was used when the verb stem was stressed, and -ttumari when the verb stem was unstressed (e.g. paiškettuma (OS) /paiskétoma/ vs. šaliktumari (OS) /sliktomári/). In the preterite/imperative we find -ttumati as well as -ttumat. Because this ending is not attested in OS texts, it is not easy to establish a distribution. In MS texts, we only find -ttumat, whereas -ttumati is attested in NS texts only. At first sight, this seems to indicate that -ttumat is the original form with -ttumati being a NH creation, but on the basis of the fact that the attestations of 3sg.pret.midd. -ati and -at seem to show a distribution between older -ati and younger -at, we may
assume that such a distribution underlies -ttumat and -ttumati as well (but compare 3sg.pret.midd. -ttati, -ttat where such a distribution is absent).
Within Anatolian, we must compare these endings to the CLuwian 2pl.pres.midd.-ending -(d)duuar(i), which shows that Hitt. -ttuma+ reflects older *-ttuua+. From an IE point of view, we must compare these endings with Skt. 2pl.midd. -dhve / -dhvam and Gr. 2pl.midd. $-\sigma \theta \varepsilon$. These latter endings seem to reflect *-d $d^{h}$ ue (thus e.g. Beekes 1995: 241), but this is not a possible reconstruction for Hittite (cf. the $-t t-=/-\mathrm{t}-/$ that cannot be explained by $*-d^{h}-$ ). Melchert (1984a: 26) reconstructs *-dh $u$ e, which indeed would account for Hitt. -tt- as well as -um- (for ${ }^{*} \mathrm{CHuV}>$ Hitt. CumV, cf. e.g. *dh $h_{3}$-uéni > tumēni). Nevertheless, *-dh $h_{2}$ ue probably should have yielded Skt. -d(h)iva and Gr. *- $\theta$ ac.
\& dūr / dūn- (n.) 'urine’: nom.-acc.sg. \& du-úúúr (KUB 13.4 iii 67), [d]u?-ú-ur (KBo 16.99 i 6).
Anat. cognates: CLuw. *d̄̄̄r/dūn- (n.) 'urine’ (abl.-instr. du-ú-na-ti).

$$
\text { PIE } *_{\text {séik }}{ }^{w}-r, *_{\text {séik }}{ }^{w}-n-?
$$

This word is hapax in KUB 13.4 iii 67f.: a-pé-e-da-ni=ma $\operatorname{DINGIR}^{\mathrm{MES}^{-}}$-eš za-akkar \& du-ú-ur (68) a-da-an-na a-ku-ua-an-na pí-an-zi ‘To him the gods will give faeces (and) $d \bar{u} r$ for eating (and) for drinking'. In this context, it is clear that $d \bar{u} r$ must mean 'urine'. Because of the use of the gloss wedges, it is very likely that the word is Luwian. In CLuwian contexts we find an abl.-instr. dūnati in KUB 35.102(+) ii (8) [an-ni-iš=k]u=ua=ti pár-na-an-za du-ú-na-ti (9) [pa-ap-pár-]ku-ua-at-ti 'The mother cleans the house with $d$. ', with additions on the basis of ibid. (15) $[a] n-n i-i s ̌=k u=u a=t i ~ p a ́ r-n a-a n-z a ~ m a-a d-d u-u ́[-u a-t i] ~(16) ~[p] a-a p-p a ́ r-k u-~$ ua-at-ti 'The mother cleans the house with wine'. Although the meaning of dūnati cannot be ascertained from the context, a meaning 'urine' is not impossible (see Starke 1990: 569 for this interpretation). If these considerations are correct, then we are dealing with a CLuwian $r / n$-stem dūur / dūn- 'urine'.
CLuw. dūr was connected with Hitt. šēhur / šēhun- 'urine' already by Čop (1965: 100ff.), which is semantically appealing and formally only strengthened by the discovery of the oblique stem $d \bar{u} n-$. Nevertheless, details are unclear. As I have shown under the lemma šēhur / šēhun- I believe that this word was borrowed into Hittite from another Anatolian language (Palaic?) in which PIE *séik ${ }^{w}-r /$ *séik $^{w}-n$ - regularly yielded šēḩur / šēhun-. Although the details regarding the initial consonant are not fully clear, I believe that in Luwian, a prefrom *Céik ${ }^{w} r$ would through PAnat. ${ }^{*} C \bar{e} g^{w} r$ and pre-Luwian $* C \bar{e} e^{w} r$ yield CLuw. $C \bar{u} r$. Note that in the other words where Luwian $t$ - seems to correspond to Hitt. $\check{s}$-,
we are also dealing loss of a PAnat. *g in Luwian (CLuw. tāua/i- ~ Hitt. šākuua‘eye’ < *sók ${ }^{w}$ o-, CLuw. tāin- ~ Hitt. šākan / šakn- 'oil’ < *sóg $\left.{ }^{(h)}-(e) n-\right)$. Perhaps this loss of PAnat. ${ }^{*}-g$ - caused initial $*_{s}$ - to yield Luw. $t$-.
${ }^{\text {GIŠ}} \boldsymbol{t u ̄ r i - ~ ( n . / c . ) ~ ' s p e a r , ~ l a n c e ' ~ ( S u m . ~ G I S ̌ S ̌ U K U R ) : ~ n o m . - a c c . s g . ~ t u - u - r i ~ ( O S ) , ~}$ acc.sg.c. tu-u-ri-in, gen.sg. tu-u-ri-ia-aš, dat.-loc.sg. tu-u-ri-ia.

Anat. cognates: CLuw. ${ }^{\text {GIšu}} \boldsymbol{t} \boldsymbol{u} r a / i$-, stick or weapon (acc.sg. $t u-u$-ri-im $=$ ša-an, tu-$u$-ri-in, du-u-ri-in, abl.-instr. tu-u-ra-a-ti, tu-u-ra-ti), tūr̄̄̄- 'to use the tūra/i-' (3sg.pret.act. tu-u-ra-a-at-ta, tu-u-ra-at-ta, 3sg.imp.act. tu-ra-ad-du).

This word is attested from OS texts onwards and consistently spelled with plene $-u$-. It denotes 'spear, lance'. The exact meaning of the CLuwian cognate ${ }^{\text {GIšs }} t \bar{u} r a / i$ - is less clear, however. Its interpretation depends on a difficult passage in a ritual in which items are buried in order to make the evilness disappear (see at tēkan / takn- for a treatment of the word inzagān):

```
KUB 35.54 ii
(31) za-a-ú-i zi-i ia-ar NUMUN \({ }^{\text {HI.A }}-n a[p] u-u-n a-a-t a\)
(32) in-za-ga-a-an ua-aš-ha \(a=\) (a) ta [BE-]ÈL SÍSKUR
(33) \({ }^{\text {GIŠh }}\) ha-at-ta-ra-a-ti ha-at-ta[-r]i-it-ta
(34) \({ }^{\text {GIS }}\) tu-u-ra-a-ti=pa=(a)ta tu-u-r[a-a-a]t-ta
(35) \(a=(a) t a\) im-ra-ǎ̌-ša<-an) \({ }^{\mathrm{d}} \mathrm{I}\) ŠKUR- \(u[n-t] i p a-r i\)
(36) ta-ra-a-u-i-it-ta
```

'Here lie down all the seeds, the tools and the sacralized objects. The ritual patient has $h$.-ed them with a $h$. and $t$.-ed them with a $t$. and has delivered them to the Storm-god of the Open Field'.

Starke (1990: 310) translates 'mit dem Grabstock aber hat er es eingegraben', which indeed seems to make sense. This is important, as it could indicate that $t \bar{u} r i-$ originally meant 'stick'. On this basis, Neumann (1976: 310) connects the word with PIE *(s)teu- 'to strike, to hit' (e.g. in MIr. tūag 'axe', OHG stoc 'stick', Lat. tudes 'hammer'), assuming that tūri- shows the suffic -ri- (compare edri- 'food', auri- 'lookout', etc.). As we see in § 1.3.9.4.f, however, we would expect that *teuri- would yield Hitt. **/túri-/, spelled ${ }^{* * t u-u ́-r i-\text {, whereas the }}$ spelling tu-u-ri- points to /tóri-/. This could point to an etymological connection with the verb $t \bar{u} r i i e / a-{ }^{z i} /$ torie/a-/ 'to harness' that reflects $* d^{h} u h_{1} r$-ielo-.
tūriịe/a- ${ }^{z i}$ (Ic1) 'to harness': 3sg.pres.act. tu-u-ri-ez-zi (OS), tu-u-ri-e-ez-zi (MH/MS), tu-u-ri-i_ia-az-zi (MH/MS), tu-u-ri-ia-zi, tu-u-ri-e-zi, 1pl.pres.act. tu-u-ri-i̇a-u-e-ni (KUB 13.35 iii 25), 3pl.pres.act. tu-u-ri-i्ia-an-zi (OS), tu-ri-i̇a-an-zi (1x), 1sg.pret.act. tu-u-ri[-ía-nu-(un)] (KBo 10.2 iii 42), tu-u-ri-ía-nu[-un] (KBo 18.57 obv. y+1), 3pl.pret.act. tu-u-ri-er (KBo 3.8 iii 17), tu-ri-er (KBo 3.34 i 16 ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.imp.act. tu-u-ri-i_ia-at-tén (KUB 24.3+ ii 37); part. tu-u-ri-ia-an-t-, tu-ri-i ia-an-t- (rare); verb.noun.gen.sg. tu-u-ri-i_ia-u-aš (OS), tu-u-ri-ía-una-aš (OS); impf. tu-u-ri-eš-ke/a- (MH/MS), tu-u-ri-iš-ke/a- (MH/MS).

IE cognates: Skt. dhúr- 'yoke; pole or shaft of a carriage', Gr. Өaı póc 'pivot of a door, axle of a chariot', TochA tursko 'ox of burden, draught bull'.

PIE * $d^{h} u h_{1} r-i e / o-$ ?
Most of the attestations of this verb are spelled with plene $-u$-: tu-u-ri-, which spelling is found in OS texts already. This points to a phonological interpretation /torie/a-/. Since Sommer (1949: 162), this verb is generally connected with Skt. dhúr- 'yoke; pole or shaft of a carriage' (nom.sg. dhứr, acc.sg. dhuram). Mayrhofer (1986-2002: s.v.) reconstructs $d h u \frac{1}{r}$ as $* d^{h} u r h_{l}$, and connects it with Gr. Өaıpós 'pivot of a door; axle of a chariot', which should reflect * $d^{h} u r h_{1}-$-io-. In Hittite, tūriie/a- seems rather to reflect $* d^{h} u h_{l} r$-ielo-, however. Perhaps we have to assume laryngeal-metathesis.
See at ${ }^{\text {GIS }}$ ' $t \bar{u} r i-$ 'spear' for the possibility that it is cognate with tūriiela- ${ }^{z i}$.
$\boldsymbol{t u s ̌ k}(\text { iie } / \boldsymbol{a})^{-{ }^{z i}}$ (Ib1 > Ic1, IIa1 $\gamma$ ) 'to be happy, to entertain (oneself), to play': 2sg.pres.act. du-uš-kat-ti (KUB 6.46 iv 32 (NH)), du-uš-ga-at-ti (KBo 25.184 iii 7 (NS)), 3sg.pres.act. tu-uš-ki-ez-zi (KBo 32.15 ii 21 (MS)), du-uš-ki-ez-zi (KBo 32.15 ii 23, 24 (fr.) (MH/MS), KUB 27.49 iii 14 (NS)), du-uš-ki-i_ia-zi (KUB 14.7 iv $14(\mathrm{NH})$ ), du-uš-ga-i (KUB 6.45 iii $61(\mathrm{NH})$, KUB 6.46 iv 30 (fr.) (NH)), 3pl.pres.act. du-uš-kán-zi (KUB 20.92 vi ${ }^{?} 15$ (NS), KBo 30.77 iv 13 (NS), KUB 59.34 iii 4 (NS), KUB 17.35 ii 26 (NS)), du-uš-ka $a_{-}-a n-z i($ KUB 55.60 iv 11 (NS)), 1sg.pret.act. du-uš-ku-un (KUB 21.38 obv. 2 (NH), KBo 18.23 obv. 6 (NH)), tu-uš-ku-un (KBo 10.12 i 21 (NH)), 3sg.pret.act. du-uš-kitg (KBo 13.94, 14 (OH/NS)); 3sg.pres.midd. du-uš-kat-ta (KUB 33.120 i 27 (MH/NS)), 3pl.pres.midd. du-uš-kán-ta (KBo 13.94, 12 ( $\mathrm{OH} / \mathrm{NS}$ )), du-uš-kán-ta-ri (KUB 29.1 iii 50 (OH/NS)), 3sg.pret.midd. du-uš-kat-ta-at (KUB 36.12 i 10 (NS), KBo 26.70 i 10 (MH/NS)), 2sg.imp.midd. du-uš-ki-iš-hu-ut (KUB 59.70 iii 8 (NS)), 3pl.imp.midd. du-uš-kán-ta-ru (KUB 45.20 ii 12 (MH/NS)); verb.noun du-uš-ku-um-mar (KBo 1.35, 4 (NS)), du-uš-ki-i̇a-u-ua-ar (KUB 3.99 ii 10 (NS)); impf.
$d u-u s ̌-k i-i s ̌-k e / a-(\mathrm{MH} / \mathrm{MS})$, tu-uš-ki-iš-ke/a- (KBo 3.40+, 3 (OH/NS)), du-uš-ki-eš-ke/a-.

Derivatives: tuškari- 'happiness' (gen.sg. [t]u-uš-ka-ri-i-aš (KBo 25.112 ii 20 (OS)); broken tu-uš-ka-r[i-...] (KBo 7.54 ii 6)), tuškaratt- (c.) 'happiness, entertainment' (nom.sg. du-uš-ga-ra-az, du-uš-ka $-r a-a z$, acc.sg. tu-uš-ga-ra-at-ta-an (KUB 33.68 ii 16), du-uš-ga-ra-at-ta-an, du-uš-ga-ra-ta-an (MH/MS), du-uš-ga-ra-at-tan (KUB 49.100 rev. ${ }^{?} 11(\mathrm{NH})$ ), gen.sg. tu-uš-ka-ra-at-ta-aš (KUB 36.110 rev. 14 (OS)), dat.-loc.sg. du-uš-ga-ra-at-ti (RS 25.421 rev .58 ), du-uš-ka$r a-t i\left(\mathrm{KUB} 22.42\right.$ obv. $6(\mathrm{NH})$ ), abl. du-uš-ka-ra-at-ta-za (NH)), dušganu- ${ }^{z i}$ (Ib2) 'to make happy' (2pl.imp.act. du-uš-ga-nu-ut-te-en (KBo 12.18 i 12)), duškaratar / duškarann- (n.) 'happiness' (abl. du-uš-ga-ra-na-za (IBoT 1.33, 16, 59), dat.loc. du-uš-ka ${ }_{4}$ ra-an-ni (KUB 33.103 ii 12), du-uš-ga-ra-ni (IBoT 1.33, 19), all.sg. tu-uš-ga-ra-an-na (KBo 3.21 iii 25)), dušgariiiatar / dušgariịann- (n.) 'happiness' (dat.-loc.sg. du-uš-ga-ri-i_ia-an-ni (RS 25.421 rev. 61)), dušgarauunant- (adj.) 'happy, glad' (nom.sg.c. du-uš-ga-ra-u-una-an-za, nom.acc.pl.n. du-uš-ga-ra-u-an-da).

It is difficult to establish what the original stem of this verb is. E.g. Oettinger (1979a: 326) interprets the verb as tuške/a- ${ }^{z i}$ (probably inspired by his etymology, < *tus-sḱe/o-). In my view, 1sg.pret.act. tuškun and duškun prove that the stem cannot have been tuške/a-, as we then would expect **tuškenun. These forms seem to point to tušk- ${ }^{z i}$ only. The forms 2sg.pres.act. duškatti and dušgatti then perhaps denote /tuskti/. The derivative dušganu- hardly can be seen as belonging with a stem tuške/a-: it likely denotes /tusknu-/. The 3 sg.pres.act. $d u$-uš-KI-IZ-zi, which in principle can be interpreted as $d u-u \check{s}$ - $k e-e z-z i=/$ tusket $^{\mathrm{s}} \mathrm{i} /$ as from a stem tuške/a-, can be read $d u-u \check{s}-k i-e z-z i=/ t u s k i e t{ }^{s} i /$ as well, as from a stem tuškiie/a- ${ }^{z i}$. When we assume that the stem was tušk- ${ }^{z i}$ with a variant tuškiie/a- ${ }^{z i}$, we perhaps can interpret the stem tuškara- seen in the derivatives tuškaratt-, tuškarātar and tuškaraûant- as /tuskra-/. Note that Rieken (1999a: 116-7) interprets these words as /tuskra-/ as well, although this is in conflict with her view that the verb is tuške/ $a^{-z i}$. She therefore states that "es sich wahrscheinlich um eine Reimbildung zu *nahšara- [handelt], da -ra- nicht an thematischen Verben tritt".

The root tušk- can only reflect a preform *TusK-. All proposed etmologies, however, presuppose that tušk- is a -ške/o-derived stem. Petersen (1937: 211, widely followed, e.g. by Oettinger l.c., Rieken l.c.) connected the verb with Skt. túşyati 'to be satisfied' and reconstructed *tus-sk'e/o-. Neumann apud Tischler (HEG T: 466) connects the verb with ON pýdr 'friendly', Goth. piup 'das Gute', which reflect a root *teu- 'in freundlichem Sinne die Aufmerksamkeit
zuwenden'. In my view, these proposals cannot be correct. The verb tušk- ${ }^{z i}$ rather reflects a root *TusK-, which is comparable in structure to e.g. *mesg-, *resg- and *tres $k^{\prime}$ - in LIV ${ }^{2}$. Unfortunately I have not been able to find cognates.
${ }^{\text {MUNUS }}$ duttariiata/i- (c.) a female functionary: nom.sg. du-ut-tar-ri-i-ia-ti-iš (KUB 22.40 iii 18), du-ut-tar-íd-ta-aś! (Bo 4120 r.col. 4), gen.sg. du-ut-tar-ri-íi-ti-ía-aš (KBo 24.126 obv. 28).

Anat. cognates: HLuw. tuwatra/i- 'daughter' (acc.sg. ${ }^{\text {FILIA }}$ tú-wa/i-tara/i-na (TELL AHMAR 1 §24), ${ }^{\text {FLLIA }} t u ́-w a / i-t a[r a / i-n a]$ (TELL AHMAR 1 §29), FILIA-tara/i-na (KELEKLİ §2)); Lyc. kbatra- ‘daughter’ (nom.sg. kbatra, acc.sg. kbatru, dat.sg. kbatri).

PAnat. *duegtr-, *dugtr-
IE cognates: Skt. duhitár-, Gr. $\theta v \gamma a ́ \tau \eta \rho, ~ G r . ~(M y c) ~ t u-.k a-t e ~(i n ~ c o m p o u n d s), ~$ TochB tkācer, TochA ckācar, Arm. dowstr, Osc. futir, ModHG Tochter, Lith. $d u k t \tilde{e}, ~ O C S ~ d b s ̌ t i, ~ G a u l . ~ d u \chi t i r ~ ' d a u g h t e r ' . ~$

$$
\text { PIE * } d^{h} u e ́ g h_{2}-t r, * d^{h} u g h_{2}-t e ́ r-m, * d^{h} u g h_{2}-t r-o ́ s
$$

The treatment of these words must start with Lyc. kbatra-. Already in 1893, Imbert (1893: 89) identified this word as 'daughter'. A few years later, Bugge (1901: 25) argued that kbatra- must reflect *tuatra- (cf. kbi 'two' < *dui-) and ultimately must belong with the other IE words for 'daughter'. In 1978, Hawkins shows that in HLuwian a cognate can be found in the form of ${ }^{\text {FILIA }}$ tú-wa/i-tara/i-, which he convincingly identifies as 'daughter'.
The Hittite word for 'daughter' is never written phonetically. On the basis of acc.sg. DUMU.MUNUS-la-an (KBo 20.101 rev.? 3), we have to assume that it probably ended in -la- and therefore hardly can be cognate with the HLuwian and Lycian word. Nevertheless, Starke (1987) argues that some words in the Hittite texts belong with tuwatra/i- and kbatra-. In KUB 40.2 rev. 5 we find a well called ${ }^{\text {TÚL }}$ Du-ưa-at-ta-ri-na-aš, which Starke interprets as "Töchterchen" (1987: 251). Unfortunately, this meaning cannot be verified. A better candidate for a cognate could be ${ }^{\text {MUNUS }}$ duttarriiata/i-. This word, which is attested a few times only (see Tischler HEG T: 471f. for attestations and treatment), denotes a female functionary. Although the exact meaning is unknown and a connection with 'daughter' cannot be ascertained, the fact that this word denotes a female functionary (compare ${ }^{\text {MUNUS }}$ šiunanzanna-, a priestess, lit. 'divine mother') and is $^{2}$ formally quite similar is remarkable at least. Because of the alteration between a stem duttariata- and duttarriiati-, it is likely that we are dealing with a word of Luwian origin (note that Melchert in his CLuwian Lexicon (1993b: 238)
confidently cites this word as "duttariyata/i- 'daughter' (or simil.)"). So, all in all, we are dealing with HLuw. tuwatra/i- and Lyc. kbatra- that clearly mean 'daughter', MUNUS duttarriiata/i- (a Luwian word in Hittite contexts) that could well be cognate, and ${ }^{\text {TÚL }}$ Duuattarina-, the appurtenance of which is far from assured.
The etymological interpretation of these forms is quite difficult. It is generally accepted that the words for 'daughter' in the other IE languages all point to a preform * $d^{h} u g h_{2}$ ter- (Skt. duhitár-, Gr. $\theta \mathrm{v}$ 人át $\boldsymbol{\rho} \rho$, TochB tkācer, etc.). How to get from $* d^{h} u g h_{2} t e r$ - to HLuw. tuwatra/i- and Lyc. kbatra- is in debate, however, especially with regard to the origin of $-a$-. In earlier times, it was often stated that $-a$ - reflects the vocalized laryngeal: $d^{h} u g h_{2} t r-\left(\right.$ or $\left.* d^{h} u g \partial_{2} t r-\right)>* t u g a t r->$ tuwatr$>$ Lyc. kbatr- (cf. most recently Kimball 1999: 388). Nowadays it has become clear that " $[t]$ here is no solid evidence for "vocalization" of $* / h_{2} /$ anywhere in Anatolian" (Melchert 1994a: 70: alleged šaklāi- 'custom, rite' from *sh ${ }_{o} k$-loi- is rather to be interpreted as šāklāi-<*seh $k$ k-loi-).

With the elimination of $* h_{2}$ as a possible explanation for $-a$-, e.g. Melchert (1994a: 69) has to assume that in $* d^{h} u g h_{2} t r->* d u g t r-$ an anaptytic vowel emerged: *duge $t r->$ *dugatr-. After the loss of PAnat. $* g$, this form then would yield Luw. tuwatr- and, later on, Lyc. kbatr- (with *tu- $>k b-$ ). This is not a very attractive scenario, however. If the cluster $* \operatorname{Vgtr} V$ needed anaptyxis at all, we would expect to find vocalization of $* r$ : $* \operatorname{Vgtar} V$ (also a sequence $* \operatorname{Vgtr} C$ was likely solved as $* V g t \partial r C)$. Moreover, if ${ }^{\text {MUNUS }}$ duttarriiiata/i- indeed is cognate, it would show a Luwian form without an anaptyctic vowel before ${ }^{*}-t$-. It seems to reflect *dugt(a)ríada/i-<* $d^{h} u g h_{2} t(e) r$-.
In my view, we will not easily be able to explain the vowel $-a$ - and the difference between duttarriiata/i- and tuwatra- without assuming that we are dealing with a real vowel and with ablaut. I therefore want to propose that duttarriiata/i- indeed reflects $* d^{h} u g h_{2} t(e) r$-, but that tuwatra/i- and kbatra- go back to *duetr- < *duegtr- < *d ${ }^{h} u e g h_{2} t r$ - (note that kbatra- must show $a$-umlaut from older $* k b e t r a-$; for disappearance of $* g$ in front of consonant cf. CLuw. nāna- ~ Hitt. nekna- < *negno-).
My reconstruction implies that the PIE word for 'daughter' originally showed ablaut in the root: nom.sg. $* d^{h} u e ́ g h_{2} t r$, acc.sg. $* d^{h} u g h_{2} t e ́ r m, ~ g e n . s g . ~ * d^{h} u g h_{2} t r o ́ s$. Note that this inflection is supported by the peculiar accentuation pattern as
 $\theta v \gamma a \tau \rho o ́ \varsigma . ~ I n ~ A n a t o l i a n, ~ n o m . s g . ~ * ~ d h e ́ g h 2 t r ~ w a s ~ e n l a r g e d ~ w i t h ~ *-e h 2^{-} ~ a n d ~$ regularly yielded HLuw. tuwatra/i- and Lyc. kbatra-. On the basis of either the stem $* d^{h} u g h_{2} t e ́ r-$ or $* d^{h} u g h_{2} t r$ - a derivative in *-io- (or *-ieh $h_{2}$ ) was formed,
which functioned as the basis for Luw. *duttarriiata/i- (for the suffix -ata/icompare CLuw. huhatalla/i- 'ancestral', derived from *huhata/i-, besides hūha'grandfather'), which was borrowed into Hittite as ${ }^{\text {MUNUS }}$ duttarriiata/i-. After the splitting off of Anatolian, nom.sg. * ${ }^{h}$ uégh $h_{2} t r$ was secondarily altered to *d'ugh ${ }_{2} t e ́ r$ (attested thus abundantly in the other IE languages) on the basis of e.g. *ph $h_{2} t \bar{e} r$ 'father', which is the reason that no traces of ablaut are found anymore outside of Anatolian.
$\boldsymbol{t} \boldsymbol{u} u \boldsymbol{u} \boldsymbol{a}$ (adv.) 'far': tu-u-ua (NH).
 ua-a-an (OS), tu-u-ua-an (OS, 1x), du-ua-a-an, du-ua-an), tuūānta (adv.) 'to this side' (tu-ua-a-an-ta (KBo 25.42 1.col. 12), tu-ua-an-ta (KBo $25.41+$ KBo 30.114 obv. 8)), tūúaz (adv.) 'from afar' (tu-u-az (OS), tu-u-ua-az (OS), tu-u-ua-za (1x)), tūuala- (adj.) 'far' (nom.sg.c. tu-u-ua-l[a-aš] (KBo 1.31 rev .16$)$, dat.-loc.sg. tu-$u$-ua-li (KBo 4.14 ii 57), all.sg. tu-u-ua-la (KUB 8.14 rev .7 )).
Anat. cognates: CLuw. dūuaza- (adj.) 'wide(?)' (acc.sg. du-ú-ua-za-an).
IE cognates: Skt. dūrám 'far away', dūrát 'from afar', Gr. $\delta \mathfrak{\eta} v$ 'for a long time, far', (Dor.) $\delta \dot{a} v, \delta o a ́ v ~ ' f o r ~ a ~ l o n g ~ t i m e, ~ f a r ', ~ G r . ~ \delta \eta \rho o ́ ৎ ~ ' l a s t i n g ~ l o n g ', ~ L a t . ~ d u ̄ d u m ~$ 'for a long time already'.

PIE *dueh ${ }_{2} m$
Although I have cited these words under the lemma tūua, on the basis of the chronological distribution we probably should conclude that tūua, which is attested in NH texts only, was a NH analogical creation on the basis of $t \bar{u} u a z$ and $t \bar{u} u a n$, which are both attested in OS texts. Despite the fact that tūuan 'to this side' and tūuaz 'from afar' are semantically rather different, already Pisani (1940: 354) suggests that they belong together, which means that tuxun represents a petrified accusative, $t \bar{u} u a^{2} z$ an old ablative and $t \bar{u} u a$ an allative form.
Already Benveniste (1932: 142f.) etymologically connected tūưa 'far' and tūuaz 'from afar' with Skt. dūrám 'far away', dūrát 'from afar', Gr. סף́v 'long, far' (< * $\delta$ Fávv) etc., which reflect a root *dueh $h_{2}$. Eichner (1978: $160^{69}$ ) reconstructs $t \bar{u} u a^{\prime}$ as $* d_{2} h_{2}$ io-, but this is problematic in view of tāiezzi $<$ teh $_{2}$ ieti and huianzi $<$ * $h_{2} u h_{1} i e n t i$ that shows that we then would expect a form **tūia-. Although a form **t $\bar{u} i a$ - would yield Hitt. $t \bar{u} u a^{2}$ - in NH times, we would expect that in OS texts the intervocalic -i-still would be present (compare OS huianzi>NH huuanzi), which contrasts with the fact that already in OS texts we find the spelling $t u-u-u a-a z$. Melchert (1984a: 30) has a different opinion and equates tuuān with Gr. $\delta \eta$ q́v, which he reconstructs as *dueh $h_{2} m$. If this reconstruction is correct, it would show
a few important things. Firstly, in a sequence *Tueh ${ }_{2}$ - the $-u$ - was retained (unlike in a sequence *Tuo $>$ Hitt. Ta). Second, a sequence *-eh $h_{2} m$ did not yield *-ahhan or *-ahhun, as one could have expected, but gave Hitt. -ān (possibly an PIE development already, sometimes referred to as 'Stang's Law'). Moreover, this form would show that we are dealing with an old root-noun $* d u e h_{2} s, * d u e h_{2} m$, *duh $h_{2} o s$. In my view, the only way that we can explain the forms $t \bar{u} u a z$ and $t \bar{u} u a$ then, is assuming the following scenario. In the cases where we find $* d u e h_{2} C$, the $* h_{2}$ is regularly lost, probably through a stage $* d u a \rho C$ (with neutralization of $* h_{2}$ to $?$ in front of consonant). In my view, we could envisage that in a paradigm where we find $* d u a i C$ besides $* d u \varsigma V$, the consonant $* ?$ has been generalized throughout the paradigm, yielding $* d u \imath V$, which regularly developed into Hitt. tūuV.
The CLuwian adjective dūuaza-, which is used as an epithet of tiiamm(i)'earth' and often translated as 'wide', is sometimes regarded as a cognate to Hitt. $t \bar{u} u a$. Apart from the fact that a meaning 'wide' is unassured, the formal aspect is not easy either because of the unexplained $-z a$ - in Luwian.

## tūuan: see tūưa

duиarni- ${ }^{z i}$ / duuarn- (Ia1 > Ic2, IIa1 $\gamma$, Ic1 > Ic2) 'to break (something); (midd.) to break (intr.)'.: 1sg.pres.act. du-ua-ar-na-ah-hi (KBo 32.19 ii 28 (MH/MS), KBo 22.137 iii 4 (NS)), du-ua-ar-na-[ah-hi] (KBo 22.137 iii 2 (NS)), du-ua-ar-na-a-ah-ḩi (NH), 2sg.pres.act. du-ua-ar-na-at-ti (KUB 15.19 obv. 7 (NS)), 3sg.pres.act. tu-ua-a[r-...] (KBo 6.2 i 20 (OS)), du-una-ar-ni-iz-zi (KBo 15.10 iv 36 (OH/MS), HKM 60 rev. 24 (MH/MS), KBo 39.258, 11 (MS), KBo 6.4 i 27, 30 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 9.28 iii 26 (MH/NS), KBo 30.2, 7 (NS), KBo 40.46 ii 2 (NS), KUB 7.53+ ii 53 (NS)), tu-ua-ar-ni-iz-zi (KBo 39.8 iv 13 (MH/MS)), du-ua-ar$n i-z i(\mathrm{KBo} 6.3$ iii 70 (OH/NS)), tu-ua-a[r-n]i-iz-zi (KBo 6.3 i 29 (OH/NS)), tu-ua-ar-na-zi (KBo 6.3 i 31 ( $\mathrm{OH} / \mathrm{NS}$ )), du-ua-ar-na-i (KBo 39.8 ii 11 (MH/MS), KUB 24.9 ii 43 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 48.118, 13 (NH)), tu-ua-ar-na-i (KBo 24.1 i 8, 12 (MH/MS)), du-ua-ar-na-a-i (KUB 26.1 iii 64 (NH)), du-ua-ar-ni-ia-az-zi (KUB 17.27 ii 36 (MH/NS)), du-una-ar-ni-i-ia-zi (KUB 17.28 ii 49 (MH/NS)), du-ua-ar-ni-e-ez-zi (NH), du-ua-ar-na-a-iz-zi (NH), tu-ua-ar-na-a-iz-zi(NH), du-ua-ar-ni-ia-iz-zi (KUB 30.15 i 35 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. tu-ua-ar-na-an-zi (KBo 39.8 iv 14 (MH/MS)), du-ua-ar-na-an-zi (KBo 13.146 i 17 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 6.34 ii 43, iii 38 (MH/NS), KUB 9.6+ iii 23 (MH/NS)), tu-ua-ar-ni-i्Ia-an-zi (KBo 20.34 obv. 10, 12 (OH/MS)), du-u_a-ar-ni-ia-an-zi (KUB 30.19 iv $22(\mathrm{OH} / \mathrm{NS})$ ), 1sg.pret.act. du-ua-ar-ni-nu-un (KUB 41.19 rev. 8 (MH/NS)), du-ua-ar-na-ah-
huu-un (KUB 13.35 iv 25, 30 (NS)), 3sg.pret.act. du-ua-ar-ni-it (KUB 17.10 i 33 ( $\mathrm{OH} / \mathrm{MS}$ ), KBo 10.45 iii 33 (MH/NS)), du-ưa-ar-na-aš (NH), 3pl.pret.act. tu-u-u-ar-ni-er (KUB 36.104 obv. 7 (OS), KBo 3.34 i 9 (OH/NS)), du-ua-ar-ner (KUB 40.95 ii 13 (NS)), 3sg.imp.act. du-ua-ar-na-a-ú (KBo 6.34 iii 41 (MH/NS)), du-ua-ar-na-du (KBo 2.3 ii 42 (MH/NS)), 3pl.imp.act. du-ua-ar-na-an-du (HKM 66 obv. 19 (MH/MS), KBo 6.34 ii 52 (MH/NS)), du-ua-ar-ni-i̇a-an-du (KBo 22.104, 13 (undat.)); 3sg.pres.midd. du-ua-ar-na-at-ta-ri (KBo 32.14 ii 48, iii 43 (fr.) (MH/MS), KBo 5.1 i 4 (MH/NS)), du-ua-ar-na-ad-da-a-ri (KBo 5.1 iv 40 (MH/NS)), 3sg.pret.midd. du-ua-ar-na-at-ta-at (KBo 32.14 lower edge 71 (MH/MS)), du-ua-ar-na-ad-da-at (KBo 5.1 i 45 (MH/NS)), 3sg.imp.midd. tu-ua-ar-na-at-ta-ru (KBo 39.8 iii 34, iv 15 (MH/MS)), du-ua-ar-na-at-ta-ru (Bo 6166 ii 10, KBo 53.27 iii 47); part. du-ua-ar-na-an-t- (MH?/NS); verb.noun du-ua-ar-nu-ua-ar (KUB 3.95, 8 (NS)), gen.sg. du-ua-ar-nu-ma-aš (KUB 26.92, 12 (NH)); inf.I du-úa-ar-nu-ma-an[-zi] (KUB $44.4+$ KBo 13.241 rev. 23 (NS)); impf. tu-una-ar-ni-iš-ke/a- (KBo 39.8 iii 33, 36 (MH/MS)), du-ua-ar-ni-eš-ke/a- (NH), du-ua-ar-ni-iš-ke/a-(NH), du-ua-ar-ạš-ke/a- (KBo 2.3 ii $41(\mathrm{NH})$ ).
IE cognates: Skt. *dhvar ${ }^{i}$ - 'to hurt, to damage'.
PIE * $d^{h} u r-n e ́-h_{l}-t i$, * $d^{h} u r-n-h_{l}$-énti
This verb shows forms of many different inflection classes, especially in the youngest texts, where we find forms that belong to the stems duuarniie/a- ${ }^{z i}$, duuarni- ${ }^{z i}$, duuarnae- ${ }^{z i}$, duuarniiae- ${ }^{z i}$ and duuarna- ${ }^{i} /$ duuarn-. It is difficult to decide which inflection is the oldest. In OS texts, we only find 3pl.pret.act. tu-ua-ar-ni-er (or tu-ua-ar-né-er), which does not reveal anything regarding its inflection (it can belong with tuuarniie/a-, tuuarni- and tuuarn(a)-), and the broken form 3 sg.pres.act. tu-ua-a[r-...]. In MS texts, we already find different stems: duuarnahhi (MH/MS) and duuarnai (MH/MS) unambiguously point to the stem duuarna- ${ }^{-}$/ duuarn-, whereas tuuarniianzi (OH/MS) unambiguously points to a stem tuuarniie/a- ${ }^{z i}$. The interpretation of 3sg.pres.act. tu/du-ua-ar-ni-iz-zi $(\mathrm{OH} / \mathrm{MS})$ is unclear however, because of the fact that the sign IZ can be read $i z$ as well as $e z$. So, in principle a reading $/{ }^{\circ}$ nit $t^{5} \mathrm{i} /$ as well as $/{ }^{\circ}$ niet ${ }^{\mathrm{s}} \mathrm{i} /$ is possible. On the basis of the form du-ua-ar-ni-zi (OH/NS) and du-ua-ar-ni-nu-un (MH/NS), which unambiguously point to $/{ }^{\circ}$ nit ${ }^{\mathrm{s}} \mathrm{i} /$ and $/{ }^{\circ}$ ninon/, I assume that at least a part of the MS attestations with $-n i-i z-z i$ denotes $/{ }^{\circ}$ nit ${ }^{\mathrm{s}} \mathrm{i} /$ (on the basis of 3pl.pres.act. tuuarniianzi ( $\mathrm{OH} / \mathrm{MS}$ ), it cannot be excluded that some attestations denote $/{ }^{\circ}$ niet $^{\mathrm{s}} \mathrm{i} /$ as well). This means that we have to reckon with a stem duuarni- ${ }^{z i}$. The interpretation of 3pl.pres.act. tuuarnanzi (MH/MS) is unclear as well. On the one hand, one could argue that it belongs with the stem duurna- ${ }^{i}$ / duuarn-, but, on the
other, we could also assume that it belongs with duuarnizzi and shows an ablauting stem duuarni- ${ }^{\text {zi }}$ / duuarn- (compare zinni- ${ }^{-2}$ / zinn- 'to finish'). Out of the three stems that are visible in MS texts, duuarna- ${ }^{i}$ / duuarn-, duuarni- ${ }^{z i}$ / duuarn- and duuarniie/a- ${ }^{z i}$, the stem duuarni-/duuarn- must be the original one since this type is unproductive and declining in Hittite, whereas both the $\operatorname{tarn}(a)$ class as well as the -ie/a-class are very productive. In this case, we can easily imagine that on the basis of 3sg.pres.act. duuarnizzi, a new 3pl.pres.act. duuarniianzi was created, which was the source for the -ie/a-class, whereas on the other hand on the basis of 3pl.pres.act. duuarnanzi a new singular stem duuarna- ${ }^{i}$ was created, which was the source for the $\operatorname{tarn}(a)$-class inflection. All in all, I assume that the original inflection of this verb was duuarnizzi, duuarnanzi (thus also Oettinger 1979a: 151, but he wrongly cites this verb as duuarne-).
Already Goetze (1954: 403) connected this verb with Skt. dhvar'- 'to damage, to hurt'. Yet although the root-etymology is generally accepted, the exact analysis of the Hittite verb is not. Eichner (1973a: 75-6) reconstructs * d'uorneié-, a derivative from a "Verbaladj. *dhuorno- 'beschädigt"". Melchert (1984a: 36) rejects this on the basis of the fact that * $d^{h} u o$ - should have given Hitt. $* * t a$ - and not tuıa-. He therefore rather reconstructs *d'uerne-iééti, *d unerne-íónti, from an $e$-grade noun $* d^{h}$ uerno-. Apart from the fact that derivatives of $o$-stem nouns usually show *-o-ie/o- and end up in the Hitt. hatrae-class, the assumed development of *d'uern- > Hitt. tuuarn- is unparalleled. In my view, *d uernVshould have yielded Hitt. **tuern $V$-, compare e.g. * $k^{w}$ ermi $>$ kuermi 'I cut'.

A better approach in my view is Oettinger's (1979a: 151), who reconstructs duuarnizzi, duuarnanzi as *d ur-né- $h_{1}-t i$, * d ${ }^{h} u r-n-h_{1}$-énti (compare zinnizzi / zinnanzi 'to finish' < *ti-né- $h_{1}-t i$, *ti-n- $h_{1}$-énti). This reconstruction is rejected by e.g. Melchert (l.c.) on the basis of the assumption that a sequence ${ }^{*} C u R C$ should always yield Hitt. CuRC, and never ${ }^{* * C u a R C \text {. As I show in Kloekhorst fthc.e, }}$ this view is incorrect. Although a sequence ${ }^{*} C u R C V$ indeed regularly yields Hitt. $/ \mathrm{CuRCV} /$, a sequence $* C u R C C$ (so with two consonants following the resonant) regularly yields Hitt. */CuəRCC/, spelled CuuaRCC (cf. kuaške/a- < *g wh sḱe/o-, kuaraške/a- < * $k^{w} r$-sḱe/o-, etc.). In this case, the regular outcomes of * $d^{h} u r n e ́ h_{1} t i$ and $* d^{h} u r n h_{1}$ énti are ${ }^{* *}$ durnizzi and duuarnanzi. Apparently, the stem of the plural was generalized throughout the paradigm (similarly in zinni- ${ }^{-2} /$ zinn-, where the geminate $-n n$ - of the plural spread over the paradigm).

The usual form of the imperfective is tuuarni/eške/a-, but once we find
 the form is slightly damaged. E.g. Tischler (HEG T: 495) proposes to read $d u-u a-$ $a r-n[i-i s ̌]-k e-e z-z i$ or $d u-u a-a r-n[i]<-i s ̌>-k e-e z-z i$. This first reading is impossible as
the handcopy of this text clearly shows that there is no room for a sign IŠ, whereas the second reading is quite far-fetched. I would rather read du-ua-ar-ăš-ke- here and assume that this form is to be compared with e.g. taraške/a(imperfective of tarna- ${ }^{i}$ / tarn-) in the sense that it is derived from the unextended root * $d^{h} u e r h_{1}$ - and reflects * $d^{h} u r h_{l}$ skélóó- Note that a sequence ${ }^{*} C r H s C$ - normally yields Hitt. /CrisC-/ (e.g. paripriške/a- < *pri-prh $l_{l}$-sḱe/o-), which means that in *d $d^{h} u r h_{l} s k k^{\prime} / o-$ the $-u$ - may have caused a slightly different development (perhaps * dhurh ${ }_{l}$ sḱe/o- > *d'urske/o- > Hitt. /tuərské/á-/, spelled duıaraške/a-). A similar development is visible in ${ }^{\text {(GIŠ) }}$ uaršma- 'piece of firewood' (q.v.) < *urh $h_{l}$-smo-.
Usually, the CLuwian verb lauarr(iia)- is regarded as cognate with duuarni- ${ }^{z i}$ / duuarn-, but see its own lemma for the improbability of this.
tuzzi- (c.) 'army, military forces; military camp' (Sum. ERIN ${ }^{\text {MES }}$ ): nom.sg. tu-uz$z i-i s ̌(K U B 23.72+40.10$ rev. 16, 26 (MH/MS)), tu-uz-zi-aš=mi-iš (KBo 2.5 ii 13 (NH)), acc.sg. tu-uz-zi-in (KBo 7.14 rev. 4 (OS), etc.), gen.sg. tu-uz-zi-aš (MH/MS), tu-uz-zi-įia-aš, tu-zi-aš, dat.-loc.sg. [t]u-uz-zi-ía (KUB 36.106 rev. 11 (OS), etc.), tu-zi (KBo 3.13 ii 3 (OH/NS)), abl. tu-uz-zi-ia-az, acc.pl. tu-uz-zi-uš (KUB 19.37 iii 10, 11), tu-zi-uš, tu-uz-zi-aš (KBo 2.5 ii 3, iii 49 (NH)).
Derivatives: tuzziiiant- (c.) 'army' (nom.sg. tu-uz-zi-íia-an-za (KBo 2.5+ iii 53, KUB 23.21 obv. 30 (fr.)), tu-uz-zi-az (KUB 23.11 iii 16)), tuzziie/a- ${ }^{z i}$ (Ic1) 'to encamp' (1sg.pret.act. tu-uz-zi-įa-nu-un (often)), tuzziįašeššar (n.) $‘ \operatorname{army}(\mathrm{camp})(?) ’\left(\right.$ nom.-acc.sg. tu-uz-zi-ia-še-eš-ša $[r]$ (KUB 19.7 i 5)), ${ }^{\text {NINDA }}$ tuzzi(c.) 'soldier-bread' (Sum. NINDA.ERIN ${ }^{\text {MEŠ. }}$; nom.sg. $t u-u z-z i-i s ̌$, acc.sg. $t u-u z-z i-$ in).

PIE * $d^{h} h_{1}-u t i-$
The bulk of the attestations show a stem tuzzi-. Only once, we find a form that points to a stem tuzziía-, namely nom.sg. tuzziaš=miš (NH), which is clearly secondary.

Forrer apud Feist (1924: $130^{1}$ ) connected this word with Goth. piuda 'people' and Gaul. Teuto-rix, which are further connected with OIr. túath 'people, tribe', We. tūd 'country', OSax. thiod, OHG diot 'people(s)', Lith. tautà 'people', Latv. tàuta 'people', Osc. touto and Umbr. totam 'civitatem' < *teutā. The Hittite word cannot reflect *teut $\bar{a}$, however, but should then go back to an $i$-stem *teut-i- (note that *teut-ti- (thus e.g. Pokorny 1959: 1085) is impossible, as this would yield **tuzzazzi- /tutst ${ }^{\text {i}} \mathrm{i} /$; *teut-io- (thus Eichner apud Hoffmann 1968: $215^{11}$ ) is impossible as well, cf. Melchert (1984a: 166)). There are some problems regarding this reconstruction, however. First, Benveniste (1962: 122-5) argues
that a semantic development from 'people' > 'army' > 'camp' is quite unlikely: the normal development is 'camp' > 'army'. Secondly, the words that reflect *teutā are found in Italo-Celtic, Germanic and Baltic only, which points to an old European substratum word (the alleged cognates Sogd. $t w \delta^{\prime} k$ 'crowd' and ModP tōda 'heap, pile' that e.g. Schmid (1968: 10) adduces in order to show that *teut $\bar{a}$ is genuinely PIE, are unconvincing).
An alternative etymology was put forward by Carruba (1966: 23), who suggested an inner-Hittite connection with dai- ${ }^{i} / t i-$ 'to put, to place'. This is followed by e.g. Melchert (1984a: 166), who points to the semantic parallel katta dai- 'to besiege' and convincingly reconstructs $* d^{t} h_{l}-u t i-$. For the suffix $*$-uti-, cf. luzzi- < *lh $h_{1}$-uti-, išhuzzi- < *sh $h_{2}$-uti-, etc.

Cf. Dercksen (2004) for the fact that this word is attested in OAssyrian texts from Kültepe as well, namely as tuzzinnum 'army'.
$\boldsymbol{u}$ - (preverb.) 'hither': $u^{-}-e^{\circ}, u_{-}-u a$ - (in $u e_{-}^{z i} / u u a-$ 'to come'), $u-i-(e-)$ (in $u i \bar{e}_{-}{ }^{z i} / u i-$ 'to send (here)'), $u-u n-n^{\circ}$ (in $\bar{u} n n a-^{i} / \bar{u} n n i-$ 'to drive (here)'), up- $p^{\circ}$ (in uppa- ${ }^{i}$ / uppi- 'to send (here)'), (ú-)uš-ši- (in $\bar{u} s ̌ s ̌ i i e / a-{ }^{z i}$ 'to draw open (curtains)'), $u^{\prime}-d^{\circ}$ (in $u d a-^{i} / u d-$ 'to bring (here)'), $\dot{\prime}-u a-t^{\circ}$ (in uuate- ${ }^{z i} /$ uuat- 'to bring (here)').
Anat. cognates: CLuw. aư-in auii- 'to come' (see at unez- wura-); HLuw. áw- in áwa/i- 'to come' (see at ue-zi/uua-).
IE cognates: Skt. áva 'off, away', Gr. aṽ 'again, towards', Lat. au-fugiō 'to flee (away)', Lith. au- 'away from, down from', OCS $u$ - 'from, away'.

PIE * $h_{2} \mathrm{Ou}$
The preverb $u$ - 'hither' functions on a par with the preverb pe- 'thither' in the sense that both can be prefixed to a verb to give it an extra semantic element of direction. The two preverbs function as opposites: paili- ${ }^{z i} /$ pai- 'to go' vs. ue- ${ }^{z i} /$
 ped- 'to bring (away)' vs. $u d a-^{i} / u d-$ 'to bring (here)' (besides the simplex $d \overline{a^{-}}{ }^{i} /$ $d$ - 'to take').
Since Hrozný (1917: 70 ${ }^{1}$ ), this preverb is generally connected with Lat. au'away’, Gr. aũ 'towards', OCS u- ‘away', Skt. áva 'off, away' etc., which reflect $* h_{2} e u$. In Hittite, a preform $* h_{2} e u$ should have yielded $* * h u$, however. This is the reason for e.g. Melchert (1994a: 66) to reconstruct all forms, including the Hittite one, as $* a u$. If we assume $o$-grade however, initial $* h_{2}$ would merge with $* h_{1}$ due to the following *o (cf. Kloekhorst fthc.c) and $* h_{2} \mathrm{ou}$ would yield Hitt. / $/ \mathrm{u} \mathrm{u}$. In my view, we can in this way equate the preverb $u$ - with the element $h u$ found in ehu 'come!' (q.v.) and pehute- ${ }^{-i} /$ pehut- 'to lead, to conduct' (q.v.), which both show
retention of $* h_{2}$ in internal, intervocalic position. So, whereas uezzi 'he comes' reflects *h $h_{2}$ ou- $h_{1}$ éi-tí, its imperative eḩu 'come!' reflects *h $h_{1}$ éi- $h_{2} o u$.
It is remarkable that we find different spellings of the preverb in the different verbs ( $u-u C-, u-C V, u^{-}-u C-, u^{\prime}-C V$ and $u C-$ ), whereas within the paradigm of each verb the spelling is fully consistent. See $\S \S 1.3 .9 .4 \mathrm{ff}$. for a full treatment of this problem.

In Luwian, we find au- in CLuw. aui- and HLuw. áwi- 'to come', which show the un-monophthongized forms. Note that alleged CLuw. $u$ - does not exist: this is based on the verb uppa-, of which an analysis $u$ - $+p a$ - is far from assured (cf. the discussion under uppa- ${ }^{i}$ / uppi- 'to send (here)').
$\boldsymbol{u}$ - 'to see': see $a u^{-}{ }^{i} / u$ -
$-\boldsymbol{u}$ (3sg.imp.act.-ending of the hi-flection)
PIE *u

This ending denotes the $3 \mathrm{sg} . \mathrm{imp}$.act. of $h i$-verbs: e.g. $a-k u$ 'he must die', $a-r u$ 'he must come', hu-u-ua-a-ú 'he must run', da-a-ú 'he must take', etc. To my knowledge, no direct cognate of this ending exists in the other IE languages. Nevertheless, it is clear that this ending must have a connection with its corresponding mi-ending $-t u$, which has a cognate in Skt. -tu and reflects *-tu. One could assume that the hi-ending - $u$ is the result of an inner-Hittite analogy to the $m i$-endings: $m i$-endings 3 sg.pres. $*-t i: 3 \mathrm{sg} . \mathrm{imp} . *-t u=h i$-endings $3 \mathrm{sg} . \mathrm{act} .-i:$ 3sg.imp. x. Note however, that this analogy must have taken place before the assibilation of $*-t i$ to $-z i$, but after the replacement of hi-3sg.pres.act. -e by $-i$. Since the latter development must be dated exactly before the oldest stage of attested Hittite (because of the two attestations of the ending $-e$ in OH ), it might become chronologically quite difficult to assume such an analogy. It therefore is better to assume that we are dealing with a PIE element $* u$, which could be attached to 3 sg.- and 3 pl.-forms in order to make them imperatives (compare Goth. 3sg.imp.act.-ending -adau $<*_{-o-t o-u}$ for the reality of an element $* u$ ). In Hittite, this element $* u$ was attached to 3sg.- and 3pl.-forms instead of the 'presentic' -i (3sg.pres.act. $-i>3$ sg.imp.act. $-u$; 3sg.pres.midd. -ari, -ttari > 3sg.imp.midd. -aru, -ttaru; 3pl.pres.act. *-anti > 3pl.imp.act. -antu; 3pl.pres.midd. -antari $>3$ pl.imp.midd. -antaru).

$$
\text { GIŠueššar: see }{ }^{\text {GIšuieššar }}
$$

 ši, 3sg.pres.act. u-i-e-ez-zi (MH/MS), u-i-ịa-zi, 1pl.pres.act. u-i-ịa-u-e-ni, 3pl.pres.act. $u$-i-i-ia-an-zi, [u-]i-e-an-zi (KUB 10.93 i 11 (NS)), 1sg.pret.act. u-i-e$n u-u n$ (VBoT 1, 11 (MH/MS)), u-i-ia-nu-un, u-ía-nu-un, 2sg.pret.act. u-i-e-eš (KBo 11.72 ii 29 (MH/NS)), 3sg.pret.act. u-i-e-et (MH/MS), u-i-ịa-at, 1 pl.pret.act. uiiauen, 3pl.pret.act. $u$-i-e-er, 2sg.imp.act. u-i-ía, 3sg.imp.act. u-i-ìa$a d-d u$, 2pl.imp.act. u-i-ía-at-tén, u-e-i-ía-[at-tén] (KUB 19.1 rev .49 (NH)), ú-a-ía-at-tén (KUB 14.14 ii $36(\mathrm{NH})$ ); part. u-i-ịa-an-t-; verb.noun gen.sg. u-i-i-ia-u-una-aš (KUB 5.6 iii 74); impf. u-e-eš-ke/a-, u-i-eš-ke/a-, u-i-iš-ke/a-, u-iš-ke/a-, u-$i$-e-eš-ke/a-.

PIE *h $h_{2} \mathrm{Ou}+* h_{1 / 3} i e ́ h_{1}-t i / * h_{1 / 3} i h_{l}$-énti
There is some confusion about the spelling of this verb. Friedrich (HW) cites the verb as "uiia- (ú-i-i̇a-; I 4)", which seems to imply that it is generally spelled with initial $u$ - . Oettinger (1979a: 338) does not give an overview of the forms, but only cites a form "ú-i-e-iz-zi", without mentioning its attestation place (he probably refers to the form $u$-i-ee-ez-z[i] (FHG 4, 11), for which see at uai- ${ }^{i}$, ui-, uiielaz ${ }^{z i}$ ). Again it seems as if the verb is spelled with initial $u$-. Kronasser (1966: 496) cites several attestations, most of which are spelled $u$-, however. He remarks that the ratio between spellings with $u$ - vs. $u$ - is about $12: 1$ (but note that the only form with $u$ - that he cites, 3pl.pres.act. $u$-i-i-ia-an-zi (VBoT 24 iv 37), in fact is to be read inf.I $u$ u-i-ía-u-an-zi 'to cry', cf. the lemma uai- ${ }^{i} / u i-$ ). Melchert (1984a: $16^{31}$ ) states: "My files show 168 examples of $u(i) y a$ - with initial $u$ - versus only four with $u$ ú-", which gives quite a different picture. In my text files, I found this verb 154 times, of which only one form was spelled with initial $\dot{u}$ - vs. $u$ - in all other cases. This one form is the aberrant form ú-a-ía-at-tén in KUB 14.14 ii $36(\mathrm{NH}$, 1st Plague Prayer). A meaning 'you must send' is assured on the basis of other versions of the Plague Prayer, which have u-i-ia-at-tén 'you must send' in this context. On the basis of the form u-e-i-ila-[at-tén'] 'you must send', which we find in KUB 19.1 rev. 49, which fragment is a join to KUB 14.14 (and line KUB 19.1 rev. $49=$ KUB 14.14 ii 36), one could perhaps argue that it should be read $u$ -$e^{!}$-ia-at-tén, but either way, this form (as well as u-e-i-ia-[at-tén]) is aberrant within the paradigm of $u i_{C} e^{z i} / u i-$.
All other verbal forms that show an initial $\dot{u}$ - belong to other verbs (either uai- ${ }^{i}$ / $u_{n} i-$, uiie/a-zi 'to cry' (finite forms and imperfective) or ue- ${ }^{z i} /$ uua- 'to come' (impf. ue/iške/a-)). So, all forms of the verb uiez- ${ }^{z i}$ /ui- (except ú-a-ia-at-tén) are spelled with initial $u$-. This spelling points to a phonological stem [?oie-],
whereas uai- ${ }^{i} / u i-$, uiie/ $a_{-}{ }^{z i}$ 'to cry' (spelled with $u^{\prime}$ ) rather is /uai-, ui-, uie/a-/ and $u e^{z i} /$ uua- 'to come' is /?ue/a-/ (see also at § 1.3.9.4.a).

The bulk of the forms show a stem uiia-, but these are found in NS texts only: the oldest forms (MH/MS) show only a stem uie- in the singular (3sg.pres.act. $u$ -$i-e-e z-z i, 1 \mathrm{sg} . p r e t . a c t . ~ u-i-e-n u-u n, 3 \mathrm{sg} . p r e t . a c t . ~ u-i-e-e t)$. Just as its counterpart peie $e_{-}^{z i} /$ pei- 'to send away', I assume that this verb originally inflected uie- ${ }^{z i} /$ ui-, which was taken over into the -ie/a-class in NH times only.
The verbs uie-/ui- 'to send (here)' and peie-/pei- 'to send (away)' clearly are compound verbs with the preverbs $u$ - and pe- respectively. The second part of these verbs is generally connected with Gr. Ï $\eta \mu$ 'to release, to make go, to let go' $<{ }^{*} h_{1 / 3} i e_{l^{-}}$(see at peie- ${ }_{-}^{z i} /$ pei- for details). In uie- ${ }^{z i} / u i$ - the preverb $u$ - /Ru/ was lowered to $/ \mathrm{Ro} /$ due to the following $-i$-.
Note that the imperfective of $u i_{-} e^{-z} / u i-$ 'to send', which is spelled with initial $u$ -(u-i-eš-ke/a-, u-i-iš-ke/a-, u-iš-ke/a-, u-e-eš-ke/a-, u-i-e-eš-ke/a-) is clearly kept distinct from the imperfective of $u e_{-}^{z i} / u u a-$, which is spelled with initial $\dot{u}-(\dot{u}-i s ̌-$ $k e / a-, u ́-i-i s ̌-k e / a-$, ú-e-iš-ke/a-). The latter represents phonological /Ruiské/á-/, whereas the former forms represent /Roiiské/á-/ (= u-i-eš-ke/a-, u-i-iš-ke/a-) > /Roiské/á-/ (= u-iš-ke/a-, u-e-eš-ke/a-) and, with analogical introduction of the strong stem, /Roieske/a-/ (=u-i-e-eš-ke/a-).
$\overline{\boldsymbol{u}} \boldsymbol{k} / \boldsymbol{a m m}$ - (pers.pron. 1sg.) 'I, me': nom.sg. $u$ - $u k$ (OS), $u ́-k=$ (OS), $u ́-g=(\mathrm{OS})$, am-mu-uk, acc.sg. am-mu-uk (OH/MS), gen.sg. am-me-el (OS), am-mi-el, am-me-$e-e l$, dat.sg. am-mu-uk (OH/MS), abl. am-me-e-da-az, am-me-e-da-za, am-me-da$z a$, am-me-e-ta-az, am-me-ta-az, am-me-ta-za, am-mi-ta-az.
Derivatives: ukel 'I, myself’ (ú-ke-el), ukila 'I, myself' (ú-ki-la).
Anat. cognates: HLuw. ámи 'I, me' (nom.sg. /?mu/ á-mu (often), á-mu-u (1x), á-mu-u-' (1x), $m u(1 \mathrm{x}), m u^{\prime}$ (often) acc.sg. /२mu/ á-mu, dat.sg. /?mu/ á-mu), áma/i- (adj.) 'my’ (nom.sg.c. /?mis/ á-mi-sa, á-mi-sá, á-mi-sà, á-mi-sa ${ }_{4}$, á-mi-isa, mi-i-sa, mi-i-sa-', acc.sg.c. /Rmin/ á-mi-na, á-mi-i-na, mi-i-na-', nom.acc.sg.n. /?man=t ${ }^{\mathrm{s}} \mathrm{a} / a ́ a-m a-z a$ (often), $\dot{a}-m a-z a_{4}(1 \mathrm{x})$, dat.sg. /?mi/ á-mi, á-mi-i, mi$i$, mi-i-', abl.-instr. /Rmi(a)di/ á-mi+ra/i, á-mi-ia+ra/i, á-mi-ia-ti, á-mi-ia-ti-i, á-

 $z i-i, m i-i-z i{ }^{\prime}$, , mi-zi, mi-zi-', nom.-acc.pl.n. /?ma/ á-ma, dat.-loc.pl. /?mi(a)nts ${ }^{\mathrm{s}}$ á$m i-i a-z a$, á-mi-ia-za-', á-mi-za, mi-ia-za, mi-ia-za-'); Lyd. ати 'I, me’ (nom.sg.
 dat.-loc.(pl.?) ẽminav, ẽminas[..](?)); Lyc. $\tilde{e} m u$ 'I, me' (nom.sg. $\tilde{e} m u$, emu, $a m u$,
dat.sg. emu), ẽmi- 'my’ (nom.sg.c. ẽmi, acc.sg.c. ẽmi, acc.pl.c. ẽmis, nom.acc.pl.n.? $\tilde{m} m a j a$ ).

See chapter 2.1 for an elaborate treatment of these words.
ukila: see $\bar{u} k$ / amm-
$\boldsymbol{u k t u} r \boldsymbol{r} \boldsymbol{i}$ (adj.) 'firm, steady, constant, eternal' (Sum. SAG.UŠ): nom.sg.c. uk-tu-u-ri-iš (often), uk-tu-ri-iš (4x), acc.sg.c. uk-tu-ri-in (1x), nom.-acc.sg.n. uk-tu-u-ri (often, OS), gen.sg. u[k]-tu-u-ri-aš, uk-tu-u-ri-ía-aš, dat.-loc.sg. uk-tu-u-ri, nom.pl.c. uk-tu-u-ri-eš (OS), uk-tu-u-ri-i-e-eš, ua-a[k-t]u-u-ri-iš (KUB 33.120 i 6 (NS)).
Derivatives: uktūri (adv.) 'firm, steady, constant, eternal' (uk-tu-u-ri), uktūri(gender unclear) 'cremation site’ (dat.-loc.sg. uk-tu-u-ri-ía, abl. uk-tu-ri-ia-az, dat.-loc.pl. uk-tu-u-ri-ía-aš, uk-tu-ri-ia-aš).

As an adjective, the word means 'firm, steady'. When used as a noun, it seems to denote 'cremation site', cf. e.g.

KUB $30.15+39.19$ obv.
(10) nu ak-kán-za ku-e-da-aš uk-tu[-ri]-ia-aš ua-ra-a-ni nu a-pé-e-da-aš $u k-t u-r i-i \underline{n} a-a s ̌$
(11) $a-r a-a h-z a-a n-d a-a s ̌ ~ 12$ NINDA.GUR $4 \cdot$ RA $^{\text {MEš }}$ GAM $t i-i a-a n-z i$
'Around those ukturi-'s where the deceased person is cremated, they lay down twelve thickbreads’.

Perhaps this word is a specialized meaning of a fire-proof (i.e. "eternal") place where cremations were executed.
The bulk of the forms are written with plene $-u$-: uktūri-. The form uaktūrioccurs only once in a NS text and may not have much merit. Rieken (1999a: 354) analyses the word as $u k t$-uri-, in which the morpheme -uri- would be ultimately derived from *-uer-/-uen-nouns (she compares Skt. añg-úri- 'finger'). Puhvel (1972: 115) connects uktūri- with Skt. ójas-, Av. aǒ̌ah-, Lat. *augus- ‘strength’. The latter forms go back to a root $* h_{2} e u g$-, which does not fit the Hitt. forms: a zero-grade ${ }^{*} h_{2} u g$ - should have given Hitt. **huk-. In LIV, a root *ueǵ- 'münter, lebhaft, kräftig werden' is cited, which at least semantically could fit uktūri-. Nevertheless, the formation of this word would remain intransparent. Further unclear.
ulae- ${ }^{z i}$ (Ic2) 'to hide, to sneak away': 1sg.pret.act. ú-la-nu-un (OH/NS), 3 sg.pret.act. $u$-la-e- $d=a-a \check{s}(\mathrm{NH})$.
Derivatives: ulē̌̌š- ${ }^{z i}$ (Ib2) 'id.' (3sg.pres.act. ú-le-eš-zi (NS), ú-li-iš-zi, 3sg.pret.act. ú-le-eš-ta (OH/NS), ú-li-iš-ta (MH/MS); 3sg.pret.midd. ú-le-eš-ta!$a t$; inf.I $u$ ú-li-iš-šu-ua-an-zi, ú-le-eš-šu-ua-an-zi; impf. ú-ul-li-iš-ke/a-).

See Oettinger 1979a: 363 for attestations. The forms ulanun and ulaet clearly point to the hatrae-class inflection. The forms that show a stem ulešš- and uliššare sometimes regarded as belonging to the paradigm of ulae-, but in my view it is best to assume a derived verb ulēšš- ${ }^{z i}$ with the suffix - $\bar{e} \check{s} \check{s}-$. The basic verb ulaeis attested in NS texts only, and since the hatrae-class was highly productive in NH times, it is possible that this verb did not inflect according to the hatrae-class originally.

Oettinger (1979a: 364) proposes a connection with Skt. láyate 'to hide oneself' from a root $*$ leiH-, implying that $u$ - must be regarded as the $u$-prefix (q.v.). Since the prefix $u$-had the meaning 'hither', it is semantically not easy to interpret ulae'to hide' as $u+$ *leiH- "to hide hither". Moreover, we would expect to find a counterpart with pe- as well, which is unattested. All in all, I am not convinced by Oettinger's etymology.
ulkiššara-, ualkiššara- (adj.) 'skilled, experienced, able’: nom.sg.c. uृa-al-kiš-ša$r a-a s ̌(K B o 1.42$ i 4, 5 (NS)), acc.pl. ul-ki-iš-ša-ru-uš (KUB 29.1 ii 13 (OH/NS)) // [...-k]i-iš-ša-ru-uš (KUB 29.2 ii 5 (OH/NS))).

Derivatives: ulkiššarahh- ${ }^{i}$, ualkiššarahh ${ }^{i}$ - (IIb) 'to make perfectly, to depict perfectly' (3sg.pres.act. u_a-al-ki-iš-ša-ra[-ah-hi] (KBo 6.26 iv $30(\mathrm{OH} / \mathrm{NS})$ ) // ua-al-k[i-iš-ša-]rạ-ah-ḩi (KUB 13.14 rev. 7 + KUB 13.16, 4 (OH/NS)), 3pl.pret.act. $u l-k e-e s ̌-s ̌ a-r a-a h-h e-e r(K B o ~ 3.34 ~ i i ~ 32(O H / N S)))$.
IE cognates: Skt. várcas-, GAv. varačah- 'splendour'.
PIE *ulk-sro-?

This word is spelled with initial $u l-k^{\circ}$ as well as $u a-a l-k^{\circ}$. E.g. Rieken (2001: 371) interprets this alteration as ablaut, but see Kloekhorst fthc.b for my view that ablauting pairs $\underset{\sim}{u V C}-/ u C$ - were not allowed in Hittite. I would rather compare this situation to the one found in urāni, uarāni 'burns': as I explain under its lemma, this verb reflects PIE *urh ${ }_{l}$ óri, which first yielded OH /urłắni/, spelled ú$r a-a-n i$, and consequently develops into $\mathrm{MH} / \mathrm{NH} /$ urr?ăni/, spelled úa-ra-a-ni. This means that PIE $* u R C->\mathrm{OH} / \mathrm{uRC}-/>\mathrm{MH} / \mathrm{NH} / \mathrm{u} \rho \mathrm{RC} /$. Although the
attested forms of ulkiššara-, ualkiššara- are all found in NS texts, the fact that the spelling $u l-k^{\circ}$ is only found in OH compositions, could indicate that this word, too, shows this distribution, namely $\mathrm{OH} / \mathrm{ulk}-/>\mathrm{MH} / \mathrm{NH} / \mathrm{u}$ əlk-/.
Hoffner (1963: 36-7) reconstructs this word as *ual-g' ${ }^{h}$ esro- 'having a strong hand', but this does not take into account the spellings with $u l-k^{\circ}$. In my view, ulkiššara-, ualkiššara- is to be interpreted as /ulKiSra-/, /uəlKiSra-/, reflecting pre-Hitt. *ulK-sra-, showing the suffix -sra- as visible in nahšaratt- 'fear' and ganuššariie/a- ${ }^{z i}$ 'to kneel' as well. The root *ulK- may belong with Skt. várcas-, GAv. varačah- 'splendour', which could reflect *uelk-es-. If correct, we must reconstruct *ulk-sro-.
-umen- / -umn- (suffix of appurtenance) 'coming from ...': nom.sg. ${ }^{\text {URU }} \mathrm{H} a$-aš-šu-$u$-ma-aš (KBo 3.27 obv. 29 (OH/NS)), ${ }^{\text {URU } H a-a t-t u-s ̌ u-m a-a s ̌ ~(K B o ~} 18.151$ obv. 1 (MH/MS)), ${ }^{\mathrm{URU}}$ Za-al-pu-u-ma-aš (KBo 3.27 obv. 28 (OH/NS)), ${ }^{\mathrm{URU}} \mathrm{H} a$-al-pu-u-ma-aš (KBo 3.27 obv. 30 (OH/NS)), ${ }^{\text {URU }}$ Šu-tum-ma-na-aš, acc.sg. URU Pu-ru-uš-ha-an-du-um-na-an (KBo 3.28 ii 5 ( $\mathrm{OH} / \mathrm{NS}$ )), gen.sg. ${ }^{\mathrm{URU}} L u-u ́-i-u-m a-n a-a \check{s}$ (OS), dat.-loc.sg. hé-eš-tu-u-um-ni (KUB 58.50 iv 14 ( $\mathrm{OH} / \mathrm{NS}$ )), nom.pl.c. ${ }^{\text {LÚ.MEŠ }} N e$-šu-me-né-eš (OS), ${ }^{\mathrm{URU}} K a-a-t a-p u-u$-me-né-eš (OS), ${ }^{\mathrm{URU}}$ Ša-lam-pu-u-me-né-eš (OS); case? ${ }^{\mathrm{URU}} \mathrm{H} a$-at-tu-šum-ma-aš (KBo $7.14+\mathrm{KUB} 36.100$ rev. 15 (OS)).
Anat. cognates: CLuw. -uann(i)- in URU Ninuuauann(i)- 'of Nineveh', tātauann(i)- 'stepfather', ānnauann(i)- 'stepmother', kulauann(i)- 'of the army'; HLuw. -wan(i)- in nom.sg.c. ha+ra/i-na-wa/i-ni-i-sa ${ }^{\text {URBS }}$ 'of Harran', acc.sg.c. TONITRUS.HALPA-pa-wa/i-ní-na ${ }^{\text {URBS }}$ 'of Halpa', gen.sg. ${ }^{\text {DeUs }}$ hara/i-ma-na$w a / i-n a-s a=p a=w a / i^{\mathrm{URBS}} \quad$ 'of Harman', dat.-loc.sg. ha+ra/i-na-wa/i$n i=p a=w[a / i \ldots]$ 'of Harran', abl.-instr. $a$-sú-ra/i ${ }^{\text {REGIO }}-w a / i-n a-t i^{\text {URBS }}$ 'of Assyria', nom.-acc.pl.n. $\dot{a}-w a / i-i a-n a-w a / i-n a=p a=w a / i^{\mathrm{URBS}}$ 'of Awayana', dat.-loc.pl. $k a$ $n a-p u-w a / i-n a-z a^{\text {URBS }}$ 'of Kanupa'; Lyc. -ñne/i- in Pilleñne/i- 'of Pinara', Tlãñne/i- 'of Tlos', Xbidẽ̃̃ne/i- 'of Kaunos'; Mil. -wñni- in Tunewñni 'of Tumnessos(?)', Xbidewñni 'of Kaunos'.

In most cases, this suffix denotes ethnic origin, for instance: LÚ URU Haššumaš 'the man of the city Hašša', Lú.meš Nešumeneš 'the men of the city Neša'. When derived from other nouns, it denotes appurtenance, e.g. ${ }^{\text {LÚ }}$ heštūmni 'the man pertaining to the hišt $\bar{a}$ ', arunumaneš 'those of the sea'. A special case is kuenzumna- 'coming from where?, of what origin?', which is derived of *kuenzan, gen.pl. of kui- / kuua- 'who, what?'.

The original inflection of -umen- / -umn- seems to be nom.sg.c. -umaš, acc.sg. -umnan, gen.sg. -umanaš, dat.-loc.sg. -umni, nom.pl.c. -umeneš (all OH texts). According to Oettinger (1982b), the original situation probably has been nom.sg.c. -umaš, acc.sg.c. *-umenan, gen.sg. *-umnaš, dat.-loc.sg. -umni, nom.pl.c. -umeneš, which would point to an original $n$-stem inflection -umen- / -umn- (note that nom.sg.c. -umaš then must reflect *-umen-s). On the basis of nom.sg.c. -umaš, the variant -umen- sometimes was altered to -uman- (apart from gen.sg. Lu-ú-i-u-ma-na-aš cited above, also nom.pl. a-ru-nu-ma-né-e-eš (KUB 8.14 obv. 14), etc.). The form Ha-at-tu-šum-ma-aš may show geminate -mmfrom *-mn-. In younger times, the suffix has become thematic, -uma-, on the basis of nom.sg.c. -umaš. Compare e.g. the name ${ }^{\mathrm{m}}$ Šuppiluliuma- lit. 'the one of the pure well' or ${ }^{\text {Lú }}$ hištuma- 'person pertaining to the hišt $\vec{a}$ '.
In Luwian, the suffix -uann(i)- has a similar meaning, which must be cognate with Lyc. -ñe/i- and Mil. -wñne/i-. These clearly show that the -m- of Hitt. -umen- must go back to *-u-. The Hittite suffix is often spelled with plene $U$ (e.g. Ka-a-ta-pu-u-me-né-eš, Lu-ú-i-u-ma-na-aš), which indicates that we are dealing with /-omen-, -omn-/. Herewith, this suffix is phonetically comparable to e.g. tumēni /toméni/ 'we take' and tarnumeni /trnoméni/ 'we release' that go back to *dH-uéni and *trnH-uéni respectively. I therefore reconstruct the suffix -umen- / -umn- as *-Huen- / *-Hun-. I know of no IE cognates, however.
ummiiant- (adj.) describing 'birds': acc.pl.c. um-mi-ía-an-du-uš (KBo 6.14 i 9 (OH/NS)).

The adjective only occurs in $\S 120$ of the Hittite Laws:
KBo 6.14 i
(9) ták-ku um-mi-ia-an-du-uš MUŠEN ${ }^{\mathrm{HILA}} a[n-n a-n u-u h-h u-u s ̌ ? ~ k(u-i s ̌-k i)]$
(10) ta-a-i-e-ez-zi
'If someone steals trained ${ }^{\text {' }}$ ummiiant-birds, ...'.

On the basis of this context the meaning of ummiiiant- cannot be determined. The preceding paragraph deals with lu-li-įa-aš MUŠEN-in an-na-nu-uh-ha-an na-ašma ka-ak-ka-pa-an an-na-nu-uh-ha-an 'a trained' pond-bird or a trained? kakkapa-', but this does not shed much light on the meaning of ummiiiant- either. Nevertheless, Puhvel (HED 1/2: 48) translates the word as 'young', assuming a connection with amiiiant- 'small' (q.v.), the negated form of miiant-, participle of
mai- ${ }^{i}$ / mi- 'to grow'). This translation is followed by Melchert (1994a: 160), who reconstructs *ud-miiant- 'grown up'. In my view, this is all much too speculative.
umiie/a- ${ }^{z i}$ : see uemiie/a- ${ }^{z i}$
-un (1sg.pret.act.-ending of the $m i$-flection): see $-(n) u n$
$\overline{\boldsymbol{u}} \boldsymbol{n n a} \mathbf{-}^{i} / \overline{\boldsymbol{u}} \boldsymbol{n n i -}$ (IIa5 > IIal $\gamma$ ) 'to send (here), to drive (here)': 1sg.pres.act. u-un-na-ah-hi (KBo 18.136 rev. 17), 2sg.pres.act. u-un-na-at-ti (HKM 71 obv. 4 (MH/MS), KUB 30.34 iv 12 (MH/NS)), 3sg.pres.act. u-un-na-i (MH/MS), u-un-na-a-i, 2pl.pres.act. u-un-n[a]-at-te-ni (KUB 26.19 ii 24 (MH/NS)), u-[u]n-ni-iš-te-ni (KUB 13.27 i 32 (MH/MS)), 3pl.pres.act. u-un-ni-an-zi (OH/MS), u-un-ni-ìa-an-zi, u-un-na-an-zi 1sg.pret.act. u-un-na-ah-hu-un, 2sg.pret.act. u-un-ni-eš (KUB 9.34 iii 28, KUB 59.46 rev. 10 (dupl.)), 3sg.pret.act. u-un-ni-iš (HKM 24. obv. 11 (MH/MS), KUB 7.23, 3, KBo $12.3 \mathrm{i}^{!} 22$ ), u-un-ni-eš-ta (KBo 18.54 obv. 8, KBo 4.4 ii 70), u-un-ni-iš-ta (KUB 14.15 ii 12), 1pl.pret.act. u-un-nu-me-en (HKM 47 obv. 10, 12 (MH/MS)), и-иn-пи-ит-те-еп (HT 1 ii 27 (NS)) u-иn-nи-um-mi-in (KUB 9.31 ii 54), 2sg.imp.act. u-un-ni (MH/MS), 3sg.imp.act. u-un-naú (KUB 13.2 i 21), 2pl.imp.act. u-un-ni-iš-tén (HKM 16, 10 (MH/MS)), 3pl.imp.act. u-un-ni-an-du (HKM 65, rev. 25 (MH/MS)); verb.noun gen. u-un-nu$m a-a s ̌$ (KBo 18.38 obv. 4); part.nom.sg.c. u-un-na-an-za (KUB 13.5 ii 17 ( OH or MH/NS)).

PIE $* h_{2} \mathrm{Ou}+$ noih $_{1 / 3}$-ei $/ *$ nih $_{1 / 3}$-enti
In my text files, this verb is attested about 120 times with a spelling $u-u n-n^{\circ}$. A citation of an aberrant spelling can be found in the edition of HKM 31, where Alp (1991: 174) cites a form ú-ni-an-du 'sie sollen schicken' (rev. 19). In the handcopy of this tablet, we read $=u$-[ $] x-a n-d u$, however. Although the small remains of the damaged sign indeed resemble the sign NI, this reading would leave quite a gap between Ú and NI. I therefore think that the traces that Alp reads as NI form the latter part of a larger sign. Although collation is necessary, I would rather read $u$ - $[d] a-a n-d u$ 'they must bring' here. Kronasser (1966: 597) cites 3pl.pret.act. ú-ni-ir (KUB 31.64 ii 39), but the context in which this form is found is too broken to determine its meaning. Hagenbuchner (1989: 223) cites KBo 18.136 rev. (17) nu-uš! un-na-ah-hi. The handcopy of the tablet
 why Hagenbuchner emends U to UŠ: I would rather read nu u-un-na-ah-hi. Some attestations of aberrant spellings are real, however. In KBo 18.14 rev. 12, we find

3sg.pres.act. un-na-i, but perhaps we are allowed to emend this to «u->un-na-i. In HT 1 ii 20, we find 3pl.pres.act. $u$-ni-ia-an-zi, but this is likely to be emended to $u-\langle u n-» n i-i=1 a-a n-z i$. Taking this into account, we must conclude that all spellings of this verb show initial $u-u n-n^{\circ}$.

The verb $\bar{u} n n a / i$ - shows the typical méma/i-inflection (ūnnahhi, ūnnatti, ūnnai vs. unnianzi). As I explain at the treatment of the méma/i-class in § 2.2.2.2.h, verbs of this class derive from polysyllabic dāi/tiianzi-class verbs that are being influenced by the $\operatorname{tarn}(a)$-class from pre-Hittite times onwards.
It is generally accepted that $\bar{u} n n a / i$ - is a compound of the preverb $u$ - (q.v.) and $n a i-{ }^{i} /{ }^{i} n i-$ 'to turn' (see at $n \bar{e}^{-}{ }^{a(r i)}, n a i^{i} / * n i-$ ) and functions as the counterpart of penna- / penni- 'to send (there)' (pe- + nai-/ni-). It is unclear why we find a geminate -nn- here, which we also find in penna- ${ }^{i}$ / penni- and in nanna- ${ }^{i}$ / nanni(see under $n \bar{e}^{a(r i)}$, nai- ${ }^{i} / * n i-$ ). Perhaps the univerbations and the reduplication were formed at a time that all initial consonants were fortis. Note that the spelling with $u$ - points to a phonological stem $/ \mathrm{RoNa}-/$, in which the preverb $u$ - apparently was lowered to $/ \mathrm{Ro} /$ due to the following -nn- (cf. § 1.3.9.4.f).
unattalla- (c.) 'merchant' (Sum. ${ }^{\text {LÚ }} \mathrm{DAM.GÀR):} \mathrm{acc.sg}. \mathrm{ú-na-at-ta-al-la-an} \mathrm{(KBo}$ 6.2 i 6 (OS)).

This word only occurs in $\S 5$ of the Hittite Laws:
KUB 6.2 i
(3) ták-ku ${ }^{\text {LÚ }}$ DAM.GÀR $k u-i s ̌-k i ~ k u-e-e n-z i ~$
...
(6) $n u-u=z-z a$ ú-na-at-ta-al-la-an=pát ar-nu-uz-zi
'If someone kills a merchant ..... He will make the merchant be transported (= let him bury)'.

Its meaning is only known because of the fact that it must refer to the LÚ DAM.GÀR 'merchant' mentioned in the first line.

The suffix -ttalla- is used to form, among others, deverbal nomina actoris. Kronasser (1966: 176) therefore derives this noun from the verb unnna- $/ \bar{u} n n i-$ 'to send here, to drive here' (q.v.). Problematic, however, is the fact that this verb is consistantly spelled $u$-un-na-, whereas unattalla- is spelled $u$ u-na-. I therefore would reject the connection but must admit that I do not have an alternative solution.
$\overline{\boldsymbol{u}}(\boldsymbol{n}) \boldsymbol{h}^{\boldsymbol{z}}{ }^{i}$ (Ib3) '?': 3sg.pres.act. $u-u n-h a-z i$ (KUB 35.79 i 5), 3pl.pres.act. $u$-un-h $h a-$ an-zi (KUB 32.94 i 3 (OS), KUB 30.40 i 18, KBo 39.118 obv. 9 (fr.), KBo 40.183, 5 (fr.), KUB 39.57 i 9 (fr.)), 1sg.pret.act. u-un-hu-un (KUB 31.77 i 16), 3sg.pret.act. u-uh-ta (KUB 31.77 i 12), u-un-Vh-da (KBo 18.180 rev. 10), 3pl.pret.act. u-un-he-er (KUB 42.20, 9), 3pl.imp.act. u-un-ḩa-an-du (Bo 69/326 (see Oettinger 1979a: 183)); impf. u-un-ȟi-eš-ke-ez-zi (KUB 31.77 i 12).

The meaning of this verb is difficult to determine. Laroche (1954: 48) proposed a meaning 'to suck', which has been taken over by Friedrich HW and Oettinger (1979a: 183), but Košak (1982: 242) explicitly states "mng. unkn., not "to suck"". The verb is consistently spelled with initial $u$-. The only $n$-less form is 3sg.pret.act. u-uh-ta, where we would expect it: $\bar{u} n h C>\bar{u} h C$ (compare the distribution between $\operatorname{likC}$ and $\operatorname{linkV}$ in the paradigm of $\left.l i(n) k-{ }^{z i}\right)$. This means that in e.g. 3sg.pres.act. $u-u n-h n a-z i$ and 3 sg.pret.act. $u-u n-V h-d a$ the $-n-$ was restored.
Although clear cognates are missing, Oettinger (1.c.) mechanically reconstructs * $h_{1 / 3} u e ́ n h_{2}-t i$, * $h_{1 / 3} u n h_{2}$-énti, which would mean that the zero-grade stem spread throughout the paradigm. Note that a root $* \mathrm{Heunh}_{2}$ - would be against the PIE root constraints.
uni(-) : see aši / uni / ini
$\boldsymbol{u n u}-{ }^{z i}$ (Ib2 > Ic2) 'to adorn, to decorate, to lay (the table)': 1sg.pres.act. ú-nu-ua$m i(410 / \mathrm{u}, 14$ (NS) (cf. StBoT 5: 184)), 3sg.pres.act. ú-nu-uz-zi (KBo 38.265 i 11 (MS), KBo 18.108 upper edge 9 (NS)), ú-nu-u[z-z]i (KBo $40.46+$ KBo 35.156 iii! 4 (NS)), ú-nu-u-ua-iz-zi (KUB 10.91 ii 16 (OH/NS)), 3pl.pres.act. ú-nu-ua-an$z i$ (KBo 5.1 iv 16 (MH/NS), KUB 58.100 iii 4, KBo 2.13 obv. 13, KUB 17.35 i 32, etc.), 3sg.pret.act. ú-nu-ut (KUB 31.143 ii 23 (OS), KBo 25.119, 3 (OS), 3pl.pret.act. ú-nu-e-er (KBo 19.112, 6 (MH/NS), KUB 33.96 iv 16 (NS), KUB 15.36 obv. 7, 10 (NH)), ú-nu-er (KBo 39.290 iii 10 (NS)), ú-nu-uа-a-er (KUB 36.67 ii 19 (NH)), 3pl.imp.act. ú-nu-ua-[an]-du (KUB 33.96 iv $13+$ KUB 36.7a iv 50, KUB 36.25 i 4); 1sg.pres.midd. ú-nu-ua-ah-ḩa-ri (KUB 17.9 i 32 (NS)), 3sg.pres.midd. ú-nu-ud-da (KUB 4.4 ii 15 (NH)), 3sg.pret.midd. ú-nu-ut-ta-at (KUB 17.5 i 5 (OH/NS), 3pl.pret.midd. ú-nu-ua-an-ta-at (KUB 46.30, 31); part. ú-nu-uа-an-t-; inf.II ú-nu-ua-an-na (KUB 17.35 i 28); impf. ú-nu-uš-ke/a- (OS).

Derivatives: unuuašha-, unašha- (c.) 'decoration, adornment' (acc.sg. ú-nu-üa$a \check{s}-h a-a n$, dat.-loc.sg. ú-nu-ua-aš-hi, abl. ú-nu-ua-aš-ha-za, nom.pl. ú-nu-una-aš-he-eš, acc.pl. ú-nu-u_a-aš-hu-uš, ú-na-aš-hu-uš (KUB 12.31 ii 25)).

IE cognates: Lat. ind-uō 'to put on (clothes)', Arm. (h)aganim 'to put on', Lith. aũti, aunù 'to put on (shoes)', OCS ob-uti 'to put on (shoes)'.

PIE * $h_{3} u$-néu-ti $/ * h_{3} u$-nu-énti
Friedrich (HW: 234) cited this verb as unuuāi-, apparently on the basis of $u$-nu-u-ua-iz-zi (KUB 10.91 ii 16 (OH/NS)) and ú-nu-ua-a-er (KUB 36.67 ii 19 (NH)) (note that the form " $u$-nu- $u$ - $u[a-i z-z] i$ ", read thus in KBo $40.46+$ KBo 35.156 iii! 4 by Haas \& Wegner (1999: 190), does not exist: the handcopy clearly shows $u$ $n u-u[z-z] i$ (cf. Groddek \& Kloekhorst 2006: 188). The oldest forms of this verb, $u ́-n u-u z-z i$ (MS) and ú-nu-ut (OS), clearly show that we are dealing with an original stem unu- $^{z i}$, however. The occasional forms that show a stem unuиae- ${ }^{-2 i}$ (apart from ú-nu-u-ua-iz-zi and ú-nu-uа-a-er also ú-nu-ua-mi) are found in NS texts only (cf. also Oettinger 1979a: $322^{134}$ ) and must have been secondarily formed under the influence of the highly productive hatrae-class. Almost all forms are spelled with initial $\dot{u}$-. A spelling with $u$ - can only be found in

KUB 4.3 ii
(12) ha-me-iš-hi-a $\mathrm{GU}_{4}$-un le-e una-aš-ti kar-ša-an-tan $=m a=z a$
(13) gal-liš-tar-ua-ni-li «le->e《<-da» da-at-ti mar-ša-an-za
(14) $\mathrm{GU}_{4}-u s ̌ ~ h a-m e-i s ̌-h i=p a ́ t ~ \mathrm{SIG}_{5}-r i i-d a-l u-u \check{s}=m a=z[a]$
(15) kar-ša-an-za gal-liš-tar-ua-ni-li u-nu-uá-ta-r[i]
(16) $n u=z a$ ú-e-kán-ta-an TÚG-an u_a-aš-ši-íla $[-z i]$
(17) $k u$-uš-ša-ni-an=ma=za Ì-an iš-ki-i $[a-z i]$
'Do not buy a cow in spring (just as) you should not take a girl (in marriage) during a party. Especially in spring a cow of poor quality looks good, (just as) an ugly girl has adorned herself for the party: she wears fashionable clothes and puts on oil that has been borrowed',
but here we are rather dealing with a scribal error, cf. the mistakes in line 13.
For the meaning 'to decorate, to adorn', cf. Sommer \& Ehelolf (1924: 74). According to Oettinger (l.c.), who apparently assumes that unu- originally is a causative in -nu-, this verb is to be connected with Lat. ind-ū 'to put on (clothes)'. This latter verb is generally connected with Arm. (h)aganim 'to put on', Lith. aũti, aunù 'to put on (shoes)', etc. and reconstructed as $* h_{2} e u$ - 'to put on (shoes)' (cf. e.g. LIV $^{2}$, although there a root final laryngeal is reconstructed $\left(* h_{2} e u H-\right)$, for which I see no evidence). This connection is convincing semantically ('*to make put on $>$ to decorate'), but formally it is problematic, because a preform *h2 $u$-neu- should have yielded Hitt. **hunu-. This problem
can be solved by either rejecting the etymology, or by adjusting the reconstruction. I would like to propose the latter solution.
The reconstruction of the initial $* h_{2}$ is especially prompted by Arm. (h)aganim, which seems to reflect $* h_{2} e u$-. The question is of course whether a reconstruction $h_{3} e u$ - is possible as well. In Armenian, there is a sound law that $*_{o}$ in open syllable yields $a$, so $*$-oCV> $-a C V$, but this development is supposed to have been blocked when this sequence is followed by an -o- (olorm 'pity', olok 'prayer', oroy̌ 'lamb'), or when the consonant in question is $-v$ - (hoviw 'shepherd' < *h $h_{3}$ eu-) or a reflex of *u (loganam 'to bathe' < *louH-, kogi 'butter' < *kou-; all examples by Kortlandt 1983: 10). Although in the first two cases the retention of $*_{o}$ is phonetically motivated, in the second case it is not: the development of $* u>$ $g$ occurs very early in the Armenian chronology of sound laws, whereas the unrounding of $*_{o}$ in open syllables is a quite recent phenomenon. It is more probable to assume that in the case of kogi and loganam the -o- is analogical to kov 'cow' and *lov (where -o- is regular). This would pave the way for my view that haganim $<*$ hoganim $<* h_{3} e u$ - (whereas aganim $<*$ oganim $<* h_{3} o u$-), and that the PIE root actually was *h3eu-. With this reconstruction, the derivation of Hitt. unu- < *h $h_{3} u$-neu- is phonetically regular (see Kloekhorst fthc.c for the development of word-initial laryngeals in Hittite).

The derivative unuuašha- is spelled as $u$-na-aš- $h^{\circ}$ once (KUB 12.31 ii 25), which may have to be regarded as a scribal error, copying the signs NU-UA (
$\overline{\boldsymbol{u} p p-{ }^{z}}$ (Ib1) 'to come up (of the sun)': 3sg.pres.act. u-up-zi (often), up-zi (KUB 7.1 ii 25, KUB 55.65 rev.? iv 50, 643/z l.col. 4 (see Otten 1971b: 47)), 3sg.pret.act. u-up-ta (KUB 31.147 ii 18 (MH/NS), KBo 5.8 iii 23 (NH)), up-ta (KBo 16.8 iii 27 (NH)); 3sg.pret.midd. u-up-ta-at (KUB 21.10, 13 (NH)); verb.noun gen. u-up-pu-u-ua-aš (KUB 8.21, 8).
IE cognates: OHG $\bar{u} f$, ModDu. op 'upon'; Skt. upári, Gr. v̋̃ $\varepsilon \rho$, Lat. super, Goth. ufar 'over'.

PIE * $h_{1}$ éup- $t i$
When we look at the attestations of this verb as cited in Oettinger 1979a: 232, we get the impression that its spelling is quite a mess: we find forms that are spelled $u-u p^{\circ}, u p^{\circ}$ as well as $u ́-u p^{\circ}$. A closer look at the attestations shows that this may not be the case, however.
If we look at the instances of $\dot{u}-u p-$, we see that these are all rather problematic. The form 3sg.pres.act. ú-up-zi (KBo 15.34 ii 22) as cited by Oettinger is
incorrect. In the handcopy of this tablet, we see that the second sign of this word
 point to the sign UP, but rather to the sign IZ. We therefore should read $n=a$ - $a \check{c}-t a$ $m a-a h-h a-a n{ }^{\text {d }}$ UTU-uš $u[-e] z-z i$ 'when the Sun-god comes'. The form 2sg.pres.act. $u$ - up-ši (KUB 6.45 iii 14) cited by Oettinger must be read
 where we find $\dot{u}-u a-s ̌ i$. The form 3 sg.pres.act. $\dot{u}-u p[-z i]$ (KUB 28.74 obv. 1) that Oettinger cites is more difficult. When we look at the handcopy of the tablet,
 with certainty that it must be UP. In my view, IZ is possible as well, which would give a reading $\dot{u}-e[z-z i]$. I must admit, however, that this sentence, $[m] a-a-a n ~ l u$ $u k$-kat-ta ${ }^{\text {d }}$ UTU-uš=kán $u$-x[...] (KUB 28.74 obv. 1) has a seeming parallel in e.g. KBo 5.2 ii 29 , where we find $m a-a-a n ~ l u-u k-k a t-t a{ }^{\text {d }}$ UTU-uš=kán $u-u p-z i$ ' when it becomes light, the Sun-god comes up'. Nevertheless, both $\overline{u p p}-^{z i}$ and $u e_{-}^{z i} /$ uuaare used to describe the coming-up of the Sun-god (e.g. ${ }^{\text {d }} \mathrm{UTU}-u s ̌{ }^{2} \dot{u}$-[e]z-zi 'the Sun-god comes' in KBo 15.34 ii 22 cited above), so despite the seeming parallel, a reading $\hat{u}-e[z-z i]$ should be equally possible. I therefore conclude that there are no convincing spellings of the verb $\bar{u} p-_{-}{ }^{i}$ with initial $\dot{u}$-.
On the contrary, the attestations cited by Oettinger with only $u p^{\circ}$ are reliable, e.g. 3sg.pres.act. up-zi (KUB 7.1 ii 25, KUB 55.65 rev.? iv $50,643 / \mathrm{z} 1 . \mathrm{col} .4$ (see Otten 1971b: 47), 3sg.pret.act. up-ta (KBo 16.8 iii 27).
According to Oettinger (1979a: 233), the one middle form ūptat, which is found in a NH text, must be analogical to the middle form luktat 'it has become bright'.
The verb.noun gen.sg. $u$-up-pu-u-ua-ǎ̌ (KUB 8.21, 8) is important as it shows that the root-final consonant is geminate $-p p$ - and not single $-p$-, which points to etymological ${ }^{*} p$. Oettinger reconstructs the verb as $* h_{l}$ éup-ti, connecting it to PIE * $\left(h_{l}\right) u p(o)$. The exact meaning and form of this adverb is unclear, however: Skt. úpa, Gr. ǘo, Lat. sub, OIr. fo, Goth. uf all denote 'under', whereas OHG $\bar{u} f$, ModDu. op mean 'upon'. The latter forms seemingly belong with *uper (i) 'over' (Skt. upári, Gr. ü $\begin{aligned} & \text { ep, Lat. super, Goth. ufar 'over'), which would semantically fit }\end{aligned}$ Hitt. $\bar{u} p p-{ }^{z i}$ as well. All in all, I follow Oettinger in reconstructing *$h_{l}$ éup-ti.
uppa- $^{i} /$ uppi- (IIa5 > Ic1, IIa1 $\gamma$ ) 'to send (here)': 1sg.pres.act. up-pa-ah-hi (MH/MS), 2sg.pres.act. up-pa-at-ti (KBo $10.12+$ KBo 10.13 iii 33 (NH)), 3sg.pres.act. up-pa-a-i, 1pl.pres.act. up-pi-ui-e-ni (KUB 17.21 iv 13 (MH/MS)), 2pl.pres.act. up-pa-at-te-ni (KUB 13.17 iv 8 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 13.4 iv 45 (fr.) ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pres.act. up-pi-an-zi (MH/MS), up-pi-i[a-an-zi], up-pa-an-zi (KUB 14.3 ii $62(\mathrm{NH})$ ), 1sg.pret.act. up-pa-ah-hu-un (MH/MS), 2sg.pret.act. up-pí-eš-ta
(e.g. KBo 18.76 rev. 4 (NS)), 3sg.pret.act. up-pí-eš-ta, up-pí-iš-ta, up-pa-a-aš (KUB 9.34 i 17), up-pa-aš (KUB 26.70, 3 (NH)), 1pl.pret.act. up-pí-ú-en (KUB 34.55 i 10 (MS), up-pa-u-e-en (MH/MS)), 3pl.pret.act. up-pí-er, 2sg.imp.act. uppí, 3sg.imp.act. up-pa-ú, 2pl.imp.act. up-pí-iš-tén (KBo 20.108 rev. 9 (NS)), up-pí-eš-tén (KBo 18.2 rev. 5 (NS)); part. up-pa-an-t-; verb.noun gen. up-pí-ia-u-ūaaš (IBoT 3.148 iv 23 (MH/NS)); impf. up-pí-iš-ke/a- (MS), up-pí-eš-ke/a-.
Derivatives: uppiéšǎar / uppiešn- (n.) 'sending, gift' (nom.-acc.sg. up-pí-eš-šar (often), up-pí-ia-aš-šar, up-pí-iš-šar (KBo 13.57 l.edge 3 (NS), KBo 1.35, 16 (NS)), dat.-loc.sg. up-pí-eš-ni, nom.-acc.pl. up-pí-eš-šar ${ }^{\text {HI.A }}$ (KUB 23.101 ii 19 (NH)), up-pí-aš-šar ${ }^{\text {HI.A }}$ (KUB 23.101 ii 4 (NH)), up-pí-ia-aš-šar (KUB 33.93+ iii $29(\mathrm{NH}))$, [up-]pí-eš-šar-ri ${ }^{\mathrm{HILA}}(\mathrm{KUB} 18.24,5(\mathrm{NS}))$ ).

PIE *h $h_{2}$ ou $+h_{l} p$-oi-ei $/ * h_{l} p-i$-enti
This verb is consistenly spelled $u p-p^{\circ}$ (about 120 cases in my files). All alleged other spellings are dubious regarding their interpretation. Alp (1991: 294) cites a form $u^{?}-u p^{?}-p[a-a h-h u-u n]$ (HKM 93, 4), but the traces in the hand copy of this tablet are very difficult to interpret: <<<
 We possibly have to read something else here, e.g. $\dot{u}-d[a-] a-u$ ? The hapax attestation u-pí-eš-ká[n-zi] (KUB 59.3, 11) is problematic as well: in this small fragment (19 lines) the verb pí-eš-ke/a- is attested 4 times ( 3 x pí-eš-kán-zi, 1x pí$e \check{s}-k e-e r)$, which may be seen as an indication that the first wedge of $u$-pí-eš-ká $[n-$ $z i]$ is just an error and that we have to read pí-eš-ká $[n-z i]$ here as well. All in all, I conclude that the spelling $u p-p^{\circ}$ is the only correct spelling of this verb.

This verb belongs to the mema/i-class (uppahhi vs. uppianzi). Like all méma/iclass verbs, this verb, too, shows influence of the $\operatorname{tarn}(a)$-class inflection from MH times onwards, yielding forms like uppanzi, uppauen and uppant-. The form uppiïauuaš shows a stem uppiie/a- ${ }^{z i}$. Oettinger (1979a: 489) states that uppa- ${ }^{i}$ / uppi- "sicher als $u$ 'her' und piie- ${ }^{\text {hhi }}$ 'geben' [ist] zusammengesetzt", which I support wholeheartedly. The fact that uppa/i- belongs to the méma/i-class whereas pai- ${ }^{i}$ / pi- 'to give' belongs to the dāi/tiianzi-class is comparable to the situation of $\bar{u} n n a-^{i} / \bar{u} n n i$ 'to drive (here)' and penna- ${ }^{i} /$ penni- 'to drive (away)' (both inflecting according to the mema/i-class) that are derived from nai- / *ni-(dāi/tiianzi-class): in pre-Hittite times polysyllabic dāi/tiiianzi-class verbs were influenced by the $\operatorname{tarn}(a)$-class and yielded the synchronic $m \bar{e} m a / i$-class (see at the treatment of the $m \bar{e} m a / i$-class in $\S 2.2 .2 .2$.h). See at $u$ - and pai- ${ }^{i} / p i$ - for an elaborate etymological treatment of these two elements.

According to Rieken (1999a: 383f.), the derivative uppieššar is altered to uppiiaššar in NH times in analogy to the forms of the verb that start to be interpreted as showing a stem uppiïa- (e.g. uppiiauuaš). Rieken (1999a: 390) also cites a form $u$-up-pí-iš, which is attested on a badly damaged fragment:

KBo 34.25
(4) $[\mathrm{x}-\mathrm{x}-] \mathrm{x}-n a-a-a \check{s} \check{s} a-a-r u k i-i s ̌-t a-a-t i$ šar-una-ač $\mathrm{x}[-\mathrm{x}]$
(5) $[k i-i s ̌-t] a-a-t i ~ h a l-h a l-t a-n i-i a-a \check{s} \check{s} a-a-r u ~ k i-i s ̌-t a-a-[t i]$
(6) $[\mathrm{x}-\mathrm{x} k] i-i s ̌-t a-a-t i ~ u-u p-p i ́-i s ̌ ~ k i-i s ̌-t a-a-[t i]$
'The loot of $[\mathrm{x}-\mathrm{x}]-n \bar{a}$ - has perished. The x of the loot has perished. The loot of the halhaltani-has perished. The [x] has perished. The $\bar{u} p p i$ - has perished'.

Because of the occurrence of the word šāru 'loot, booty' on this fragment (note however that CHD (Š: 296) interprets šāru as "an evil force" here), and because of the formal similarity, Rieken states that "eine Deutung von uppiš als "Sendung, Geschenk" (= uppeššar/uppiiiaššar) immerhin eine gewisse Wahrscheinlichkeit [besitzt]". Problematic, however, is the fact that this form would be the only one within the group of attestations of uppa- ${ }^{i} /$ uppi- and uppieššar that is spelled with initial $u-u p-p^{\circ}$. I therefore would rather separate this form from uppa/i-.
The CLuw. verb $\bar{u} p p a$ - is often translated 'to send, to bring' and regarded as cognate with Hitt. uppa- ${ }^{\text {/ }}$ uppi-. In my view, a translation 'to send, to bring' for CLuw. uppa- cannot be ascertained on the basis of the contexts in which it occurs, and has probably been suggested on the basis of a formal similarity with Hitt. uppa/i- only. This makes CLuw. uppa- etymologically valueless.
upāti- (n.) 'landgrant': nom.-acc.sg. (\&) ú-pa-ti, ú-ba-a-ti (KBo 5.11 ii 15), gen.sg. ú-pa-ti-aš, ú-pa-ti-aš, ú-pa-a-ti-į্a-aš, dat.-loc.sg. ú-ba-a-ti (OS), ú-ba-tiia (OS), nom.-acc.pl. $u$-pa-a-til $i^{\text {HIA. }}$.

Derivatives: ${ }^{(L \mathbf{U})} \mathbf{u p a t i t a l l a - ~ ' ? ’}\left(\right.$ stem? ̣̂́-pa-ti-ta-al-la (KUB 56.12, 9), ${ }^{\text {Lú.MEŠ }}$ ú-pa-ti-ta-al-l[a(-)...] (KUB 56.12, 10)).

Anat. cognates: CLuw. upa- 'to furnish, to grant(?)' (3pl.pres.act. ú-pa-an-ti, 3sg.pret.act. ú-pa-at-ta, 2sg.imp.act. ú-pa, 3pl.imp.act. ú-pa-an-du, part. ú-pa-am$m a-a n)$; HLuw. upatit- 'territory’ (dat.-loc.sg. ${ }^{* 274} u-p a-t i-t i$ (TELL AHMAR 1 §8), ${ }^{* 274} u$-pa-ti-ti-i (TELL AHMAR 1 §20), gen.adj.acc.sg.c. ${ }^{* 274} u$-pa-ti-tà-si-i-na (MARAŞ 4 §3)).

Although this word is attested in OS texts already, it is generally accepted that this word must be of Luwian origin. This is indicated by the occasional use of
gloss wedges as well as by the fact that the word is attested in HLuwian as upatit-. Luwian stems in $-i t$ - show a nom.-acc.sg. in $-i$ and therefore are borrowed into Hittite as -i-stems (cf. gen.sg. upatīaš). Melchert (1993b: 242) interprets the CLuwian verb $u$ úpa- as 'to furnish, to grant' and assumes that this is the basis for upatit-. Starke (1990: 198), however, states that upatit- is likely to be analysed as a derivative in -it-, of which the basis upat- is not yet identifiable. According to him, other borrowings are OAss. ubadinnum and Ugar. 'ubdy 'territory'.
$\boldsymbol{u r} \boldsymbol{-}^{\overline{a r} i}$, uar- ${ }^{\overline{a r} i}$ (IIIf) 'to burn (intr.), to be burned' (Sum. BIL): 3sg.pres.midd. ú-ra-$a-n i$ (StBoT 25.4 iii 44 (OS), StBoT 25.137 ii 3 (fr.) (OS), KBo 9.127+ i 6, 8, 29 (fr.) (MS), KUB 33.59 iii 9 (OH/NS), KBo 22.137 ii 13 (NS), KUB 32.8 iii 23 (NS), 450/u, 4 (NS)), una-ra-a-ni (KBo 8.96 obv. 3, 5, 7 (MS), KUB 60.73 rev. 17 (MS), KBo 6.12 i 19 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 30.15+ obv. 10 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 33.46 i 4 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 33.53 + FHG 2 ii $14(\mathrm{OH} / \mathrm{NS})$, KUB 33.67 iv 3, $4(\mathrm{OH} / \mathrm{NS})$, KUB 15.31 ii 2, 4, iii 59 (MH/NS), KUB 15.32 ii 20, iv 29 (MH/NS), 1321/u iii 59, iv 8 (MH/NS), KBo 39.169 i 2 (NS), KBo 39.290 iii 14 (NS), KBo 44.80, 3 (NS), KUB 7.56 ii 2 (NS), KUB 10.95 iii 4 (NS), KUB 17.12 iii 7 (NS), KUB 25.31 ii 2, 4 (NS), KUB 29.4 iii 58, iv 41 (NS), KUB 39.71 ii 18 (NS), KUB 58.83 iii 9 (NS), KBo 12.33 iii 5 (NH), etc.), ú-ua-ra-a-n[i] (1191/z obv. 11 (NS)), ua-ra-ni (KUB 33.67 iv 2 (2x) (OH/NS)), ua-ra-an-ni (KUB 30.36 iii 3 (MH/NS), KUB 58.83 iii 14 (NS)), 3pl.pres.midd. ua-ra-an-da-ri (KUB 58.83 iii 10 (NS)), 3pl.pret.midd. ua-ra-an-ta-at (KUB 39.36, 7 (OH/NS), KUB 39.39 ii 2 ( $\mathrm{OH} / \mathrm{NS}$ )), ua-ra-an-da-at (KUB 39.4+ obv. 19 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 39.14 i 14, ii 11 $(\mathrm{OH} / \mathrm{NS})$, KUB $39.35(+) 30.24$ i 30 , ii $5(\mathrm{OH} / \mathrm{NS})$, KUB 34.65, $8(\mathrm{OH} / \mathrm{NS})$ ), 3sg.imp.midd. ú-ra-a-nu (KUB 12.28, 8 (NS)), ua-ra-a-nu (KUB 29.7+ obv. 66 (MH/MS), KUB 33.11 iii 17 ( OH/NS), KUB 33.49 iii $12(\mathrm{OH} / \mathrm{NS})$, KUB $33.53+$ FHG 2 ii 16 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 51.30 rev. 6 (OH/NS), KBo 39.252, 3, 5 (NS), KUB 17.12 iii 5 (NS)), ua-ra-nu (KBo 38. 247 ii 6 (MS?)); part. ua-ra-an-t- (MH/MS), ua-ra-a-an-t-.

Derivatives: uarnu- ${ }^{z i}$ (Ib2) 'to kindle, to set fire to' (1sg.pres.act. ua-ar-nu-mi, 3sg.pres.act. uа-ar-nu-zi, ua-ar-nu-uz-zi, 3pl.pres.act. ua-ar-nu-an-zi, ua-ar-nu-ua-an-zi, 1sg.pret.act. ua-ar-nu-nu-un, 3sg.pret.act. ua-ar-nu-ut, 1pl.pret.act. ua-ar-пи-те-еп, иа-ar-пи-ит-те-еn, 3pl.pret.act. ua-ar-nu-er (MH/MS), ua-ar-nu-e-er, ưa-ar-nu-ú-e-er (KUB 17.10 iii 15), 2sg.imp.act. ua-ar-nu-ut, 2pl.imp.act. ua-ar-nu-ut-tén; 3sg.pres.midd. ua-ar-nu-ta-ri (KUB 8.25 i 3, 9); part. ua-ar-nu-
 (KUB 12.22, 16), inf.I uа-ar-nu-ma-an-zi, ua-ar-nu-um-ma-an-zi; impf. ua-ar-
$n u-u s ̌-k e / a-$ ), uriuarant- (adj.) 'burning' (nom.-acc.sg.n. ú-ri-ua-ra-an (KUB 17.10 iii $22(\mathrm{OH} / \mathrm{MS})$ )), see \& uranae- - $^{i}$.

IE cognates: Lith. vìrti, vérdu 'to cook', OCS vbrěti 'to cook'.

$$
\text { PIE *urh } h_{l}-\dot{o}-r i
$$

See Neu 1968: 188f. for an extensive treatment of this verb. The 3sg.-forms $u$ u(a)rāni and u(a)rānu are unique in the sense that they show dissimilation from original $*_{u}^{u}(a) r a \bar{r} i$ and $*_{u}(a) r \bar{a} r u$. The verb shows two stems, namely ur- (attested in OS texts already) and uar- (from MS texts onwards). Sometimes, these stems are regarded as ablaut variants (e.g. Rieken 2001: 371, who apparently regards ur- as zero grade vs. uar- as full grade). This is very unlikely, however: middles from the tukkāri-class show a zero grade root throughout the paradigm. This means that there never was a full grade form to begin with from which a full grade stem could have spread over the paradigm. Moreover, the clear chronological distribution between OH ú-ra-a-ni vs. MH/NH ua-ra-a-ni rather indicates that we are dealing with a phonetic development that took place within the Hittite period.

Since Goetze \& Pedersen 1934: 74 this verb is generally connected with Lith. vìrti 'to cook' and OCS vbrěti 'to cook'. Because these latter forms show acute accent, they must reflect *uerH-, which means that for Hittite we must reconstruct *urH-ór(i). If we now compare the MH/NH form úa-ra-a-ni, which must go back to *urH-ór (i), to paripparai =/pripər?ái/ < *pri-prh ${ }_{l}$-ói-ei, in which * $h_{l}$ must have remained as a synchronic phoneme $/ \mathrm{I} /$ in order to cause the $* r$ to vocalize to /ər/, we see that we must phonologically interpret ua-ra-a-ni as /uərPắni/. So here the laryngeal has been preserved as well (which indicates that we must reconstruct uerh $_{1^{-}}$, since ${ }^{*} u r h_{2 / 3}$-ór $(i)$ would have yielded ${ }^{*}{ }^{*}$ uarhāri). The question now is, how is $\mathrm{OH} \dot{u}-r a-a-n i$ to be interpreted? In my view, $\dot{u}-r a-a-$ $n i$ represents phonological /ur?ắni/ in which vocalization of $-r$ - has not taken place yet. So I reckon with a development *urh $h_{l}$ ór $(i)>\mathrm{OH} /$ urlắni/ $>\mathrm{MH} / \mathrm{NH}$ /uərPắni/. For other instances of PIE *uRC-> OH /uRC-/ $>\mathrm{MH} / \mathrm{NH} /$ uəRC-/, see e.g. at ualkuua- and ulkiššara-, ualkiššara-.

Note that the reduplicated adj. uriuarant- probably stands for /uri-uər?ant-/. The causative uarnu- ${ }^{z i}$ must reflect *urh $h_{l}$ neu-. This form then should regularly have yielded $\mathrm{OH} /$ urnū-/ (with loss interconsonantal $* h_{l}$ ) $>\mathrm{MH} / \mathrm{NH} /$ uərnū-/. The absence of a spelling $* * u r-n u$ - $=/ u r n u \overline{-} /$ is due to the fact that this verb is not attested in OS texts.

The exact interpretation of the hapax form ua-a-ra-i (KUB 17.27 ii 26 $(\mathrm{MH} / \mathrm{NS}))$ is unclear to me. It seems to denote something like 'starts a fire', cf. the translation by Haas \& Wegner (1988a: 192):

KUB 17.27 ii
(25) $n u=k a ́ n{ }^{\text {MUNUSS} S ̌ U . G I ~}{ }^{\mathrm{d}} \mathrm{UTU}-i$ IGI- $a n-d a 3$ GIR $_{4}{ }^{\text {HI.A }}$ an-da har-pa-a-iz-zi
(26) nu GÍR ZABAR pa-ah-hur-r=a ua-a-ra-i nu=kán ua-a-tar
(27) ${ }^{\text {NINDA }}$ pár-ša-an- $n=a$ an-da pé-eš-ši-ía-az-zi nu kiš-an me-ma-i
"Und die Beschwörerin häuft dem Sonnengott gegenüber gesondert drei gebrannte Tongeschirre auf; und einen Dolch (aus) Bronz (hält sie), und facht ein Feuer an; und Wasser und zerbröckeltes Brot wirft sie hinein und spricht in dieser Weise:".

Yet, the formal analysis of $u \bar{a} r a i$ is rather enigmatic. Melchert (1984a: $11^{13}$ ) states that ūārai replaces original *uāri< *uórei, but since we are dealing with a root *uerh $l_{1-}$ and since *uórh $l_{l}$-ei should yield **uārri (cf. ārri $<$ *h $_{l} o ́ r h_{l}$-ei, šārri $<$ *sórh $h_{l}$-ei) this is impossible. Perhaps ua $\bar{r} r a i$ is an ad hoc transitive formation on the basis of the middle $u a r-{ }^{a} r i$ 'to be burning' instead of normal uarnu- ${ }^{z i}$.
$\bar{u} r r$-: see $\bar{u} r r(i i e / a)-$
${ }^{\text {GIŠ}} \boldsymbol{u r a}$-: $\mathrm{see}^{\text {GIŠ }}$ uera-
${ }^{\text {DUG }} \boldsymbol{u r} \overline{\boldsymbol{a}}$ - (gender unclear) a vessel?: case? $u$-ra-a-aš (KUB 11.56 v 5).
This word occurs only once, in KUB 11.56 v (5) [ ... ] 2 DUG $^{\text {HI.A }} u$-ra-a-aš mar$n u-u a-a n$ ar-ta '... 2 u.-vessels with beer stands'. It is not clear whether we have to regard $u r \bar{a} s ̌$ as nom.pl. here, or as dat.-loc.pl. and assume that another word, which is now lost because it stood in the broken part, was the subject of the sentence and stood near the $u r \bar{a}$-vessels. No clear meaning, no etymology.
Friedrich (HW Erg. 1: 22) also refers to KBo 8.72 i 7 under this lemma, but there we find ${ }^{\text {GIŠ }}$ ú-ra-a-an, for which see at ${ }^{\text {GIŠ }}$ uera-.
uraianni-, uriianni- ${ }^{\text {Mušen }}$ (c.) an oracle bird: nom.sg. u-ra-ía-an-ni-eš (KUB 5.11 iv 60), u-ra-ia-an-ni-š (KUB 5.24 ii 46), $u$-ri-an-ni-eš ${ }^{\text {MUŠEN }}$ (KBo 15.28 i 4), acc.pl. u-ra-ia-an-ni-uš (KUB 5.20 iii 18).

This word denotes a bird used in bird oracles, but it is not clear exactly what kind of bird is meant. The formal similarity with ${ }^{\text {LÚ }}$ uriiianni-, uraianni-, a functionary (spelled with the sign U as well, and showing a similar alternation between uriiiaand uraia-) is striking. An equation of the two cannot be proven, however. Further unclear.
${ }^{\text {Lú }}$ uraiananni-: see ${ }^{\text {LÚ }}$ uriïanni-
${ }^{\text {LÚ }}$ uralla- (c.) 'horse-trainer': acc.sg. u-ra-al-la-a(n)=š-ša-ma-an (KBo 3.34 ii 23).

Derivatives: ${ }^{\text {LÚ }}$ urallatar / urallann- (n.) 'profession of horse-trainer' (dat.loc.sg. ${ }^{\text {Lú }}$ u-ra-al-la-an-ni (KUB 31.112, 15)).

This word occurs only once, in KBo 3.34 ii (22) ... a-pu-u-n=a (23) ${ }^{\text {LÚ }} u$-ra-al-la-$a(n)=\check{s}$-ša-ma-an i-e-et 'but he made him into their uralla-'. From the context it is clear that uralla- is some kind of functionary in horse-training. The context of ${ }^{\text {LÚ }}$ urallanni is too broken for a good understanding of the text. Nevertheless it is likely that this word, which must belong with an abstract noun *urallatar must denote something like 'profession of horse-trainer'. The origin of these words is unclear.
\& uranae- ${ }^{z i}$ (Ic2) 'to bring a fire-offering': 3sg.pres.act. \& ú-ra-na-iz-zi (KBo 23.112, 4), verb.noun \& ú-ra-na-u-uа-ar (КВо 23.112, 3).

See Van den Hout 1995: 120f. for the context in which these words occur:
KBo 23.112 + KUB 49.14
(3) $\left[{ }^{\mathrm{m}}\right.$ Ta-at-ta-m] $a-r u$ ku-it \& $\dot{u}-r a-n a-u-u a-a r$ SIxSÁ-at
(4) $\left[\quad{ }^{\mathrm{m}}\right.$ Ta-at-]ta-ma-ru-uš \& $\dot{\prime}-r a-n a-i z-z i$
(5) [ -]x $m a-a-a n=m a-a=s \check{s-s ̌ i}=a t \operatorname{DINGIR}^{L U M}$ hुa-ra-tar una-aš-túl

'Was [das betrifft, daß für Tattam]aru ein Brandopfer festgestellt wurde, [... Tat]tamaru wird ein Brandopfer dabringen [...] ... wenn du, o Gottheit, für ihn das keineswegs zum Verstoß (und) Vergehen machst, so sollen die Zeichen günstig sein; der Thron Links: ungünstig'.

Etymologically these words likely belong with ur- ${ }^{\text {ari }}$ 'to burn' (q.v.). The use of gloss wedges hardly can denote a foreign origin, because the forms are genuinely

Hittite (3sg. on -zi, verb.noun on -uar). Perhaps the words are ad hoc-formations and therefore marked.
${ }^{\text {LÚ }}$ uriidanni-, uraianni- (c.) a functionary: nom.sg. u-ri-an-ni-iš (OS), u-ra-ia-an$n i-i s ̌$ (KUB 31.61 + KUB 26.61 ii 9, VBoT 71 obv. 10 (fr.), KUB 16.77 iii 2), acc.sg. u-ri-an-ni-in (OS); stem u-ri-an-ni (OS), u-ri-ía-an-ni; broken u-ri-ia-an$n i-i[a(-)$ (KUB 55.43 iii 36).

This word is consistently spelled with initial $u$ - (and never with $u^{\prime}$-) and is attested in OS already. It is not clear what kind of functionary it denotes exactly. It is remarkable that the word quite often is attested uninflected. This could point to a foreign origin, which may be supported by the attestation of a form u-ra-ia-an-ni in a CLuwian text (KBo 29.43, 6). The alternation between uriiia- and uraia- may point to foreign origin as well.

The formal similarity to uraianni-, uriianni- ${ }^{\text {MUŠEN }}$, an oracle bird, is striking, especially because this word, too, is spelled with the sign $U$ and shows an alternation between uriia- and uraia-. Semantically, a connection cannot be proven, however. Further unclear.
uriinanni- $^{\text {MUŠEN }}$ : see uraianni-
$\bar{u} r r(i i e / a)$ - '?': 3pl.pret.act. u-ur-ri/e-er (KBo 3.60 ii 7).
The hapax attestation $u$-ur-ri-er or u-ur-re-er (KBo 3.60 ii 7 (OH/NS)) is generally translated as 'they helped' and seen as belonging to the paradigm of uarrae- ${ }^{z i}$ 'to help' (q.v.). The context runs as follows:

KBo 3.60 ii
(description of a people that attack humans and then eat them)
(6) ma-a-an ú-e-er LÚ ${ }^{\mathrm{URU}}$ Šu-tu-um-ma-na-aš ${ }^{\mathrm{URU}} Z[u-\mathrm{x}-\mathrm{x}-\mathrm{x}]$
(7) ${ }^{\mathrm{URU}} U$-ka4-a-pu-ua $u$-ur-ri/e-er $\operatorname{LÚ}{ }^{\mathrm{URU}} \check{S} u$-ú-da ${ }^{\mathrm{KI}}=\check{S}\left[e^{? ?}\right]$
(8) ${ }^{\mathrm{m}} K a-n i-u-u \check{S}{ }^{\mathrm{URU}} U-k a_{4}-a-p u-i a-a \check{s}-s{ }_{-}=a$
(9) me-na-ah-ha-an-ta pa-i-[er]

Güterbock (1938: 104f.) translates this text as:
'Als es geschah, daß der Šudaër (und) die Stadt $\mathrm{Zu}[\ldots]$ der Stadt Uqapuuna zu Hilfe kamen, da zo[gen] ihm(?) der Mann von Šuda, Kaniu und die Stadt Uqapuia entgegen'.

This translation is not imperative, however: the form $\bar{u} r r(i) e r$ could just as well mean something else. I would translate as follows:
'When they came, the Šudaean [and] $\mathrm{Zu}[\ldots] \bar{u}$.-ed towards' Ukāpu. The Man of Šuda and Kaniuš of Ukāpu went against him'.

This means that I would separate the form $\bar{u} r r(i) e r$ from the verb uarrae- ${ }^{z i}$. Further unclear.
uriuarant-: see at $u r-{ }^{\bar{a}}{ }^{\text {ri }}$
$\bar{u} r k i-$ (c.) 'trace, track, trail': nom.sg. u-ur-ki-eš, u-ur-ki-iš, acc.sg. u-ur-ki-in, dat.-loc.sg. u-ur-ki-ia.
Derivatives: urkiiae ${ }^{-{ }^{\text {i }}}$ (Ic3), urkiie/a- ${ }^{-{ }^{z i}}$ (Ic2) 'to track down' (1sg.pres.act. urkiiami (HW: 235), 3sg.pres.act. ur-ki-ía-ez-zi (KUB 29.30 ii 5 (OS), u-ur-ki$e z[-z i]$ (VBoT 114, 6 (NS))).
IE cognates: Skt. vraj- 'to walk, to stride'.

$$
\text { PIE * } h_{1 / 3} u r g-i-
$$

Note that virtual all attestations of $\bar{u} r k i-$ are spelled with initial U (except ur-ki-ía$e z-z i$ ) which points to phonological /(1)orgi-/ or /(?)orki-/. Duchesne-Guillemin (1947: 80) connected this word with Skt. vraj- 'to walk, to stride', which would point to a pre-form *urg-i- (thus also e.g. Eichner 1973: 73; Melchert 1994a: 95). Althouch semantically this connection seems plausible, formally it is problematic. On the basis of *urh ${ }_{1}$ ór $(i)>\mathrm{OH} / u r$ ª́ni/, ú-ra-a-ni>MH/MH /uər?ắni/, úa-ra-a$n i$ 'burns' and $* u l k^{w} o->\mathrm{MH}^{2} / \mathrm{u}^{2} \mathrm{k}^{\mathrm{w}} \mathrm{a}-/$, ua-al-ku-ua- 'bad omen' (if this latter etymology is correct) we would expect that the preform *urg-i- would have yielded OH **/urgi-/, **(ú-)ur-ki-> MH/NH /uərgi-/, **ua-ar-ki-. With this knowledge in mind, we would rather think that $u$-ur-ki- $=/$ RorKi-/ reflects *h $h_{1 / 3} u r K-i-$, compare e.g. ${ }^{*} h_{2} u r g-i->$ Hitt. hurki- $=/ H o r g i-/ ' w h e e l '$. Perhaps this means that we should recontruct the root of $\bar{u} r k i-$ and $v r a j$ - as $* h_{1 / 3} u r e g$ - (for this structure, compare e.g. *h $h_{2}$ uied' ${ }^{h}$ 'to hurt (lethally)', cf. LIV $^{2}$ s.v.; for the development *h $h_{13}$ ure-> Skt. vra-, cf. vrajá- 'fold, fenced area' < * $h_{1} u r e g ́-o-$ ). All in all, I reconstruct $\bar{u} r k i-$ as * $h_{1 / 3} u r g-i$ - (cf. Kimball's reconstruction "*( $h_{l}$ )wrǵi-" (1999: 247)), derived of a root *h $h_{1 / 3}$ ureg- as visible in Skt. vraj- 'to walk, to stride'.
$\bar{u} r t a-$ (c.) a disease?: acc.pl. $u$-ur-tu-uš (KUB 43.38 rev. 23).

This word occurs only once, in the following context:
KUB 43.38 rev.

```
(21) [ki-i=ua ku]-it SAG.DU-az nu=u_a-a=̌̌-ma-aš \({ }^{\mathrm{d}} \operatorname{SifN~una-al-ḩa-an-na-ú~}\)
            \(n[u=u a-a=\check{s}-m a-a \check{s}(?)]\)
(22) [...-z]a ŠÀ-az hu-u-ua-a-ú nu=ua-a=š-ma-aš an-du-u-ri-i-ia-aš [ ]x[ ]
(23) [ ]-za \({ }^{\mathrm{d}} \hat{S}^{\prime} N \quad u\)-ur-tu-uš i-ad-du nu=ua-a=̌̌-ma-ǎ̌=za ki-n[u-un ...]
(24) [...]-aš KUR.KUR \({ }^{\text {MEŠ }}\) an-da ú-una-an-na i-at-ta-ri
```

'Regarding that what is on the head, the Moon-god must strike you. And he must run .... out of [your] heart. And in your entrails the Moongod [...] must make $u$.-s. And no[w] he comes into the [....] lands to see'.

Perhaps $\bar{u} r t u s ̌$ means 'diseases'. No further etymology.
-uš (acc.pl.c.-ending)
IE cognates: Skt. -as, Gr. -aৎ, Lat. -ēs, Goth. -uns, Lith. -is.
PIE *-oms, *-ms
This ending is used in consonant- as well as thematic stems and denotes acc.pl. of commune words. It is predominantly spelled ${ }^{\circ} \mathrm{Cu}$ - $u \check{s}$, but occasionally we find forms with plene spelling. As I have shown in § 1.3.9.4.f, we predominantly find plene spellings with the sign Ú, pointing to /-us/, in older texts, whereas spellings with the sign U , indicating /-os/, occur in younger texts. This seems to indicate that an OH acc.pl.-ending /-us/ is developing into $\mathrm{NH} /-\mathrm{os} /$. Note that an ending /-os/ occurs also in $k u$-u-uš /kós/ 'these' and $a-p u-u$-uš /Rbós/ 'those', but these are spelled with the sign $U$ throughout the Hittite period.

Often, the PIE acc.pl.-ending is reconstructed as *-ns, on the basis of e.g. Gr. $-\alpha c$, Skt. -as, Goth. -uns, etc. For Hittite, a reconstruction *-ns is impossible however: it would have yielded -aš or possibly -anz, but not /-os/. On the basis of the parallelism with the 1 sg.pret.act.-ending /-on/ < *-m, acc.sg.c. ku-u-un /kón/ < *kóm and acc.sg.c. a-pu-u-un /?bón/ < *h $h_{l} b^{h}$ óm, it is in my view likely that the OH acc.pl.c.-ending $/-\mathrm{us} />\mathrm{NH} /-\mathrm{os} /$ goes back to $*-m s$ and, when thematic, to *-oms. Note that when accentuated, *Cóms yielded already OH /-ós/, spelled Cu-$u$-uš.
uššaniiela- ${ }^{z i}$ : see ušniiela- ${ }^{z i}$
ušantari- / ušantarai- (Luw. adj.) 'bringing gains, bringing blessings': nom.sg.c. $u$-ša-an-ta-ri-iš (KUB $7.53+$ KUB 12.58 i 52 iv 8 ), $u$-ša-an-da-ri-iš (ibid. iv 11), \& u-ša-an-da-ri-iš (KUB 58.108 iv 10, 11, 13), acc.sg.c. u-ša-an-ta-ri-in (KUB $7.53+$ KUB 12.58 iv 7), dat.-loc.sg. u-ša-an-ta-ri (KUB $7.53+$ KUB 12.58 iv 9), Luw.nom.pl.c. ú-ša-an-da-ra-i-in-zi (KUB 35.84 ii 12), Luw.dat.-loc.pl. [úú-ša-a]n-ta-ra-ia-an-za (KUB 35.84 ii 9).
Derivatives: ušantara- ${ }^{i}$ '?' (3sg.prs.act. $u$-ša-an-ta-ra-a-i (KUB 15.9 ii 4)).
The bulk of the attestations occur in one text only:
KUB $7.53+$ KUB 12.58 iv
(7) nam-ma=za=kán $\mathrm{GU}_{4} u$-ša-an-ta-ri-in SI e-ep-zi пи me-ma-i
(8) ${ }^{\mathrm{d}} \mathrm{UTU} B E-L \grave{I}=I A$ ka-a-aš ma-ah-ha-an $\mathrm{GU}_{4}$-uš $u$-ša-an-ta-ri-iš
(9) $n=a$-aš=kán $u$-ša-an-ta-ri ha-li-ia an-da nu=za=kán ha-a-li-et
(10) $\mathrm{GU}_{4}$.NÌTA-it ${ }^{\mathrm{GU}_{4}} \mathrm{~A} \mathrm{~A}$-it šu-un-ni-eš-ke-ez-zi ka-a-ša
(11) EN.SISKUR QA-TAM-MA u-ša-an-da-ri-iš e-eš-du nu=za=kán É-er
(12) $I S ̌$-TU DUMU.NÌTA ${ }^{\text {MEŠ }}$ DUMU.MUNUS ${ }^{\text {MEŠ }}$ ha-aš-še-et
ha-an-za-aš-ši-it [har-t]u-[u-u] $a-t[\mathrm{i}]$
(13) har-tu-u-ua-har-tu-ua-ti QA-TAM-MA šu-un-ni-ed-du
'He further takes a $u$. cow by the horns and says: 'Sun-god, My Lord, behold. Just as this cow is $u$. and (is) in a $u$.-pen and she keeps filling the pen with bullcalves and cow-calves; may likewise the Lord of the Ritual be $u$. too, and may he fill his house with sons and daughters and progeny and brood!'’.

On the basis of this text, many scholars translated ušantari- as 'fertile, pregnant'. Starke (1990: 374f.), however, argues that the adjective, which he regards as Luwian because of the gloss wedged forms \& u-ša-an-da-ri-iš (KUB 58.108 iv $10,11,13$ ) and the Luwian inflected nom.pl.c. ú-ša-an-da-ra-i-in-zi (KUB 35.84 ii 12) and dat.-loc.pl. [u/ú-ša-a]n-ta-ra-ía-an-za (KUB 35.84 ii 9), has the meaning 'bringing gains, bringing blessings' (followed by Melchert 1993b: 2456). He also points to the fact that the word shows a stem-form ušantari- as well as ušantarai-. According to Starke, ušantar(a)i- is derived from an unattested noun ušantar-, which itself goes back to a participle *ušant-, which he interprets as cognate with the HLuwian verb ${ }^{(\mathrm{BONUS})} u s n u(w a)$ - 'to bless' and the noun ${ }^{\text {(BONUS) }}$ wasu- 'good'.
ušiie/a- ${ }^{z i}$ : see uešiie/a ${ }^{z i}$
ūššiie/a- ${ }^{z i}$ (Ic1) 'to draw open (of curtains)': 3pl.pres.act. ú-uš-ši-an-zi (KBo 25.17 i 2 (OS), KBo 17.11 i 15 (fr.) (OS), KBo 20.10 i 2 (OS)), uš-ši-a[n-zi] (KBo 17.74 iv 27 (OH/MS)), uš-ši-ia-an-zi (KUB 2.13 i 2 (OH/NS), KUB 7.25 i 2 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 11.22 i 15 (NS), KUB 11.35 i 9 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 2.6 iii 22 (fr.) ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 20.79 l.col. 4 (OH/NS), KUB $25.15 \mathrm{rev} .6,17$ (NS), KUB 25.26 i 3 (NS)), 2pl.imp.act. uš-še-et-tén (KUB 29.1 i 43, 45 ( $\mathrm{OH} / \mathrm{NS}$ )).

PIE *h $h_{2} \mathrm{Ou}-+{ }^{*} h_{1} s-i e / o-$
It is remarkable that all OS attestations are spelled with initial $u$ - $u \check{s}$-, whereas all younger attestations show $u \check{s}$ - only. See § 1.3.9.4 for my view that this points to phonological /RuSie/a-/. See Kimball (1987b: 165f.), for a detailed treatment of this verb. She interprets $\bar{u} s ̌ s ̌ i i_{i} / a$ - as the $u$-counterpart of peššiie/a- 'to throw away, to cast' (q.v.), and suggests that both are derived from the verb šiie/a-zi' to
 for further treatment.
 ( $\mathrm{OH} / \mathrm{NS}$ )), uš-ša-ni-ía-zi (KUB 13.4 ii $40(\mathrm{OH} / \mathrm{NS})$, KUB $13.6+$ KUB 13.19+ ii 31 ( $\mathrm{OH} / \mathrm{NS}$ )), 2pl.pres.act. uš-ni-ia-at-te-ni (KUB 13.4 ii 72, iv $26(\mathrm{OH} / \mathrm{NS})$ ),
 3sg.pret.act. uš-ša-ni-ia-at (KUB 31.76+ iii 20 (MS), KUB 13.35 iii 16 (NS)), 1pl.pres.act. uš-ša-ni-i̇a-u-e-en (KUB 13.4 iv 73 ( $\mathrm{OH} / \mathrm{NS}$ )), uš-ša-ni-i ia-u-en (KUB 13.35 iii 24 (NS), KUB 40.86 rev. 9 (NS)), 3sg.imp.act. uš-ša-ni-iad-ad-du (KUB 13.4 ii 39 ( $\mathrm{OH} / \mathrm{NS}$ )); impf. 3sg.pres.midd. uš-ne-eš-kat-ta (KUB 29.29, 12, 15 (fr.) (OS), KBo 6.10 iii 18, 22 (OH/NS)), impf.1sg.pret.act. uš-ni-iš-ke-nu-un (KUB 31.76+ iv 14 (MS)), impf.3sg.pret.act. uš-ša-ni-iš-ke-et (KUB 21.27 i 35 (fr.), iv 40 (NH)).
IE cognates: Skt. vasná- 'price', Gr. $\tilde{0} v o \varsigma(n) ~ ' p r i c e ',. ~ L a t . ~ v e ̄ n u m ~ d a r e ~ ' t o ~ s e l l ', ~$ Arm. gin 'price'.

PIE *us-n-ie/o-
This verb denotes 'to put up for sale' and therewith clearly is connected with Hitt. $u \bar{a} \check{s}-{ }^{i}$ 'to buy', Skt. vasná- 'price', Gr. $\tilde{\omega} v o c$ 'price', etc. It is spelled $u \check{s}-n i-$ as well as $u s \check{s}-s ̌ a-n i$ - which points to phonological /uSnie/a-/.

Although all attested forms of this verb inflect according to the -ie/a-class, Neu (1980c: 87-8) states that ušniie/a- must be a remodelling of an older stem *ušnae${ }^{z i}$ (according to him still visible in the OS imperfective ušneške/a-) and that this *ušnae- ${ }^{z i}$ reflects *usno-ie/o-, a verbal derivative of a noun *usno- 'sale'. This
seems improbable to me: hatrae-class verbs are very stabile throughout Hittite, and it would be unexpected that an original $* u$ šnae $^{-2 i}$ would be transformed into ušniie/a- ${ }^{z i}$. I therefore think we should analyse /uSnie/a-/ at face value, namely as a derivative in -ie/a- of a noun *ušn-, which can only be regarded as an $n$-stem *us-n-. This would also explain the different ablaut-grades as found in Skt. vasná-, Arm. gin, Lat. vēnum < *ues-no-: Gr. ©̃̃voc < *uos-n-os: Hitt. ušn- < *us-n-. Note that Hitt. ušniie/a- ${ }^{z i}$ cannot be compared directly to Skt. vasnayáti 'to higgle' and Gr. ©̀véoual 'to buy' that reflect *uosn-eie-.
uštul-, uašstul- (n.) 'sin, offense': nom.-acc.sg. uš-tu-ul (KBo 18.151 rev. 15 (OH/MS)), uš-[d] $u^{?}-u l$ (KUB 17.10 iii 10 (OH/MS)), ua-aš-túl (MH/MS, often), ua-aš-du-ul, u_a-aš-tu-ul, acc.sg.c. ua-aš-du-li-in (ABoT 44 iv 16 (OH/NS)), gen.sg. uš-tu-la-aš (KUB 29.29 i 10, 16 (fr.) (OS)), una-aš-túl-aš (KBo 6.10 iii 20 (OH/NS)), u ua-aš-túl-la-aš (MH/MS), ua-aš-du-la-aš, dat.-loc.sg. ua-aš-du-ú-li (KUB 23.77 rev. 105 (MH/MS)), ua-aš-du-li, ua-aš-túl-li (KUB 9.15 ii 23 (NS)), abl. ưa-aš-du-la-az (KBo 32.15 iii 19), instr. una-aš-du-li-it, nom.-acc.pl. una-aš$d u-u l^{\mathrm{HI} . \mathrm{A}}$.
Derivatives: unašdulae- ${ }^{-i}$ (Ic2) 'to offend' (3pl.pres.act. una-aš-du-la-an-zi (KBo 17.65 obv. 41)), uaššulaúant- 'offense' (abl. una-aš-d[u-l]a-u_a-an-da-za (KUB 16.39 ii 11)).

PIE * usTh $_{2 / 3}$-éul
This word clearly is cognate with uašta- ${ }^{i}$ / uašt- 'to sin' (q.v.). Although the bulk of the attestations of this word show a stem uašdul-, the oldest ones show uštul-. This latter stem therefore must have been the original one. Apparently, the zero grade stem ušt- of uštul- was replaced by uašt- in the early MH period, probably in analogy to the full grade stem of the verb. The fact that we find an original zero-grade root in this noun implies that the suffix -ul- must have been accentuated, which is supported by the spelling una-aš-du-ú-li, which must reflect *-éul-i. See at unašta- ${ }^{i}$ / unašt- for further etymology. Note that despite the one NS commune form acc.sg.c. uašdulin all other forms clearly indicate that the word is neuter.
$\boldsymbol{u d a} \mathbf{-}^{i} / \boldsymbol{u d}$ - (IIal $\gamma$ ) 'to bring (here), to bring (over)': 1sg.pres.act. $\dot{u}-d a-a h-h i$, 2sg.pres.act. udatti (HW: 236), 3sg.pres.act. ú-da-i (OS), ú-da-a-i, 1pl.pres.act. ú-du-me-e-ni (OS), ú-tu $u_{4}-m e-e-n i, \quad u$-du-um-me-e-ni, 2pl.pres.act. ú-da-at-te-ni, 3pl.pres.act. ú-da-an-zi (OS), 1sg.pret.act. ú-dah-h[u-un] (OS), ú-da-ah-hu-un, ú$d a h-h u-u n, 2 s g . p r e t . a c t . ~ u ́-d a-a \check{s}$ (KUB 29.1 i 24), 3sg.pret.act. $u$ - $d a-a \check{s}$ (MH/MS),
$u ́-d a-a-a s ̌$ (MH/MS), 1pl.pret.act. ú-tum-me-en, 3pl.pret.act. ú-ter (OS), ú-te-er, $u ́$-te-e-er, 1sg.imp.act. ú-da-al-lu (KBo 17.62+63 iv 15, 18 (MS?)), 2sg.imp.act. ú-da, 3sg.imp.act. ú-da-ú, ú-da-ad-du, 2pl.imp.act. ú-da-at-te-[en] (MH/MS), ú-da-at-tén, ú-ta-a[t-tén], 3pl.imp.act. ú-da-an-du (MH/MS); part. ú-da-an-t-; verb.noun ú-tum-mar; inf.I I [ú]-tu4-ma-an-zi (MH/MS), ú-tum<<-da»〉-m[a-an-zi]; impf. ú-ti-iš-ke/a-, [ú]-te-eš-ke/a-.

PIE $* h_{2} \mathrm{Ou}+* \mathrm{doh}_{3}$-ei $/ * d h_{3}$-enti
All attestations in my file (about 510 examples) are spelled with initial $\dot{u}$ - and never with $u$-. Semantically, uda- ${ }^{i} / u d-$ is the counterpart of peda- ${ }^{i}$ / ped-. Both are a clear compound of $u$ - 'hither' $\left(* h_{2} o u-\right)$ and pe- 'thither' (*h $\left.h_{l} p o i-\right)$ respectively and the verb $d \bar{a}^{-}{ }^{i} / d$ - 'to take'. See at their lemmas for etymology. Note that the oldest texts consistently spell $u d a-/ u d$ - with a short $-a$ - in the strong stem forms, whereas the simplex $d \bar{a}-/ d$ - shows long $-\bar{a}$ - (udahhi vs. dāhhe, udai vs. dāi). This is due to the fact that $u d a^{-}{ }^{i} / u d$ - is trisyllabic (cf. the short $-a$ - in tarna- ${ }^{i} /$ tarn-, etc.). In later texts, the spelling of $d \bar{a}-/ d$ - becomes more influential on the spelling of $u d a-/ u d-$-, yielding the spelling $u$ - $d a-a-i$. Note that the paradigm of $u d a-/ u d$ - has preserved some archaic forms that have been innovated in the paradigm of dā-/d-: e.g. utummen vs. dāuen, uter vs. dāer, utumanzi vs. dāuanzi. These are an important indication for the original ablaut patterns in Hittite verbs
uttar / uddan- (n.) 'word, speech; thing, case; story; reason' (Sum. INIM, Akk. $A U \bar{A} T U$ ): nom.-acc.sg. ut-tar (OS), ud-da-ar, gen.sg. ud-da-na-a-aš (OH/MS, MH/MS), ud-da-na-aš (MH/MS), ut-ta-na-aš, ud-da-a-na-aš, dat.-loc.sg. ud-da$n i-i(\mathrm{MH} / \mathrm{MS}$, often), ud-da-a-ni-i ( $\mathrm{OH} / \mathrm{NS}$ less often), ud-da-ni (less often), erg.sg. ut-ta-na-an-za, abl. ud-da-na-a-az (MH/MS), ud-da-na-za (MH/MS), ud$d a-a-n a-a z(\mathrm{NH} / \mathrm{NS})$, instr. ud-da-an-ta, ud-da-ni-it, nom.-acc.pl. ut-ta-a-ar (OS), ud-da-a-ar, dat.-loc.pl. ud-da-na-a-aš (MH/MS), erg.pl. ut-ta-na-a-an-te-eš, ud-da-na-an-te-eš.
Derivatives: ud(da)nalliie/a- ${ }^{\text {zi }}$ (Ic1) 'to speak about, to conjure, to bewitch' (1sg.pres.act. ud-da-na-al-li-ia-mi, 3sg.pres.act. ud-da-na-al-li-zi, impf. ut-na-al-li-iš-ke/a-), uddaniie/a- ${ }^{z i}$ (Ic1) 'to speak about, to conjure, to bewitch' (impf. ud-da-ni-iš-ke/a-).
Anat. cognates: CLuw. utar / utn- (n.) 'word(?), spell(?)' (n.) (nom.-acc.sg. ú-tar-, ú-tar-ša, ú-ta-ar-ša, nom.-acc.pl. ú-ut-ra, gen.adj.acc.sg.c. ú-ut-na-aš-ši-in, gen.adj.acc.pl.c. ú-ut-na-ǎ̌-ši-in-za).

PIE *uéth $h_{2}$ r, *uth $h_{2}$ én-s.

It should be noted that the interpretation of the CLuwian words is far from assured. The forms and translation cited here have been taken over from Melchert (1993b: 247), but e.g. Starke (1990: 565) assumes that utar / utn- in fact means 'water'. If utar / utn- indeed means 'word', it would be difficult to reconcile the single $-t$ - of CLuwian with the geminate $-t t$ - of Hittite. I therefore will largely ignore the CLuwian forms here.

The etymological interpretation of uttar / uddan- has proven to be very difficult. Eichner (1980: $146^{69}$ ) connects uttar with Skt. vad- 'to speak', Gr. aủ $\delta \eta$ 'voice' and reconstructs $* h_{2} u o d h_{2}-r / * h_{2} u d h_{2}-n$-. The idea is that the initial $* h_{2}$ - is lost in the nominative due to the $o$-grade ('de Saussure effect': * $h_{2}$ uod $h_{2}-r>{ }^{*}$ uattar) and that absence of $h$ - then spread throughout the paradigm $\left({ }^{*} h_{2} u d h_{2}-n->* h u t t n-\right.$ >> uttn-), after which the nominative *uattar is replaced by uttar in analogy to the oblique stem. This account seems quite intricate to me. Rieken (1999a: 299302) mechanically reconstructs *é/óut-r / *ut-n-'. This would regularly yield */údar / utn'//, and if we assume that in Hittite the fortis $-t$ - of the oblique stems has been generalized, whereas in Luwian $-d$ - has spread, we could account for both Hitt. uttar / uttan- and CLuw. utar / utn-. Problematic, however, is that a root *eut- is further unattested (Rieken's account that "man [...] an den Ansatz von * $h_{1} e u$ - "sagen, sprechen" [könnte] denken, zu dem *h $e u g^{u h}-/ * h_{1} u^{u} g^{u h}-$ "feierlich, rühmend, prahlend sprechen" (gr. عv̋रoual, lat. voveō, ai. vāghát-) im gleichen Verhältnis steht wieh *heieig"-"gehen" zu *h $h_{l}$ ei- "ds.". Auszuegehen wäre von einem proterodynamischen Paradigma mit komplexem Suffix *héu$t r / * h_{l} u$-tén-s ( $\gg{ }^{*} h_{l} u t-n$-és)" is not very compelling).
I would rather suggest a connection with the root *ueth $h^{-}$'to speak' that is reconstructed in LIV ${ }^{2}$ on the basis of Lat. vetō 'to veto', MWe. dy-wed- 'to say' < *ut-ne- $h_{2}{ }^{-}$and OIr. as •pena 'testifies' < *eks-uet-nā-ti (see already Pedersen 1938: $29^{1}$ for a connection between uttar and MWe. dy-wed-). The paradigm *uéth $2_{2}-r / *$ uth $_{2}$-en- regularly yielded *uettar / uttan- (cf. e.g. pattar / pattan- < *poth $2_{2}-r /{ }^{*}$ pth $_{2}$-en-), of which it is obvious that it was replaced by uttar / uttan(see Kloekhorst fthc.b for the impossibility of an ablaut $u V C / u C$ in Hittite). The seemingly hysterodynamically inflected forms $u d-d a-n a-a-a \check{s}, u d-d a-n i-i$ and $u d-$ $d a-n a-a-a z$ can be compared to ēšhar / išhan- where an originally proterodynamic noun ( $* h_{1}$ és $h_{2}-r / * h_{l} s h_{2}$-en-) also shows hysterodynamically accentuated forms in Hittite (e.g. iš-ha-na-a-ă̌). It may not be accidental that here the suffix-vowel *e has been coloured to $-a$ - as well.
$\boldsymbol{u t n} \overline{\boldsymbol{e}} /$ utni- (n.) 'land' (Sum. KUR): nom.-acc.sg. ut-ne-e (OS), ut-ni-e, ut-ni, gen.sg. ut-ni-i ia-aš (KUB 8.30 i $23(\mathrm{OH} / \mathrm{NS})$ ), ut-ne-ía-aš (KBo 3.21 ii 4
( $\mathrm{OH} / \mathrm{NS}$ )), dat.-loc.sg. ut-ni-ía (OS), ut-ni-i (OH/NS), ut-ne-ia, ut-ne-e-ia, ut-ne$e$, abl. ut-ni-ia-az, ut-ne-e-az, nom.-acc.pl. ut-ne-e, dat.-loc.pl. KUR-e-aš.

Derivatives: utniiant- (c.) 'people, population' (nom.sg. ut-ni-ia-an-za (OS), KUR-e-an-za, acc.sg. ut-ni-(ía-)an-da-an (OS), dat.-loc.sg. ut-ni-íia-an-ti (OS)).

Anat. cognates: CLuw. *uatna- 'land' in Kizzuuatna-?; Lyc. wedre/i- 'city?, country?' (nom.sg. wedri).

IE cognates: Arm. getin 'ground, land'.

$$
\text { PIE *( } \left.h_{3}\right) u d-n-\bar{e} i, *\left(h_{3}\right) u d-n-i-
$$

See e.g. Neu (1974a: 113) for attestations. The oldest paradigm seems to be $u t n \bar{e}$, utniiač̌. In more recent times, the stem utnē was generalized throughout the paradigm, giving e.g. utneįaš and utnēaz. The dat.-loc.sg. utniia probably is the old allative *utni-o, whereas utn̄̄ is the old dative *utni-ei. The inflection is very rare: the only possibly comparable form is nom.-acc.pl. ku-le-e-i 'vacant' (KBo 6.2 ii 47). Nom.-acc.sg. utne is best explained as *-nēe, whereas the oblique cases show ${ }^{*}$-ni-.

The identification of the stem is difficult. Often, the word is connected with Arm. getin 'ground, land', which probably reflects *uedenV. It is disputed whether the root *ued-, *ud- is the same as in *uod-r 'water' (see at uātar / uitēn-). If Gr. oṽ $\delta a c$ 'ground' is cognate, we perhaps have to reconstruct * $h_{3}$ ued-, $* h_{3} u d$ - although it is not without controversy to assume a development * $h_{3} u d$ - > Gr. ov $\delta$-. For a possible connection with Lyc. wedre/i- and Luw. *uadna-, cf. Melchert (1994a: 317) who states that "[b]oth the meaning of wedre/i- and the analysis of Kizzuwatna- remain problematic". It is interesting why this word show a cluster -tn- whereas normally *-tn- assimilated to -nn- (cf. the abstract nouns in -ātar / -ānn- < *-ótr / *-ótn-). Melchert (1994a: 161) explains this as the result of a morpheme boundary that prevented the assimilation, but Puhvel (HED 3: 353) more plausibly states that etymological $*$-dn- remains unassimilated and therewith contrasts with *-tn- that regularly yields -nn- (similarly in huidar / huitn-).
$\check{\boldsymbol{S}} \overline{\boldsymbol{A}} \boldsymbol{R} \boldsymbol{U} \boldsymbol{u} \boldsymbol{u} \boldsymbol{u m e n i -}$ (n.?) a wind or direction of the wind: nom.-acc.sg.? $\dot{\text { in }}$-du-me-ni.
This word occurs only once, in KUB 8.34 iii (12) $\check{S} A-A-R U$ ú-du-me-ni i-ía[-at$t a-r i$ '] 'The $u$-wind will bl[ow]' (cf. Laroche 1952b: 22). The context is too broken to determine what direction of wind is meant. Oettinger (1995: 46f.) interprets udumeni as 'Benetze das Gesicht!', from *ued- 'to wet', parallel to ${ }^{\mathrm{IM}}$ tarašmeni- 'Dörre das Gesicht aus!', from ters- 'to dry'. He cannot explain,
however, why the form is udumeni instead of **udmeni. Moreover, the verbal root *ued- is unattested in Hittite. I would rather follow Tischler (HEG T: 153) who states that "[d]a es sich jedoch um Ausdrücke aus der Übersetzungsliteratur handelt, ist fremde Herkunft wahrscheinlicher".

ийа- (c.) '?’: gen.sg. ú-ua-aš (KBo 3.40+ rev. 14).
This word occurs in one difficult context only, the Soldier's Song in the PuhanuChronicle:

KBo 3.40+rev.

(14) $n u-u=m-m u$ an-na-aš=ma-aš kat-ta ar-nu-ut ti-ia $a[-a=m-m u t] i-i a n u-u=m-m u$
ú-ua-aš=ma-aš kat-ta ar-nu-ut
(15) $[t] i-\frac{1}{2} a-a=m-m u$ ti-i-i $a$
'The clothes of Neša, the clothes of Neša, bind' me, bind'! Bring me down my mother's, bind ${ }^{?}$ me, bind ${ }^{?}!$ Bring me down my $u$,'s ${ }^{?}$, bind ${ }^{?}$ me, bind ${ }^{?}!$ '.

The exact interpretation of $u u a$ - is unclear, despite several proposals by different scholars (e.g. 'son’ (Hrozný 1929: 297), 'forefather' (Ivanov 1967: 977ff.; Watkins 1969b: 239; Oettinger 1978: 74-5, who assumes that uua- is the Nešite variant of 'normal' Hittite huhha- 'grandfather' and consequently that anna- ~ hanna- 'grandmother'), 'nurse' (Melchert 1986)).

ииал-: 'to come': see uez- ${ }^{z i} /$ una-

ииа- 'to see': see $a u^{-}{ }^{i} /{ }^{-}$-
uйhnuиar: see uahnuuar at ueh- ${ }^{z i}$ / uah-
${ }^{\text {UZU }} \boldsymbol{u}$ ualla-: see ${ }^{(\mathrm{UZU})}$ ualla-
uuantiuant(a)-: see at uantai- ${ }^{i}$ / unanti-
uuarkant-: see uarkant-
uuašta- ${ }^{i}$ : see uašta- ${ }^{i}$ / unašt-
uuate- ${ }^{z i}$ / uuat- (Ia1) 'to bring (here)': 1sg.pres.act. ú-ua-te-mi (MH/MS), 2sg.pres.act. ú-ua-te-ši (MH/MS), 3sg.pres.act. ú-ua-te-ez-zi (OS), ú-ua-da-az-zi (1x, KUB 21.29 iii 38 (NH)), 1pl.pres.act. ú-ua-tu $u_{4}$-um-me-e-ni (KUB 31.44 ii 12 (MH/NS)), ú-ua-te-ua-ni (KUB 31.42 ii 14 (MH/NS)), ú-ua-te-u-e-ni (KUB 14.15 iii 38 (NH/NS)), 2pl.pres.act. ú-ua-te-et-ta-ni (MH/MS), uuatetteni (HW: 239), ú-ua-da-te-e-ni (KUB 13.9 + KUB 40.63 iii 10 (MH/NS)), 3pl.pres.act. ú-ua-ta-an-zi (OS), ú-ua-da-an-zi (MH/MS), 1sg.pret.act. ú-ua-te-nu-un (OS), 2sg.pret.act. ú-ua-te-et (KUB 24.7 iv 36), 3sg.pret.act. ú-ua-te-et (OS), 1 pl.pret.act. uuateuen (HW: 239), 3pl.pret.act. ú-ua-te-er (OS), ú-ua-te-e-er (MH/MS), 2sg.imp.act. ú-ua-te (MH/MS), ú-ua-ti, ú-ua-te-et, 3sg.imp.act. ú-ua-te-ed-du (MH/MS), 2pl.imp.act. ú-ua-ti-it-tén (MH/MS), ú-ua-ta-at-tén (KUB 15.34 iii 16 (MH/MS)), ú-ua-te-et-tén, ú-ua-te-tén, 3pl.imp.act. ú-ua-da-an-du (MH/MS).

This verb shows some variaty of forms, but the oldest paradigm probably inflected thus: uuatemi, uuateši, uuatezzi, uuatummēni, uuadatēni, uuatanzi, uuatenun, *uйateš, uu_atet, *uuatumen, uuatatten, uuater. This means that we are dealing with an ablauting stem uuate $\mathbf{-}^{z i}$ / uuat-, which is fully compatible with a derivation of $* d^{h} e h_{1}-* d^{h} h_{1}$-. Synchronically, uuate-/uuat- seems to function as the counterpart of pehute- ${ }^{z i} /$ pehut- 'to bring (there)', which goes back to $* h_{l}$ poi$h_{2}$ ou-d ${ }^{h} e_{1^{-}}$, combining the preverbs $* h_{1}$ poi- (Hitt. pe-) and $* h_{2} o u-$ (Hitt. $u$-). The exact interpretation of uuate-/uuat- is unclear, however. It is likely that the initial $u$ - is to be equated with the preverb $u-<* h_{2} o u$-, but the element $-u a$ - is unclear to me. Melchert (1994a: 134) therefore assumes that uuate-luuat- reflects $u$ - + *uod'eie- 'to lead' that secondarily has taken over the inflection of pehute-/pehut-.

Melchert (1993b: 248) cites a CLuwian verb uuata- 'to bring?', which is hapax in the following context (same in iv 1-2):

KUB 35.102+103 ii
(13) $i$-i-i $a-a n-d u=k u=u a z a-a s ̌-s ̌ i-i n ~ D U M U-a n-n a-a \check{s ̌-s ̌ i-i}[n]$
(14) a-an-ni-in ua-ra-al-li-in ú-ua-ta-a[n-du]
'They must go, they must $u$. one's own mother of this son'.
I would not dare to state that a translation 'to bring' is imperative here. Such a translation is apparently assumed on the basis of a formal similarity with Hitt. uuate-/uuat- only, which in my opinion is too small a base.
uuiten-: see uātar / unitēn-
uzuhri- (c.) 'grass': acc.sg. ú-zu-uh-ri-in, dat.-loc.pl. ú-zu-uh-ri-ti-i, [ú-zu-uh$r i]-t i-i-1 a$.

This word, which denotes 'grass', is sometimes interpreted as 'zuhri-, having the determinative Ú that is used with plants. Otten (1971b: 1) states that we better read uzuhri-, however. The word only occurs in texts about horse-training. The dat.-loc.-forms in -ti(ia) clearly indicate that the word is Hurrian.

```
=uа=: see =ua(r)=
uah-: see ueh_- / uah-
[u]ahanuuammant-: read [ma]rhanuuammant-, q.v.
```

uahhu- ${ }^{z i}$ : see ueh- ${ }^{z i} /$ uah
 KBo 19.38 ii 93 (MH/MS)), 3sg.pres.act. ua-a-i (KUB $14.1+$ KBo 19.38 ii 91 (MH/MS)), ú-i-ia-ezz-z[i] (KUB 15.34 iv 19 (MH/MS)), ú-i-ia-iz-zi (KUB 15.32 i 37 (MH/NS)), $\dot{u}-i-e-e z-z[i]$ (FHG 4, 11 (undat.)), 3pl.pres.act. $u$ ú-i-i ia-an-[zi] (KUB 15.31 i 35 (MH/NS)), 3pl.pret.act. $u$ u-i-e-er (KUB 31.67 iv 10 (NS)); inf.I $u$ ú-i-ia-u-an-zi (KUB 30.28 obv. 29 (NS), VBoT 24 iv 37 (MH/NS)); impf. ú-e-eš-ke/a(3pl.pres.act. ú-e-ě̌-kán-zi (KUB 39.5 rev. 13 (OH/NS)), sup. ú-e-eš-ga-u-an (KUB 17.6 i 26 (OH/NS), KBo 32.15 iii 9 (MS)), ú-e-eš-ke-u-an (KUB $19.4+$ 19.45 obv. 8 (NH)), ú-e-eš-ke«<-iš»-u-an (KUB 33.106 iii 6 (NS))).
 KBo 19.38 ii 92), impf. $u$ í-i-ú-i-iš-ke/a- (KBo 16.72+73 i 11, 14, 18, KUB 33.119, 16), ú-e-u-iš̌-ke/a- (KBo 24.5 ii 10)), uiuiǔiskattalla- (c.) 'crier' (nom.sg. ú-i-uius-išs-kat-tal-la-aš (KBo $1.44+$ KBo 13.1 i 40)).

The interpretation of the forms of this verb has been difficult. Friedrich (HW) cites two verbs: a hi-verb "u$u \bar{a} i-"$ (with 3sg.pres.act. $u \bar{a} \bar{i}$ only) and a mi-verb "uiiāi-", both 'schreien'. Oettinger is not consistent in his treatment. The form $u \bar{a} i$
he cites (1979a: 475) as belonging to a stem "uie-hhi", (i.e. belonging to the dāi/tiiianzi-class), but he does not mention the other forms under this lemma. On p. 73 he cites a verb "uiie-hhi", (also belonging to the däi/tiianzi-class), but does not cite any forms. Are uiie- ${ }^{h h i}$ and uie- ${ }^{h h i}$ to be seen as the same verb, and does he also regard forms like uiiami as belonging here? Melchert (1984a: 132) is more clear and states that $u \bar{a} i, u i i a n z i$ are to be regarded as belonging to the dāi/tiiuanziclass, with forms like uiiami being backformations on the basis of 3 pl. uiianzi. According to him, this is indicated by the fact that 3 sg .pres.act. $u \bar{a} i=$ is found in the same context as 1 sg.pres.act. uiiami:

KUB $14.1+$ KBo 19.38 ii


KUR-e

ú-i-ìa-mi
'The aliia-bird does not cry, it does not bite, it does not spread (its wings). [...] hunts the aliia-bird. Why does the pig cry? Who [...] in the land [...] kills. And I wil cry like a pig'.

I agree with Melchert: the oldest paradigm of this verb is shown by uāi/uiizanzi, whereas the forms that belong to the paradigms uiie/a- ${ }^{z i}$ and uiiae ${ }^{z i}$ are younger secondary creations.
Formally, the thematic forms uiie/a $-^{z i}$ resemble the forms of the verb uie- ${ }^{z i} / u i-$ 'to send' a lot, but they are consistently spelled differently: 'to cry' has an initial $u$ ú, whereas 'to send' shows initial $u$-. Nevertheless, forms of these verbs have occasionally been misinterpreted by scholars. For instance,

KUB 31.67 iv
(9) [ ... ]x $2{ }^{\text {MUNUS }}$ SUHुUR.LA $_{5}$ DINGIR $^{L I M} I S ̌$-TU É.DINGIR ${ }^{L I M}$
(10) [ ... ]x ú-i-e-er nu=u $u$ - $a=\check{s}$-ma-aš=kán SAG.DU- $i$
(11) [ ... ki-i $] a-a n-t a-r i$
is translated by Starke (1990: 430) as
' 2 Hierodulen der Gottheit schickte man aus dem Tempel [...] herauf' (mit den Worten): "Auf ihren Kopf sind [...] gelegt."",
but I would prefer
'Two hierodules of the deity cried from out of the temple "On your/their heads [...] are lied.".

The same goes for the form $u$ ú-i-e-ez-z[i(FHG 4,11), which is cited in Oettinger (1979a: 338) as 'to send', but must mean 'to cry'. The context it occurs in,

FHG 4
(10) [ ... ]x-ía $\mathrm{TI}_{8}{ }^{\text {MUŠEN }}$-aš pár-ta-ú-n[i-it $\ldots$... $]$
(11) [ ... ]x [...]=pát ú-i-e-ez-z[i ... ]
must, despite its bad preservation, be compared to
KBo 15.48 ii
(5) ...nu ${ }^{\text {LÚ }}$ pal-una-at-tal-la-aš
(6) $\mathrm{TI}_{8}{ }^{\text {MUŠEN }}$-aš pár-ta-u-ni-it LUGAL-i me-na-ah-ha-an-da
(7) una-a-tar $3=$ ŠU pa-ap-pár-aš-zi pal-ų $a-i z-z i=$ ma $1=\check{S} U$
'The crier sprinkles water with an eagle's feather three times toward the king and cries out once' (cf. CHD P: 199).

In the case of the imperfective, the spelling difference between $u$ - and $u$ - is significant as well: ú-e-eš-ke/a-means 'to cry' (or 'to come', but this is more often spelled $u$-i-iš-ke/a-) whereas $u$-e-eš-ke/a- is 'to send'. This means that the forms should be phonologically interpreted as follows: una-a-i=/uái/, ú-i-ìa-an-zi $=/ u i a ́ n t{ }^{s} i$ / and $\dot{u}-e$-eš-ke/a- = /uìské/á-/. This contrasts with e.g. uie- $e^{z i} / u i-$ 'to send (here)' which is spelled $u-i-\frac{1}{2} a-a n-z i=/$ Roiánt ${ }^{\text {s }} \mathrm{i} /$ and $u-i-e s ̌-k e / a-=/$ Roìské/á-/ and $u$-e-eš-ke/a- = /Ròské/á-/.
Etymologically, the verb is likely derived from the onomatopoetic words $u$ ú $i$ 'whee!' (KUB 55.38 ii 19) or (u)uāi- 'woe' (in $\bar{a} i-(u) u \bar{a} i-$ 'woe and pain' (acc.sg. a-i-in ú-ua-a-i-in (StBoT 25.4 iv 26-7, 35 (OS), StBoT 25.7 iv 5 (OS), a-i-in ua-a-i-in (StBoT 25.3 iv 14 (OS), StBoT 25.7 iv 9 (OS)).
 $k a-a n-z i$ (IBoT 1.36 i 20 (OH/MS)), 3sg.pret.act. ưa-a-kiš (NS), una-ka $a_{4}-a \check{s}$ (NS), ua-ak-ki-iš (MH/NS), ua-a-ki-et (NS), 1pl.pret.act. u_a-a-ku-e-en (MH/NS), 2sg.imp.act. u_a-ak (undat.), una-a-ga (NH); inf.II u_a-ga-a-an-na (KUB 34.128 obv. 13 ( $\mathrm{OH} / \mathrm{MS}$ )), úa-ga-an-na (KUB 60.121 obv. 19 (MS)), úa-kán-na (KBo 8.130 ii 7 (MS)), ua-ka $4_{4}-a n-n a$; impf. ua-ak-ki-i[š-ke/a-...] (KBo 3.40b obv. 17 ( $\mathrm{OH} / \mathrm{NS}$ )).

Derivatives: ${ }^{\text {NINDA }}$ uagātaš- (n.), a kind of bread (acc.sg. ưa-ga-a-ta-aš (OS), ua-ga-a-da-aš (OS), ú $a$-ga-ta-aš (OS), úa-ga-da-aš (OS), u_a-ga-da-a-aš (1x, OS), acc.sg.c. una-ga-ta-an (OH/NS), coll. una-ga-a-ta), ${ }^{\text {NINDA uageššar / unagešn- (n.) a }}$ kind of bread (nom.-acc.sg. u_a-ge-eš-šar (OS, often), u_a-ke-eš-šar (OS), una-ge-

Anat. cognates: Pal. u्रakk- 'to bite(?)' (3pl.pret.act. ǔa-ak-ka $\left.{ }_{4}-k a ́ n-t a\right)$.
IE cognates: Gr. ${ }^{\circ} \gamma v v \mu$ t 'to break', TochAB wāk- 'to split, to burst'.
PIE *uó $h_{2}{ }^{(g)}-e i / * u h_{2}{ }_{2}^{(\stackrel{\prime}{g}}$-énti.
See Oettinger 1979a: 444f. for attestations. The oldest forms (OS and MS), ua-a$k i$ and ua u-ak-kán-zi, clearly show an ablaut uāk- ${ }^{i}$ / uakk-, with which this verb belongs to class IIa2 ( $\bar{a} / a$-ablauting $h i$-verbs). The alternation between $-k$ - and $-k k$ - is typical for this class (compare $\bar{a} k-{ }^{i} / a k k$ - 'to die', ištāp- ${ }^{i} / i s ̌ t a p p-' t o ~ s h u t ', ~$ $n \bar{a} h{ }^{-}{ }^{i} / n a h h-$ 'to fear', e.a.). Usually, this alternation can be explained by lenition of an original fortis consonant due to the *ó of the singular (e.g. *stóp-ei > /istábi/, *nó $h_{2}$-ei >/náhi/). In the case of $u \bar{a} k{ }^{-}{ }^{i} / u a k k$-, we would therefore at first sight assume a preform *ú ${ }_{2} k$-ei > ūāki. Such a reconstruction is problematic in the weak stem, however: as we see at the treatment of $u e k k-{ }^{z i}$, a zerograde $* u k$ - in an ablauting paradigm secondarily was changed to Hitt. /uìk-/ = ue/ikk-.
This problem is solved by the etymology provided by Kammenhuber (1961b: 47), who connected $u \bar{a} k-/ u a k k$ - with Gr. ${ }^{\circ} \gamma v v \mu$ 'to break', which reflects *ueh ${ }_{2}{ }^{( }{ }_{g}^{\prime}$-. If we apply this root structure, we arrive at a paradigm * uó $h_{2}{ }^{(\prime)}{ }_{g}^{\prime}-e i /$
 an anaptyctic vowel emerged in order to avoid an ablaut $u V C-/ u C$ - (see also at uekk- ${ }^{z i}$, uātar / uitēn-). Due to the adjacent $* h_{2}$, this vowel appears as / / / cf. the
 *teks $C$-). If we assume that $*_{-} h_{2}{ }^{(\prime)} g^{\prime}$ assimilates to fortis $-k k$ - in pretonic position, but yields $-k$ - after accentuated vowel (compare šāgāi- 'sign, omen' < *séh ${ }_{2} g \bar{o} i$ ),
 uakk-.

Although NINDA uageššar / uagešn- is generally seen as a derivative of unak- ${ }^{i}$ uakk-, it is unclear whether NINDA uagātaš (cf. Rieken 1999a: 196-7) is as well. The word apparently is a neuter stem uagātaš-, out of which in younger Hittite a commune stem uagata- was extracted (as can be seen in the acc.sg.c. uagatan). If it is derived from this verb, then the formation is unclear (there are no other words that show a suffix -ātaš-).
 HT 18, 8, KBo 4.8 ii 8, KBo 45.211, 7), ua-ag-ga-a-ri (KBo 4.8 ii 10), ua-a-ag-ga-a-ri (Bo 3375, 6), ua-ag-ga-ri (KUB 36.25 i 15, Bo 5166 rev. 5), ua-ak-ka ${ }_{4}-r i$ (KUB $24.8+36.60$ i 15, ii 3, KUB 36.25 i 14, KBo 10.50 r.col. 13, KUB 42.100 iii 25), 3sg.imp.act. ua-ak-ka ${ }_{4}-r u$ (KUB 31.86+ i 12).

PIE *uh $\left.{ }_{2}{ }^{( }\right)=\dot{g}(-r i)$ ?
See Oettinger 1976b: 140f. for attestations. In HW (241), this verb is cited as uakkar-, probably on the basis of "Prt. Sg. 3 uaqqares" in KUB 33.106 ii 8. Oettinger (l.c.) rather reads this context thus:

KUB 33.106 ii
(7) ... nu ma-ah-ha-an ${ }^{\mathrm{d}} H{ }^{H}$ é-pád-du-uš ${ }^{\mathrm{d}} T a \check{s}-m i-s ̌ u-u n ~ a-u s ̌-t a$
(8) nu=kán ${ }^{\mathrm{d}} H e ́-p a-d u-u s ̌ ~ s ̌ u-u h-h a-a z ~ k a t-t a ~ m a-u s ̌-s ̌ u-u-u a-a n-z i ~$ ua-ak-ka $-r i-e \check{s}[-k e-u]-a n$
(9) ti-ila-at ma-n=a-aš=kán šu-uh-ha-az kat-ta ma-uš-ta-at

See at the lemma uakkariie/a- ${ }^{z i}$ for a treatment of this context.
The verb uakk- ${ }^{a r i}$ denotes 'to be lacking', as e.g. in KBo 4.8 ii (10) $U$ ' $-U L=a=\check{s}-$ $\check{s} i-i=\check{s}$-ša-an ku-it-ki ua-ag-ga-a-ri 'but nothing is lacking for him' i.e. 'but he lacks nothing'. Oettinger (l.c.) supposes a connetion with uakkariie/a-zi 'to revolt against' (q.v.), but I do not see how this connection would work semantically. A better comparandum might be unak(ki)šiie/az- ${ }^{z i}$ (q.v.), which denotes 'to be lacking' as well.

Because of the almost consistent plene spelled ending -āri, it is clear that uakk${ }^{a} r i$ belongs to the tukkāri-type, of which it has been generally thought that it goes back to a structure *CC-ó-ri, i.e. zero-grade root followed by an accentuated ending. In the case of uakkāri, this means that uakk- reflects a zero-grade formation. The only zero-grade stem uakk- that I know of in Hittite is found in the

 A semantic parallel is available in ModDu. ontbreken 'to be lacking', derived from breken 'to break'.

Oettinger (l.c.) suggests a connection with Lat. vacuus 'empty', which reflects * H$) u h_{2} k$ - (cf. Schrijver 1990: 307-8). Problematic, however, is that in my view a preform *uh $k$-óri should regularly yield Hitt. **ukkāri, and that I see no way how to explain the secondary epenthetic vowel $-a$ - without availability of a fullgrade form.
uagai- (c.) 'grain weevil' (Sum. UH.ŠE): nom.sg. una-ga-a-iš (KUB 4.3 obv. 5), abl. ua-ga-i̇a-za (KUB 46.42 iv 11), acc.pl. una-ka $a_{4}-a-u s ̌$ (KUB 46.38 i 4, KUB 46.42 iii 1), ua-ka ${ }_{4}$-uš (KUB 46.38 i 6)

See Hoffner (1977b: 75) for attestations. He translates this word as 'grain weevil' and states that "the connection with wak- "to bite, peck" may be only illusory (folk etymology) or genuine". If the connection with $u \bar{a} k-{ }^{i} / u a k k$ - indeed is justified, we should reconstruct *uéh ${ }_{2}{ }^{(\prime)}$-oi-. See at $u \bar{a} \bar{a} k-{ }^{i} /{ }_{c}$ uakk- for further etymology.
uakkariie/a- ${ }^{z i}(\mathrm{Ic} 1>\mathrm{Ic} 2)$ 'to rebel against, to revolt against': 3sg.pres.act. ua-ag-
 ia $a-z i(\mathrm{NH})$, una-ak-ri-ịa-zi (KUB 8.3 ii 5 (OH/NS)), úa-ag-ga-ri-ia-iz-zi (NH), ua$a k-k a_{4}-a-r i-i a-z i(N H)$, 1sg.pret.act. ua-ag-ga-ri-ia-nu-un (NH), ua-ak-ka ${ }_{4}-r i-i{ }_{2} a-$ nu-un (NH), 3sg.pret.act. ua-ag-ga-ri-ia-at, 2sg.imp.act. ua-ag-ga-ri-ia (OH/NS); verb.noun gen.sg. ua-ag-ga-ri-ia-u-aš (NH); inf.I uaggariïauanzi (HW: 241); impf. úa-ak-ka ${ }_{4}-r i-e s ̌[-k e / a-]$; broken ua-ak-ka-ri-i_ia[-..]] (OS).

Derivatives: u्रakkareššar / uakkarešn- (n.) 'rebellion(?)’ (abl. una-ak-kar-eš-na$a z$ (KBo 8.47 i 12)).

PIE *uo $k^{\prime}-r-i e / o-? ?$
Most attestations are from NH texts, but the OS attestation ua-ak-ka-ri-ia $a[-.$. (KUB 36.106 obv. 7) shows that the verb was used in OH times already. The one attestation ua-ak-ri-ia-zi ( $\mathrm{OH} / \mathrm{NS}$ ) might indicate that we are dealing with a phonological /uakrie/a-/.

The verb denotes 'to rebel, to revolt', as can be seen from many contexts. One context, however, may indicate that uakkariie/a- could stand for fysical revolting as well:

```
KUB 33.106 ii
    (7) ... nu ma-ah-ha-an \({ }^{\mathrm{d}} H{ }^{H}\) é-bad-du-uš \({ }^{\mathrm{d}}\) Taš-mi-šu-un \(a-u s ̌-t a\)
(8) nu=kán \({ }^{\mathrm{d}} \mathrm{H}\) é-pa-du-uš šu-uh-ha-az kat-ta ma-uš-šu-u-ūa-an-zi
    ua-ak-ka \({ }_{4}\)-ri-eš[-ke-u]-an
(9) ti-ía-at ma-n=a-aš=kán šu-uh-ha-az kat-ta ma-uš-ta-at n=a-an
    mUNUS.MEŠSUHUR.LA \({ }_{5}\)
(10) e-ep-per \(n=a\)-an Ú-UL tar-ni-er
```

'When Hepat saw Tašmišu, Hepat began to stirr? sothat she would fall down from the roof. She would have fallen down from the roof, but her servants grabbed her and did not let her go'.

Often, uakkariie/a- is seen as a derivative of uakk- ${ }^{-\quad \text { rri }}$ 'to be lacking' (q.v.). This seems to be based especially on the fact that in the older literature the verb uakkwas thought to display a root uakkar- (3sg.pres.midd. uakkāri), and because of the fact that we find a few attestations of uakkariie/a-spelled una-ak-ka $a_{4}-a-r i-i a-$, a spelling that resembles the word $u a-a k-k a_{4}-a-r i$ 'is lacking'. Nevertheless, a connection between uakkariie/a- and uakk- is dificult, especially semantically. I do not see how we could connect 'to rebel against, to revolt' with 'to be lacking'. E.g. Tischler (HW) translates uakkariie/a- with 'Mangel leiden lassen', but this translation seems to be based on the presupposed etymological connection with uakk- only. Formally, the connection is not evident either. We would have to assume that uakkariie/a- is a derivative in -ariie/a- of the verbal root uakk-, whereas to my knowledge, this suffix is only used with nouns in -ant-, e.g. gimmandariie/a- ${ }^{z i}$ 'to spend the winter' from gimmant- 'winter', nekuman-dariie/a- ${ }^{z i}$ 'to undress (someone)' from nekumant- 'naked', parkuuantariie/a- ${ }^{z i}$ 'to become pure' from *parkuuant- 'pure', while other verbs in -ariia- are all derived from nouns in -ar-: ešhariie/a-z from ešhar-, hahhariie/a- ${ }^{z i}$ from hahhar(a)-, happariie/a- ${ }^{z i}$ from happar-, etc.
All in all, I would conclude that uakkariie/a- ${ }^{z i}$ means 'to stirr' $>$ 'to revolt against' (and not 'to make someone lack something') and is derived from a noun *uakkar-, which perhaps denoted some movement (and is not derived from the verb uakk- 'to be lacking'). Unfortunately, such a noun is unknown in Hittite, nor do I have a etymological suggestion for it. Formally, it could go back to *uo ${ }^{\prime} k-r$.
uak(ki)šiie/a- ${ }^{-z i}$ (Ic1) 'to be lacking': 3sg.pres.act. una-ak-ši-i-ia-zi (KUB 8.35 i 11 (NS), Bronzetafel ii $74(\mathrm{NH})$ ), ua $a-a k-k i-s ̌ i-e-e z-z i(K U B 8.28$ i $5(\mathrm{OH} / \mathrm{NS})$ ), 3sg.pret.act. una-ak-ši-i_ia-a[t] (VSNF 12.116 rev. 5, 10 (NS)); part. una-ak-ši-ialan$z a$ (KUB 23.61 i 8 (NS)).
Derivatives: úaggašnu- ${ }^{z i}$ (Ib2) 'to leave out' (3pl.pres.act. una-ag-ga-aš-nu-an-zi (VBoT 24 i 9 (MH/NS))), uakšiianu- ${ }^{z i}$ (Ib2) 'to deny a person of something' (3sg.pres.act. una-ak-ši-i_ia-nu-zi (KUB 13.4 iii $40(\mathrm{OH} / \mathrm{NS})$ ), 2pl.pres.act. una-ak-ši-ia-nu-ut-te-ni (KUB 13.4 i 49 (OH/NS)), 1sg.pret.act. una-ak-ši-ía-nu-nu-un (KBo 12.38 ii $15(\mathrm{NH}))$ ).

PIE *u $h_{2}{ }^{(\prime)}-s-i e / o-?$

For the semantics of this verb, cf. e.g.

## Bronzetafel ii

```
(74) ú-uk-k=a4 ma-ah-ha-an \({ }^{\text {m.d }}\) LAMMA-an pa-ah-ḩa-aš-ḩi \(n u-u=s ̌-s ̌ i=k a ́ n ~ m a-a-a n\)
    una-ak-ši-ía-zi
```


'Just like I will protect Kurunta - every time something is lacking for him I will replace it - ...'.

Semantically, this verb is therefore quite similar to $u a k k-{ }^{\bar{a} r i}$ 'to be lacking' (q.v.). Formally, uak(ki)šiie/a-could then be a derivative in -s- of uakk-. This plain stem uakš- is still visible in úaggašnu- ${ }^{z i}=/$ uaksnu-/, wheras all other forms show the NH -ied $/ a$-extension. See at $\underset{\sim}{u} a k k-{ }^{a} r i \quad$ for further etymology.

DUG/URUDU unaǩ̌ur (n.) a vessel; a cubic measure; a time unit: nom.-acc.sg. ua-ak-


This word denotes a vessel that is used as a cubic measure for e.g. honey, oil, milk and wine. Moreover, it is used as a time unit (probably a water clock). Only one possibly inflected form is known, viz. gen.sg.(?) un[a]kšurraš.

Becauce we do not know exactly what kind of object uakšur denotes, it is difficult to etymologize it. Pisani (1982: 178) connected this word with uak(ki)šiie/a- ${ }^{z i}$ 'to be lacking', which formally is possible (cf. the stem uakšvisible in uakšnu- ${ }^{z i}$ ), but semantically not easy to defend. According to Pisani, unak(ki)šiie/a- ${ }^{z i}$ ultimately is cognate with Lat. vacō 'to be empty', and he therefore assumes a semantic development 'to be empty' > 'to be a container'. See at the lemma of uak(ki)siie/a- ${ }^{z i}$ for the impossibility of a connection with Lat. vacō, however.
unaktūri-: see $u k t \bar{u} r i-$
${ }^{(U Z U)}$ ualla-, ualli- (c.) 'thigh(-bone)(?)': nom.sg. ưa-al-la-aš, ú-ua-al-la-aš (1x, KUB 55.53 i 11), acc.sg. úa-al-la-an, gen.sg. u_a-al-la-aš, nom.pl. u_a-al-li-e-eš (KUB 29.1 iv 10), ua-al-li-i-e-eš (KBo 4.1 rev. 20), ua-al-li-iš (ABoT 1 i 16), acc.pl. una-al-lu-uš (KUB 29.1 iv 9).

For semantics, compare Alp (1957: 26-7), who translates this word as "Keule, Schenkel' (beim Tier) und 'Oberbein, Oberschenkel' (beim Menschen)". Alp
cites the word as uualla- as well, based on a spelling $u$-ua-al-lu-uš in KUB 29.1 iv 9 and ú-ua-al-la-aš in KUB 55.53 i 11. The former attestation may rather be read (KUB 29.1 iv 9) nu 10 una-al-lu-uš ti-an-zi 'they put down ten un.-s'. The latter attestation runs thus:

KUB 55.53 i
(10) $n u 12$ NINDA.GUR $4 \cdot$ RA $^{\text {HI.A }}$ TUR $^{T I M}$ ŠÀ.BA 1 NINDA.GUR 4 .RA
ha $a-a z-z i-l a-a[s]$
(11) me-ma-al ZÍZ NINDA.Ì.E.DÉ.A ZAG-aš í-úla-al-la-aš
(12) $n=a$-at $A$-NA DINGIR.MAH pé-ra-an ti-an-zi
'(There are) 12 thickbreads, the heart(?) of a cub, one thickbread (of) h. meal, wheat, fat-bread (and) a right $u$. They place these before the Mother-goddess'.

It indeed may show a singular spelling $u$-ua-al-la-. If the form ua-al-li-i-e-eš (KBo 4.1 rev. 20) belongs here as well, we see a stem ualli- too. The appurtenance of the word ${ }^{\mathrm{UZU}} \dot{u}$-la- (q.v.) is unclear, however.
Alp (1.c.) proposed to analyse ${ }^{(\mathrm{UZU})}$ ualla- as a derivative in -alla- of the verb uиa- 'to come' (see $u e_{-}^{z i} / u u a-$ ). This is formally quite improbable, as uua- is a quite recent stem which was formed out of the original paradigm $u \bar{e}_{-}^{z i} / * u u$ - in analogy to the -ie/a-class. No further etymology.
ualla/i- 'to praise, to honour': 1sg.pres.act. una-al-la-ah-hi (KUB 31.127 iii 37), 3pl.pres.act. una-li-[iñ]a-an-zi (KUB 6.46 iv 28); impf. una-al-li-iš-ke/a-, ua-al-li-eš-ke/a-.

This verb is generally translated as 'to praise, to honour', compare, e.g.
KUB 31.127 iii
(37) tu-uk DINGIR ${ }^{L A M}$ ua-al-la-ah-hi
'I praise you, god';

KUB 6.46 iv
(28) $n u-u=t-t a$ DINGIR $^{\text {MEŠ }}{ }^{\text {Š }} A$ ME-E HUR. SAG $^{\text {MEŠ }}$ ÍD $^{\text {MEŠ }}{ }_{u} a-l i-[i] a-a n-z i$
'the gods of the 100 mountains and rivers praise you'.
When accompanied with $=z$, the verb is translated 'to boast, to brag', e.g.
KBo 5.6 i

$$
\begin{equation*}
\text { ... nu ku-it-ma-an URU }{ }^{\text {DIDLI.HI.A }} \text { ú-e-te-eš-ke-et } \tag{3}
\end{equation*}
$$


(5) kat-ta-an-da Ú-UL ku-ua-at-ka tar-nu-um-me-ni ma-ah-ha-an=ma
(6) URU ${ }^{\text {DIDLI.HI.A }}$ ú-e-tu $u_{4}$-ma-an-zi zi-in-ni-it $n=a$-aš URU Al-mi-na
(7) an-da-an pa-it nu-u=š-ši ${ }^{\text {LÚ KÚR z }}$ za-ah-hi-ía me-na-ah-ha-an-da
(8) nam-ma Ú-UL ku-iš-ki ma-az-za-aš-ta
'While he was fortifying the cities, the enemy was boasting "We will never let him come down to the city of Almina". But when he had finished fortifying the cities, he entered Almina, but none of his enemies gave further resistence in battle against him'.

The exact inflection of this verb is unclear. I will therefore cite it as ualla/i-. If the form ua-li-[i]a-an-zi really belongs to this verb (which is semantically quite possible), we must assume that it is misspelled for uat-al)-li-ia-an-zi.

This verb probably is related with ualli- 'pride(?)' and ualliiatar / ualliiann'(song of) praise'. Often, ualla/i- is further connected with ualluške/a-, which then is translated 'to praise', too. For instance, Melchert (1994a: 81-2) reconstructs "ualla-" as *ual-neh $2_{2}$ and "uallu-" as *ual-neu-, but see at ualluške/a- for the problems regarding this view. Oettinger (1979a: 490-1) assumes that 'to praise' developed out of 'to make strong' and therefore connects ualla/i- with Lat. valēre 'to be strong', TochB walo 'king', etc. < *uelH-.
ualahh- ${ }^{z i}$ : see ualh- ${ }^{z i}$
ualahhi-: see ualhi-

цаllanu- ${ }^{z i}$ (Ib2) 'to erase(?)': 3sg.pres.act. ua-al-la-nu-u[z-zi] (KUB 26.43 ii 37); part. nom.sg.c. ua-al-la-nu-an-za (KUB 34.19 iv 9).

The only clear context in which this verb is attested is

```
KUB 26.43 ii
(35) ki-i ṬUP-PU PA-NI \({ }^{\mathrm{d}}{ }^{\mathrm{URU}}{ }^{H}\) a-at-ti ki-it-ta-ru \(n=a\)-at pé-an ar-ha \([U ́-U L\)
            \(k u-i s ̌-k i d a-a-i]\)
(36) \(k u-i \check{s}=m a k i-i\) ṬUP-PU A-NA \({ }^{\mathrm{d}} \mathrm{U}^{\mathrm{URU}}\) Ha-at-ti pé-ra-an ar-ha da-a-[i ... ]
(37) na-aš-m=a-at ar-ha la-hu-u-ua-i na-aš-ma ŠUM-an ua-al-la-nu-u[z-zi ...]
(38) pa-ra-a pé-e-da-i \(n=a-a n=k a ́ n{ }^{\mathrm{d}} \mathrm{U}^{\mathrm{URU}}\) KÙ.BABBAR- \(t i{ }^{\mathrm{d}} \mathrm{UTU}^{\mathrm{URU}} A-r i-i n-[n a \ldots]\)
(39) Ù DINGIR \({ }^{\text {MEŠ }}\) hu \(u\)-u-ma-an-te-eš \(Q A-D U\) NUMUN \(=S ̌ U\) ar-ha
```

```
har-kán-nu-[ua-an-du]
```

'This tablet must lay before the Storm-god of Hatti. [No-one shall take] it from before (the deity). Whoever does take this tablet from before the Storm-god of Hatti [...] or will pour it away or will erase? the name [...] will bring forth, the Storm-god of Hatti and the Sun-goddess of Arin[na] and all the gods shall destroy him together with his offspring'.

Formally, uallanu- ${ }^{z i}$ looks like a causative in -nu- of a stem ualla-, but the only known verb ualla- 'to praise' does not fit the meaning. No further etymology.
unalh $^{z i}$ (Ia4) 'to hit, to strike' (Sum. GUL, RA): 1sg.pres.act. ua-al-ah-mi (MH/MS), 2sg.pres.act. ưa-al-ah-ši (MH/MS), [u] $a$-al-ah-ti, 3sg.pres.act. una-al-ah-zi (OS), ua-la-ah-zi (OS), u-ua-al-ah-zi (KBo 16.50 obv. 20), 1pl.pres.act. ua-al-hu-u-ua-ni (MH/MS), ua-al-hu-uূa-ni (MH/MS), ua-al-hu-e-ni (NS), 2pl.pres.act. ua-al-ah-ta-ni, 3pl.pres.act. ua-al-ha-an-zi (OS), ua-al-ah-ha-an-zi, 1sg.pret.act. ua-al-hu-un (OS), ua-al-ah-hu-un, 3sg.pret.act. ua-al-ah-ta (MH/MS), 1pl.pret.act. ưa[-al? $h] u^{?}$-en (KBo 18.86 obv. 13), 2pl.pret.act. ua-la-ah-tén (MH/MS), 3pl.pret.act. una-al-ah-he-er (MH/MS), ua-al-he-er, 2sg.imp.act. ua-al-ah (MH/MS), 2pl.imp.act. ua-al-ah-tén (MH/MS), ua-al-ah-te-en (MH/MS); part. ua-al(-ah)-ha-an-t-; verb.noun ua-al-hu-ua-ar, ua-al-ah-hu-u-uaar, gen.sg. una-al-hu-ua-aš; inf.I una-al-hुu-ua-an-zi (MH/MS), ua-al-hu-u-ua-an-zi (MH/MS), ua-al-ah-hu-u-úa-an-zi, u-ua-al-hu(-u)-ua-an-zi (KBo 16.50 obv. 10, 15); impf. una-al(-ah)-hi-iš-ke/a-, ua-al(-ah)-hi-eš-ke/a-.

Derivatives: ualhanna- ${ }^{i}$ / ualhanni- (IIa5) 'to hit, to strike (impf.)' (2sg.pres.act. ua-al-ha-an-na-at-ti, 3sg.pres.act. ua-al-ah-ha-an-na-i, ua-al-ha-an-na-i, ua-al-ha-an-na-a-i, 3pl.pres.act. ua-al-ha-an-ni-an-zi (OS), ua-al-ha-an-ni-ía-an-zi, 3sg.imp.act. una-al-ha-an-na-ú; impf. úa-al-ha-an-ni-iš-ke/a(MH/MS), ưa-al-ha-an-ni-eš-ke/a-), ualheššar / ưalhešn- (n.) 'strike, blow’ (nom.-acc.sg. u_u-al-he-eš-šar, u_a-al-hi-iš-šar, gen.sg. ua-al-hi-iš-na-aš, dat.loc.sg. RA-eš-ni).

IE cognates: Lat. vellō 'to tear apart', Gr. éá $\lambda \omega v$ 'was killed', TochA wällüṣtär 'dies'.

$$
\text { PIE *uélh } h_{3}-t i / * u l h_{3} \text {-énti }
$$

This verb is well-attested, from OS onwards. The spellings ua-al-ah-C, ua-la-ah$C$, ua-al-h $V$ and ua-al-ah-h $V$ all clearly point to a phonological interpretation /ualH-/. The spellings with $u$ - $u$ a- occur in one text only (KBo 16.50) and therefore can be disregarded. The exact etymological interpretation of ualh- has
been disturbed by the idea that it has an inner-Hittite cognate in hulle- ${ }^{z i}$ / hull- 'to smash'. E.g. Oettinger (1979a: 264) reconstructs a root $* h_{2} u e l h_{2}{ }^{-}$, of which on the one hand a thematic formation $* h_{2} u l h_{2}$-é-ti would be visible in hullezi and on the other a root-present $* h_{2}{\underset{\sim}{2}}^{\text {ull }} h_{2}-t i$ yielded ualhzi with dissimilation of the first $* h_{2}$ due to the second one. As I have argued under its own lemma, hulle- ${ }^{z i}$ / hull- is best explained as a nasal-infix formation $* h_{2} u l-n e-h_{l^{-}}$of a root $* h_{2} u l h_{l^{-}}$, and therefore cannot be equated with ualh-.
I rather follow LIV $^{2}$ in reconstructing a root $* u^{\prime} h_{3^{-}}$'to strike' $\left({ }^{*}-h_{3^{-}}\right.$visible in Gr. zá $\lambda \omega v$ 'was killed' < * $\left.h_{1} e-u l h_{3}-e h_{1}-\right)$. Note that $u e ́ l h_{3}-t i / * u l h_{3}$-énti in pinciple should have yielded **ualzi / **ulhanzi. Nevertheless, on the basis of the consonantal $*_{u}$ of the singular, the plural form was realized $*_{u} l h_{3}$-énti. This latter form regularly yielded Hitt. /uəlHánt ${ }^{\text { }} \mathrm{i}$, on the basis of which the laryngeal was restored in the singular form, which then yielded /uálHt ${ }^{\text {s }} \mathrm{i} /$.
ualhi- (n.) a beverage used in cult: nom.-acc.sg. ua-al-hi (OS), ua-al-ah-hi,
 ua-al(-ah)-hi-it.
 (KUB 13.3 ii 22)).

$$
\text { PIE *uolh }{ }_{3}-i, * u l h_{3}-i-o s ? ?
$$

This word denotes a beverage that is used in cult and is attested from OS texts onwards. Although in principle the word could very well be of IE origin, our lack of understanding its exact meaning precludes etymologizing it. Nevertheless, one could envisage a formal connection with the verb ualh- ${ }^{z i}$ 'to strike'. If so, then we would have to reconstruct *uolh ${ }_{3}-i$, *ulh $h_{3}-i-o ́ s$. Note however that this paradigm regularly should have yielded ${ }^{* * u}$ ulli, **ulhiiaš. We therefore have to assume that on the one hand the consonantal $*_{u}$ of the nominative spread throughout the paradigm, and on the other the laryngeal of the oblique stem, yielding attested ualhi, ualhiaš.
ualhuuant- (adj.) 'uncultivated(??)': nom.sg.c. ua-al-hu-u-ua-an-za (HKM 77 obv. 11 (MH/MS)), nom.pl.c. u_a-al-hu-u-u्यa-an-te-eš (KUB 31.84 iii 69).

This adjective occurs twice, but in only one case the context is clear:
KUB 31.84 iii
(66) har-kán-ta-aš $\check{S} A$ LÚ ${ }^{\text {GIŠ̌ }}$ TUKUL $k u-i s ̌$ A.ŠÀ ${ }^{\text {HI.A }}$ ta'-an-na-a-at-ta=ia
(67) ku-e pí-e-et-ta $n=e-e=t-t a ~ h[u-] u-[m] a-a n ~ G U L-a \check{-}$-ša-an e-eš-tu
(68) $m a-a h-h a-a n=m a$ NAM.RA ${ }^{\text {HI.A }} p i ́-a n-z[i \quad n] u-u=\check{s}-s ̌ i ~ A\left[\check{S}^{\prime}-R\right] A$ hu-u-da-ak
(69) hi-in-kán-du gi-im-ra-aš-š=a ku-i-e-e[̌̌ ú]a-al-hu-u-úa-an-te-ě̌
(70) $n u-u=\check{s}-m a-a \check{s}=s \check{a}-a n$ ú-e-tum-ma-aš ud-d[a-n]i-i IGI ${ }^{\mathrm{HI} . \mathrm{A}}$-ua hुar-ak
(71) $n=a$-aš $\mathrm{SIG}_{5}$-in ú-e-da-an-za e-eš-t $[u]$
'What fields there are of a TUKUL-man who has disappeared and what unoccupied pietta-allotments there are, all this must be put in writing for you. And when they give deportees, provide them quickly with a place. And the field which are $u$., keep an eye on them regarding the matter of construction. It must be built well'.

The other context is broken:

HKM 77 obv.
(10) [ ... $\quad a]$-pa-a-aš LÚ KÚR ha-an-da-a-an
(11) [ ... ]x-zi ua-al-hu-u-ua-an-za

Alp (1991: 267) translates ualhüuanza here as 'geschlagen' but this apparently is based on a false connection with ualh- ${ }^{z i}$ 'to hit' (q.v.) only. In the first context, ualhüuanteš seems to refer to fields that are uncultivated and have to be built upon. The exact meaning, however, is still unclear and etymologizing therefore is useless.
ualli- (adj.) 'shaven(?)': nom.-acc.sg.n. ua-al-li (KBo 6.26 iii 13), nom.sg.c. ua-al-li-iš (IBoT 1.31 i 25 ).

This word is an adjective that describes skins. Generally, it is translated 'shaven', 'depilated' or 'smooth', e.g. IBoT 1.31 i (25) $1{ }^{\text {KUš }} \mathrm{A} . G A ́ . L A ́ ~ B A B B A R ~ u a-a l-l i-~$ $i s ̌$ LÚGUD.DA SÍG hur-ri=kán an-da 'one white bag of smooth leather, short, contains Hurrian wool'. No etymology.
ualli- (?) 'pride(?)': gen.sg. ua-al-li-i_ia-aš (KUB 19.13 i 48 (NH)).
This word is hapax in the following context:
KUB 19.13 i (additions and translation by Güterbock 1956b: 110)
(47) [I-NA ${ }^{\text {URU }}$ T]i-mu-ha-la an-da-an ú-et nu ${ }^{\mathrm{URU}}$ Ti-mu-ha-la-aš URU-aš
(48) [ŠA LÚ $\left.{ }^{\mathrm{MES} \text { UR }}\right]^{\mathrm{U}}$ Ga-aš-ga ưa-al-li-ia-aš pé-e-da-an e-eš-ta
'Then he came back [into (the town of) T]imuhala. The town of Timuhala was a place of pride [of the] Gašgaeans'.

If ualli- indeed means 'pride', it may be the source of the derivative ualliiatar / ualliiann- '(song of) praise' and the verb ualla/i- 'to praise'.
ualli- 'thigh(-bone)(?)': see ${ }^{(\mathrm{UZU})}$ ualla-
ualliiatar / ualliiann- (n.) '(song of) praise': nom.-acc.sg. ua-al-li-i_ia-tar (KUB 21.38 obv. 48, 51 (NH), KUB 6.45 ii 48, 49 (NH), KUB 6.46 iv 17, 18 (NH)), dat.-loc.sg. u_a-al-li-i_ia-an-ni (KBo 32.14 ii 42, iii 41 (MH/MS), KBo 32.19 iii 44 (MH/MS)).

This word probably is an abstract noun of the stem ualli-, also visible in ualli'pride' and ualla/i- 'to praise'.
 al-li-u]a-al-li-i_ia-aš (KUB 33.113 + KUB 36.12 i 20), úa-a[l-li-úu-]al-li-ía-aš (KBo 35.160 rev.? 5, 9 (fr.)), dat.-loc.sg. ua-al-li-ua-al-li (KUB 27.1 i 3, 29, iv 8, 16), ua-al-li-ua-li (KUB 27.1 i 17, iv 21), ua-al-li-ua-al-li-ía (KUB 27.1 iv 31), nom.pl.c. ua-al-li-ųa-al-li-uš (KUB 33.112 + KUB 36.2c iii 12 // KUB 33.111, $3)$.

This word occurs a few times, mostly as an epithet of ${ }^{\mathrm{d}} I S ̌ T A R$. In the following context it describes 'winds':

KUB 33.112 + KUB 36.2c iii (with additions from KUB 33.111 + HT 25, see Otten 1950: 11)
(10) KASKAL-an=ma $k[(u$-in)] $i$-ila-an-ta-ri nu KASKAL[-an ku-in?]
(11) ú-ua-an-zi n $n u-u \check{c}^{\check{?}}$ am-( $\left.(m u-u)\right] k^{\mathrm{d}}$ LAMA-aš ne-pí-š[(a-aš LUGAL-u)š]
(12) DINGIR ${ }^{\mathrm{MES}}-a \check{~}$ ȟi-in-ik-m[( $\left.\left.\mathrm{IM}^{\mathrm{H}}\right)\right]^{\mathrm{IA}}-u \check{s} u a-a l-l i-u a[(-a l-l i-u \check{s})]$
(13) $A-N A$ d́é.A KASKAL-š[i me-n]a-ah-ha-an-da $\times[\ldots]$
'The road that they go (and) the road [that] they come, these I, ${ }^{\text {d }}$ LAMA, the king of Heaven, point out to the gods. The $u$. winds opposite the way of Ea [brought them the words of ${ }^{\text {d LAMA] }}$ ' (added translation based on similar contexts).

Otten (l.c.) translates $\underset{\sim}{u}$. as "stürmisch" here. For its use as an epithet of Ištar, compare e.g. KUB $33.113+$ KUB 36.12 i (20) $n=a-a s ̌=k a ́ n ~ u \sim[a-a l-l i-u] a-a l-l i-i ̣ a-$
$a \check{s}$ (21) ti-i-ia-at ${ }^{\mathrm{d}} I \check{S} T A R-i \check{s}$, but especially KUB 27.1 i (29) $A-N A{ }^{\mathrm{d}}$ IŠTAR É úa-al-li-ua-al-li=ma ..., etc.

Besides these attestations of the adjective, Oettinger (1979a: 34) also cites a verb ualiualae- 'streuen(?)', but gives no reference to its attestation place(s). Tischler (HG: 193) cites a verb "ualliuallai- (II) 'kräftigen'", but does not give attestations either. Besides the translation 'stürmisch', we sometimes find a translation 'strong' as well (e.g. Tischler HG: 193). The latter meaning seems to be especially prompted by a connection with HLuw. wali- (nom.-acc.pl.n. (adv.) CRUX $_{w a}$ i-la (CEKKE §24), wa/i-la (KULULU 5 §8)), which is translated as 'strong' by Starke (1990: 452), because of the connection with the CLuwian adjective niualla/i-, which he interprets as 'weak'. CHD (N: 459) translates niualla/i- as 'innocent', however, a meaning which would fit Hawkins’ interpretation of HLuw. wa/i-la as 'fatally' as well (cf. Hawkins 2000: 486). This would mean that there is no Luwian stem *ualli- that means 'strong', so there is no ground anymore to translate ualliualliia- as 'strong' as well.
All in all, we can conclude that ualliualliia- is an adjective describing 'winds' as well as 'Ištar'. A translation 'stürmisch' could be possible, but perhaps 'quick' fits both contexts better. An etymological connection with a supposed Luwian stem *ualli- is unassured, and semantically not likely.
ualk(iiie/a)- (Ia4 / Ic1) '?’: 3sg.pres.act. u્રa-la-ak-zi (KUB 8.3 obv. 10 (OH/NS)); 3pl.pres.midd. ua-al-ki-ia-an-da (KUB 58.30 ii 21 (MS)), 3sg.pret.midd. ua-al-ak-ta-at (KUB 49.3 obv. 8 (NS)); verb.noun. una-al-ki-i-ia-u-ua-ar (KUB 7.58 i 7 (MH/NS)).
Derivatives: ualganu- ${ }^{z i}$ (Ib2) '?' (3sg.pres.act. una-al-ga-nu-uz-zi (KBo 13.31 i 11 (OH/MS)), 3sg.pret.act. ua-al-ga-nu-ut (KUB 33.10 obv. 11 (OH/MS))).

See Neu 1968: 187f. for attestations. There he also cites ualkuuan, but see ualku(u) a- for this. According to Neu, the meaning of ualk(iie/a)- can hardly be determined because most of its forms are found in broken contexts: "[n]ur ualganut steht in einem vollständig erhaltenen Satz":

KUB 33.10 obv.

| (6) [ |  |
| :---: | :---: |
| (7) [ | (-)]ni-e-ẹt-ta-at n=a-aš-ta TÚL-ru ši-il-mạ[- |
| (8) [ | ]x ÍD ${ }^{\text {HI.A }}$ ar-šar-šu-u-ru-uš hu-it-ti-il ${ }^{\text {a- }}$ |
| (9) [ | s] ${ }_{\text {a-ah-ta }}=$ =u-uš ua-al-ga-nu-ut ua-ap-pa-mu-uš x[ |
| (10) | -]a-uš pí-ip-pa-aš É ${ }^{\text {HI.A.TIM }}$ pí-i[p-pa-aš |

Otten (1942: 32-34) translates this as
"Warum habt ihr mich [...] zum Sprechen gebracht? (15) ]..., nun die Quelle(n) ....[ (16) ]x, die strömenden Flüsse leit[ete er (ab) ${ }^{(?)}$ (17) ]er suchte und ...te die Wadi [ (18) [die Fenst]er stürzte er ein, die Häuser stür[zte er ein]".

Personally, I would not dare to guess what ualganu- would mean in this context. Nevertheless, Oettinger (1979a: 234) glosses ualk- with "(in bestimmter Weise) schlagen, mißhandeln(?)", without indicating how he arrives at this meaning. He admits, however, that "eine genauere semantische Untersuchung würde den hier vorgegebenen Rahmen sprengen". His etymological proposal to connect OHG walkan 'to move to and fro, to press together' therefore does not have much value.
Kimball (1994a: 81-2), states about ualk(iie/a)- that "[t]he meaning of the verb is not entirely clear, since it is preserved mostly in damaged or obscure contexts, but it seems to indicate an action with destructive, or at least unpleasant, consequences", and in note 22: "In KBo XIII 31 in a badly damaged passage (Riemschneider, StBoT 9 no. 15) walganu- occurs in what is plainly a series of unfavourable omens; cf. ēshar arszi "blood will flow" ib. I 8 and KUR ${ }^{\text {LÚ }}$ KÚR sakkuriatta "the enemy will prevail" ib. I 10. In KUB XXXIII 10 its object is wappamus "river banks", and it refers to actions done by Telepenus in his rage: $n u=s$ walganut wappamus "He w.'ed the river banks"." Nevertheless, Kimball as well states that "walk- is probably to be compared with Skt. valgati "jumps", OE wealcan "roll" (NE walk) and OHG walkan id. [..], which would point to an IE *welg-". I do not understand how she arrives at this conclusion. The semantics of ualk(iie/a)- and of ualganu- are too unclear to base any firm conclusion on. Any etymological proposal can be based on formal similarities only, which is unconvincing. So, without more clear attestations of these verbs, no etymology can be given.
ualkiššara-: see ulkiššara-
ualku(u)a- (n.) something negative: acc.sg. una-al-ku-an (KBo 22.2 obv. 2 (OH/MS)), ua-al-ku-ua-an (KBo 3.40b, 15).
IE cognates: Skt. $a$-vrká- 'safe'.
PIE *ulk ${ }^{w} \dot{o}-$ ?
The word occurs twice, namely in the following contexts:

KBo 22.2 obv.
(1) [MUNUS.LUGA]L ${ }^{\text {URU }}$ Ka-ni-iš 30 DUMU $^{\text {MEŠ }} 1^{E N}$ MU-an-ti haa-a-ǎ̌-ta UM-MA $\check{S} I=M A$
(2) [ki]-i=ua ku-it una-al-ku-an ha-a-aš-hu-un
'The Queen of Kaniš bore thirty sons within one year. She (speaks) thus: "What kind of $u$. did I give birth to?"';

KBo 3.40b+
(15) ... ú-k=u-uš pu-nu-uš-ke-m[i ki-i=ua? k]u-it ua-al-ku-ua-an

'I ask them "What [kind of] $\underset{\sim}{u}$. do you (pl.) [....]?". They answer:"The [Hurr]ian army comes to the country" (cf. Soysal 1987: 177 and 181).

On the basis of these contexts, an exact meaning cannot be determined. Otten (1973: 16) proposes a meaning "schlechtes Omen, Unheilverkündendes".
Lehrman (1987: 16-7) suggests that ualkuıa- is cognate with Skt. a-vroká'safe', which would point to an original adjective *ulk ${ }^{w}$ 'o- 'dangerous'. His idea is then that this adjective is the source of the substantive *ul $k^{w} o$ - 'wolf' as visible in Skt. vŕka- and Gr. $\lambda$ úкoৎ̧ (through the same derivation process as visible in e.g. Skt. kচ́ṣṇa- 'black antelope' from krṣná- 'black’ or Gr. Г $\lambda \alpha$ ṽкоৎ, PN, from $\gamma \lambda \alpha 0 \kappa o ́ \varsigma$ 'shining'). If this etymology is correct (but note that it semantically is weak in the sense that the meaning of ualkuua- is not clear beyond any doubt), it would show that the word-initial sequence $* u R C$ - yields Hitt. uaRC-. The examples cited in Melchert (1994a: 126-7) to claim the contrary ( ${ }^{*} u R C>$ Hitt. $u R C$-) are false: the stem $\bar{u} r r$-, which Melchert interprets as 'help' and derives from "* $w_{0} h_{l} i-$ " has nothing to do with 'help' (cf. the lemma $\bar{u} r r(i i e / a)-$ ); the noun $\bar{u} r k i-$ 'track, trail', which Melchert derives from "PA[nat.] *wrgi-", may in fact rather reflect $* h_{1 / 3} u r g-i$. Moreover, a development $* u R C>\operatorname{c}^{2} a R C$ is visible in

Note that Lehrman (1987 and 1978: 228-30) claims that PIE *ul $k^{w} o$ - has an Anatolian outcome as well, namely CLuw. ualua/i-, which he translates as 'lion'. This translation goes back to Steinherr (1968) who argues that the sumerogram UR.MAH, which occasionally occurs in CLuwian names and carries the phonetic complements $-a$ - and $-i$-, must be identified with the onomastic element ualua/i-. Although Steinherr indeed shows that we find Piha-UR.MAH as well as Pihaualui and UR.MAHु.LÚ as well as Ualuiziti, he is not able to give a single
text in which UR.MAH and ualua/i- are used as duplicates of one another. Because piha- and -ziti are very common onomastic elements, their occurrence with both UR.MAH and ualua/i- in my view is non-probative. Moreover, the fact that both onomastic elements end in $-a / i$ - is non-probative either, because this alteration is inherent to every commune $a$-stem-word. Nevertheless, Lehrman (l.c.) takes the equation between ualua/i- and UR.MAH 'lion' for granted and states that CLuw. ualua/i- 'lion' must be cognate with PIE *uí $k^{w} o$ - 'wolf'. Apart from the objections raised above, this is formally impossible as well: PIE *- $k^{w}$ yields CLuw. /-k ${ }^{\mathrm{w}}-/$, cf. CLuw. papparkuua- 'to cleanse' < *perk' - (see at parkui/ parkuuai-).
ualluške/a- ${ }^{z i}$ (Ic6) 'to pray to(?)': 1sgpres.act. una-al-lu-uš-ke-mi (KUB 29.1 i 26), 3sg.pres.act. una-al-lu-uš-ke-zi (KUB 34.53 ii 12), [ũa-a]l-lu-uš-ke-zi (KBo 32.16 iii 6), 2pl.pret.act. ua-al-lu-uš-ke-et-te-n=a-an (KUB 23.77, 79 (MH/MS)), 3pl.pres.act. ua-al-lu-uš-ká[n-zi] (KUB 34.53 ii 13); 2pl.pres.midd. ua-al-lu-uš-ke-ed-du-ma-at (KUB 34.44 iv 14).

This verb is attested a few times, but mostly in damaged contexts, on the basis of which its meaning cannot be (well) determined. The only good context is

KUB 29.1 i
(24) DINGIR-na-aš=(š)-ma-aš KUR-e he-e-še-er $n u=m u=z a$ LUGAL-un
(25) la-ba-ar-na-an hal-zi-i-e-er
(26) $n u$ EGIR-pa ad-da-a(n)=š-ma-an ${ }^{\mathrm{d}} \mathrm{U}-a n ~ u a-a l-l u-u s ̌-k e-m i ~ n u ~ G I S ~{ }^{\mathrm{HIIA}}$ LUGAL-uš

'The gods have opened up the country for you, and me they have called the king, Labarna. Again I $\underset{\sim}{ }$. the Storm-god, your father. The king wishes from the Storm-god trees that the rains have made strong and raised'.

In this context, ualluške/a-seems to denote 'to pray to, to ask (of a deity)'. On the basis of the formal resemblance to ualla/i- 'to praise, to honour', ualluške/a- is often translated 'to praise' as well. Although in this context such a translation is possible, it is by no means ascertained. I would therefore refrain from too much etymologizing on the basis of a supposed connection between ualla/i- and ualluške/a- (unlike e.g. Melchert 1994a: 81, who derives ualla- from *ual-neh $2^{-}$ and "uallu-' from *ual-neu-).

Unclear is the appurtenance of the verb ualu- in the following context:

KUB 48.99
(12) da-a-er=ua tu-li-ịa-an $a-a z-z a$
(13) úa-lu-uš-ke-u-ưa-an ti-i-e-er
(14) $\left.{ }^{\mathrm{d}}\right] I-l a-l i-i s ̌=u a=z a$ ua-lu-ut-ta-a[t]
(15) $[u ́-] u k=u a-r=a$-an $u$ ú-ua-tẹ $[-m i]$
'They took the assembly (and) $a z z a$ began $u$.-ing. The deity Ilali was $u$.-ed, and I brought him here'.
unālula- (c.) 'pupil?': acc.pl. ưa-a-lu-lu-uš (KBo 31.143 obv.? 3), dat.-loc.pl. ưa-a$l u-l a-a \check{s}$ (KUB $33.66+$ KBo 40.333 ii 18).

This word occurs only twice. The first context is:
KUB 33.66 + KBo 40.333 ii (for text cf. Groddek 1999: 38)
(16) $A$-NA DUMU.LÚ.U $\mathrm{U}_{9} . \mathrm{LU}=m a ~ t u-e k-k i-i=\check{s}-s ̌ i[a] n$-da-an
(17) la-lu-uk-ke-et ḩar-ša-ni-i=šs-š̌i> KI.MIN ša-ku-una-aš=ša-aš KI.MIN
(18) ua-a-lu-la-aš=ša-aš KI.MIN IGI ${ }^{\mathrm{HI} . \mathrm{A}}-a s ̌ ~ h a r-k i-[a] s ̌ ~ d a-a n-k u-u a-i a-a s ̌$
(19) KI.MIN ḩa-an-ti-[i]=š-ši KI.MIN e-ne-ra-ǎ̌=ša-aš
(20) KI.MIN la-ap-li-pa-ǎ̌=ša[-aš?] KI.MIN
(21) $k a-r u$-ú ma-a-an n=a-aš $a-a p-p a$
(22) QA-TAM-MA ki-ša-ru
'To the mortal it became luminous on his body. Ditto on his head. Ditto on his eyes. Ditto on his $\underset{\sim}{l}$. Ditto on the white parts (and) black parts of (his) eyes. Ditto on his forehead. Ditto on his eyebrows. Ditto on his eyelashes. Like (he was) before, let him become again likewise!'.

The other context is broken:
KBo 31.143 obv.
(2) [
(3) [
(4) [

$$
\begin{array}{cl}
] \times p a-r a-a-a=\check{s}-t a p a[- & ] \\
] \times u a-a-l u-l u-u s ̌ i s ̌-s ̌ a-a-a \check{S}[ & ] \\
{[] \mathrm{GI}^{\mathrm{HI} . \mathrm{A}}=\check{S} U \dot{u}-u a-a-t a r=\check{s} e-e t d[a-} & ]
\end{array}
$$

In line 3 it seems as if 'ualula-s (acc.) of the mouth' are mentioned.
Oettinger (1976a: 30) also cites KBo 6.34+ iii (30) [una-a-lu-]ú-la-an pa-ri-i-ia$a n-z i$, which he translates as '[Eine Bl]ase blasen sie auf'. It is unclear to me why Oettinger reads $\underbrace{}_{\text {u }} \bar{a} l \bar{u} l a n$ here, apparently only because of the fact that ${ }_{\sim}^{u} \bar{a} l u l a$ - ends
in -ula-. There are many more words that end in -ula-, however, and these are just as well a candidate to be added here.

From the first context mentioned, it is clear that $\underset{\sim}{u} \bar{a} l u l a$ - is a body part, situated on the face, probably paired (which is also suggested by acc.pl. in the other context). Groddek (l.c.) suggests that the word means 'pupil', because it is mentioned between 'eyes' and 'white and dark (parts) of the eyes'. This is a possibility. No further etymology.
\& ualuaialla- (gender unclear) 'evil gossip(?)’: dat.-loc.sg. ua-al-ua-ia-al-li, gen.sg. una-al-ua-ìna-al-la-aš.

This word is attested in one context only:
KUB 13.35 + KUB 23.80 i
(17) $n u=u a=m u$ I-NA KUR URU $K a-r a-{ }^{\mathrm{d}} D u$-ni-ìa-aš $u-i-e-r$
(18) nu=ua ku-it-ma-an I-NA KUR URU Ka-ra- ${ }^{\mathrm{d}} D u-n i-i a-a \check{s} p a-a-u n$ []
(19) ku-it-ma-an=ua EGIR-pa ú-ua-nu-un nu=ua=kán EGIR-az
(20) \& ua-al-ua-ia-al-li an-da Ú-UL ku-iš-ki pé-eš-ši-iš-ke-et
(21) nu=ua a-pé-ez INIM-az GÙB-li-iš-šu-un
(22) $m a-a-a n=m a=u a$ IŠ-TU KUR URU $K a-r a-{ }^{\mathrm{d}} D u-n i-i a-a \check{s}=m a k u-u a-p i$
(23) EGIR-pa ú-ua-nu-un nu=ua=mu ${ }^{\text {LÚ }} p a-r a-a-u^{\prime}-u a-a n-d a-a n-n=a \quad u$-i-e-er
(24) INIM $\downarrow$ u_ ua-al-ua-ía-al-la-aš=ma=ua=kán nam-ma EGIR-an kat-ta pa-it
'They sent me to Babylon. And while I went to Babylon until I came back, noone kept throwing inside the $u$. from behind. Because of this case 'I became left'. But when I at one point came back from Babylon, they sent to me also a supervisor. But the case of the $u$. went back down again'.

Although details are unclear, it seems that ualuaialla- refers to some kind of evil gossip. The use of gloss wedges indicates a foreign (Luwian?) origin.
-uan (supine-suffix)
IE cognates: Skt. iva 'in the manner of'.
PIE *-un

The verbal noun that ends in -uan is traditionally called supine. This supine only occurs in the construction supine + dai- $^{i} / t i$ - which denotes 'to begin ...-ing'. It is remarkable that the supine is seldomly derived from the bare verbal stem (I only know of the examples ha-an-nu-an (NS, of hanna- ${ }^{i}$ / hann-), iš-hu-u-ua-u-u $[a-n]$
 ua-an (of kane/išš-zi), ka-ri-pu-u-ua-an (of karāp- ${ }^{i} /$ kare/ip-), pí-i-ia-u-u [a-an] (of pai- ${ }^{i} / p i-$ ), pár-hu-ua-an (OH/MS, of parh- ${ }^{z i}$ ), ša-pa-ši-i-ia-u-a[n] (MH/MS, of
 (of tarhu $u^{z i}$ ), ua-ǎ̌-šu-u-ua-an (of uešš- ${ }^{n a}$, uašš̌e/a- ${ }^{z i}$ ) and [..]x-ni-[i]n-ku-ua-an (KUB 31.81 rev. 11), cf. Kammenhuber 1955: 40). Instead, in the bulk of the attestations it is derived of the imperfectives in -ške/a- ( ${ }^{\circ} \check{s}$ - $k e-(u-) u a-a n$ and ${ }^{\circ} \check{s}$-ga-una-an), -šš(a)- ( $\left.{ }^{\circ} \check{s}-s ̌ u-u a-a n\right)$ and -anna/i- (-an-ni-ua-an and -an-ni-ia-ua-an).
The supine-suffix -uan cannot be separated from the verbal noun in -uar / -uaš and the inf.I-suffix -uanzi. These all point to an original substantivizing suffix *-ur / *-uen-. Within the paradigm of such a suffix, -uan can only reflect an endingless locative *-un (note that *-uen (reconstructed thus by e.g. Melchert 1984a: $24^{47}$ ) should have yielded Hitt. ${ }^{* *}$-uen). In my view, the form *-un must $^{\text {un }}$ be compared to Skt. iva 'in the manner of' that goes back to virtual *hilun (with generalized zero-grade stem), the locative of a verbal noun *héei-ur / * h ili-uénthat is still visible in Hitt. iunar (q.v.). Note that also in Hittite forms like $i-i s ̌-s ̌ u-$
 verbal stem shows the generalized zero-grade formation. The suffix *-un originally must have had two outcomes, namely -un after consonants and -uan after vowels. Just as in nom.-acc.sg. -uar, the postvocalic variant -uan has been generalized (from *-ske-uñ and *-anni-un).
-uani (1pl.pres.act.-ending): see -uen(i)
uant-, uantae-, uantiie/a- 'to glow, to light': 3sg.pres.act. ua-an-t[a-...] (KUB 27.68 i 5 (NS)), 3sg.pret.act. ua-an-ta-it (KUB 23.59 ii 8 (NS)), 2sg.imp.act. ua$a n-t a-i($ KUB $30.14+$ KUB 6.45 iii 70 (NH)), [ $\downarrow a-a] n-t a-a-i$ (KUB 6.46 iv 38 (NH)); part. nom.sg.c. ua-an-ti-an-za (KBo 27.60, 13 (NS)), acc.sg.c. ua-an-ti-i्da$a n-d a-a[n]$ (KUB 48.80 i 6 (NS)); impf. una-an-te-eš-ki-iz-zi (KUB 36.12 iii 12 (NS)).
Derivatives: u्रantē̌šs- ${ }^{z i}$ (Ib2) 'to become glowing(?)' (3sg.pres.act. ua-an-te-eš$z i(K U B 14.12$ obv. 13), 3sg.pret.act. úa-an-te-eš-ta (KUB 48.80 i 9), unantēma-, uanteuantema- (c.) 'glowing (of the sun), lightning' (nom.sg. [una-an-t]e-e-ma-aš (KBo 25.117 obv. 6 (OS)), ua-an-ti-ma-aš (KUB 36.12 iii 11), ua-an-te-em-ma$a \check{s}$ (KUB 7.13 obv. 18, KUB 26.25 ii 10), ua-an-te-ua-an-te-ma-aš (KUB 6.45+ iii 11, KUB 6.46 iii 50 (fr.), acc.pl. ua-an-ti-m[u-uš] (KUB 33.103 iii 2)), uuantiuant(a)- 'lightning(?)' (abl. ú-ua-an-ti-ua-an-ta-az (KUB 17.10 ii 33)).

The exact semantics of this verb and its derivatives are not easy to determine. A translation 'glow' seems to fit well for the following contexts:

KUB 30.14 + KUB 6.45 iii
(66) $n=a$-an=ši du-uš-ga-ra-u-ua-an-za pí-iš-ke-el-lu
(67) píd-du-li-ìa-u-una-an-za=ma=da le-e pé-eš-ke-mi
(68) $n u=m u{ }^{\mathrm{d}} \mathrm{U} p i ́-h a-a \check{s}-s ̌ a-a s ̌-s ̌ i ~ \mathrm{EN}=I \quad A$ ar-mu-ua-la-aš-ha-aš
(69) i-ua-ar še-er ar-mu-u-ua-la-i ne-pí-ša-aš=ma=mu
(70) ${ }^{\mathrm{d}} \mathrm{UTU}$-aš $i$-una-ar še-er una-an-ta-a-i
'May I give it to him gladly, may I not give it to you reluctantly. Oh, $p$. Stormgod, moon-shine over me like the moon-shine, glow over me like the Sun-god of heaven!';

KUB 27.68 i
(5) GIM-an=kán ${ }^{\mathrm{d}} \mathrm{UTU} \mathrm{AN}^{E}{ }^{E} u a-a n-t[a-\ldots]$
'When the Sun-god of heaven starts' glowing';
KBo 26.60
(13) [GUŠ]KIN ua-an-ti-an-za
'glowing gold'.
Sometimes, a translation 'to light (of lightning)' is needed:

KUB 36.12 iii ... har-ši-ḩar-ši=ma pa-ra-a

(10) pár-aš-ša-nu-uš-kán-zi $8 \mathrm{ME}=m a ~ u ̂ a-a s ̌-s ̌ a-a n-z i ~ h e ́-e-u s ̌ ~$

(12) ua-an-te-eš-ke-ez-zi $n=a$-an=kán še-šu-una-aš É.ŠÀ-na-aš
(13) pa-ra-a ú-da-an-du
'May they call forth the thunderstorm. May they call forth the rains and winds that break the rock for 90 IKU's and cover (it) for 800 (IKU's). The lightning that lights strongly, may they bring it in front of the sleeping room'.

The noun uantem (m)a-denotes either the radiation of the sun or 'lightning'. For the first meaning, cf.

KUB 26.25 ii $^{\text {? }}$
(8) ma-a-an ŠA m KÙ.PÚ-ma HुUL-lu na-ǎ̌-ma ŠA DUMU ${ }^{\text {m }}$ Šu-up-pí-lu-l[i-u-ma]
(9) HUL-lu « ${ }^{\mathrm{d}} \mathrm{UTU} \mathrm{AN}^{E}$ ta-pár-ri-i-ia-ši a-pé-da-ni=tá=k-kán
(10) me-hu-ni LI-IM DINGIR ${ }^{\text {MEŠ }}$ MA-MIT ${ }^{\mathrm{d}} \mathrm{UTU}$-aš ua-an-te-em-ma-aš
(11) har-ni-en-kán-du
'When under the Sun of heaven you command evil against Šuppiluliuma or evil against the son of Šuppiluliuma, at that moment may the thousand gods of the oath (and) the radiation of the Sun-god destroy you!'.

The second meaning is found in e.g. KUB 7.13 obv. (18) te-et-hi-ma-aš ua-an-te-em-ma-aš 'thunder (and) lightning'. Compare also

KUB 17.10 ii
(33) ${ }^{\mathrm{d}}$ Te-li-pí-nu-uš le-e-la-ni-ǐa-an-za ú-et ú-ua-an-ti-ua-an-ta-az[=ma']
(34) ti-it-h[i-i]š-ke-et-ta
'Telipinu came furiously and it thundered with lightning'.
A morphological interpretation of the verb is difficult. The 3sg.pret.act-form uantait unambiguously points to the hatrae-class inflection. The 2 sg.imp.act.form uantai could either belong to the hatrae-class or to the dail/tiíanzi-class inflection. The participle uantiiant- could in principle show a dāi/tiianzzi-class inflection, but also belong to a -ie/a-class inflection. Since all forms are attested in NS texts, and since both the hatrae- and the -ie/a-class inflection are very productive in this period, we cannot determine what the original inflection of this verb was. A loose stem uant- seems to be visible in uantēšš-zi and the nouns untēma- and uanteuantema- 'lightning', which are a derivative with the suffix -ema-, -ima- (for which see Oettinger 2001: 463-5). The origin of this uant- is further unknown.
Sometimes it is assumed that the CLuwian adjective or noun uandaniia- is cognate (e.g. Oettinger 1979a: 381), but this is a mere guess as the meaning of CLuw. uandaniia- is unclear.
${ }^{\text {NINDA }}$ unantīli- (c.) a kind of bread: nom.sg. una-an-ti-i-li-iš (KUB 35.142 i 10).
The word occurs only once and an exact meaning cannot be determined. Starke (1990: 345) interprets the word as 'hot', but this is a mere guess based on a formal similarity with uant-, uantae-, uantiie/a-'to glow' (q.v.). Further unclear.
uаппи(m)miia- (adj. from original noun) 'orphaned (child), widowed (woman)': nom.sg.c. una-an-nu-um-mi-aš (KUB 17.4, 3), úa-nu-um-mi-ía-aš (KUB 17.4, 6, 12 (fr.)), acc.sg.c. una-an-nu-um-mi-ia-an (KUB 17.4, 2), gen.sg. u्रa-an-nu-mi-i्वa$a s ̌$.

This word only occurs together with MUNUS 'woman' and DUMU 'son'. According to Hoffner (1988: 150-1), uannummiiaaš MUNUS and uannummiiáš DUMU denote "women and children who are without husbands and fathers either because he has died or because he has abandoned them". It usually functions as an adjective (e.g. nom.sg.c. ua-an-nu-um-mi-aš DUMU-aš (KUB 17.4, 3), acc.sg.c. ua-an-nu-um-mi-ia-an DUMU-an (KUB 17.4, 2)), but in KUB 13.2 iii 31-2 we find ua-an-nu-mi-ía-aš MUNUS-ni, where u. does not agree with dat.loc.sg. MUNUS-ni. This implies that uannummiiia- originally was a noun, 'singlehood (vel sim.)'. The construction $\mathrm{X}+$ gen.sg. uannummiiač ' X of single-hood' was used as 'orphaned (child), widowed (woman)' on the basis of which uannummiįaš was reinterpreted as nom.sg.c. of an adjective uannummiia-.

According to Kimball (1999: 337), uannummiiza- is "obviously related to Lat $v a ̄ n u s$ 'vain, empty', < *h $h_{1} w^{2} h_{2}-n o-$, Skt. vāyati 'disappear' (with full-grade *h $h_{1} w_{2} h_{2}$ ), Skt. ūná- 'deficient, inferior < *h $h_{1} u h_{2}-n o ́-$ [...]', and she therefore reconstructs uannummiia- as *he ueh $h_{2}-n-+$ the appurtenance-suffix -umn- + -ia'being in a state of bereavement'. I must admit that I do not find this analysis as obvious as Kimball does (the appurtenance-suffix -umn- is to my knowledge only used as a real ethnicon). On the basis of this word alone, she then assumes a development $* V h_{2} n V>V n n V$. As I have argued under ${ }^{\text {GIŠ }}$ māhla-, ${ }^{\text {UZU }}$ muhrai- / mahrai- and ${ }^{\text {GIS }}$ zahrai-, these words seem to point to a development $* V h_{2} R V>$ Hitt. $V h R V$. Although I must admit that I have no examples of $* V h_{2} n V>$ Hitt. $V h n h V$ (but compare šahhan $<{ }^{*} \operatorname{seh}_{2}-n$ ), I do not think that the case of uannummiia is strong enough to prove the opposite.

MUL ${ }_{\text {uanup }}$ (p)aštal(l)a/i- (c.) 'morning star(?), comete(?), falling star(?)': nom.sg. ua-an-nu-up-pa-aš-ta-al-la-aš (KUB 29.4 ii 68), úa-an-nu-up-pa-aš-ta-al-li-iš (KUB 19.4 i 11), una-an-nu-pa'-aš-ta-li-eš (KUB 34.16 iii 3), [ua-an-nu]-pa-aš-ta$l u-u s ̌ ~(? ~ K B o ~ 14.61, ~ 6), ~ n o m . p l . ~ u ̛[a-a] n-n u-u p-p a-a s ̌-t a-l u-u s ̌ ~(K U B ~ 8.16+24 ~ i i ~ 4) . ~$.

Because of the determinative MUL, the word clearly refers to some kind of star. We find $a$-stem as well as $i$-stem forms, and possibly even a $u$-stem form if

Weitenberg (1984: 276) is right in interpreting [una-an-nu-]pa-aš-ta-lu-uš (KBo $14.61,6)$ as nom.sg. No further etymology.
-uanzi (inf.I-suffix)
PIE *-uen-ti+-i ?
The suffix -uanzi, which marks inf.I, is clearly related to the verbal noun-suffix -uar / -uaš (q.v.) and the supine-suffix -uan (just as the inf.II-suffix -anna is related to the verbal noun-suffix -ātar / -ann-). The suffix -uar / -uaš reflects the substantivizing suffix *-ur / *-uen-, which means that -uanzi probably reflects an old case form of this suffix. In the nominal inflection, no case ending $-z i$ is known, however. I am wondering to what extent it is possible to assume that -uanzi reflects an old ablative ending *-uanz $<$ *-uen-ti, to which an $-i$ was added in analogy to the adding of $-i$ to the 3sg./pl.pres.act.-ending $-(a n) z<*_{-}(e n) t i$, which yielded $-(a n) z i$. As this $-i$ is not added to other ablatives, we must assume that at that time the infinitive was not seen as a nominal form anymore, but as a real part of the verbal paradigm.
uappiiela- ${ }^{z}{ }^{\text {zi }}$ (Ic1) 'to bark': 3sg.pres.act. una-ap-pi-ia-zi (KUB 13.8, 7), 3pl.pres.act. úa-ap-pí-an-zi, u_a-ap-pí-ia-an-zi, 3sg.imp.act. ua-ap-pí-ia-ad-du; impf. ua-ap-pí-iš-ke/a-.

The verb occurs often in rituals, in the expression ${ }^{\text {LÚ.MEŠ }}{ }^{\text {UR }}$ GI $_{7} \underset{\sim}{u a-a p-p i-i} a-a n-z i$ (e.g. KBo 4.13 vi 7) 'the dog-men bark'. Clearly onomatopoetic, cf. ModDu. waffen 'to bark'.
uарри- / uappau- (c.) 'river bank': voc.sg. ua-ap-pu=mi-it (KUB 30.35 i 8),
 ap-pu-u-uа-a-aš, dat.-loc.sg. ua-ap-pu-i, uа-ар-pu-uа-i (КВо 9.106 ii 15), all.sg.(?) ua-ap-pu-иа (KUB 33.69 iii 13), abl. ua-ap-pu-ua-az, ua-ap-pu-ua-za, acc.pl.c. ua-ap-pa-mu-uš (KUB 33.10 i 11), una-ap-pu-uš (? KUB 41.8 i 21), dat.loc.pl. una-ap-pu-ua-aš (KBo 10.45 i 32).

See Weitenberg 1984: 52-4 for attestations and an extensive treatment. Note the acc.pl.-form uappamuš which shows that this noun originally showed ablaut: uарри- / uappau-. To my knowledge, the word has no good etymology.
${ }^{\mathrm{UZU}}$ uappuzzi-

The word ${ }^{\mathrm{UZU}}{ }_{u a-a p-p u-u z-z i-i a}$ (KUB 27.1 i 39) occurs only once, and denotes 'tallow'. As the normal word for 'tallow' is ${ }^{\mathrm{UZU}}$ appuzzi-, which is also attested in ibid. 43 , it is likely that uappuzziia is a scribal error. See at ${ }^{\mathrm{UZU}}$ appuzzi- for further etymology.
uar- ${ }^{-\bar{r} r i}$ : see $u r-{ }^{-\overline{r a r i}}$
$=\boldsymbol{u} \boldsymbol{a}(\boldsymbol{r})=($ particle of direct speech $)$
Anat. cognates: Pal. =uar= (particle of direct speech(?)); CLuw. =ua (sentence initial particle); HLuw. $=\boldsymbol{w} \boldsymbol{a}=($ sentence initial particle); Lyc. $=\boldsymbol{w e}$ (sentence initial particle).

PAnat. $=$ uor $=$
IE cognates: Gr. $\varepsilon$ lip $\omega$ 'to speak'.

$$
\text { PIE *uerh }{ }_{1}-
$$

The particle $=u a(r)=$ is used in the sentence-initial particle chain and denotes direct speech. If it is followed by a particle starting in a vowel, the form is =uar $=$ (e.g. $n u=u a-r=a-a s ̌)$. If the following particle starts in a consonant or if $=u a(r)=$ is the last particle, the $-r$ - is dropped (e.g. $n u=u a-a=\check{s}-s \check{s} i, n u=u a)$. It is obligatorily used in the first sentence of the direct speech, but can sometimes be omitted in the remaining sentences of the direct speech phrase. The particle can be found in most other Anatolian languages as well. Palaic $=$ uar $=$ shows that the $-r$ - is real, Lyc. =we shows that we have to reconstruct PAnat. =uor=. Usually, the particle is connected with the PIE root for 'speak', *uerh $l_{1}$ - as seen in Gr. $\varepsilon$ lp $\rho$.

```
-uar /-uaš(suffix of verb.noun)
    PIE *-ur / *-uen-s
```

One of the suffixes to form a deverbal abstract noun is -uar. In the oldest texts, we only find nom.-acc.sg. -uar and gen.sg. -uaš as inflected forms. Other cases (e.g. abl. as in $a r-m a-a h-h u-u a-a z-z a$ and instr. as in $a-a s ̌-s ̌ i-i=i a-u-n i-i t t$ and $a-a s s_{-}-s \check{c}-$ ia-u-ua-an-ni-it 'with love') are younger creations. The suffix -uar / -uaš is etymologically connected with the inf.I-suffix -uanzi (q.v.) and the supine-suffix -uan (q.v.) (just as the inf.II-suffix -anna is etymologically connected with the verbal nouns that end in -ätar, -ann-). They clearly must go back to the PIE suffix *-ur / *-uen-
The prehistory of this suffix is quite complicated. As we can see from $a-n i-u-u r$ 'prestation, ritual' $=/ 2 n$ niorr $/<h_{3} n-i e ́-u r$, the phonetic outcome of ${ }^{\circ} C e ́-u r$ was
$/{ }^{\circ} \mathrm{Co}$ r/. We therefore must assume that in verbs of the structure $* C C$-ié-ur and *CC-skéé-ur, which regularly would have yielded /CCiór/ and /CCskór/, the suffix *-ur was restored on the basis of verbs of the structure *CéC-ur. The new forms *CC-ié-ur and *CC-skéé-ur were phonemicized as *CCiéur and *CCskéeur. Because in postconsonantal position the suffix *-ur should yield Hitt. ${ }^{\circ} \mathrm{Cur}$, cf. *péh ${ }_{2} u r>p a h h u r$ 'fire', we must assume that the variant *-ur spread from the thematic verbs to the verbs of the structure *CéC-ur as well, yielding *CéC-ur. Note that this generalization only took place in the verbal noun, which is nicely visible in the fact that the synchronic verbal noun to hink- ${ }^{z i}$ 'to bestow' is hinkuuar, whereas we also find a noun henkur 'gift', which must be the old verbal noun that at one point was not synchronically analysed as such anymore and therefore retained its phonetically regular -ur.

The gen.sg.-ending -uaš must reflect proterodynamic *-uen-s (Schindler 1975a: 8). Note that this is one of the very few traces of the gen.sg.-ending $*_{-s}$ in Hittite: in all other cases, the hysterodynamic ending ${ }^{*}$-os has been generalized, also in originally proterodynamic and static paradigms (e.g. pahhuenaš 'fire' and mēhunaš 'time').
The paradigm of these nouns originally must have shown ablaut: *CéC-ur, *CC-uén-s. The full-grade of the root was generalized, cf. šēšuuar, šéšuuaš 'to sleep'. For the interpretation of inf.I-suffix -uanzi as an old abl. *-uen-ti and of the supine-suffix -uan as an old locative *-un, see their respective lemmas.
uarašh- '?': 3pl.pres.act. ú-ar-aš-ha-an-zi, un[a-ar-aš-ha-an-zi], verb.noun una-ar$a \check{s}-h u-a r, ~ u a-a r-a s ̌-h u-u-u{ }_{n} a-a r$.

The verb uarašh- is attested in one context only, of which we have two versions:

KUB 10.66 vi
(1) $[\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x} d] a^{? ?}$-al-li-e-eš
(2) $\left.\left[{ }^{\mathrm{GIS}}\right)\right]$ ha-at-ta-lu-ut ${ }^{\mathrm{LU}}$ hat-at-u $a_{a}-i$
(3) ${ }^{\text {LÚ }} \mathrm{UR} . \mathrm{GI}_{7}{ }^{\text {LÚ }} k u-u a-n a-a n-n=a$
(4) $\mathrm{Gİ}^{\mathrm{MEŠ}}=\check{S} U-N \hat{U}$ ú-ar-aš-ḩa-an-zi
with semi-duplicate
KBo 7.48
(11) [ ]x-al-li-e-eš ${ }^{\text {GIŠ }}$ ha-at-ta-[lu-ut ${ }^{\left.\text {LÚ } h a-a t-u a_{a}-i \_a-a s ̌\right] ~}$
(12) $\left[^{\mathrm{L}} \mathrm{UR}^{\mathrm{U}} \mathrm{URI}_{7}-a \check{s}{ }^{\mathrm{LU}} k\right] u-u ́-n a-a s ̌-s ̌=a \mathrm{Gİ}^{\mathrm{MES}}=\check{S} U \underset{\sim}{u}[a-(a r-a \check{s}-\hat{-h} a-a n-z i)]$
'the x-alli-s uarašh- the feet of the hatuaia-men(man), the dog-men(man) and the $k$.-men(man) with a bolt-pin' (first text with gen.pl., second text with acc.sg. of respect).

The verb.noun uarašhuıar is attested in only one context as well, of which there are two versions:

KBo $10.28+33$ i
(2) úa-ar-a[š-hu-u-ua-ar ]x ti-an-zi
(3) $m a-a-a n=z a$ LUGAL- $u[\check{s}$ GA $] \mathrm{L}^{A M}$ EGIR-pa da-a-i
(4) ${ }^{\text {LÚ.MEŠ }}$ UR.BAR.RA ua-ar-aš-hu-u-ua-ar
(5) da-li-an-zi $n=e$ [p]ár-aš-na-an-zi
'... they put [down] the $\underset{\sim}{u}$.. When the king takes back the cup, the wolf-men leave the $u$. and they squat'.

Similarly in
Bo 69/396 obv. (see Singer 1983: $84^{70}$ )
(2) [

| (3) [ | K-zi LÚ.MEŠ UR.BAR.RA |
| :--- | :--- |
| (4) [ | K]AxUD ua-ar-aš-hu-ar |

]-zi ta pár-aš-na-a-an-zi

On the basis of these contexts, it is difficult to determine the meaning of the verb uarašh-.
Sometimes, ưaršh- is equated with uarš-' 'to wipe' (e.g. Oettinger 1979a: 429), but this is not supported by the facts. A meaning 'sie streifen ab' (thus Oettinger 1979a: $429^{70}$ ) for uarašhanzi is by no means ascertained. It is even unlikely, as uarašh- apparently denotes some action executed with a bolt-pin ( ${ }^{\text {GIŠh }}$ hattalu-). I therefore regard a connection with uarš- 'to wipe' as improbable.
${ }^{\text {(GIŠ) unarašma-: } \mathrm{see}}{ }^{\text {(GIŠ) uaršma- }}$
uaraưara- (c.) a fruit: nom.sg. u_a-ra-ưa-ra-aš (KBo 10.34 i 17).
The word occurs only once, in a list of fruit. No clear meaning, no etymology.

цагhui- / uarhuйi- (adj.) 'raw, rough; unshaven; leafy; covered with forest': nom.sg.c. una-ar-hu-iš, acc.sg.c. u_a-ar-hu-in (IBoT 2.39 ii 25), nom.-acc.sg.n. ua-
$a r-h u-i$, gen.sg. ua-ar-hu-ua-ía-aš (KUB 9.31 i 6), nom.pl.c. ua-ar-hu-ua-e-eš (KBo 2.12 ii 3), ua-ar-hu-iš, acc.pl.c. ua-ar-hu-ua-uš (KUB 32.63, 8, KUB $45.47+$ ii 17), nom.-acc.pl.n. una-ar-hu-ua (KUB 20.4 i 9).
Derivatives: u्रarhu(ua)nu- ${ }^{z i}$ (Ib2) 'to plant densely' (2sg.pret.act. una-ar-hu-ua-nu-ut (KBo 12.59 iv 5 (OH/NS)); part. ua-ar-hu-nu-ua-an-t- (KUB 13.24, 16 (MH/NS)); impf. una-ar-hu-nu-uš-ke/a- (KBo 10.47 g iii 13 (NS))), unarhuēšš- ${ }^{i}$ (Ib2) '?' (3sg.imp.act. [una?-]ar-hu-u-iš-du (KUB 41.33 ii 8)), uarhuēššar (n.) 'brushwood' (nom.-acc.sg. una-ar-hu-e-e[š-šar] (KUB 21.19 + 338/v + 1303/u iii 13), ua-ar-ḩu-eš!-šar (KUB 3.94 i 22)).

PIE *uér ${ }_{2 / 3} u-i-s$, *urh ${ }_{2 / 3} u$-éi-s ??
The word denotes the roughness of hides and clothes, the unshavenness of sheep's body parts, the leafiness of trees and the dense overgrowth of mountains. The derivative uarhunu- ${ }^{z i}$ shows that we are dealing with an $i$-stem of a root uarhu- /uarH ${ }^{\mathrm{w}}$-/. Oettinger (1979a: 549) connects this word with Gr. عĩpos 'fleece' (following Neumann 1958: 90) which he reconstructs as $*_{\text {ur }} h_{2}$-u-ih $h_{2^{-}}$, but this preform does not yield the Greek form by regular sound change. If uarhuiindeed is of IE origin it cannot reflect anything else than ${ }_{\alpha_{8}}^{\operatorname{ur}} h_{2 / 3} u$-(e)i-. Melchert (1984a: 13) agrees with this etymology, but states that we have to reconstruct *uerh ${ }_{2} u i$ i-, as he thinks that *urh $h_{2} u i$ - would lead to $u r$-. For the OH period, this is correct (compare OH urāni = /urPắni/ 'burns' < *urh $\left.h_{l} o ́ r(i)\right)$, but in the MH period, it would regularly have yielded uarhui- = /uərHui-/ (cf. MH uarāni = /uərアắni/). Moreover, a preform *uerh ${ }_{2 / 3} u i$ - would have yielded Hitt. **uerrui- (cf. erh- / arah- / arh-). Nevertheless, if this adjective is of IE origin, we must reconstruct *uérh $2_{2 / 3} u-i-s$, *urh $h_{2 / 3} u$-éi-s, in which the zero-grade stem has been generalized. Note that a PIE root * uerh $_{2 / 3} u$ - is against the PIE root constraints (a cluster -rHuin a root is unparalleled), which means that we would be dealing with an $-u$ extension of a root ${ }^{*}$ uerh $_{2 / 3}$.
uarhuššu-, uarhušt- (gender unclear) '?': dat.-loc.sg. una-ar-hu-uš-šu-i (IBoT 1.29 obv. 39) with dupl. una-ar-hu-uš-ti-i (KBo 45.51 ii 3).

See Weitenberg 1984: 54 for attestations. The meaning of these words cannot be determined. The connection with ${ }^{\text {GIŠ }}$ uarhušdu- is unclear. No etymology.

GIšuarhušdu- (n.) an object in cult: nom.-acc.sg. ua-ar-hu-uš-du (KUB 55.5 iv 25); broken u_ ua-ar-hu-uš-dụ[(-)...] (KUB 20.15, 6), unarhušdu[...] (Bo 5628 obv. 2).

See Weitenberg 1984: 54 for attestations. The exact meaning of this word cannot be determined. The connection with uarhuššu-, uarhušt- is unclear. No etymology.
uari- / uarai- (adj.?) describing oracle bird: nom.pl.c. úa-ra-e-eš (HKM 47, 44, 46 (MH/MS), HKM 49,16 (MH/MS)).

This word occurs in two letters from Maşat Höyük only. HKM 47 deals with bird-oracles, and uaraēš apparently refers to some kind of oracle-bird. HKM 49 is badly damaged, but this letter probably deals with bird-oracles as well. Alp (1991: 415) cites the stem as uarai-, but perhaps an interpretation as a (substantivized?) adjective uari- is better. No clear meaning, no etymology.
 acc.sg.c. ua-ar-ri-in, nom.-acc.sg.n. ua-ar-ri, gen.sg. ua-a-ar-ra-aš (KUB 23.72 ii 19 (MH/MS)), ưa-ar-ra-aš (KUB 23.72 ii 20 (MH/MS), HKM 5 obv. 9 (MH/MS)).
Derivatives: uarrišša- ${ }^{i}$ / unarrišš- (IIal $\gamma$ ) 'to help, to come to help' ( 2 sg.pres.act. ua-ar-ri-iš-ša-at-ti (KBo 5.4 rev. 45 (NH), KUB $21.5+$ KBo 19.74 iii $68(\mathrm{NH})$ ), ua-ar-re-eš-ša-at-ti (KBo $5.4 \mathrm{rev} .46(\mathrm{NH})$, KUB $19.6+21.1+19.73$ iii 49 (NH)), ua-ar-ri-<iš-sša-at-ti (KUB $21.5+$ KBo 19.74 iii $65(\mathrm{NH})$ ), ua-ar-<ri->iš-ša-at-te (KUB 23.1 ii $35(\mathrm{NH})$ ), úa-ar-ri[-e/iš]-ša-at-t $[i]$ (KBo 10.12+13 ii 52 (NH)), 2pl.pres.act. [una-a]r-re-eš-ša-at-te-ni (KUB 26.12 i 7 (NH)), 3pl.pres.act. una-ar-ri-iš-ša-an-zi (KBo 5.8 i $10(\mathrm{NH}))$, 1sg.pret.act. [uरa-a]r-re-eš-ša-ah-hu-un (KBo 4.4 ii $38(\mathrm{NH})$ ), 2sg.pret.act. una-ar-ri-iš-ši-iš-ta (KUB $31.47 \mathrm{obv} .13(\mathrm{NH})$ ), 3sg.pret.act. una-ar-ri-iš-ši-iš-ta (KBo $6.29+$ KUB 21.12 ii 11 (NH)), ua-ar-re-eš-še-eš-ta (KBo $3.4+$ KUB 23.125 i 37 (NH), KBo 16.1 i 56 (fr.) (NH), KUB 14.16 ii 13 (NH), KBo 5.8 i 42 (fr.) (NH)), 2sg.imp.act. úa-ar-ri-iš-ša (KBo 5.9 ii 17 (NH), KBo 4.3 ii 15 (NH)), úa-ar-re-eš-ša (KBo 5.13 iii $20(\mathrm{NH})$, KBo 19.66 + KUB 6.41 iii 38 (NH)), 3sg.imp.act. una-ar-ri-iš-ši-iš-du (HW: 245), « úa-a[r-re$e] s ̌-s ̌ e-e s ̌-d u(A B o T ~ 57$ obv. 29 (NH)), \& úa-ar-r[e-eš-še-eš-du] (ibid. 32 (NH)); part. una-ar-ri-iš-ša-an-t- (KBo 5.8 i 19 (NH)), una-ar-re-eš-ša-an-t- (KUB 19.36 i 14 (NH)), (u)uarra halzai- 'to cry for help' (ú-ua-a-ar-ra hal-za-iš (KUB 31.4 + obv. 3 ( $\mathrm{OH} / \mathrm{NS}$ )), with dupl. ua-ar-ra hal[-..] (KBo 12.22 i $4(\mathrm{OH} / \mathrm{NS}))$ ), uarrae- ${ }^{z i}$ (Ic2) 'to come to help' (3sg.pres.act. una-ar-ra-a-iz-zi (KBo 4.4 ii 26 (NH)), 3sg.pret.act. ua-ar-ra-it (KBo 3.4 iv $17(\mathrm{NH})$ ), 2sg.imp.act. ua-ar-ra-a-i (KBo 4.4 ii $24(\mathrm{NH})$ ), uarrahitašša- (adj.) 'being of help' (nom.sg.c. ua-ar-ra-hi-ta-ač-ša-ǎ̌ (KUB 20.60, 7)).

Anat. cognates: CLuw. ưarrahitašša/i- 'being of help' (nom.sg.c. [u] $a-a r-r a-h i-$ ta-aš-ši-iš (KBo 45.11 obv. 6)); HLuw. wariïa- 'to help' (3sg.pres.act. wa/i+ra/i$i a-i a(\mathrm{BOHÇA} \S 7, \S 8, \S 12), 3 \mathrm{sg} . p r e t . a c t . ~ w a / i+r a / i\left[-i a^{?}\right]-t a(\mathrm{BOHÇA} \S 11)$.

PIE *uorH-i-
The stem uarri- occurs as an adj. 'helpful' as well as a neuter noun 'help(fulness)'. Suffix ablaut can be seen in gen.sg. uā̄rraš (KUB 23.72 ii 19), uarraš (ibid. 20) < *uarraiaš. The expression (u)uarra halzai- ${ }^{i}$ (spelled ú-una-a$a r-r a$ and ua-ar-ra) occurs in one context only (Puhanu-chronicle: both attestations are duplicates of each other). These forms could be old allatives *uarraia > uarra. The verb uarrae- ${ }^{z i}$ is NH only. It seems to be based on the stem uarra- as seen in uarra halzai-, although it cannot be excluded that it is derived directly from uarri-, as e.g. kappae- ${ }^{z i}$ 'to diminish' is derived from the adjective kappi- / kappai- 'little'. Often, 3pl.pret.act. u-ur-ri/e-er (KBo 3.60 ii 7 (OH/NS)) is cited as belonging to the paradigm of uarrae- as well, but a translation 'they helped' is not ascertained. Its aberrant appearance ( $\bar{u} r r$ - instead of uarr-) is hard to explain, so we rather have to regard it as a separate verb that does not belong to this stem. I therefore treat it under a separate lemma, ūrr(iie/a)-. The adj. uarrahitašša- is clearly based on the Luw. gen.adj. uarrahitašša/i-, itself derived of a Luwian noun *uarrahit- 'help'. According to Starke (1990: 155-6), the verb uarrišša- ${ }^{i}$ uarrišš- is based on a Luwian impf. *uarrišša-, although that verb is not attested. It is true that within the small group of imperfectives in -š̌s $(a)$-, uarrišs (a)- stands quite apart as it is attested in NH compositions only, whereas
 impress' are attested from OH times onwards. Whether this means that uarišš(a)is not a genuine Hittite formation is unclear, however.
I know of no outer-Anatolian cognates. If these words are of IE origin, the $-r r$ points to $*-r H$-. This means we are dealing with a preform *uor $H-i$. See Melchert (1994a: 78) for an elaborate treatment of these words, which in my view lays too much weight on the form $\bar{u} r r(i) e r$.
uariše/i(ia)- (gender unclear) '?': gen.sg. una-ri-še-ía-aš, una-ri-ši-ía-aš.
This word occurs in one context only:

KBo 13.260 iii
(33) $n u$ EGIR-az al-l[ $a-a l-l] a-a-a[s]$
(34) [h]a-ta-am-mi-iš pé-ra-an=ma-a=š-ši
(35) $[u] a-r i-s ̌ e-i a-a s ̌ ~ s ̌ e-l i-u s ̌ ~ a-r a-a n-d a ~$
(36) $[p] a-r a-a=a s ̌ ~ t i-i a-z i$
(37) $[n]=a$-aš=kán an-da a-la-al-la-a
(38) $[m] a-u s ̌-d u \quad a-a p-p a=m=a-a s ̌$ si-i $a-z i$
(39) $[n]=a-a s ̌=k a ́ n ~ a n-d a ~ u n a-r i-s ̌ i-i-i a-a \check{s}$
(40) [pa-]ah-ḩu-e-na-aš-š=a še-li
(41) $[m] a-u s ̌-t a-r u$
'Behind, the allall $\bar{a}$ - is hata-ed. But before him, piles of unarišeia- are standing. (If) he walks forward, let him fall into the alall $\bar{a}-$. (If) he falls backward, let him fall into the pile of uarišia- and fire'.

On the basis of this context, it cannot be determined exactly what uariše/iidameans. Perhaps it is parallel to al(l)all $\bar{a}-$ (q.v.), which possibly denotes 'treachery'. One could think of a connection with $u r_{-}{ }^{\bar{a} r i}$ 'to burn' (q.v.), but this is based on the formal similarity only.
unarite $^{z i}$ : see uerite- ${ }^{z i} /$ unerit- $^{\text {- }}$
uarkant- (adj.) 'fat': nom.sg.c. úa-ar-kán-za, acc.sg.c. ua-ar-kán-ta-an, ú-ua-ar$k[a ́ n-t a-a n]$ (KBo 3.60 ii 3), nom.-acc.sg.n. úa-ar-kán, gen.sg. úa-ar-kán-ta-aš, nom.pl.c. u_a-ar-kán-te-eš, ưa-ar-ga-an-te-eš, úa-ag-ga-an-te-eš, acc.pl.c. una-ar-kán-du-uš.
Derivatives: u्रarkēššz ${ }^{i}$ (Ib2) 'to grow fat' (3sg.pret.act. ua-ar-ke-eš-ta (KBo 32.14 ii 4) ), uargnu- ${ }^{z i}$ (Ib2) 'to make fat' (1sg.pret.act. ua-ar-ga-nu-nu-un (KBo 32.14 ii 12); impf. [ųa-a]r-ga-nu-uš[-ke/a-] (KBo 32.113, 5)).

IE cognates: Skt. úrj- 'food, refreshment, strength', Av. varəzaiiaṇt- 'providing much strength', Av. varəz- 'strength', Gr. ò $\rho \gamma \alpha{ }^{\prime} \omega$ 'to overflow, to swell', ò $\rho \gamma \eta$ ந́ 'passion, anger, fierceness', OIr. ferc 'anger'.

PIE *uorhl ǵ-ont-
Once we find a form ua-ag-ga-an-te-eš (HT 1 iii 32), which assuredly belongs to this word, as it is a duplicate of ua-ar-kán-te-eš (KUB 9.31 iii 39) and ua-ar-ga-an-te-eš (KUB 9.32 i 21). It is unclear whether we are dealing with a real phonetic change (uark-> uakk-), or a mistake from the copyist (AK instead of AR). The word is usually spelled with initial $u a-$, but once we find a spelling $u$ -ua-, in KBo 3.60 ii 3. The derivatives uarkēšs- ${ }^{z i}$ and uargnu- ${ }^{z i}$ show that we have to analyse uarkant- as a stem uark- followed by the sufffix -ant- which we find more often in adjectives. For the etymology see Szemerényi (1942: 397) and Čop
(1955b: 31), who connect it with Skt. úrj- (f.) 'food, refreshment, strength' etc. from *uerh $h_{1} \dot{g}$-. This means that uarkant- probably reflects *uorh ${ }_{1} \dot{g}$-ont-.
uarkui- (c.) 'anger, fury (?)': acc.sg. una-ar-ku-i(n)=š-ša-an (KUB 33.28, 6), \& una-ar-ku-i(n)=š!-ša-an (KUB 17.10 iii 12).

PIE ? ${ }^{*} u(o) r K^{w}-i-$
This word is attested twice.

KUB 17.10 iii

$$
\begin{equation*}
\ldots n=a-a \check{s}-t a{ }^{\mathrm{d}} T e-l i-p i ́-n u-i \tag{9}
\end{equation*}
$$

(10) tu-ug-ga-az=še-e-et $i-d a-a-l u-u=s \check{-s ̌ i}-i t \quad d a-a-a h-h u-u n \& u s ̌-d u ?$ ? $-u l=\check{s} e-e t$

(12) da-a-ah-ḩu-un \& úa-ar-ku-u(n)=̌̌-ša-an da-a-ah-hu-un ša-a-u-ar da-a-ah[-hu-un]
'Of Telipinu, of his body, I took his evil, I took his sin, I took his wrath, I took his anger, I took his $\underset{\text { u }}{ }$., I took fury'.

A parallel is found in
KUB 33.28
(4) $n=a-a \check{s}-t a{ }^{\mathrm{d}} \mathrm{U}-n i[\quad]$
(5) $u a-a \check{c}-d u-u l=s ̌ e-e t ~ d a-a[h-h u-u n]$
(6) $u$ ua-ar-ku-i(n)=š-ša-an da-a[h-hu-un ]
'Of the Storm-god[ ... ], I to[ok] his sin, [ ... ], I to[ok] his $u$.,., ... ]'.
It is likely that either una-ar-ku-uš-ša-an is wrong for una-ar-ku-iš-ša-an or the other way around. As it is easier to assume that in $u$ u-ar- $k u-u \check{s}-\check{s} a-a n$ a vertical wedge is lost than to assume that an extra one was written in una-ar-ku-iš-ša-an (so UŠ () wrong for IŠ (T), I assume that the word must have originally been uarkui(n)=ššan 'his ưarkui-'.

As the word appears in an enumeration of idālu 'evil', ušdul 'sin', karpi'wrath', kardimiïatt- 'anger' and šāuar 'fury', it is likely that it denotes something evil as well, and particularly something like 'anger, fury, etc.'. The one attestation with gloss wedges may point to a foreign (Luwian) origin, but this is not obligatory. In the same text $u \check{s} d u l$ is gloss wedged as well, though this word is generally regarded as genuinely Hittite. I know of no cognates, but uarkuishould mechanically reflect *u(o)r $K^{w}-i-$.
uarp- $^{z i}$ (Ia4 > Ic1) 'to wash, to bathe' (Sum. ŠE.NAGA): 1sg.pres.act. ua-ar-ap$m i$, 3sg.pres.act. una-ar-ap-zi (MH/MS), una-ar-pa-zi (KBo 2.8 i 21), 3pl.pres.act. ua-ar-pa-an-zi, ua-ar-ap-pa-an-zi, ua-ar-pí-ia-an-zi (KUB 29.40 iii 28, 32), ua-ar-pa-a-an-zi (KBo 31.139. 8), 1sg.pret.act. ua-ar-pu-un, 3sg.pret.act. ua-ar-ap$t a$, 3sg.imp.act. u_a-ar-ap-du, uа-ar-ap-tu $u_{4}$; 2sg.imp.midd.? ua-ar-pu-ut (VBoT 120 iii 7); part. ua-ar-pa-an-t-; verb.noun ua-ar-pu-ua-ar, gen.sg. una-ar-pu-u-uaaš; inf.I ua-ar-pu-(u-)ua-an-zi.
Derivatives: uarpa- (n.) '?' (nom.-acc.pl. ua-ar-pa (KBo 4.11 obv. 13, KUB 35.133 ii 33), dat.-loc.pl. ưa-ar-pa-aš (KUB 35.133 ii 34)), ${ }^{\text {GIŠ DÍLIM uarpašī- }}$ (c.), a certain bowl (for washing?) (nom.sg. GIš DÍLIM ua-ar-pa-ši-i-iš (KUB 12.36 + KUB 60.9 i 9, KUB 30.37 i 7)), uarpuzi- (n.), object used by bathing? (nom.-acc.sg. ua-ar-pu-zi (KUB 12.8 i 17)).
IE cognates: Lith. ver̃pti 'to spin', RussCS vbrpsti 'to tear, to rob'.
PIE *uérp-ti / *urp-énti

The spelling ua-ar-ap-zi besides ua-ar-pa-zi proves that the stem was uarp-. The geminate spelling -pp- in uarappanzi shows that the stem was/uarp-/. A stem uarpiie/a- (uarpiianzi) is found in one MH/MS text only. It is unclear whether this is a secondary creation or an old remnant of a system in which uarp- reflects an old root-aorist and uarpiie/a- a *-ie/o-derived present (see e.g karp(iie/a)- ${ }_{-}$for such a distribution). See Weitenberg (1977) for the seperation of uarp- 'to wash, to bathe' and a verb uarpae- ${ }^{\text {zi }}$ 'to suppress', a derivative of uarpa- 'enclosure' (q.v.).

The verb quite clearly denotes 'to wash, to bathe; but Oettinger (1979a: 234) cites the interesting passage KUB 15.31 i (18) nu=kán EGIR-an-da (19) GIš pa-ah-hu-ru-la-az pa-ah-hur ua-ar-pa-an-zi (dupl. KUB 15.32 i 19-21) 'und dann reiben sie mit dem Feuerholz Feuer', which he uses as an argument to assume that uarp- originally meant 'to rub', which through 'to rub clean with water' became to denote 'to wash, to bathe'. CHD P: 17 translates this passage as 'Afterwards they enclose (i.e. bank?) the fire with a $p$.-implement', however, and explicitly state that uarpanzi here does not belong with uarp- 'to wash, to bathe' but with uarpae- 'to enclose, to surround' (see at uarpa-). Whatever the correct interpretation, Oettinger's proposal (1979a: 234) to connect uarp- with the root *uerp- 'to turn to and fro' (Lith. ver̃pti 'to spin') through a semantic development 'to rub (one's hands)', still remains the best etymology.
Some instances of the noun uarpa- are not fully clear. The contexts in which they are found show that they do not belong with uarpa- 'enclosure' (q.v.), but more likely are related to uarp- 'to wash, to bathe'. The first context is

KBo 4.11 obv.
(13)

$$
\ldots{ }^{\mathrm{DUG}} \mathrm{U}^{\mathrm{T}} \mathrm{UL}^{\mathrm{HI} . \mathrm{A}} t i-a n-z i \text { una-ar-pa da-an-zi}
$$

(14) n=a-at da-ga-an la-a-ḩu-ua-an-zi
'They place the vessels, take $u$.'s and empty them on the floor'.
A similar context can be found in
KUB 35.133 ii
(33) ... nu=kán u_a-ar-pa
(34) da-a-i nu ua-ar-pa-aš še-er GEŠTIN KU $\mathrm{K}_{7}$ ši-ip-pa-an-ti
'He takes the $u$.-s and libates sweet wine over the $u$.-s'.
The exact meaning of uarpa- remains unclear, however.
uarpa- (n.) 'enclosure': dat.-loc.sg. ua-ar-pí (in uarpi tiiant- 'fenced-in, enclosed' (KUB 13.2 iv 28)), nom.-acc.pl. ua-ar-pa (in uarpa dai- 'to enclose'),
Derivatives: uarpae- ${ }^{z i}$ (Ic2) 'to suppress, to conquer' (1sg.pret.act. ua-ar-pa-nu$u[n]$ (KBo 3.13 iii 4), ?3pl.pres.act. una-ar-pa-an-zi (KUB 15.31 i 19), impf.2sg.pres.act. una-ar-pí-iš-ke-ši (KBo 3.21 ii 19)). ưarpa/ilae- ${ }^{\text {zi }}$ (Ic2) 'to surround(??)' (3pl.pret.act. ua-ar-pi-la-a-e-er (KUB 31.101 obv. 10); inf.I [u] $]$ a-ar-pa-la-u-ua-an-zi (IBoT 3.121, 2)).
IE cognates: TochA wärp- 'to surround', warp 'enclosure', TochB wārp- 'to surround'.

PIE *uorP-o-
See Weitenberg 1977 for a treatment of these words. The exact stemformation of the basic word is not fully clear, but we possibly are dealing with a noun uarpa(n.) 'enclosure' of which we find a nom.-acc.pl. ua-ar-pa in the expression uarpa dai- ' '(lit.) to place enclosures > to enclose', and of which we only once find a dat.-loc.sg. ua-ar-pí in uarpi tiilant- 'put in enclosure(?)'. If this is correct, then the verbal forms úarpanu[ $n$ ] and úarpiške/a- 'to suppress, to conquer' may be analysed as belonging to a stem uarpae- ${ }^{z i}<*_{\text {uarpa-ie/a }}$. See at the lemma of uarp- ${ }^{z i}$ 'to wash, to bathe' for the discussion of 3pl.pres.act. ua-ar-pa-an-zi (KUB 15.31 i 19).

The adj. uarpalli- 'strong, great', which is often seen as cognate to these words, must have a different origin: see at its own lemma.

Etymologically, we have to connect Hitt. uarpa- to TochA wärp-, TochB wārp'to surround'. Adams (1999: 587) connects these words further with Goth. wairpan 'throw' (but this verb reflects *uerg'-), Latin verbera 'switches, lashes, thongs' and Lithuanian vir̈bas 'switch, rod' (but these are semantically far). His connection with ModEng. wrap is more appealing semantically, but the formal side is difficult: if related, it would show Schwebe-ablaut *uroP- (the -p- of wrap goes back to a PGerm. geminate *-pp- and therefore bears no information on the possible PIE labial). We must bear in mind, however, that the word is very recent and local, so likely does not go back to an old inherited word.
This means that we are left only with Hitt. uarpa- and TochA wärp-, B wārp-, on the basis of which we can reconstruct a root *uorP- only. TochA warp 'enclosure' shows the exact same formation as Hitt. uarpa-, viz. *uorP-o-.
The verb uarpa/ilae- possibly means 'to enclose' as well. It occurs twice, but only one context is clear:

KUB 31.101 obv.

$$
\begin{aligned}
& \text { (8) ... nam-ma-a=n-na-aš } \\
& \text { (9) ki-iš-ša-an ḩa-at-<<at->-ra-at-tén MUŠEN }{ }^{\mathrm{HI} . \mathrm{A}}=u a-a=n-n a-a s ̌=k a ́ n \\
& \text { (10) ua-ar-pí-la-a-e-er nu=ua=kán ÍD } a-p a ́ d-d a \\
& \text { (11) za-i-u-en }
\end{aligned}
$$

'You have written us thus: "The birds enclosed(?) us, and therefore we crossed the river"'.

The exact formation of the verb is unclear to me, however.
uarpalli- (adj.) 'strong, great': nom.sg.c. ua-ar-pa-al-liš (KUB 4.4 i 13)).
Anat. cognates: HLuw. warpali- 'brave; strong, great' (nom.sg.c. "SCALPRUM+RA/${ }^{L A I / U "}$ wa/i+ra/i-pa-li-sa (MARAŞ 1, §1d)), warpa/i- 'craft, skill, knowledge' (acc.sg. ${ }^{* 273}$ wa/i+ra/i-pi-na /warpin/ (KARKAMIŠ A15b §22), gen.sg. "*273" wa/i+ra/i-pa-si /warpasi/ (KARKAMIŠ A3 §16), dat.-loc.sg. "*273" wa/i+ra/ipi/warpi/ (KARKAMIŠ A12 §8, §12)), warpasali- (adj.) 'craft-' (nom.-acc.pl.n. ${ }^{* 273} w a / i+r a / i-p a-s a-l i-i a a^{-i}($ MARAŞ 14 §3)).

This word occurs only once, in a bilingual text where it corresponds to Akk. gašru 'strong, great'. The -alli-suffix clearly points to Luwian origin, which is supported by the attestation of the HLuw. adj. warpali- which is translated as 'brave’ by Hawkins (2000, 132), but which could just as well mean 'strong, great'. Within HLuwian, this word likely belongs with warpa/i- 'skill, craft,
knowledge’ (on which see Hawkins \& Morpurgo-Davies 1986: 76-7), which has no good etymology. This means that the inner-Hittite connection of uarpalli- with uarpae- ${ }^{z i}$ 'to conquer, to suppress' (see at uarpa- 'enclosure') is incorrect.
uarpan(n)ala- (adj.) describing sacrificed sheep: acc.sg. ua-ar-pa-an-na-la-an (KUB 9.13, 18), ua-a[r-p]a-na-la-an (KUB 24.5 ii 12).

This word occurs twice, in the following contexts:
KUB 24.5 ii
(11) GIM-an=ma $\mathrm{GE}_{6}-z a k[i-i] s^{2}-\stackrel{s}{ } a-r i n u=k a ́ n[n e]-p i ́-s ̌ i ~ G A M-a n$
(12) $A-N A{ }^{\text {d }}{ }^{\text {SINN }} 1$ UDU $u a-a[r-p] a-n a-l a-a n s ̌ i-p[a-a n-t] i$
'When it becomes night, he sacrafices one $u$. sheep to the Moongod under the sky';
KUB 24.5 + KUB 9.13 i
(30) $n=a$-aš=kán GIM-an ar-ha $u$ ú-ez-zi $n u=z a ~ u ̌ a-a r-a[p-z i n u]=k a ́ n ~ 1 ~ U D U ~$
ua-ar-pa-an-na-la-an
(31) $A$-NA ${ }^{\text {d }}$ UTU ne-pí-ši kat-an ši-pa-an-ti
'When he comes, he washes himself and sacrifices one $u$. sheep to the Sun-god under the sky'.

It apparently describes the sheep that are being sacrificed to the Moongod and the Sun-god. Perhaps the sentence $n u=z a$ uarapzi 'he washes himself' indicates some etymological connection with uarpan( $n$ )ala-, but this is mere speculation. For the time being, a meaning cannot be determined, so etymologizing is useless.
uarpiie/a- ${ }^{z i}$ : see uarp- ${ }^{z i}$
unarši $^{i}$ (IIa2 > Ic1) 'to reap, to harvest, to wipe': 3sg.pres.act. una-ar-aš-še (KUB 29.30 iii 4 (OS)), u_a-ar-ši (KUB 29.30 iii 8 (OS), KUB 29.38 i 3 (fr.) (OS), IBoT 1.36 i 69 (MH/MS), KBo 6.11 i 7 (fr.) (OH/NS)), ưa-ar-aš-zi (KBo 6.26 i 45 ( $\mathrm{OH} / \mathrm{NS}$ )), una-ar-še-e-ez-zi (KBo 6.12 i $25(\mathrm{OH} / \mathrm{NS})$ ), 3pl.pres.act. [una-ar-š] $i^{?}$-an$z i$ (KUB 29.30 ii 18 (OS)), úa-ar-ša-an-zi (KBo 15.10 iii 42 ( $\mathrm{OH} / \mathrm{MS}$ ), HKM 66 rev. 37 (MH/MS)), ua-ar-aš-ša-an-zi (KUB 24.3 ii 8 (MH/NS)), u_a-ar-ši-įa-an-zi (KBo 6.26 i $8(\mathrm{OH} / \mathrm{NS})$ ), 1sg.pret.act. una-ar-šu-un (KUB 33.66 iii $10(\mathrm{OH} / \mathrm{MS})$ ), 3sg.pret.act. ưa-ar-aš-ta (KBo 3.33 ii 17 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pret.act. una-ar-še-er (KBo 3.33 iii 18 ( $\mathrm{OH} / \mathrm{NS}$ )), 2sg.imp.act. u_a-ar-aš (HKM 21 rev .15 (MH/MS)),

3sg.imp.act. ua-ar-aš-du (HKM 33 rev. 33 (MH/MS), KUB 31.84 ), 3pl.imp.act. u_a-ar-ši-ía-an-du (KUB 13.1 i 36 (MH/MS)); part. u_a-ar-ša-an-t-; verb.noun ua-ar-aš-šu-ua-aš (KBo 5.7 ii 44 (MH/MS)); inf.I una-ar-šu-una-an-zi (HKM 66 rev. 41 (fr.) (MH/MS), KUB 12.62 i 11 (NS)), ua-ar-šu-u-ua-an-zi (KUB 14.20, 19); impf. una-ar-aš-ke/a- (HKM 25 obv. 10 (MH/MS), HKM 66 rev. 38 (MH/MS), KUB 13.2 i 2 (fr.)).

Derivatives: unaưarš- ‘id.' (part. una-ưa-ar-ša-an-t- (KUB 30.38 i 10 (NS), KUB 41.22 iv 2, KBo 23.1 i 30)).

IE cognates: OLat. vorrō 'to wipe', Lat. verrere 'to wipe', RussCS vbrxu 'to thresh'.

PIE *uórs-ei / *urs-énti
In the oldest texts, this verb inflects according to the hi-conjugation: uarašše, uarši. Only later on, we find forms that are mi-inflected (uarašzi (OH/NS)). The only form that is deviant is [ua-ar-š]i-an-zi (KUB 29.30 ii 18 (OS)), which would point to a stem uaršiie/a-zi. Unfortunately, the form is broken on the crucial point, and we therefore may not have to take this form into account. Note that the oldest form of this verb, 3sg.pres.act. una-ar-ǎ̌-še (OS) is very important because it shows that the original 3 sg.pres.act.-ending of the hi-conjugation was $-e$, which was replaced by $-i$ through analogy (see also at the lemma $-i$ ).
Already Benveniste (1932: 137) connected Hitt. uarš- with Lat. verrere 'to wipe', OLat. vorrō 'id.', RussCS vbrxu 'to thresh' that reflect a root *uers-. Note that in *uórs-ei / *urs-énti first the consonantal *u- of the singular spread to the plural. The regular outcome of *uórsei / *ursénti then would have been **/uáRi, uərSánt ${ }^{\mathrm{s}} \mathrm{i}$, of which the cluster /-rS-/ spread throughout the paradigm. This also explains the occasional geminate spelling of - $\check{s} \check{s}-$ in e.g. una-ar-aš-še, una-ar-aš-ša$a n-z i$, etc.
 the spirit > to reconcile, to pull oneself together': 3sg.pres.act. ua-ar-ši-ía-az-zi (KUB 14.8 ii $28(\mathrm{NH})$ ), ua-ar-ši-i ia-zi (KUB 14.3 ii 67, $68(\mathrm{NH})$, KUB 15.5+ i 15 (fr.) (NH)), 1sg.pret.act. una-ar-ši-ía-nu-un (KUB $14.15+$ KBo 16.104 iii 26 (NH)), 3sg.pret.act. ưa-ar-ši-i-et (KBo 19.109, 7 (MH/NS)), 3sg.imp.act. una-ar$a s ̌-d u(K U B 14.14$ ii $14(\mathrm{NH})$ ), ua-ar-ši-ia-ad-du (KUB 14.11 iii $38(\mathrm{NH})$ ), 3pl.imp.act. una-ar-ši-ía-an-du (KUB 13.1 i 36 (MH/MS)); 3sg.pres.midd. una-ar-aš-ta (KUB 33.62 ii 4, 5, 6 ( $\mathrm{OH} / \mathrm{MS}$ ) // Bo 6472 ii 14, 15, 16 ( $\mathrm{OH} / ?$ )), ua-ar-ši-iáat-ta-ri (KUB 14.8 ii 34 (NH), KUB 16.7 ii 36 (NS)), 2sg.imp.midd. una-ar-ši-
ia ah-hhu-ut (KUB 9.32 i 14, 23 (NS)); part. ua-ar-ša-an-t- (IBot 3.148 iii 11 (MH/NS)).

Derivatives: uarš(iial)nu- ${ }^{\text {zi }}$ (Ib2) 'to make (someone) pull oneself together; to refresh (trans.)' (3pl.pres.act. u_a-ar-ša-nu-an-zi (KUB 13.4 iv 11 (OH/NS)) // u_a$a r-s ̌ i[-i \underline{c} a-n u-a n-z i]$ (KUB 40.63 iv 5 (OH/NS)), 1sg.pret.act. u_ ua-ar-ši-ía-nu-nu-un (KBo 12.38 ii 21 (NH)); part.nom.-acc.sg.n. ua-ar-ši-i_ia-nu-ua-an (KUB 19.23 obv. 7 (NS))).

IE cognates: Skt. várṣman- 'hight', á vrṣásva 'pull yourself together!', Lith. viršùs, OCS vrbxz 'top, summit'.

PIE *uérs-to, *urs-ié/ó-
Usually, this verb is translated 'to appease oneself, to soothe', but in my view it more likely has a meaning 'to regain one's strength, to refresh', and, when used with ZI 'spirit, soul', 'to lift the spirit, to reconcile, to pull oneself together, to get a grip'. Compare e.g.

## IBoT 3.148 iii

(10) EN tab-ri=ua=za iš-pí-ía-an-za
(11) ni-in-kán-za e-eš nu=za EGIR-an ua-ar-ša-an-za e-eš
'Oh lord of the tabri, be satisfied with food and drink and then be refreshed!';
KUB 14.11 iii
(36) ... nu $A-N A{ }^{\mathrm{d}} \mathrm{U}^{\mathrm{URU}}{ }^{H} a-a t-t i \mathrm{EN}=I A$
(37) $\grave{U} A$-NA DINGIR ${ }^{\text {MES }} B E-L U^{\text {MES }}=I A \mathrm{ZI}$-an-za nam-ma
(38) ua-ar-ši-i_i-ad-du nu=mu ge-en-zu nam-ma
(39) da-at-tén nu=kán IŠ-TU KUR URU Ha-at-ti
(40) hi-in-ga-an ar-ha nam-ma u-i-lia-at-tén
'May the spirit of the Storm-god of Hatti and the gods, my lords, be lifted (= may you be reconciled)! May you take pity in me! May the plague be sent away out of the land Hatti!';

KBo 16.32 + KUB 50.6 ii
(16) HुUL-ah-t=a-aš ku-iš UN-aš n=a-aš nu-u-ua ku-it TI-za nu a[-pé-(el ku-it)]
(17) ZI-za UL u_a-ar-ši-i̇a-an-za nu SISKUR ma-an-tal-li ar-ha B[AL-u-(an-zi)]
(18) a-pé-ez UL SIxSÁ-at
'Because the person who hit them is still alive and because his spirit is not (yet) lifted (= he has not pulled himself together yet), it therefore was determined not to perform the mantalli-ritual';

KUB 19.23 obv.
(7) $\mathrm{EN}=$ İA ZI-an UL una-ar-ši-i-ia-nu-ua-an h har-ku'-un
'I have not lifted the spirit of my master'.
A more literal meanging 'to lift' may be visible in the following context, which then seems to deal with levers:

KUB 33.62 ii
(4) [nu kat-te-ra-an ha $a$-] $a$-an IM-aš=kán ua-ar-aš-ta ša-ra-a-az-zi-ia-an

(6) $\left[h a-a-a n^{\mathrm{G}}\left({ }^{\mathrm{S}} \check{s} \mathrm{~s} a-a\right)\right] m-m a-m a=k a ́ n ~ u n a-a r-a \check{s}-t a$
'[D]ip [the lower] and the clay will be lifted. [Dip] the upper and the māl will be lifted. [Dip] the middle and the šammama-nut will be lifted'
(cf. CHD L-N: 124 for this reconstruction of the text, but note that CHD's translation of uarašta as "will be refreshed(?)" (CHD Š: 115) does not make sense).
If the $\mathrm{OH} / \mathrm{MS} 3$ sg.pres.midd.-forms uarašta from the last cited context indeed belong to this verb, it seems that we are dealing with an original opposition between a middle stem uarš- Ha(ri) vs. an active stem uaršiie/a- ${ }^{z i}$, for which compare e.g. hatt- ${ }^{(t) a(r i)}$, hazziie/a- ${ }^{z i}$. In younger times we find the stem uarš- also in the active (3sg.imp.act. u_arašdu (NH)) and uaršiie/a- in the middle (uaršiiattari (NH) and unaršiiahhhut (NS)).

The etymology of this verb depends on one's interpretation of its semantics. E.g. Melchert (1994a: 163) states that uarš(iie/a)-, which he translates as 'to soothe', goes back to an original meaning *'to trickle, to drip', on the basis of which he assumes a connection with the noun uarša- that he translates as 'rainshower'. Rieken (1999a: 470 ${ }^{2313}$ ), who translates uarš(iie/a)- as "beruhigen, besänftigen", rejects such an etymological connection, however.
If the verb uarš(iie/a)- indeed originally denotes 'to lift (oneself)', I would like to connect it with the root *uers- as visible in Skt. várṣman- 'hight', Lith. viršùs, OCS vrъxъ 'top, summit'. A semantic development to 'to lift oneself, to pull
oneself together' is also visible in Skt. á vrṛásva 'pull yourself together!'. All in all, I reconstruct unarš- ${ }^{\text {tla(ri) }}$ as *uérs-to and u_aršiie/a- ${ }^{z i}$ as *urs-ié/ó-.
úarša- (c.) 'fog, mist': gen.sg. úa-ar-ša-aš (KUB 16.37 iv 5 (NS), KBo 13.245 vi
 ša-aš (KUB 5.1 iv $71(\mathrm{NH})$ ).

This word especially occurs in the syntagm uaršaš d U 'Storm-god of $\underset{\sim}{u}$. ., which is mostly found in broken passages:

KUB 16.37 iv
(5) [ ... $i ?-]$ ši-ah-ḩa-an-zi ${ }^{\mathrm{d}} \mathrm{U} \underset{\sim}{u} a-a r-s ̌ a-a \check{s}$
(6) [ ... -]ma héé-e-ú-uš DÙ-zi
'... they [re]veal. The Storm-god of $u$. [...] but [...] makes rain';
KBo 13.245 vi
(5) hu-u-ma-an-da-aš te-et-hi-mi [ ... ]
(6) ${ }^{\mathrm{d}} \mathrm{U}^{\mathrm{HILA}}-a \check{s}$ al-pa-aš una-ar-ša-aš [ ... ]
(7) héé-e-u-uš da-a-i
' $[\ldots]$ for all in the thunder [...] for the Storm-gods of clouds and $\underset{\text {. }}{\underset{\text {. }}{ } \text { [...] places }}$ rains';

KUB 9.15 ii (cf. Cohen 2002: 134f.)
(6) [ ... ] an-da ta-ma-aš-zi una-ar-ša-š=a ${ }^{\mathrm{d}}\left[\mathrm{U}^{?}\right]$
(7) [ ... ] ta-ma-aš-zi n=a-an=kán una-ar-ša-aš
'[...] will oppress, and [the Storm]-god of $u$. will oppress [...] and [...] of $u$. [will ...] him'.

In one context, uarša- occurs without ${ }^{\mathrm{d}} \mathrm{U}$ :
KUB 5.1 iv
(71) BAD-an=ma an-za-aš KAL-i BÚN-mi har-ši-har-ši una-ar-ša-aš hé-[u]a? -aš UL HUŠ-hi
(72) KARAŠ ${ }^{\text {HI.A }}=k a ́ n ~ T A ~{ }^{\mathrm{d}} \mathrm{U} U L z a-a h-t a-r i$
'But when he for our sake(?) does not fear the violent thunder and lightning, the $u$.-s and the rains and the armies are not striken by the Storm-god, ...'.

Although all passages are either incomplete or difficult to interpret, the latter context clearly shows that ưarša-, just as KAL-i BÚN-mi haršiḩarši 'violent thunder and lightning' and hee[u]aš 'rains', should be regarded as a certain bad weather condition. This would of course perfectly fit the fact that it is used as an epithet of ${ }^{\mathrm{d}} \mathrm{U}$ 'Storm-god'.
Friedrich (1930: $35^{5}$ ), who translates the first context cited here as "Der Wettergott ... [...] ... macht Regengüsse" (which is not necessarily correct: the -ma before hēunus could well be the conjunction $=m a$, which implies a new subject for this sentence), points to the formal similarity between uaršaš and Skt. varṣá'rain', assuming that Hitt. unarša- is a loanword from Indic. Laroche (1946-47: 110) translates uarša- as "rosée", 'dew' and in 1963: 62 states that it is "un mot hittite authentique" that must be cognate with Skt. varṣá- 'rain' and Gr. $\varepsilon$ ć $\rho \sigma \eta$ 'dew'. This view has been generally accepted since then. In my view, we first should compare uarša- within Hittite, namely to uaršula- that denotes 'fume, vapour'. It therefore is more likely that uarša- denotes 'fog, mist'. Nevertheless, this does not affect the etymological connection with Skt. varṣá- 'rain' and Gr. غ̇épon 'dew’ semantically. Yet, we need to discuss a few formal points.
First, there is some debat on the interpretation of the Greek forms. In the poetic language, we find the word $\varepsilon$ é $\rho \sigma \neq \eta$ 'dew', which in classical times is (irregularly) contracted to $\varepsilon$ ह́ $\sigma \sigma$. In Hesych, we find the gloss ä $\varepsilon \rho \sigma \alpha v \cdot \tau \eta ̀ \nu \delta \rho o ́ \sigma o v . ~ K \rho \tilde{\eta} \tau \varepsilon \varsigma$ 'dew (Cretan)', which resembles the unique spelling ả́́ $\rho \sigma \eta \nu$ as found on one papyrus. On the basis of these latter two forms, often the reconstruction * $h_{2}$ uérs$e h_{2^{-}}$is given, under the assumption that $\mathfrak{a} \dot{\varepsilon}-$ has been assimilated to $\dot{\varepsilon} \varepsilon \varepsilon^{-}-$. Because such assimilations are far from regular in Greek and because a spelling with initial $\dot{\alpha}$ - is found twice only, both in dubious sources, we should rather take the frequent spelling éépoŋ as original and reconstruct *híuérs-eh $2_{2}$ (cf. also Eichner 1973: 54). In view of the development PAnat. */RRV-/ > Hitt. /RV-/ as described in § 1.4.5.a, we can assume that a sequence $* h_{1} u o$ - would yield Hitt. ua-. (Note that scholars that reconstruct úarša- as *h $h_{2}$ uors-o- must assume 'De Saussure Effect', i.e. loss of $* h_{2}$ - in an $o$-grade formation.)
Secondly, intervocalic *VrsV should have yielded Hitt. /VRV/, cf. *Horso- > Hitt. /RaRa-/, a-ar-ra- 'arse'. The only way in explaining uarša- then is by assuming an original ablauting root noun, e.g. *hiuérs-s, *h $h_{1}$ uérs-m, * $h_{1}$ urrs-ós (cf. e.g. tuekk-/tukk-). (Note that this scenario precludes the existence of an ograde stem, which is necessary if one reconstructs $* h_{2}$ uors-o-.)

All in all, we can say that the etymological connection between Hitt. uarša-

other is semantically attractive, but that the exact reconstruction of the Hittite word is difficult.
${ }^{\text {(GIŠ) }}$ uaršama-: see $^{\text {(GIŠ) }}$ uaršma-
uaršha-: see uarašha-
uaršiiatt- (c.) 'reconciliation(?)': nom.sg.c. [una-a]r-ši-i-ia-za (HT 42 obv. 10), gen.sg. una-ar-ši-íia-at-ta-aš (KUB 9.12 ii 5).
 26.34 i 18)).

See Rieken 1999a: 107 for a treatment. In the vocabulary HT 42, of which the Akkadian and Sumerian parts are broken off, we find obv. (9) [t]a-ri-aš-ha-aš 'tiredness' (10) [una-]ar-ši-i_ia-za (11) [una-a]r-ši-į् $a-z a$. In the vocabulary KBo 26.34 we find i (16) SÈD-an-za 'calmness(?)' (17) ta-ri-ía-aš-h $a-a s ̌ ~ ‘ t i r e d n e s s ' ~$ (18) ua-ar-ši-ía-tar, of which the translations are lost as well. Although we are dealing here with another formation (stem in -atar instead of -att-), it is likely that the words are semantically similar. Besides this, we find the following context:

KUB 9.12 ii
(3) ${ }^{\mathrm{d}} \mathrm{UTU}-a \check{s} \mathrm{IGI}^{\mathrm{HILA}}=\check{S} U 3$ TA-PAL $1^{\text {NU-TIM }} \mathrm{x}[\quad . . \quad]$
(4) $\check{a} a-k u-\langle u a-) i$
(5) $1^{N U-T I M}{ }_{2}^{u a-a r-s ̌ i-i} a-a t-t a-a \check{s} \mathrm{IGI}^{\mathrm{H}}\left[{ }^{\mathrm{L} . \mathrm{A}}=S ̌ U \quad \ldots \quad\right]$
(6) $n u$ LUGAL MUNUS.LUGAL ${ }^{\mathrm{d}} \mathrm{UTU}-i$ an-da-an ua-a[r-ši-i-ia-an-te-eš?]
(7) $a-s \check{a} a-a n-d u 1^{N U-T I M} m a-n i-i-i a-a[h-h i-i-i a-a s ̌ ?]$
(8) ha ha-ne-eš-na-aš IGI ${ }^{\mathrm{HILA}}=S \check{S} U$
'The Sun-god's eyes are three pairs - one pair is [....] of looking; with (them) [let him look] at the king and queen. One pair are his eyes of reconciliation, let the king and queen be rec[onciled] to the Sun-god. One pair are his eyes of gover[ning] and judging' (translation as in CHD Š: 55).

A translation 'reconciliation' (thus in CHD Š: 55), would fit the place in the vocabularies as well. Clearly, this word is derived from uarš- ta(ri) , uaršiie/a- ${ }^{z i}$ 'to lift (oneself); reconcile' (q.v.).
unaršiie/a- ${ }^{z i}$ "to appease": see unarš- ${ }^{\text {tIa(ri) }}$, u्रaršiie/a- ${ }^{z i}$

There is one verbal form showing the stem uaršiie/a- that does not seem to belong with either uarš- 'to reap, to harvest, to wipe' or with uarš- ${ }^{\text {tua(ri) }}$, uaršiie/a- ${ }^{z i}$ 'to lift (oneself); to refresh', namely the form found in the following context:

KUB 33.84 + KBo 19.109a iv (cf. Siegelová 1971: 58)
 $\mathrm{A}^{\mathrm{HIIA}}-n a-a \check{s}$
 una-ar-ši-i-et
(8) [(nu GIM-an ${ }^{\text {MUŠHéHé-dam-mu-uš) ua-ar-š]u-la-an KẠŠ iš-tah-ta nu=kán [(A-NA }}$
$\left.{ }^{\mathrm{M}}\right)$ ] ${ }^{\mathrm{US}} \mathrm{H}$ é-dam-mu tar-hu-u-i-li
(9) $\left[\left(\mathrm{ZI}^{\mathrm{HILA}}=\check{S}\right) U\right.$ ša-ne-ez-zi-iš $]$ te-eš-h $a$-aš e-ep-ta
'She (= Ištar) strewed aphrodisiac(?), šahi- and parnulli-wood into the mighty waters. And in the waters the aphrodisiac(?), šahi-and parnulli-wood uaršiie/a-d. When Hedammu tasted the taste of the brewage, a sweet dream seized the soul of the mighty Hedammu'.

CHD (P: 179) translates "in the waters (Hedammu) smelled the aphrodisiac(?), šahi-wood, and p.", interpreting uaršiiet as "smelled". This cannot be correct. Firstly, we would have expected that parnulli- would be in the accusative case, parnullin (just as in line 6), if it were the object of uaršiiet. Secondly, if Hedammu were the subject of uaršiiet, I do not see why he is not already mentioned by name in this line. The fact that Hedammu's name is expresly used in line 8 indicates that he is introduced as a new topic there, which means that he cannot have been the subject to uaršiiet.
In my view, it is clear that $\bar{a} s ̌ s ̌ i z i a t a r, ~{ }^{\text {GIIŠ̌ }}$ šhíš̌ and ${ }^{\text {GIŠ }}$ parnulli are the subject of uaršiiet and that this verb describes the process by which the strewing of these three objects into the waters yields the KAŠ (which must stand for 'brewage' here and not for 'beer'), whose uaršula- intoxicates Hedammu. So it is not conincidental that uaršiiet and uaršula- both show a root uarš-: the verb means 'produces the uaršula-', or 'dissolve into unaršula-' (cf. Siegelová's translation "zerging"). See at uaršula- for further treatment.
In CHD Š: 178 the words ša-ni-iz-zi ua-ar-aš-ta (KUB 27.29 ii 16) are translated as "he smelled the sweet things", again as if we are dealing with a verb
uarš- 'to smell'. Yet the context is too broken to ascertain this interpretation, and e.g. Haas \& Wegner (1988a: 135-6) translate "süß ... wegwischte".
${ }^{\text {(GIŠ) }}$ uaršma- (c.) '(piece of) firewood': nom.sg. una-ar-ša-ma-aš, acc.sg. ưa-ar-ša-ma-an (VSNF 12.65 i 26, KUB 7.47 obv. 4), ua-ar-aš-ma-a[n] (KUB 32.138 rev. ${ }^{\text {5 }}$ ), ú-ua-ar-ša-ma-an (KUB 32.129 rev. 3 (NS)), abl. úa-ar-ša-ma-za (KUB 26.58 obv. 11), ua-ar-ša-am-ma-za (KBo $6.29+$ KUB 21.12 iii $22(\mathrm{NH})$ ), acc.pl. una-ar-ša-mu-uš (often), u_a-ar-ša-ma-ǎ̌ (KBo 13.131 obv .5 ), ưa-ar-ša-am-ma-aš (KUB 17.10 iii 14 (OH/MS)).

PIE *urh ${ }_{1}$-smo-
This word is commonly spelled $u$ ua-ar-ša-m-, but occasionally we find a spelling with geminate -mm- (ua-ar-ša-am-m-), and once a spelling ua-ar-aš-ma-. Especially this last spelling indicates that phonetically, this word was /uarsMa-/ or /uərsMa-/. The spelling ú-ua-ar-ša-ma-an (KUB 32.129 rev. 3) is cited by HW: 247 as Úua-ar-ša-ma-an, but this seems incorrect to me: nevertheless, because of its aberrancy (note that on the same tablet we find ua-ar- (ibid. 4)), we can disregard this spelling.
For the meaning, cf. for instance
KUB 17.10 iii
(14) ${ }^{\text {GIŠ }}$ una-ar-ša-am-ma-aš ú-i-šu-u-ri-íla-ta-ti nu ku-u-uš GIŠua-ar-š[a-mu-uš]
(15) ma-a-ah-ḩa-an u_a-ar-nu-ú-e-er ${ }^{\mathrm{d}}$ Te-li-pí-nu-ưa-aš-š=a kar-pi-[iš]
(16) kar-di-mi-ía-az u_ u-aš-tu-ul ša-a-u-ar QA-TAM-MA u_a-ra-a-[ni]
'(Pieces of) firewood is broken. While they burn these pieces of firewood, the anger, rage, fury and wrath of Telipinu burns likewise';

KUB 51.22 rev. (with additions from dupl. KUB 32.138 ii 11f.)
(1) $\left[{ }^{\text {GIŠ }}{ }^{u} u a-a\right] r-s \check{a}-m u-u \check{s}-s{ }_{s}=a[(k i-i \check{s}-t a-n u-z i)]$
(2) $[(n=a$-at=kán $)]$ pa-ra-a pár-ni pé-e-da-a[-i $n=a-a s ̌=\check{s} a-a n]$
(3) $[h a-a \check{s}-\check{s}(i-)] i$ iš-ḩu-u-una-a-i
(4) $[(n=a-a \check{s}$ ar- $) h a]$ una-ar-nu-zi
(5) $\left[{ }^{\text {GI }}\right]^{\text {šu }} \underset{\sim}{ } a-a r-s ̌ a-m u-u s ̌ k a r[(-a) \check{s}-z i]$
(6) $[n=a-a \check{s}=] s ̌ a-a{ }^{\text {DUG }} p a-a h-h u-n\left[(a-a l-) l i-i a^{?}\right]$
(7) $[I-N A]$ É.ŠA-ni PA-NI DINGIR ${ }^{L I M}$ pé-e-da-a[-i]
(8) [ ha-aš-]šu-un-ga-iz-zi[
]
(9) [ ]A-NA DINGIR ${ }^{L I M}$ pa-ra-a i[š-hu-u-ua-a-i]
(10) [nu GIŠ úu-ar-š]a-mu-uš kán-ti-i[t ]
'And he extinguishes the pieces of firewood. He carries it out to the house, and throws them into the fire-place. He sets them alight. He cuts pieces of firewood and brings them in a pahhunalli-container into the inner room to the deity. [ He pr]esses [them and] th[rows them in front] of the deity. [He covers(?) the pieces of fir]ewood with wheat and speaks as follows'.

It is likely that uaršma- is connected with $u r^{-}{ }^{\text {äri }}$ 'to burn' (especially visible in the first context). If so, it probably shows a suffix ${ }^{*}$-smo-, which is further unattested in Hittite, however (unless tarašma- 'skull' (q.v.) shows it as well). As I argued at $u r_{-}{ }^{\bar{a} r i}$, this verb reflects *urh $h_{1}$ óri, which means that uaršma- reflects *urh ${ }_{l}$ smo-. Note that a sequence $* \mathrm{CrHsC}$ - normally yields Hitt. /CRisC-/ (e.g. in paripriške/a- < *pri-prh $l_{l}$-skée/o-), which means that in *urh $h_{l} s m o-$ the $* u$ - may have caused a slightly different development. A similar development is visible in duuaraške/a- < *d'urh ${ }_{l}$-sk'e/o- (the old imperfective of duuarni- ${ }^{z i}$ / duuarn- 'to break’ (q.v.)). See at $u r^{-\bar{a} r i}$ for further etymology.
ưaršula- (c./n.) 'fume, haze, vapour': nom.sg.c. ưa-ar-šu-la-aš (KBo 3.5 iv 32, KUB 7.23, 11 (fr.), KUB 12.65, 21 (fr), KUB 15.34 ii 32, KUB 24.1 i 10 // KUB 17.10 ii 7 , KUB 36.44 iv 4, KUB 36.95 iii 6 , FHG $2+$ KUB $33.45+53$, 25, VBoT 58 i 11, ), acc.sg. ưa-ar-šu-la-an (KUB 24.14 i 22, KUB 33.52 iii 7, 2073/g, 3), dat-loc.sg. ua-ar-šu-li (KBo 4.13 vi 6, KUB 25.32 + KUB 27.70 iii 28, KUB 25.37 + KUB 35.131 i 42, ii 12, KUB 27.12, 5, IBoT 1.1 iii 3, 6, 13, etc.), ua-ar-šu-ú-li (KUB 20.99 iii 21), una-ar-šu-li $i_{x}$ (KUB 17.35 i 33, iv 32), nom.-acc.pl.n. úa-ar-šu-la (KBo $3.2 \mathrm{ii}^{!} 11$ ).

The exact interpretation of this word is debated. It often occurs in the syntagm uaršuli eku- ${ }^{z i}$ :

## IBoT 1.1 iv

```
(9) \(3 B E-L U^{\mathrm{HI} \mathrm{A}}=\) ši me-na-ah-ha-an[-da]
(10) ua u-ar-šu-li
(11) \(a-k u-u a-a n-z i\)
(12) [LU]GAL-uš GUB-aš \({ }^{\mathrm{d}} \mathrm{U}-a n\)
(13) \({ }^{\text {HUR.SAG }} P i s ̌-k u-r u-n u-u a-a n\)
(14) \(u[a]-a r-s ̌ u-l i \quad 1=\check{S} U\)
(15) e-ku-zi
```

'The three lords opposite him drink uaršuli. While standing, the king drinks uaršuli the Storm-god and the mountain Piškurunuuaa once';

KUB 20.99 iii
(18) LUGAL-uš=za=kán ŠU $\mathrm{U}^{\mathrm{HIIA}}=\check{S} U a$-ar-ri $n=a$ - $a \check{s} \check{s} a-r a-a$
(19) ti-i-e-ez-zi $n=a-a s ̌ ~ P A-N I{ }^{\mathrm{NA}_{4}} \mathrm{ZI} . \mathrm{KIN}{ }^{\mathrm{d}} \mathrm{IM}$
(20) pa-iz-zi nu ${ }^{\mathrm{d}} \mathrm{U}^{\mathrm{URU}} \check{S ̌ a-a-r i-i s ̌-s ̌ a ~}$
(21) una-ar-šu-ú-li $1=\check{S} U$ e-ku-zi
'The king washes his hands and steps upwards and goes to the huuaši-stone of the Storm-god. He drinks uaršuli the Storm-god of Šārišša once'.

A few times, uaršula- occurs together with ${ }^{\text {GIŠ5 }}$ ERIN 'cedar wood':
KUB 24.1 i
(11) ki-nu-na-a=t-ta ša-ne-ez-zi-iš úa-ar-šu-la-aš
(12) ${ }^{\text {GIŠ̌ }}$ ERIN- $a n-z a$ Ì- $a n-z a$ kal-li-iš-du $n=a-a \check{s}-t a$ EGIR-pa
(13) ${ }^{\text {É }} k a-r i-i m-n i ~ a n-d a ~ e-h u ~$
'May the sweet $u$. (from/and) cedar wood and oil call you now, come back into the temple!';

KUB 15.34 ii

${ }^{\text {LÚ }} \mathrm{AZU}-a s ̌$ mé-mị-ia $a-a ̣ s ̌$
(33) DINGIR ${ }^{\text {MEŠS }}$-aš kal-li-iš-tar-u $[a-n i] e-e s ̌-d u$
'Let there be on the party for the gods $\underline{u}$. of cedar wood, the st[riking] of the Ištar-instrument and the reciting of the priest'.

In HW (274), Friedrich translates this word as "Besänftigung, Beruhigung" and "Erfrischung" but adjusts this to "Tropfen; Saft; Duft" in HW Erg. 3: 36 (on the basis of Laroche 1963: 61), stating that, when used with $e k u^{z i}$ 'to drink', uaršuli means "(im Tropfen), tropfenweise". Güterbock (1986: 212) proposes to translate uaršula- as 'smell', and states that "uarsuli ekuzi should be translated "he drinks in the smell" and refers to "drinking the god" only by sniffing the aroma of the wine". This translation, 'smell, odor', is taken over in CHD (e.g. the third context cited here is translated in CHD Š: 176 as 'let the fragrant odor, (namely) the cedar and the oil summon you'). This works also fine for e.g.

KUB 24.14 i
(22) $\check{S} A$ UR. $\mathrm{GI}_{7}=m a-a=t$-ta una-ar-šu-la-an
(23) a-ua-an ar-ha pár-hu-un ŠA UR.GI $=m a$ šal-pa-aš UZU UR.GI ${ }_{7}$ (24) ${ }^{\text {UZU }}$ GÌR.PAD.DU UR. $\mathrm{GI}_{7}=$ in a ši-mi-ši-i-ia-nu-un
'I have driven away from you the odor of the dog; I have burned the dung(?) of the dog, the flesh of the dog, and the bones of the dog' (translation: CHD Š: 107);

KBo 3.5 iv
(31) $m a-a h-h a-a n=m=a-a s ̌$ ar-ha la-a-an<-zi> $n=a-a s ̌ I-N A$ É ${ }^{\text {LÚ }} \mathrm{KUS}_{7}$
(32) an-da pé-e-hu-da-an-zi ma-ah-ha-an=m=a-aš=kán ua-ar-šu-la-aš
(33) pa-ra-a pa-iz-zi $n=a-a s ̌ 5=\check{S} U$ ar-ru-ua-an-zi nam-m=a-aš
(34) kat-kat-ti-nu-an-zi
'When they unharness them (the horses), they bring them into the stable. When they begin to smell (lit. When smell goes forth from them), they wash them five times and then make them shrug' (translation: CHD P: 33);

KBo 3.2 rev.
(10) $m a-a h-h a-a n=m=a-a s ̌$ ar-ha la-a-an-zi $n u-u=\check{s}-m a-a \check{s}$

$$
{ }^{\mathrm{KUŠ}_{\mathrm{KIR}}^{4}} \mathbf{} \cdot \mathrm{TAB} \cdot \mathrm{ANŠE}=\check{S} U-N U \text { pa-ra-a } \dot{U}-U L
$$

(11) da-an-zi n=a-aš kat-ta aš-nu-an-zi ua-ar-šu-la=ia-a=š-ma-aš kat-ta pé-e-da-i
'When they unharness them they do not take off of them their halter. They rub them down (lit. treat them), and it carries their odors down' (cf. CHD P: 352).

In the following context (cf. Siegelová 1971: 58), a translation 'smell, odor' is not fully correct: KUB 33.84+ iv (8) [(nu GIM-an MUŠ Hé-dam-mu-ụš) ua-ar-š]u-la-an KAŠ iš-tah-ta 'When Hedammu tasted the $u$. of the brewage'. Here we seem to be dealing with 'taste'. Another translation is also necessary in KUB 36.44 iv (4) пи ưa-ar-šu-la-aš=te-eš a[m]-me-el kat-ta u-ua-ru 'Let your (i.e. ${ }^{\text {d}}$ UTU) $u$. be seen by me'. Here it is clear that we are dealing with something visible. All in all, uaršula- seems to denote the immaterial appearance of a certain object in smell, taste or "materialization". We could think of a basic meaning 'fume, haze, vapour'.

Within Hittite, we probably have to assume that uaršula- is cognate with uarša'fog, mist'. See there for etymological treatment. See also at uaršiie/a- ${ }^{2 i}$ 'to produce uaršula-'.
uart- 'to plaid together': 3pl.pres.act. ua-ar-ta-an-zi (KBo 3.2 rev.' 7).
PIE *uert- 'to turn'
This verb occurs only once, in the Kikkuli-text:
KBo 3.2 rev.

(7) $n u-u=s ̌-m a-a s ̌ \mathrm{KUN}^{\mathrm{HI} . \mathrm{A}}=\check{S} U$ an-da ua-ar-tạ-an-zi $n=a-a s ̌ ~ t u-u-r i-i, ~ a-a n-z i$
(8) $n=a-a \check{s} 1 ⁄ 2$ DANNA pé-en-na-i
'When they lead them (the horses) up out of the river, they anda $\underset{\sim}{u}$. their tails for them and harness them. One drives them half a mile'.

It should be noticed that the third sign of the word ua-ar-tap-an-zi is slightly
 principle a reading ŠA is possible as well. Nevertheless, the place of the first vertical wedge shows that we are dealing with TA, as it should have been more to the right if the sign were ŠA.

Kammenhuber (1961a: 137) translates the sentence as 'dreht man ihnen ihre Schwänze ein', which indeed seems to be a meaningful translation.
Etymologically, a connection with PIE *uert- 'to turn' (thus Kammenhuber o.c. $136^{49}$ ) seems appealing. Problematic, however, could be the fact that all other IE languages seem to show that *uert- means 'to turn (oneself)' and is not used as a transitive verb. Yet in Hittite, the use of the preverb anda could be crucial in this regard. Kammenhuber assumes that uart- is a borrowing from Indic (just as -uartanna (q.v.), which is only found in the Kikkuli-text as well), but this cannot be decided on formal grounds: a preform *urtenti 'they turn' would by regular sound law give Hitt. uartanzi (vocalization of *ur- to uar- in analogy to the singular, where we would expect *uertmi to give **uartmi).
-uartanna 'for ... rounds'
This word only occurs in the Kikkuli text, as the second member of compounds aikauartanna 'for one round', tierauartanna 'for three rounds', panzauartanna 'for five rounds', šattauartanna 'for seven rounds' and nāuartanna 'for nine
rounds' (probably haplology for *nauauartanna). All these words are borrowed from Indic. The element -uartanna corresponds to Skt. vartaní- 'road, course'.
${ }^{\text {(GIŠ) }}$ uarduli- (c.) a kind of plant?: nom.sg. una-ar-du-li-iš, acc.sg. una-ar-du-li-in, gen.sg.? ua-ar-du-la-aš, acc.pl.? ua-ar-du-li-e-eš.

The word occurs a few times only:
KUB 7.13 obv. (with additions from dupl. KUB 46.56 obv. ${ }^{?} 4-7$ )
(18) ... EGIR- $a[n=m a=u(a-r=a-) a n]$
(19) hu-im-ma-aš tar-na-a-ú kat-ta-an=ma=ua-r=a-an ta-ga-an[-zi-(pa-aš)]
(20) GIŠ.ÙR? ${ }^{\text {tar-na- } a-u ́ u}$ GUNNI- $a \check{s}=u a-r=a$-an ua-ar-du-li-iš[-šs=a']
(21) tar-na-a-úu GIŠ $a-r a-s ̌ a-a s ̌=u a-r=a-a n{ }^{\text {GIŠ }} k a t-t a-l u-u z\langle-z i\rangle=i a t[a r-n a-a-u \bar{u}]$
'Then, may the huimma- release [him]. May the flo[or] below (and) the roofbeam? release him. May the hearth [and] the $u$. release him. May the door and the lintel re[lease] him';

KUB 24.9+ iii (see Jakob-Rost 1972: 45-6 for transliteration)
(27) $[($ ma-an z)]i-in-ni-iz-zi $n u$-u=š-ša-an «^nu»» ua-a-tar
(28) $\left[\left(I-N A 5\right.\right.$ GAL GIR $\left.\left._{4}\right)\right] l a-a-h u-u a-i n=e=t a$ ŠÀ.BA $A$-NA GAL G[( $\left.\left.\mathrm{IR}_{4}\right)\right]$
(29) $[(t a-r i-i a-a t)-t a-(a-r)] i-\frac{i}{C} a-a n 1$ GAL GIR $4{ }_{4} u a-a r-d u-l i-[(e-e s ̌)]$
(30) $\left[\left(1\right.\right.$ GAL G)]IR ${ }_{4}$ GEŠTIN ma-ah-la-aš ḩu-el-pí-iš 1 GAL GIR 4 [(aš-ha-i-ú-ul)]
(31) [1 GAL GIR 4 (ir-ha-a-i)]t nu ku-it-t=a ar-ha-ía šar-ra-[(i)]
'When she is finished, she pours water in 5 clay cups. And of these, in one cup (she puts) tariiattariia-, in one cup uarduli-'s, in one cup the young branch of a vine, in one cup ašhaiul (and) in one cup irhāit. And each one she divides separately';
ibid.
(41) [E]GIR-an-da=ma ua-ar-du-li-in la-hu-u-u[a-a-i]
(42) [nu t]e-ez-zi ku-u-un UN-an DINGIR ${ }^{\text {MEŠ }}$ ua-ar-du-la-a[s]
(43) $\qquad$ -a]r a-aš-šu-an-ni an-da ḩu-u-la-li-[ía-at-tén]
'Then she pours the uarduli- and says: "O gods, you must surround this man [.....] of ${ }^{\text {? }}$ _arduli- (and) in well-being!"";

ChS I/5, Nr. 7 i

$$
\begin{equation*}
\left.t e-p u{ }^{\text {Giš }}\left(a n-t a r-u i_{5}-l a-a\right)\right] \check{s} \text { NUMUN-an te-pu } \tag{2}
\end{equation*}
$$

 te-pu
'[ein wenig]; Samen der antarwila-Pflanze, ein wenig; ūnt-(Pflanzen)? des Gar[tens ?], warduli-Gewächs (des) Gebirge(s); Gold, (ein Stuck) rotes Fell, (von allem) ein wenig' (translation Haas \& Wegner 1988a: 76).

It is difficult to establish what uarduli- denotes exactly. In KUB $24.9+$ it seems to denote some kind of liquid that can be poured. In KUB 7.13, however, it appears in the pair GUNNI-aš uarduliš $[\check{s}=a]$ 'hearth and $\underset{\sim}{u}$.', which in one way or another must be similar to taganzipaš GIŠ.ÙR 'floor and roof-beam' and GIŠ arašaš ${ }^{\text {GIIš } k a t t a l u z(z i)=i a ~ ' d o o r ~ a n d ~ l i n t e l ' . ~ M o r e o v e r, ~ i n ~ t h e ~ A l l a i t u r a h h i-r i t u a l ~}$ (ChS I/5, Nr. 7 i 3) it appears with the determinative GIŠ. It therefore is likely that uarduli- denotes some kind of plant, the juice of which could be used in magical practices. The connection with 'hearth', however, remains unclear. No etymology.
\& uar(ru)ualan- (n.) ‘seed, progeny’ (Sum. NUMUN): nom.-acc.sg. NUMUNan, gen.sg. « úa-ar-ru-ua-la-na-aš (KUB 21. 37,13), dat.-loc.sg. « ua-ar-úu-la-ni (KBo 4.10 ii 24), ua-ar-ua-la-ni (Bronzetafel iii 2, 6, 16, iv 24), nom.-acc.pl. NUMUN ${ }^{\text {HI.A }}-n a$ (KUB 35.54 ii 31, KBo 29.2 ii 9), Luw.erg.sg. < ua-ar-ua-la-na-an-te-eš (KBo 4.10 ii 25).

The manyfold usage of gloss wedges as well as the occurrence of a Luwian inflected erg.sg. uarualanteš (note the $i$-Motion!) in

KUB 4.10 ii
(24) da-me-da-ni-i=a-at \& u_ar-ura-la-ni le-e pí-ía-an-zi
(25) ŠA $^{\mathrm{m}} U l-m i-{ }^{\mathrm{d}} \mathrm{U}-u p=$ pát (or -up-p=át ?) \& ua-ar-ua-la-na-an-te-eš har-du
‘They shall not give it to another progeny, the progeny of (only?) Ulmiteššub must have (it?)',
indicates that we are dealing with an origial Luwian word. Starke (1990: 480f.) argues that this word has to be read as uaruatn- (reading the sign LA (其) as AT (覑) ), but Melchert (1993b: 261-2) speaks against this because of a possible connection with ${ }^{\mathrm{d}}$ Uarualiia-. Moreover, Starke assumes that the paradigm originally was uaruattar, uaruatn-, but this would not fit the neuter $n$-stem endings that are used with the sumerogram NUMUN (e.g. nom.-acc.pl.

NUMUN ${ }^{\text {HI.A }}-n a$ ). I therefore follow Melchert and interpret this word as a neuter n-stem uarualan-. No etymology, however.
 una-a-ši (KBo 6.2 ii 45, 46, 49 (OS), KUB 29.29, 11 (OS), KUB 13.8 obv. 16 (MH/NS), VSNF 12.57 i 9 (NS), VSNF 12.127 obv. 6), ua-ši-i_ia-zi (often, NH), 2pl.pres.act. ua-a-ši-i[a-at-te-]ni (KUB 13.4 ii 72 (OH/NS)) 1sg.pret.act. ua-ši-i्टाa-nu-un (KUB 31.78 iv 8 (NS)), u્રa-a-ši-ịa-nu-u[n] (KUB 7.6, 2 (NS)), 3sg.pret.act. úa-ši-(ǐa)-at (often), 2pl.imp.act. úa-a-aš-tén (KUB 23.72 rev. 36a (MH/MS)); inf.I u_ u-ši-i-ia-u-ua-an-zi (KUB 31.76 ii 3 (NS)).

IE cognates: Skt. vasná- 'price', Gr. $\tilde{\omega} v o \varsigma ~(n) ~ ' p r i c e ',. ~ L a t . ~ v e ̄ n u m ~ d a r e ~ ' t o ~ s e l l ', ~$ Arm. gin 'price' < *uesno-.

PIE *uós-ei / *us-énti
For the semantics of this verb, compare e.g.

KBo 6.26 ii
(27) ták-ku ${ }^{\text {LÚ MUŠEN.DÙ-a[n } a] n-n a-n u-u a-a n-t a-a n ~ k u-i s ̌-k i ~ u a-a-s ̌ i ~}$
(28) 25 GÍN KÙ.BA[BBAR] pa-a-i ták-ku LÚ-an na-aš-ma MUNUS-an
(29) dam-pu-u-pí-in ku-iš-ki una-a-ši 20 GÍN KÙ.BABBAR pa-a-i
'If someone buys a trained augur, he will pay 25 silver shekels. If someone buys an inferior man or woman, he will pay 20 silver shekels'.

The oldest forms of this verb, 3sg.pres.act. ūāši (OS) and 2pl.imp.act. uaāšten (MH/MS), clearly shows that we are dealing with a stem u$u \bar{a} s$ - that is hiconjugated. Unfortunately, no weak stem forms are attested on the basis of which the ablaut of this verb can be determined. See at ušniiela- ${ }^{z i}$ 'to put up for sale', however, for an inner-Hittite cognate that reflects zero-grade. In NS texts, we find a secondary stem $u \bar{a}$ ǎiie $/ a-^{z i}$, which is formed on the basis of 3sg.pres.act. uazši.
Already since Götze (1928: $99^{2}$ ) this verb is generally connected with Skt. vasná- 'price', Gr. ${ }^{2} v 0 \varsigma$ (n.) 'price', Lat. vēnus 'sale', etc. that all go back to a root *ues- 'to buy'. This means that Hitt. ūāši must go back to *uós-ei.
unašs- ${ }^{z i}:$ see uešš- ${ }^{1 t a}$; unaššse/a- ${ }^{z i}$
uašanna- 'track'
The word is found in the Kikkuli-text only:

KBo 3.2 rev.
(22) ma-ah-ha-an=m=a-aš ar-ha la-a-an-zi n=a-aš $a$-a-an-te-et ú-e-te-ni-it
(23) ar-ra-an-zi nam-m=a-aš ÍD-i kat-ta pé-e-hu-da-an-zi $n=a-a s ̌ ~ 3=S ̌ U ~$
(24) kat-kat-ti-nu-an-zi nam-m=a-aš tu-u-ri-ia-an-zi n=a-aš na-ua-ar-ta-an-ni


(27) $9^{!?}=\check{S} U u a-a h-n u-z i$
'When they unharness them, they wash them with warm water. Then they bring them to the river and make them immerse three times. Then they harness them and let them galop nine rounds of the track for one mile and 80 IKU. The height of the track is six IKU, its width is four IKU. He makes (them) turn nine times around the track';

KUB 1.11 + KUB 29.57 iv
(20) nam-m=a-aš kat-kat-ti-nu-an-zi $n=a$-aš ar-ra-an-du-uš

(22) pár-ha-an-du-uš! pa-a-an-zi úa-ša-an-na
(23) $n=a$-aš! pár-ku-ưa-tar=še-et 5 IKU DAGAL=ZU=ma 3 IKU $1 / 2 \mathrm{IKU}=i a$
(24) $a-r a-a h-z a-a n-d a=m=a-a s^{\prime} I S \check{S ̌}-T U$ GIŠ ${ }^{\text {HI.A }}$ una-ah-nu-ma-a[n]
(25) ANŠE.KUR.RA ${ }^{\text {MEŠ! }}=$ ma $a-r a-a h-z a a^{\prime}-a n-d a 6=S ̌ U u a-a h-n u-a n-z[i]$
'Then they make them immerse and harness them after being washed. They go galloping for one mile and twenty IKU, on the track. Its height is five IKU, its width is three IKU and a half. It is surrounded with trees. They make the horses surround it six times'.

The word probably denotes 'track' or something similar. Because of its use with nauartanna, which is an Indic word, it is likely that uašanna-, too, is of Indic origin. Kammenhuber (1961a: 138-9) even suggests that the form ua-ša-an-na$\check{s} a-i{ }^{i} a$ is to be interpreted as a spelling of an Indic gen.sg. *vasannasya 'of vasanna-'. Unfortunately, I do not know of an Indic word *vasan(n) a- that would fit this meaning.
uaššapa-: see uašpa-
uašše/a- ${ }^{z i}$ : see uešš- ${ }^{1 t a}$; unašše/a- ${ }^{z i}$
uašhar (n.) 'onion(?)' (Sum. SUM $\left.{ }^{\mathrm{SAR}}(?)\right)$ : nom.-acc.sg. ưa-aš-har (KUB 60.57, 7).

PIE * $u_{0 s h_{2}-r / n-? ~}^{\text {? }}$
This word is hapax in the following context:
KUB 60.57
(6) [ ]x SISKUR aš-ša-nu-ua-an-zi nu x[ ]
(7) $[\quad k]$ u-e im-ma ku-e una-aš-har $\mathrm{x}[$ ]
ku-i]t-ma-an=kán $\operatorname{DINGIR}{ }^{L A M} I-N A[$ ]
'[ ... ] they take care of the ritual. [ ... ] whatever uašhar [ ... W]hen the deity in [ ... ]'.

Although on the basis of this fragmentary context a meaning for uašhar cannot be determined, it is likely that this word must be equated with uašhar as found in the compound šuppiúašhar ${ }^{\text {SAR }}$ 'onion(?)' (lit. 'pure ưašhar') (q.v.). This could mean that just as šuppiunašhar corresponds to the sumerogram SUM.SIKIL ${ }^{\text {SAR }}$, uašhar possibly corresponds to $\mathrm{SUM}^{\mathrm{SAR}}$.
The fact that šuppiúašhar shows a derivative šuppiúašhanalli- could indicate that uašhar, if it is correctly connected with šuppiunašhar, is $r / n$-inflected.
Mechanically, uašhar seems to reflect *uosh $2_{2}-r / n-$, but I do not know of any cognates. Further unknown.
uašši- (n.) '(ingredients of) medicine': nom.-acc.sg. una-aš-ši, nom.-acc.pl. una-aš$\grave{s} l^{\text {HILA }}$.

This word denotes 'medicine', or 'ingredients of medicine':
KBo 5.2 iv
(20) $n u 1$ kap-pí-in ŠE da-a-i ${ }^{\mathrm{NA}_{4}} \mathrm{ZA}$.GÌN ${ }^{\mathrm{NA}_{4}} \mathrm{GUG}^{\mathrm{NA}_{4}}$ AŠ. $\mathrm{NU}_{11}$.GAL
(21) te-pu da-a-i ḩu-u-uš-ti-in GIŠERIN ${ }^{\text {GIŠŠINIG te-pu }}$
(22) da-a-i $n=a$-at=ša-an $A-N A{ }^{\text {DUG }} k u-u s ̌$ šku-uš-šu-ul-li
(23) kat-ta ku-uš-ku-uš-zi ar-ha=m=a-at ši-hi-il-li-i_ $a-a \check{s}$
(24) ú-i-te-ni-it tar-na-i $n=a-a s ̌-t a$ EN SÍSKUR ${ }^{\mathrm{d}}$ UTU-ía
(25) me-na-ah-ha-an-da ti-i-e-ez-zi nu ke-e una-aš-ši
(26) ta-an-ga-ra-an-za e-ku-zi
'He takes one bowl of barley, he takes a little lapis-lazuli, carneol and alabaster and he takes a little hūšti-, cedar and tamarisk and pounds them in a mortar. He
dissolves it in purified water. The patient steps in front of the Sun-god and drinks this medicine on an empty stomach';

KBo 5.2 iv
(37)

$$
\text { ... nu=kán }{ }^{\text {LÚ }} \mathrm{AZU} \text { a-pé-e-ez še-er ar-ha }
$$

(38) la-a-hu-i nu ${ }^{\text {DUG }} \mathrm{GAL}^{(G I R} 44$ šu-un-na-i $n=a$-aš-ta $A$-NA DUG-za
(39) ši-he-el-li-i̇a-aš u_a-a-tar ku-it an-da nu=za a-pé-e-ez a-ar-ri
(40) ${ }^{\text {DUG }}$ GAL $=m a k u-i s ̌ s ̌ u-u-u a-a n-z a \quad n=a-a t^{\prime} A-N A \underbrace{}_{1} a-a s ̌-s ̌ l^{\text {HI.A }} d a-a-i$
(41) nu ua-aš-ši il. $k u-u s ̌-k u-u s ̌-s ̌ a-a n-z i ~ n=a-a \check{s}=k a ́ n ~ A-N A ~{ }^{\mathrm{d}} \mathrm{EN} . Z \mathrm{Z}$
(42) me-na-ah-ha-an-da ti-i-e-ez-zi $n=a$-at a-da-an-za e-ku-zi
'The magician pours out of it and fills the clay cup. He washes himself with the purified water that is in the vessel. He places the cup that was filled near the ingredients. They pound the ingredients and he steps opposite the Moongod. While eating, he drinks it';

KUB 6.36 ii
(6) $[m a-a-a] n=z a=k a ́ n ~ a n-t u-u h-s ̌ a-a n ~ a-u ́-l i-i s ̌ ~ e-e p-z i$
(7) $[m a-a-a] n$ an-tu-uh-ša-an $\mathrm{IGI}^{\mathrm{HIA}}-u[a]$ iš-tar[-ak-zi]
(8) $[\quad] x$ ki-i una-aš-ši da-a-i
'When auli- seizes a man, when the eyes of a man ail, [ ... ] he will take this medicine'.

No clear etymology.


uašku(i)- (c.) ‘offense, sin’: acc.sg. una-aš-ku-in (KBo 24.122, 25 (NS), KUB 15.1 iii 45 (NH), KUB 18.63 i 21 (NS)), una-aš-ku-un (KUB 18.63 iv 20 (NS)), gen.sg. una-[aš]-ku-i-i-ia-aš (KUB 15.6 i 16 (NS)), dat.-log.sg. ưa-aš-ku-i (IBoT 2.129 obv. 26 (NS)), nom.pl.c. ua-aš-ku-i-e-eš (KUB 5.6 i 7 (NS), KUB 18.18, 3 (NS)), acc.pl.c. ua-aš-ku-uš (KUB 5.9 obv. 29 (NS)), dat.-loc.pl. ua-aš-ku-ua-aš (KBo 23.114 obv. 29, 29 (NS)), una-aš-ku-aš (KUB 16.48 rev. 6 (NS)).

Anat. cognates: CLuw. ưaškuit- (n.) 'offense’ (nom.-acc.sg. \& úa-ǎ̌-ku-u-i-š[a] (ABoT 56 iv 6 (NH/NS))), uašku(ua)llimma/i- (adj.) 'sinful' (nom.-acc.sg.n. una$a s ̌-k u-u$ ua-al-li-im-ma-an-za, abl.-instr. úa-aš-kuィ-ul>-li-im-ma-a-ti).

See Weitenberg 1984: 270 for attestations. This word occurs in NH and NS texts only. It shows $u$-stem forms (e.g. acc.sg. uaškun) as well as $i$-stem forms (e.g. acc.sg. uaškuin), but it cannot be determined which inflection is more original. The one attestation with gloss wedge, namely $\langle\underset{\sim}{u} a-a \check{s ̌-k u-u-i-s ̌[a] ~(A B o T ~} 56$ iv 6) is interpreted by Starke (1990: 180) as a Luwian nom.-acc.sg.-form uaškui=ša of a Luwian neuter stem uaškuit-. According to Starke, the forms that show a Hitt. stem úaškui- are based on an adaptation of this Luwian word. The Hittite forms that show a $u$-stem ưašku- are, according to Starke, borrowed from CLuw. *uašku(i)- (a commune word with $i$-Motion), the stem of which is still visible in CLuw. uašku(ua)llimma/i- (adj.) 'sinful'. The fact that Hitt. uašku(i)- is attested in NS texts only, supports these assumptions.
Eichner (1974: 71) suggests that CLuw. uaškuit- and *uašku(i)- are the regular outcomes of a stem *uastu- (showing a development *tur $>k \underset{\sim}{u}$ ), which he connects with Hitt. Hitt. uašta- / uašt- 'to sin' and its derivative uštul-, uaštul- 'sin'. Although a Luwian development $* t u>k u$ is hard to prove (cf. Melchert 1994a: 274), this suggestion may offer an attractive explanation of the semantic similarity between the Luwian and the Hittite words. Note that besides the extended stem *uast-u- CLuwian also possesses the unextended stem uašta-, which is cited under the lemma unšta- ${ }^{i}$ / uašt-. See there, too, for an etymological treatment.
${ }^{\text {(TÚG) }} \boldsymbol{u} a \mathbf{a ̌ p a -}$ (c.) 'clothing' (Sum. TÚG ${ }^{(?)}$ ): nom.sg. úa-aš-ša-pa-aš (KBo 35.109, 6, KUB 27.28 i 7), acc.sg. úa-aš-pa-an (KBo 17.93 obv. 11 (MS), KUB 31.69 obv.? 5, 6); broken úa-aš-ša-pa[-...] (KBo 8.114 obv. 8).

Anat. cognates: CLuw. u्रašpant- 'wearing shrouds(?)' (gen.adj.nom.pl.c. una-aš-pa-an-ta-aš-ši-in-zi).

PIE *uos- $b^{h} o-?$
This word occurs a few times only, e.g.
KUB 31.69 obv.?
(4) $\left[m a-a-a n{ }^{\mathrm{d}} I S \check{T} A\right] R^{\mathrm{URU}} L a-u a-z a-a n-t i-i a \operatorname{GAŠAN}=I A A-N A{ }^{\mathrm{d}} \mathrm{UTU}^{\check{\Sigma} I} I-N A$ K[UR $\left.{ }^{\text {URU }} A r-z a-u-u a\right]$


'When you, Ištar of Lauazantiiia, My Lady, rush forth to My Majesty in the land of Arzaua, you put on your $u$. like a man, and you put (it) on like a woman. And your $u$. on your body [....]';

KBo 8.114 obv.
(7) $n u{ }^{\mathrm{d}} \mathrm{LUGAL}=$ pát úa-aš-ša-an-z[i ....]
(8) $A$-NA ${ }^{\text {d }}$ LUGAL-ma una-aš-ša-pa[-... ]
'They clothe Šarruma. [...] to Šarruma a unaššapa-[ ... ]’.
On the basis of the contextual evidence, Goetze (1955: 50-1) suggested that uašpa- must be the word underlying the sumerogram TÚG 'clothes'.

As Goetze already noticed, the word seems to be derived from the verb uešš- ${ }^{1 t a}$, uašše/a- ${ }^{z i}$ 'to clothe'. Watkins (1969b) compares uašpa- to Lat. vespillo 'undertaker $<*$ dresser (of dead bodies)' (cf. the fact that CLuw. uašpant- is found in a negative (funereal) context) and reconstructs *uos-po-. The several Hitt. attestations u_ uaš-ša-pa- seem to point to phonological /uaSba-/ which then must reflect *uos-b ${ }^{(h)} o$-.
Goetze (l.c.) points to the fact that the plural form TÚG ${ }^{\text {HI.A }}$ appears with commune as well as neuter adjectives, which shows that uašpa-, although basically commune, could form a coll.pl. in $-a$ as well.
uašta- ${ }^{i}$ / uašt- (IIal $\gamma$ ) 'to sin, to offend': 2sg.pres.act. ua-aš-ta-at-ti (KUB 6.44 iv 32 (NH)), ua $a-a \check{s}-t a-s ̌ i(N H$, often), ua-aš-ta-a-ši (NH, 2x), 3sg.pres.act. [un]a-aš-ta-i (KBo 9.73 obv. 6 (OS)), ú-ua-aš-ta-i (KBo 3.28 ii 10 (OH/NS)), ua-aš-ta-i (KUB 13.8 obv. 12 (MH/NS)), ua-aš-da-a-i (KUB 23.68+ obv. 28 (MH/NS)), ua$a s ̌-t i(K U B 1.16+K U B 40.65$ iii $60(\mathrm{OH} / \mathrm{NS})$ ), 3pl.pres.act. una-aš-ta-an-zi (KBo 16.47 i 8 (MH/MS)), 1sg.pret.act. una-aš-ta-ah-ḩu-un (KUB 14.11 + 650/u iii 29 (NH)), ua-aš-da-ḩu-un (KUB 26.32 i 11 (NH/NS)), 2sg.pret.act. ua-aš-ta-at-ta (KUB 33.24 i 33 ( $\mathrm{OH} / \mathrm{NS}$ )), una-aš-ta-aš (NH), 2pl.pret.act. ua-aš-ta-at-te-en (KBo 16.27 i 23 (MH/MS)), 3pl.pret.act. una-aš-te-er (NH), úa-aš-ti-er (NH); verb.noun ua-aš-du-mar (KBo 4.14 ii 60, 64, 71); impf. una-aš-ta-aš-ke/a- (KUB 23.72 obv. 36 (MH/MS)), una-aš-te-eš-ke/a- (KUB $14.11+650 / \mathrm{u}$ iii 26 (NH)).

Derivatives: uaštanu- ${ }^{z i}$ (Ib2) 'to make into a sin, to regard as an offense' (3sg.pres.act. una-aš-ta-nu-uz-zi, 3pl.pres.act. una-aš-ta-nu-an-zi, 1sg.pret.act. ua-aš-ta-nu-nu-un; part. u_a-aš-ta-nu-ưa-an-t-), unaštahh ${ }^{-}$(IIb) 'to sin, to offend' (impf. ua-aš-ta-ah-he-eš-ke/a- (KUB 36.86 obv. 8 (NS))), uaštai- (c.) ‘sin, offense' (nom.sg. u्रa-aš-ta-i-iš (KBo 4.3+ i 33 (NH)), una-aš-ta-iš (KUB 21.19 iii

45 (NH), KUB 14.7 iv $2(\mathrm{NH})$ ), acc.sg. ua-aš-ta-in (KUB 23.99 obv. 5 (NH)), acc.pl. ưa-aš-ta-uš (KBo 3.34 ii 24 (OH/NS), KUB $7.41+$ KBo $10.45+$ Bo 2072 + KUB 12.56 i 56 (MH/NS))).

Anat. cognates: CLuw. unašta- (n.) 'sin’ (nom.-acc.sg. una-aš-ta-an-za, una-aš-ta$a z-z a)$.

In the oldest texts, this verb clearly inflects according to the tarna-class. Forms that are inflected according to the hatrae-class (uaštāši) and the -ie/a-class (uaštier) are found in NH texts only and are clearly secondary due to the high productivity of both the hatrae- and the -ie/a-class in this period. Within Hittite, the noun uštul-, uaštul- 'sin' clearly is a derivative, and shows that originally this verb must have had a weak stem ušt-. Because Hittite did not tolerate an innerparadigmatic alternance between $\# u V C$ and $\# u C$ (cf. Kloekhorst fthc.b), the original paradigm *uašta- ${ }^{i}$ / ušt- was altered to unašta- ${ }^{i}$ / uašt- with generalization of the full-grade stem.
Verbs that belong to the tarna-class can go back to three different structures: *CR-no- H -, $* \mathrm{Ce}-\mathrm{C}(\mathrm{R}) \mathrm{oH}$ - or $* \mathrm{CoRCh}_{2 / 3^{-}}$(see $\S 2.2 .2 .2$.d for these types). In the case of uašta- only the latter type is applicable, which indicates that uašta- ${ }^{i} /$ *ušt- $^{\text {un }}$ mechanically goes back to *uós $\operatorname{Th}_{2 / 3}$-ei $/ *_{u s T h_{2 / 3} \text {-énti. I know of no convincing }}$ IE cognates. Catsanicos (1991) unconvincingly argues that Hitt. ưašta- is cognate with Gr. ảátך 'error, sin' and reconstructs *h2umst- (followed by e.g. Melchert 1994a: 50). The latter word is more likely a verbal noun of Gr. áó $\omega$ 'to damage', however, which reflects $* h_{2} u e h_{2}$ - or $* h_{2} e u h_{2}$ - and may be connected with Lyc. qa'to destroy' (cf. Kloekhorst fthc.c).
See at ưašku(i)- for possible Luwian cognates.
-unašta(ri), -unaštat(i) (1pl.midd.-endings): 1pl.pres.midd.: ar-una-aš-ta (KUB 17.21 iv 5 (MH/MS), KBo 16.27 ii 3 (MH/MS)), u-ua-u-ua-aš-ta-ri (KBo 16.59 i 7 (NS)), e-šu-ưa-aš-ta (KUB 31.143 ii 36 (OS), KUB 12.66 iv 10 (OH/NS)), e-šu-aš-ta (KBo 16.25 i 71 (MH/MS)), e-šu-ưa-aš-ta-ti (KBo 3.7 iv 7 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 24.8 iv 6 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 33.106 ii 13, 14 (NS)), i-į $a-u$-ua-aš-ta[(-)...] (KBo 17.48 obv. 6 (MS)), pa-ah-šu-ua-aš-ta (KBo 16.27 iii 16 (MH/MS), KUB 19.25 i 13 (fr.) (NH)), [̌̌] a-li-ku-ua-aš-ta-ti (KBo 3.45, 9 (OH/NS)), za-ah-hi-ia-u-ua-aš$t a$ (KUB 31.44 ii 15 (MH/NS), 777/v, 3 (fr.) (NS)), za-ah-hi-i ia-u-u_a-aš-ta-ti (KBo 3.4 ii 13 (NH), KBo 12.27 iii 5 (NH), KUB 21.10, 9 (NH), KBo 14.6, 15 (NH)); 1pl.pret.midd.: ar-ûa-aš-ta-at (KBo 16.59 obv. 14 (NS), KUB 23.115, 13 (MH/NS), 500/u, 7 ("erg.") (MS)), e-eš-šu-ųa-aš-ta-ti (1490/u 14 (NS)), [šu-]up-pa-ri-ia-u-ua-aš-ta-ti (KUB 8.48 i 1 (NS)).

PIE *-uos-d $h_{2}(o)$
The present-ending is found in three different forms, -uašta, uaštati and -uaštari. It is clear that of these forms -uašta is the more original one (attested in OS and MS texts), whereas -uaštati and -uaštari are found in NS texts only (see also Yoshida 1987 for this distribution). Note that -uaštari is attested only once vs. 8 times -uaštati. In the preterite, we find -uaštat and -uaštati. Almost all of these are found in NS texts, except possibly for ar-ûa-aš-ta-at that Neu (1968: 5) cites in 500/u, 7 (MS, according to Košak 2005c: 162), but with the comment "(erg.)". Does this mean that the whole form is added, of only a part of it?
Etymologically, this ending should be compared with Skt. -mahe, -mahi, Gr.
 comparable to 1 pl.act. -uen(i), -uani (q.v.). This means that Hitt. -uašta reflects (virtual) *-uos- $d^{h} h_{2}$ or $*_{-u}$ uos- $d^{h} h_{2} O$ (with secondary -o in analogy to the other middle endings).
uaštul-: see uštul-
unattai- (c.) 'bird' (Sum. MUŠEN): nom.pl. ưa-at-ta-e-eš (KBo 4.2 ii 32 ( $\mathrm{OH} / \mathrm{NS}$ )).

This word occurs only once, in

KBo 4.2 ii
(31) ... nu ki-i[ $\check{s}-s ̌ a-a n ~ m e-m a-i]$
(32) ku-i-e-eš=ua ha-tu-ga-e-eš ua-at-ta-e-eš nu=ua=aš[=ša-an ... ]
'he speaks as follows: "Whatever terrible uattai-s (there are), them [...]"'.
Because of the occurrence of hatugi- MUŠEN ${ }^{\text {HI.A }}$ 'terrible birds' in
ibid. i
(16) nu=ua i-it-tén h $h[a-t] u$-ga-uš MUŠEN ${ }^{\mathrm{HIIA}} k i-i \check{s}$-ta-nu-ut-te-en
(17) nu=kán ke-e NUMUN $\left[{ }^{\mathrm{HI}}\right]^{\mathrm{A}}$ ma-ah-ha-an ki-iš-ta-ri
kal-la-a-ra=ia《<-ra-ia»»=kán
(18) $u d-d a-a$-ar h ha-tu-ga-ú-š=a MUŠEN ${ }^{\mathrm{HI} . \mathrm{A}}$ QA-TAM-MA ki-iš-ta-ru
'You must go and exterminate the terrible birds. Just as these seeds are exterminated, may likewise the inauspicious words and the terrible birds be exterminated',

Friedrich (1927: $190^{1}$ ) suggests that uattaēš may be the phonetical spelling of MUŠEN ${ }^{\text {HI.A. }}$. This suggestion is generally accepted.

Because of the diphthong-stem, it is likely that this word is inhereted. Nevertheless, I do not know of any cognates.
ūātar / uitēn- (n.) 'water' (Sum. A, Akk. M $\hat{U}, M \hat{E}$ ): nom.-acc.sg. una-a-tar (OS), ua-tar (OS), gen.sg. ú-ui $i_{5}-t e-n a-a \check{s}$ (MH/NS), dat.-loc.sg. ú-i-te-e-ni (MH/MS), ú-$e-t e-n i(\mathrm{MH} / \mathrm{NS})$, all.sg. ú-e-te-na (MH/NS), erg.sg. ú-e-ti-na-an-za(-) (MH/NS), instr. ú-i-ta-an-ta (OS), ú-i-da-an-da (OS), ú-e-da-an-da (MH/NS), ú-e-da-an-ta (undat.), ú-i-te-ni-it (MH/NS), nom.-acc.pl. ú-i-ta-a-ar (OS), ú-e-da-ar (OS), ú-e-da-a-ar (NH), dat.-loc.pl. ú-i-te-na-aš (MH/NS).

Derivatives: see also uida- 'wet'.
IE cognates: Skt. udán-, Gr. v̋ $\delta \omega \rho$, Umbr. utur, OCS voda, Goth. wato, ON vatn, OSax. watar, OHG wa33ar 'water'.

PIE *uód-r, ud-én-
The etymological tie-in of this word with the other IE words for 'water' (especially OSax. watar) was one of the keys to deciphering the Hittite language and has generally been accepted since then. The paradigm shows two stems, nom.-acc.sg. ūātar besides obl. uitēn-. Since Schindler (1975a: 4-5) these stems have been explained as reflecting a static paradigm *uód-r, *uéd-n-.
See now Kloekhorst (fthc.b), however, for my view that the PIE paradigm of 'water' was not static, but proterodynamic (*uód-r, *ud-én-) and that Hitt. uitēnmust be phonologically interpreted as /uidén-/, the phonetic outcome of *udén-, which form shows an analogical restored consonantal $* u$ - instead of expected vocalic *u- in analogy to nom.-acc. *uodr. The basis of this analogy is the fact that alternation between initial consonantal $u$ and vocalic $u$ was not tolerated in Hittite (cf. e.g. uekk $z^{-z i}$ and uttar, uttan-).
uattariie/a- ${ }^{\text {ta(ri) }}$ (IIIg) '?': 3sg.imp.med. una-at-ta-ri-et-ta-ru (KBo 12.96 i 15).
This verb occurs only once:

KBo 12.96 i
(14) $[m a-a-a] n ~ \check{S} A{ }^{\text {URU }}$ La-la-an-da me-ma-i nu la-la-at-ta-ru
(15) $\left[\right.$ ma-a-a]n $\check{S} A{ }^{\text {URU U Ua-at-tar-ua me-ma-i nu ua-at-ta-ri-et-ta-ru }}$
'If (someone) from the city Lalanda speaks, he must be $l$.-ed. If (someone) from Uattarua speaks, he must be $u$.-ed'.

From this context alone, a meaning cannot be determined. HW, Erg. 3: 36 glosses it with 'quellen(?)', but this meaning is based on the formal similarity with uattaru- 'source, well' only and has no merit. It is quite possible that we are dealing with a nonce-formation, created on the basis of the city name Uattarua.
${ }^{\text {NINDA }}$ uatarmašši- (c.) a kind of bread: acc.pl. ${ }^{\text {NINDA }}$ ua-tar-ma-aš-ši-uš (KUB 55.54 obv. 17).

The suffix -ašssi- could point to a Luwian origin. The exact meaning of this word is unclear, so no further etymology.
uātarnahh- ${ }^{i}$ (IIb) 'to order, to instruct': 1sg.pres.act. ua-tar-na-ah-hi ((KBo 11.1 obv. 20) ( NH ) ), ua-a-tar-na-ah-mi (KBo 18.76 rev. $8(\mathrm{NH})$ ), ua-tar-na-ah-mi (KBo 18.76 rev. $13(\mathrm{NH})$ ), 2sg.pres.act. una-tar-na-ah-ti (NH), 3sg.pres.act. ua-a-tar-na-ah-hi (KUB 2.2 iii 37 (OH/NS)), ua-a-tar-na-ah-zi (VSNF 12.114 obv. 7 (NS)), ua-tar-na-ah-zi (KUB 26.12 ii $26(\mathrm{NH})$ ), 3pl.pres.act. ua-tar-na-ah-ha-an$z i(\mathrm{MH} / \mathrm{MS}), 1$ sg.pret.act. una-a-tar-na-ah-hu-un, ua-tar-na-ah-hu-un, 2sg.pret.act. ua-tar-na-ah-ta (MH/MS), 3sg.pret.act. ua-tar-na-ah-hi-iš (KBo 3.38 obv. 23 ( $\mathrm{OH} / \mathrm{NS}$ )), ua-a-tar-na-ah-ta (KBo 14.1 rev. $87(\mathrm{NH})$ ), 1pl.pret.act. ua-tar-na-ah-hu-u-en, 2pl.pret.act. ua-tar-na-ah-tén (MH/MS), 3pl.pret.act. ua-a-tar-na-ah-heer, 2sg.imp.act. ua-a-tar-na-ah (MH/MS); part. ua-a-tar-na-ah-ha-an-t-, ua-tar-na-ah-ha-an-t-; verb.noun. gen.sg. ua-tar-na-ah-hu-u-ua-aš; inf.I ua-tar-na-ah-hu-u-ua-an-zi, impf. un-tar-na-ah-he-eš-ke/a-, ua-tar-na-ah-hi-iš-ke/a-.
Derivatives: uatarnahha- 'message, instruction' (abl. ua-tar-na-ah-ha-az (KBo 12.85 ++ i 27 (MH/NS))).

This verb shows forms both with $m i$ - and hi-conjugation endings. Nevertheless, it is likely that just as the other verbs in -ahh-, uatarnahh- was hi-conjugated originally. The etymology of this word is unclear. Often (e.g. Eichner 1980: 126, $146^{69}$ ), the verb is compared to uttar / uttan- 'word, speech', but it is difficult to reconcile the geminate spelling of uttar with the single spelling of uätarnahh-. Eichner states that uatarnahh- is derived from a part. *uadarnant-, which is syncopated from *uadarienant-, itself a derivative in -nant- of a verb *uadarié-, which is a denominative derivative of *uaddar-, the preform of uttar 'word'. This account is incorrect, for several reasons: (1) I know of no derivatives in -ie/a- that show a lenited stop vs. the fortited stop of the ground word; (2) I know of no
deverbal derivatives in -nant-; and (3) I know of no syncopes of -ie-. All in all, I see no possibility to etymologically connect uātarnahh- with uttar / uttan- 'word, speech', although I am not able to offer an alternative solution.
uat(ta)ru- ( n. ) 'well, source' (Sum. TÚL): nom.-acc.sg. ua-at-ta-ru (KUB 31.143a + VBoT 124 (StBoT 25: 188) iii 21 (OS), KUB 8.41 iii 14 (fr.) (OS)), ua-at-ru (KBo 40.34, 5 (MH/MS)), gen.sg. ua-at-ru-aš (KBo 8.41 ii 3 (OS)), ua-at-ta-ru-aš (KUB 31.143a + VBoT 124 ii 11 (OS), Bo 4767 (StBoT 25: 180), 4 (OS)), [una-at-]ta-ru-ua-aš (KBo 25.112 iii 8 (OS)), all.sg. una-at-tar-ua (KBo 3.7 iv $12(\mathrm{OH} / \mathrm{NS})$, KUB 17.6 iv $9(\mathrm{OH} / \mathrm{NS})$ ), dat.-loc.sg. ua-at-tar-ú-i (KBo 24.12 obv. 6 (NS)), TÚL-i (KUB 12.66 iv 15 (OH/NS)), nom.-acc.pl.(?) [una-at$t a] r^{?}-u a ?$ (KUB 19.37 iii 54).

PIE *uot(H)-ru-
Already in OS texts, where the word is attested multiple times, we find a spelling uattaru-besides uatru-, probably indicating phonological /uatru-/.
Etymologically, it is tempting to connect this word with uātar / uitēn- 'water' (thus e.g. Weitenberg 1984: 195), but this is impossible in view of the geminate spelling of -tt- in uattaru-, which points to an etymological $* t$, which contrasts with the etymological $* d$ in ua $\bar{a} t a r<* u o ́ d r$. One could argue that uattaru- reflects Luw. *uéd-ru- (with Čop's Law causing geminate -tt-), but because of the abundant attestestations in OS texts already, a foreign origin of this word is not likely. Moreover, *ued- would probably have yielded CLuw. **uid- (cf. Melchert 1994a: 262). So, although I know of no IE cognates, I would reconstruct this word mechanically as *uot $(H)$-ru-.
$\boldsymbol{u}^{\boldsymbol{u} a t k u-}{ }^{z i}$ (Ia4) 'to jump (out of), to flee': 3sg.pres.act. ua-at-ku-uz-zi (often), ua$a t-k u-z i$ (often), 3pl.pres.act. ua-at-ku-ua-an-zi, ua-at-ku-an-zi, 3sg.pret.act. ua-at-ku-ut-ta (KBo 25.122 ii 5 (OS), HKM 64 rev. 15 (MH/MS)), ua-at-ku-ut (Güterbock 1952: first tablet i 17, iii 18, third tablet i 5, iv 21), 3pl.pret.act. ua-at-ku-e-er (KBo 18.57 rev. 39), 2sg.imp.act. ua-at-ku (KBo 47.7 obv. 13 (MS)), 3pl.imp.act. ua-at[-ku-an-tu] (KBo 25.122 ii 6 (OS)); 3sg.pres.midd.(?) ua-at-ku-at-ta (KBo 13.137, 11), ua-at-ku-ut-ta (KUB 31.111, 5), ua-at-ku-it-ta (KUB 30.67, 6), 2sg.imp.midd. ua-at-kat-ah-hu-ut (KBo 5.3+ iii 50), ua-at-ga-ah-h[u$u t$ (KUB 19.24 rev. 31); part. ua-at-ku-ua-an-t-; verb.noun ua-at-ku-ua-ar (KUB 26.12 iv 40 , KUB 21.43 iv 8 ); impf. u्रa-at-ku-uš-ke/a- (StBoT 14.16 iv 15 (MH/NS)).

Derivatives: uatkunu- ${ }^{z i}$ (Ib2) 'to make jump, to make flee' (3sg.pres.act. ua-at-ku-nu-zi, 1sg.pret.act. u_a-at-ku-nu-nu-un, 3sg.pret.act. ua-at-ku-nu-ut, 3pl.pret.act. ua-at-ku-nu-e-er, ua-at-ku-nu-er).

$$
\text { PIE *uétkw }-t i
$$

This verb is attested quite often, a few times in OS texts already. It shows a stem uatku- throughout its forms. Only the 2sg.imp.midd.-forms uatkahhut, uatgahhut (duplicates of each other) are aberrant, but according to Neu (1968: 195), these forms are modelled after the form ušgahhut which precedes in the text. The 3sg.pres.midd. ua-at-ku-it-ta (or ua-at-ku-et-ta) is, according to Oettinger (1979a: $337^{161}$ ), a rebuilding in analogy to the -ue-class.
Oettinger (1979a: 237) convincingly suggests that uatku- has to be interpreted as /uatk ${ }^{\mathrm{W}}-/$, which is supported by 3 sg.pret.act. uatkutta (the ending -tta is used only when the stem ends in consonant whereas $-t$ is used when the stem ends in vowel, e.g. 3sg.pret.act. arnut: note that the spelling ua-at-ku-ut occurs in the Song of Ullikummi (Güterbock 1952) only).
Čop (1955c: 69, followed by e.g. Oettinger 1979a: 237) assumes that /uatk ${ }^{\mathrm{w}}$-/ reflects *uo- $t k^{w}$-, of which the latter part is the zero-grade of the root *tekw - 'to walk, to hurry' (Skt. tak- etc.). Melchert (1994a: 95) reconstructs *uélótk ${ }^{w}$-, apparently assuming that $*^{u} \operatorname{uetk}^{w}$-, too, would yield uatk ${ }^{w}$ - (similarly takš-zi 'to undertake, to unify' < *teks-). If so, then uatku-could reflect *ue-tkw -, of which the prefix *ue- possibly is identical to the prefix found in uete- ${ }^{z i} /$ uet- 'to build'. If uatku-does not reflect a univerbated verb, however, we have to reckon with a root *uetk ${ }^{w}$-, which is structurally comparable to e.g. *h2ed ${ }^{h} g^{h}$ - (see at hatk- ${ }^{i}$ ) or *tetk'- 'to create' (although the latter probably goes back to an old reduplication of *tek-' 'to procreate').

GIŠ uauarkima- (c.) object in which the door-ax is fixed and turns: nom.sg. ua-ua-ar-ki-ma-aš, acc.sg. ua-ua-ar-ki-ma-an, dat.-loc.sg. ua-ua-ar-ki-mi, abl. ua-ua-ar-ki-ma-za (KUB 32.120, 3); uninfl.? ua-ua-ar-ki-ma (KUB 17.10 iv 10).
IE cognates: Gr. عilp $\gamma \omega$, éź $\rho \gamma \omega$ 'to enclose, to encompass', Skt. vrjána'community, enclosure of a community'.

PIE *h $h_{l}$ uorǵ- ?
This word was determined as "Türangel" by Otten (1952: 235), a translation which still often can be found. Boysan-Dietrich (1987: 128f.) shows that the word means either 'Drehzapfen' or 'Drehpfanne', however, e.g. in

KBo 21.6 obv. (with dupl. KBo 25.193 obv.? 3f.)
(1) [EGIR-a]n-da=ma-a=z[ $\left.{ }^{\text {GIŠ }}\right] u$ ua-ua-ar-ki-ma-an ŠA IM [ ]da-a-i
(2) $[n=a$-an=]ši $=k a ́ n ~ A-N A ~ S A G . D U=S ̌ U ~ a n-d a ~ a p-p i ́-i s ̌-k e-e z-z i ~$
(3) $\left[{ }^{\mathrm{MUNUS}}\right]$ ŠU. $\mathrm{GI}=m a k i-i s ̌-s ̌ a-a n ~ h ̧ u-u k-k i-i s ̌-k e-e z-z i$
(4) [ ${ }^{\text {GIS }}$ ua-una-]ar-ki-ma-aš ta-me-tar-ua-an-za EGIR-an ke-e-da-ni tar-ru-u [ ... ]
(5) [ke-]e-da-ni tar-ru-u pa-ra-a-an iš-tap-pé-er EGIR-an da-ma-[ǎ̌-šer]
(6) $[m a-] a h-h a-a n=m a-a=s \check{s}-\check{s} a-a n{ }^{\text {GIS }}{ }^{\text {IG }}{ }^{\text {GIŠ }}{ }_{u} a-u a-a r-k i-m i ~ u ́-e-[e h-z i i-d a-a-l u-u s ̌]$
(7) [U]D-az ma-ni-in-ku-una-an-za MU-za $\operatorname{DINGIR}^{\mathrm{MES}_{-}}-a s ̌$ š $k a r-p i ́-i s ̌ ~ p a-a n-[g a-u-u a-a s ̌$ EME- $a \dot{s}]$
(8) KASKAL-az EGIR-pa ne-[ia-ru]
'She takes a $u$. of clay and holds it on his head. The Old Woman conjures as follows. "The powerful? $\underset{\sim}{u}$. [...-s] afterward $\operatorname{tarr} \bar{u}$ for this one. They have stopped the breath tarr $\bar{u}$ for this one. They oppressed back. Just as the door turns in the $u$., let the evil day (and) the short year (and) anger of the gods turn back from every road"'.

Boysan-Dietrich also adduces the following context, where uauarkima- is added, however:

KBo 12.112 rev.
(11) ... nu=ua- $a=\check{s}$-ša-an GIŠIG GIM-an

(13) [an-da-an QA-TAM-MA] ب̣́-e-ha-at-ta-ru
'Just as a door turns [in a u.], [likewise] the child must turn [inside] his mother'.

She also cites

KBo 24.71
(11) [... ša-]ra-a-az-zi úa-u ua-ar-ki-mi kat-te-r[i DINGI]R ${ }^{\text {MEŠ }}$ dan-ku-i

$$
d a-g a-a n-z[i-p i ́ . . .]
$$

which would indicate that there was an 'upper' $u$.
In my view, we have to interpret uauarkima- as that part of the threshold or door-post in which the door-ax is fixed and turns. Perhaps it denotes some kind of wooden bearing between the wooden ax and the stone threshold.

An enigmatic attestation is

KUB 17.10 iv
(8) pa-id-du ${ }^{\mathrm{d}}$ Te-li-pi-nu-ua-aš kar-pí-iš kar-di-mi-ia-az u_ ua-aš-du-ul
(9) ša-a-u-ar pár-na-an-z=a-at tar-na-úúiš-tar-ni-ía-š=a-at an-na-aš-na-an-za
(10) tar-na-ú ${ }^{\text {GIšl }}$ lu-ut-ta-an-z=a-at tar-na-ú ua-ua-ar-ki-ma iš-tar-ni-i_l-š=a-at (11) hi-la-aš tar-na-ú KÁ.GAL=at tar-na-ú ḩi-lam-na-an-z=a-at tar-na-ú
'It must go, the wrath, anger, desolation and rage of Telipinu. The house must let them go. The inner annǎ̌šar must let them go. The window must let them go. u.. The inner courtyard must let them go. The big gate must let them go. The gatehouse must let them go'.

It is remarkable that uauarkima, which apparently is uninflected, seems to fall outside the sentences here.
Etymologically, the word is often connected with the verb for 'to turn' that is reconstructed as *h2uerg- (Hitt. hurki- 'wheel', Skt. vāvrj-). The assumption is then that the $* h_{2}$ is lost in uauarkima- because of the o-grade: ${ }^{*} h_{2}$ uorg- $>{ }^{*}$ uorg$>$ uark-. This connection is not that likely on semantic grounds, however: the uauarkima- did not turn itself, but the door was turning in the uauarkima-.

In my view, other connections are possible as well, e.g. with Gr. $\varepsilon \in \varepsilon \rho \gamma \omega$, $\varepsilon$ l' $\rho \gamma \omega$ 'to enclose, to encompass' (*hiluerǵ-): the uauarkima- is, of course, the object in which the door-ax is fixed. Note that a development $* h_{1} u o->$ Hitt. ua- is supported by e.g. *hiluorso-> Hitt. unarša- 'fog, mist' (cf. § 1.4.5.a).
See Oettinger 2001 for the suffix -ima-.

ие- ${ }^{z i} /$ ииа- (Ic4) 'to come': 1 sg.pres.act. ú-ua-mi (OS), ú-ua-am-mi (2x), ú-ua-a-
 $u ́-e z-z i$ (OS, often), ú-ua-az-zi (rare), 1pl.pres.act. ú-ua-u-e-ni (OS), 2pl.pres.act. ú-ua-at-te-ni (MH/MS), ú-ua-at-te-e-ni, 3pl.pres.act. ú-en-zi (OS, later rare), ú-ua-an-zi (OS, later often), 1sg.pret.act. ú-ua-nu-un (MH/MS), ú-ua-a-nu-un (1x), 2sg.pret.act. ú-ua-ǎ̌, 3sg.pret.act. ú-e-et (OS), ú-et (OS), ú-i-it (KBo 25.123, 4), 1 pl.pret.act. ú-ua-u-en (OS), 2pl.pret.act. ú-ua-at-tén, ú-uа-tén, 3pl.pret.act. ú-eer (OS), 2sg.imp.act. e-hu (q.v.), 3sg.imp.act. ú-ed-du, ú-ua-du, 2pl.imp.act. ú-ua-at-te-en (OS), ú-ua-at-tén, ú-ưa-tén, ú-et-te-en (KBo 3.41, 22 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.imp.act. ú-ua-an-du; part. ú-uূa-an-t-; inf.I ú-ưa-u-an-zi (MH/MS); impf. ú-iš$k e / a-, u ́-i-i s ̌-k e / a-, u ́-e-i s ̌-k e / a-$.
Anat. cognates: CLuw. auni- 'to come' (2sg.pres.act. $a-u ́-i-s ̌ i, 3$ sg.pres.act. $a-u$ - $-i-$ $t i$, $a-u i_{-}-t i$, 1sg.pret.act. $a-u ́-i-h a, 3$ sg.pret.act. $a-u ́-i-t a, 3 p l . p r e t . a c t . ~ a-u ́-i-i n-t a, ~ a-$ ú-i-en-ta, a-ú-in-t[a], 2sg.imp.act.(?) $a-u i_{5}$, 3sg.imp.act. $a-u ́-i-d u$, $a-u i_{-}-d u, a-u ́-i-$
$d u=r$; part. $a$-ú-i-im-mi-iš, $a-u ́-i-\langle i m\rangle-m i-[i s ̌], a-u ́-i-i m-m a-a n)$; HLuw. áwi- 'to come’ (3sg.pres.act. /Rawidi/ á-wa/i-ti (KARKAMIŠ A5a §11, KÜRTÜL §3), á$w a / i+r a / i$ (PALANGA §11), 3sg.pret.act. /Rawida/ á-wa/i-tà-' (SULTANHAN §5), 3sg.(?)pret. "PES" $\dot{a}-w a / i-t a ̀$, 3pl.imp.act. /Rawintu/ á-wa/i-i-tu (KULULU 1 §13)).

PIE *h $h_{2} \mathrm{Ou}+$ * $_{1}$ éi-ti $/ * h_{l} i$-énti
All forms of this verb are spelled with initial Ú-. Beckman (1983: 34) cites a form $u$ - $u a-a[t-t e-]$ in (KBo $17.62+63$ iv 7 ) that he translates as 'come!', but the photograph of this tablet (available through Hetkonk) clearly does not support
 gap between $-a[t-.$.$] and [. .-]$ in is far too large to support this reading. Perhaps we are dealing here with a middle form of $a u-^{i} / u$ - 'to see' (q.v.), which occasionally is spelled with initial U-. Note that the imperfective of $u e_{-}^{z i} / u u a-$, which is spelled with initial $\dot{u}-(\dot{u}-i \check{s}-k e / a-, \dot{u}-i-i \check{s}-k e / a-, \dot{u}-e-i \check{s}-k e / a$ - $)$ is clearly kept distinct from the imperfective of $u e_{-} e^{z i} / u i-$ 'to send', which is spelled with initial $u$ - (u-i$e s ̌-k e / a$-, $\quad u$-i-iš-ke/a-, u-iš-ke/a-, u-e-eš-ke/a-, u-i-e-eš-ke/a-). The former represents phonological /Zuiské/á-/, whereas the latter represents /Roiiské/á-/ > /Roiské/á-/ and, with analogical introduction of the strong stem, /Roieske/a-/. Some of the forms of the paradigm of ue- ${ }^{z i}$ / uua- are identical to forms of the paradigm $a u^{-}{ }^{i} / u$ - 'to see' (q.v.). The hapax $u$ u-i-it (KBo 25.123, 4) with -i-instead of normal uet is found in a text that contains the equally aberrant ha-an-ti-iz-zi-an instead of normal hantezzian (cf. Melchert 1984a: 93).
Synchronically, ue- / uua-inflects according to class Ic4, verbs in -uue/a- (note that the occasional spellings $u$-ua- $a-m i$ and $u$-ua- $a-s ̌ i$ may have to be regarded as inflecting according to the hatrae-class). Usually, these verbs are denominatives in *-ie/o- that are derived from $u$-stem nouns. It is clear that this is not the origin of ue- / uua-, however. From a semantic point of view, it is obvious that ue- / uua- is the $u$-counterpart of paii- ${ }^{z i} /$ pai- 'to go' (q.v.). Just as this latter verb is a compound of the preverb pe- (*hpoi-) and the root $* h_{l} e i-$, ue $e^{z i} /$ uua- must originally have been a univerbation of the preverb $u$ - $\left(* h_{2} o u\right.$ - $)$ and the root $* h_{1} e i$-. Exactly when this univerbation was created is not fully clear. Apparently, it happened at the time that $* h_{2} o u$ had already monophthongized to $/ \mathrm{Ru} /$. Moreover, because in huianzi 'they run' $<* h_{2} u h_{1} i e ́ n t i$ the cluster $* h_{1} i$ intervocalically yielded $\mathrm{OH}-i-$, we must assume that the initial laryngeal of *h iénti 'they go' had already been lost. So, in 3pl.pres.act. the univerbation took place between the elements $* / \mathrm{u} /$ and $* / i a ́ n t ~ i s i /$, which yielded pre-Hitt. */Ruiánt ${ }^{\mathrm{s}} \mathrm{i} /$, which regularly developed into $\mathrm{OH} /$ Ruánt ${ }^{\mathrm{s}} \mathrm{i}$ /, spelled $u ́-u a-a n-z i$. In 3 sg.pres.act. and 3 sg.pret.act.,
which were $* h_{l}$ éi-ti and $* h_{l}$ éi-t in PIE, we are dealing with the univerbation of the elements $* / R u /$ and $* /$ Reet $^{s} \mathrm{i}$ / and $* / R e ́ t /$, which formed pre-Hitt. */Ru?ét ${ }^{s} \mathrm{i} /$ and /Rupét/, which regularly yielded $\mathrm{OH} /$ /?uét ${ }^{\mathrm{s}} \mathrm{i}$, spelled $u ́$-e-ez-zi and /?uét/, spelled $\dot{u}$-e-et. On the basis of $/$ ?uét ${ }^{\mathrm{s}} \mathrm{i} /: /$ ?uánt ${ }^{\mathrm{s}} \mathrm{i} /$, the verb was reinterpreted as a thematic verb belonging to class Ic4, on the basis of which secondary forms like 1sg.pres.act. ú-ua-mi/Ruámi/ were created. Note that like in other thematic verbs, the thematic vowel -e-received some productivity in the OH period, on the basis of which the OS form $\dot{u}$-en-zi was created.
In Luwian, the univerbation between $* h_{2} \mathrm{Ou}$ and $* h_{l} e i$ - took place when the former element still contained a diphthong, so $* / \mathrm{Rau} /$. On the basis of the fact that in CLuwian we find a stem aui-, the HLuwian verb áwa/i-, which is spelled with the ambiguous sign $w a / i$, must be read áwi- as well.
ueh- ${ }^{z i}$ / uah- (Ia3; IIIa > IIIb, IIIh) 'to turn (oneself); to patrol': 1sg.pres.act. ú-e-eh-mi (KBo 12.103 i 16 (NS)), 3sg.pres.act. ú-e-eh-zi (OS, very often), ua-ah-zi (KUB 1.13 i 49 (MH/NS)), ua-ah-hu-zi (KBo 3.5 iii 4 (MH/NS)), 3pl.pres.act. una-ḩa-an-zi (OS, very often), ú-e-ḩa-an-zi (KBo 11.1 i 33 (NH), KUB 25.37 ii 22 (NS)), 1sg.pret.act. ú-e-hu-un (KUB 23.11 ii 13 (MH/NS)), 3sg.pret.act. ú-e-eh-ta (KUB 33.106 iii 46 (NS)), 3sg.imp.act. ú-e-ha-ad-du (KUB 12.17, 10 (NS)), 3pl.imp.act. ú-e-ḩa-an-du (KUB 7.1 ii 34 ( $\mathrm{OH} / \mathrm{NS}$ )); 1sg.pres.midd. ú-e-ha-ah$h[a]$ (KUB 36.75 iii 18 ( $\mathrm{OH} / \mathrm{MS}$ ) (cited by HW: 250 as uehahha[ri], but there is no indication for the sign RI), 3sg.pres.midd. ú-e-ha-at-ta (KBo 32.13 ii 12 (MH/MS), KUB 7.1 ii $33(\mathrm{OH} / \mathrm{NS})$, KUB $9.25+27.67$ iii $5,53,58$, iv 13 (MH/NS)), ú-e-ha-at-ta-ri (KUB 33.103 iii 6 (MH/NS), KUB 9.31+ i 12 (NS)), ú-e-eh-ta-ri (KUB 13.4 iii 20 (OH/NS), KBo 3.3+ ii $18(\mathrm{NH})$, KBo 4.12 rev. 11 (NH), KUB 19.41+ ii $22(\mathrm{NH})$, KUB 21.38 obv. $31(\mathrm{NH})$ ), 3pl.pres.midd. ú-e-h $a-$ an-ta (OS), ú-e-ha-an-ta-ri, ú-e-ha-an-da(-ri), 3sg.pret.midd. ú-e-ha-at-ta-at (KUB 4.1 i 14 (MH/NS)), ú-e-eh-ta-at (KUB 26.1 iii 18 (NH)), 3pl.pret.midd. ú-e-hha-an-da-at (KUB 32.68 ii 7 (NS)), 3sg.imp.midd. ú-e-ha-at-ta-ru (KBo 12.112 rev. 10, 13 (NS), KBo 4.6 obv. 15 (NH)), 3pl.imp.midd. ú-e-ha-an-da-ru; part.nom.sg.c. ua-ḩa-an-za (KUB $1.16+$ KUB 40.65 iii 62), nom.-acc.sg.n. ua-ha-a-an (KBo $15.10+$ KBo 20.42 ii 28); verb.noun ú-e-hu-ua-ar, gen. ú-e-hu-uaaš; inf.II ú-e-ha-an-na (KUB 4.1 i 40, KUB 24.2 i 9); impf. ú-e-he-eš-ke/a-, ú-e-hi-iš-ke/a-.

Derivatives: unahātar / uahann-, uehātar / uehann- (n.) 'turning' (gen.sg. ưa-ha- $a n-n[a-a \check{]}]$ (KBo 6.29 iii 23, HKM 26 obv. 8 (MH/MS)), ú-e-ha-an-na-aš (KBo 6.28 ii 25)), uahnu- ${ }^{z i}$ (Ib2) 'to make turn, to turn (someone)' (1sg.pres.act. uа-ah-nu-mi (OS), uূa-ah-nu-ú-mi (OS), 2sg.pres.act. u_a-ah-nu-ši, 3sg.pres.act.
ua-ah-nu-uz-zi (OS), ua-ah-nu-zi (MH/MS), 1pl.pres.act. ua-ah-nu-me-ni (OS), uа-ah-nu-ит-те-е-ni, 2pl.pres.act. uа-ah-nu-ut-te-ni, 3pl.pres.act. ua-ah-nu-ua$a n-z i(\mathrm{MH} / \mathrm{MS})$, ua-ah-nu-an-zi, 1sg.pret.act. u_a-ah-пu-nu-un, 3sg.pret.act. u_a-ah-nu-ut, 1pl.pret.act. ua-ah-nu-um-me-en, 3pl.pret.act. ua-ah-nu-e-er, ua-ah-nu$e r, 2$ sg.imp.act. ua-ah-nu-ut, 3sg.imp.act. ua-ah-nu-ud-du, 2pl.imp.act. ua-ah-nu$u t[-t e ́ n], 3 p l . i m p . a c t . ~ u ् र a-a h-n u-u а-a n-d u ; ~ p a r t . ~ u a-a h-n u-a n-t-, ~ u a-a h-n u-u a-a n-t-; ~$ verb.noun ua-ah-nu-mar; [й-]ah-nu-ua-u-ua-ar, ú-ua-ah-nu-ua-ar (KBo 3.2 i 66 passim); verb.noun ua-ah-nu-eš-šar; inf.I una-ah-nu-ma-an-zi; impf. ua-ah-nu-uš-
 (KUB 13.4 iii 12)).

$$
\text { PIE *uéi } h_{2}-o \text { ? }
$$

The active forms of this verb show an ablaut ueh $\mathcal{Z}^{z i}$ / uah-. Sometimes the verb is cited as ueh-/uah(h)- as well, which would imply that there are also forms with uahh-. This is not the case, however. The form 1pl.pres. ua-ah-hu-u-e-ni $(189 / \mathrm{v}, 3$ $=$ KBo 19.110, 3), cited in Oettinger 1979a: 99, has to be read as [ku-u]t-ru-ua$a h-h u-u-e-n[i]$ 'we summon as witness' (cf. Oettinger 2002: XIX). To my knowledge, only the opaque 3sg.pres. ua-ah-hu-zi (KBo 3.25 iii 4, in the same context where ibid. iv 18 has $u$-e-eh-zi) and the one attestation ua-ah-ha-an-na (KUB 36.80 i 7 (MH/NS), but note that the crucial signs are damaged) (versus many attestations ua-ha-an-na) show a geminate -hh-. These cannot nullify the dozens of attestations of $u a h$ - (many in OS) that are spelled with a single $-h-$.
Consensus has it that ueh- ${ }^{z i}$ / uah- reflects a Narten-inflected verb *uēh $h_{2^{-}}$/ ueh $_{2}$ - E.g. Oettinger (1979a: 99) states: "ú-e-ih-zi [..] : ua-ah-hu-u-ẹ-ni [..] geht auf *ué $h_{2}-t i:$ *uắ $h_{2}$-uene-i $[.$.$] zurück. Schon in der älteren Sprache dringt die$ Lenierung des $h$ (una-ha-an-zi [..]) und später auch der $e$-Vokalismus (ú-e-ha-an-zi [..]) aus dem Sg. ein". This is unlikely for several reasons, however. The first reason is the fact that there are virtually no forms with uahh- attested. We find uahanzi from OS onwards, which contrasts with the fact that the preform *uéh ${ }_{2} n t i$ should regularly have given ${ }^{* *}$ uahhanzi. It therefore is often stated that 3 pl . uahanzi took over the lenited - $h$ - from the singular (as also Oettinger 1.c.), but this is impossible. First, the * $h_{2}$ of the singular forms *ué $h_{2}-m i$, *ué $h_{2}$-si and *ué $h_{2}-t i$ would not get lenited as it is part of a cluster. Moreover, the $* h_{2}$ in these forms would have regularly been lost before consonant other than $*_{s}$. So the regular outcome in Hittite of a PIE Narten-paradigm of a root *ueh ${ }_{2}$ - would have been ***uēmi, **uēhsi, **uēzzi, **uahhuueni, **uātteni, **uahhanzi (if one accepts Eichner's Law, which I reject, cf. § 1.4.9.2.b). I do not see how in this paradigm a lenited $-h$ - could have been generalized in order to yield attested uahanzi.

Moreover, the reconstructed root $*_{u} e h_{2^{-}}$is based on the Hittite forms only. Reflexes of this root are unknown from any other IE language. All in all, I reject the theory that the active paradigm ueh $\mathbf{z}^{z i}$ / uah- can be explained as the outcome of a Narten-inflected paradigm of a PIE root *ueh $h_{2}$.
We should rather go back to the etymology provided by Eichner (1973a: 76-7). The only way in which this verb could be regarded as of IE origin, is to start with the middle paradigm. Middle forms are attested in OS texts already, which means that the middle inflection is not necessarily derived of the active inflection. Unfortunately, it is not fully clear what the original 3 sg.-form was: we find uehatta(ri) as well as uehtari (compare e.g. šuppari, šuptari and šuppattari 'he sleeps'). On the basis of 1 sg.pres.midd. uehahha and 3sg.pres.midd. uehatta(ri) it is certainly possible that the original form was *ueha(ri). If so, this form could in principle go back to a preform *uéih $h_{2}-o$. Note that in this form the lenited /h/ would be regular. When on the basis of the middle stem *ueih $2^{-}>$Hitt. ueh- an active paradigm was created, it is in my view quite credible that in analogy to e.g. $e \check{s}-{ }^{z i} / a \check{s}$ - 'to be' and the other $e / a$-ablauting $m i$-verbs this paradigm received a secondary ablaut ueh- ${ }^{z i} /$ uah- .
If this scenario is correct, we should connect the root *ueih ${ }_{2}$ - to Skt. véti 'to pursue, to strife after' (compare expecially vītá- 'turned to' for the semantics), Lith. výti 'to pursue', etc. (cf. also Eichner 1973: 77 and Kimball 1999: 211). Usually, these verbs are reconstructed as reflecting a root *ueih $l^{-}$, with a $* h_{l}$ that
 too uncertain to draw any conclusions on, however (cf. Frisk 1960-72 s.v. who states that this verb well may have been influenced by ín $\mu \mathrm{t}$ 'to send').
$\boldsymbol{u}^{\boldsymbol{u}} \boldsymbol{e k} \boldsymbol{k}^{-z i}$ (Ia5) 'to wish, to desire, to ask for' (Sum. IR): 1sg.pres.act. ú-e-ek-mi, 2sg.pres.act. ú-e-ek-ti, ú-ek-ti (KBo 19.74 iv 3), 3sg.pres.act. ú-e-ek-zi (OS), ú-ek$z i$ (OS), 3pl.pres.act. ú-e-ek-kán-zi (KUB 27.66 ii 15 (NS)), ú-e-ek-k[án-zi] (HT 36 obv. 10 (NS)), [ú-]ẹ-ek-kán-zi (HT 36 rev. 4 (NS)), ú-e-ek-k[án-zi] (KBo 29.69, 14 (NS)), [ú-(e-)e]k-kán-zi (KBo 15.64 i 1 (MH/NS)), ú-e-kán-zi (KUB 59.69, 4 (NS), KBo 19.133, 6 (NS), KUB 51.79 iv 18 (NS), KUB 58.43 i 13 (NS), KUB 45.65, 6 (NS)), ú-e-kán-z[i] (KUB 17.24 iii 8 (NS)), [ú-]e-ga-an-zi (KBo 45.25 iii 11 (NS)), 1sg.pret.act. ú-ek-ku-un (KBo 17.61 rev. 8 (MH/MS)), ú-e-ku-un (KUB 19.39 iii 10 (NH), KUB 34.53 rev. 6 (MS?)), 3sg.pret.act. ú-ekta (OS), ú-e-ek-ta, 1pl.pret.act. ú-e-ku-u-en (cited by Oettinger (1979a: 18) (NH)), ú-e-ku-e《<-u»>-en (KUB 16.42 i 34 (NH)), 3pl.pret.act. ú-e-ke-er (KBo 3.38 obv. 21 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 14.8 i 21 (NS)), 2sg.imp.act. ú-e-ek, 2pl.imp.act. ú-e-ek-
te-i[n]; part. ú-e-kán-t- (NS), verb.noun ú-e-ku-ua-ar, impf. ú-e-ki-iš-ke/a-, ú-e-ki-eš-ke/a-.
IE cognates: Skt. vaś- 'to wish, to want, to strive after', Av. vas- 'id.', Gr. $\dot{\varepsilon} \kappa \omega ́ v$ 'voluntary'.

PIE *uék-ti / *uḱ-énti
See Oettinger 1979a: 17f. for an overview of forms. Already since Hrozný (1919: $180^{6}$ ), this verb is generally regarded as derived from the root *uek-, also visible in Skt. vaś-, Av. vas- 'to wish, to want' and Gr. $\dot{\varepsilon} \kappa \omega ́ v$ ( $₹ \varepsilon \kappa \omega ́ v$ ) 'voluntary'. In his description of the leniting rules, Eichner (1973a: 81) assumed that the single $-k$ as visible in forms like 1sg.pret. uekun and 3pl.pret ueker must be the result of a lenition due to a preceding accentuated long vowel: *úék'. He therefore reconstructs an acrostatic root present *uék-kil *uék-nti. This view is widely followed and has been elaborated upon. For instance, Oettinger (1979a: 100) states that $\dot{u}-e-e k-z i$ must be analysed as /ūēgzi/ and $\dot{u}-e-e k-k a ́ n-z i$ as /ưěkanzi/ and that the forms that are spelled $\dot{u}$-e-kán-zi show generalization of the lenited velar out of the singular.
Apart from the fact that the other IE languages in which the root *uek' has been preserved do not show any traces of an acrostatic inflection (Skt. 3sg. váṣti: 1 pl . uśmási and GAv. 3sg. vašt̄̄ : 1pl. usāmahı̄ reflect an ordinary root-present *uék-ti : *uk'-mé), the occurrence of a lenited velar in the paradigm of Hitt. uekk ${ }^{z i}$ is difficult to explain. In the singular forms, where $*_{-} k^{\prime}$ - allegedly has been lenited due to the preceding long vowel, $* k$ is always part of a cluster, and clusters do not get lenited: the preforms *uék'mi, *uék'ksi, *uék'kíi therefore would not yield Hitt. /uēg-/, but rather /uēk-/. The only form for which one could argue that $* k^{\prime}$ could have undergone lenition is 1 sg. pret. *uék' ${ }^{\prime}-m$, but of exactly this form the oldest attestation is $u$ úek-ku-un (MH/MS) with a geminate $-k k$-. So I do not see how a lenited velar could have come about and spread throughout the paradigm.

If we compare the spellings $\dot{u}$-e-ek-kán-zi and $u$-e-kán-zi, we see that the first form is the lectio difficilior and therefore must be the 'correct' spelling. This means that the latter form is a simplified spelling in which the sign IG has been left out. I therefore want to propose to interpret all spellings with $\dot{u}-e-k V$ as simplified spellings for $u$-e-ek-kV. This means that we are only dealing with a stem uekk-.
As we saw above, the other IE languages in which this verb is attested show a normal root-present *uék-ti/*uk'-énti. The question is what this paradigm would yield in Hittite. The answer for the singular form is straightforward: PIE *uékiti would yield Hitt. /uékt ${ }^{\text {s}} \mathrm{i} /$, spelled $u$-e-ek-zi, which is exactly the form we find in
the texts. The expected outcome of PIE *ukénti is more problematic, however. Taken in isolation, the phonetically regular outcome of PIE *ukénti would have been Hitt. **ukkanzi. As part of a paradigm, however, the outcome may have been different. In Hittite, we never find word-initial paradigmatical alternations: for instance, an initial consonantal $u$ never alternates with vocalic $u$. I therefore assume that original paradigms in which a full grade *ue/oC- alternated with the zero-grade $* u C$-, first the consonantal $* u$ - was generalized, yielding a zero-grade $*_{u} C$-. The cluster $*_{u} C$ - then was solved in different ways: through the anaptyctic vowel /i// (spelled -e/i-) when the following consonant was a stop (cf. also uātar / uitēn-) or through the anaptyctic vowel / / / (spelled $-a$-) when the following consonant was $* R, * h$ and $*_{s}$ (cf. also uēěš- ${ }^{H a}$, uašše/a- ${ }^{z i}$ ). In the case of *ukénti, I therefore believe that on the basis of the singular stem *uék-, the original 3pl.pres. *uk-énti was altered to *ukénti, the initial cluster of which then was solved as /ułkánt ${ }^{\text {s }} \mathrm{i}$, spelled ú-e(-ek)-kán-zi. I must admit, however, that it cannot be excluded that in some cases the spelling $\dot{u}-e(-e k)-k a ́ n-z i$ in fact denotes /uékant ${ }^{\mathrm{s}} \mathrm{i}$, a secondary 3pl.-form in which the full-grade stem of the singular has been generalized. All in all, I assume that Hitt. uekzi / uekkanzi ultimately goes back to *uék-ti / *uk'-énti.
ūēlku- (n.) 'grass, vegetation' (Sum. U' ${ }^{(\mathrm{HI} . \mathrm{A})}$ ): nom.-acc.sg. ú-el-ku (often), ú-e-el$k u$ (often), ú-i-el-ku (KUB 30.53+ ii 7), ú-el-ku-ua-an (KBo 6.34 iv 17), dat.loc.sg. ú-el-ku-i, ú-e-el-ku-i (KUB 27.16 i 17), all.sg. ú-el-ku-ua (KBo 17.61 rev. 19), abl. Ú-úa-az (KBo 20.19+ i 8, 12), instr. ú-el-ku-it (KBo 19.130 i 10); unclear ú-e-el-ku-ua (KUB 34.60, 9).
IE cognates: Skt. valśa- 'sprout', OCS vlasz 'hair', Russ. vólos 'hair'.

This word is treated by Weitenberg (1984: 179f.), who discusses the problem regarding the semantics ('grass' or, more general, 'vegetation') and the occurrence of two stems, namely uelku- and nom.-acc.sg.n. uelkuuan which either is from uelkuua- (n.) or uelkuuant-. Eichner (1975b: 1584) connects this word with Skt. valśa- 'sprout', OCS vlasъ 'hair', Russ. vólos 'hair', all from *uolkoo-. If the Hittite word indeed is cognate, it would show *uélk-u-.
uellu- (n. > c.) 'pasture, meadow' (Sum. Ú.SAL, Akk. USALLU): nom.sg.c. ú-e-el-lu-uš (KBo 6.34 iv 13 (MH/NS), KUB 33.41 ii 3 ( $\mathrm{OH} / \mathrm{NS}$ )), acc.sg. ú-el-lu-un (KUB 9.4 iii 29 (MH/NS)), Ú.SAL-un (KUB 39.8 iv 6 (OH/NS)), nom.-acc.sg.n. ú-e-el-lu (KBo 5.7 rev. 1 (MH/MS), VBoT 58 i 10 (OH/NS)), ú-el-lu (KUB 17.8
iv 27 (NS)), gen.sg. ú-el-lu-aš (KBo $20.19+20.25$ obv.? 7 (OS)), ú-e-el-lu-ua-aš (KBo 21.47 iii 17, KBo 24.110 iv 7, KBo 23.49 iv 8, KBo 25.109 iii 20), ú-e-el-ua-aš (KBo 25.109 iii 10), ú-el-lu-ua-aš (KBo 13.223 ii 6 , KBo 34.108, 5), dat.loc.sg. ú-e-el-lu-i (KBo 25.109 iii 24, KUB 17.10 i 12, KUB 33.10 ii 4), úe-el-lu$u ́-i$ (KUB 7.5 i 14), ú-i-el-lu-i (KBo 30.2, 14 (NS)), ú-el-lu-i (KBo 24.11 obv. 9), all.sg. Ú.SAL-ua (KUB 30.19 iv 8), abl. ú-e-el-lu-ua-az (KBo 23.50 ii 12, KUB 29.4 iii 46), ú-el-lu-ua-az (KBo 15.29 iii 14), ú-ẹl-lu-u-ua-az (KUB 15.34 i 1), instr. Ú.SAL-it (KUB 36.18 iii 27), nom.-acc.pl.n. ú-e-el-lu-ûa[...] (KUB 8.41 ii 16 (OS)).
IE cognates: ?ON vollr 'meadow, pasture'.
PIE *uélnu-?
See Weitenberg (1984: 181f.) for an extensive treatment of this word. We find commune as well as neuter forms. All commune forms are from NS texts, however, whereas nom.-acc.sg.n. ú-e-el-lu is found in a MH/MS text and, more importantly, the form $u$-e-el-lu-ua[...] (KUB 8.41 ii 16), which is possibly to be interpreted as nom.-acc.pl.n., in an OS text. I therefore assume that the forms with neuter gender reflect the original situation.
The word is consistently spelled $\dot{u}$-e-el- or $\dot{u}$-el-. The only exception, $\dot{u}-i-e l-l u-i$, is found in a NS text. The spelling of geminate -ll- is consistent as well. The one exception ú-e-el-ua-aš may have to be emended to ú-e-el-<lu-»ua-aš.
The geminate -ll- must be the result of an assimilation proces and go back to either *-ln- or *-lH-. This means that in principle, uèllu only can reflect *uélnu or * uélHu.

A possible connection could be made with ON vollr 'meadow, pasture', which could reflect *uolnu-. The latter word is usually reconstructed as *ualpu-, however, as if belonging to the other Germanic words for 'wood, forest'. Yet, from a semantic point of view, a connection with the Hittite word seems preferable, which would mean that uellu- reflects *uelnu-.
uemiie/a- ${ }^{z i}$ (Ic1) 'to find' (Sum. KAR): 1sg.pres.act. ú-e-mi-ia-mi (MH/MS), 2sg.pres.act. ú-e-mi-ia-ši (NS), 3sg.pres.act. ú-e-mi-ez-zi (OS, often), ú-e-mi-zi (OS, 1x), ú-e-mi-e-ez-zi (MH/MS), ú-e-mi-ia-az-zi (MH/MS), ú-e-mi-ia-zi (MH/MS), ú-e-mi-az-zi (1x), ú-e-mi-i-e-ez-zi (NS), ú-e-me-ez-zi (1x), ú-i-miia $a<-z i>(\mathrm{KBo} 6.3$ iv 27 ( $\mathrm{OH} / \mathrm{NS}$ )), 1pl.pres.act. ú-e-mi-ia-u-e-ni (HHCTO 4, 7 (MH/MS)), 3pl.pres.act. ú-e-mi-įa-an-zi (MH/MS), ú-mi-ía-an-zi (KUB 30.42 iv 23), 1sg.pret.act. ú-e-mi-ia-nu-un, 3sg.pret.act. ú-e-mi-et (OS), ú-e-mi-ia-at (MH/MS), 1pl.pret.act. ú-e-mi-ia-u-en (OS), 3pl.pret.act. ú-e-mi-er, ú-e-mi-e-er,
$u ́-e-m i-i-e-e r, \quad 3 p l . i m p . a c t . \quad u ́-e-m i-i a-a n-d u$; 3sg.pres.midd.(?) ú-e-mi-ía-at-ta (KBo 18.50 obv. 11), 3sg.imp.midd. ú-e-mi-ía-at-ta-ru; inf.I uemiiaunanzi (cited by HW: 252); impf. ú-e-mi-iš-ke/a- (MH/MS).
Anat. cognates: HLuw. wa/imi- 'to find' (1sg.pret.act. wa/i-mi-LITUUS-ha (KARKAMIŠ A15b §23, MARAŞ 8 §3, TELL TAYINAT 2, line 3), 2sg.pres.act. wa/i-mi-LITUUS-si (ASSUR letters $f+g$ §42), uninfl. wa/i-miOCULUS (KARAHÖYÜK §3)).

## PAnat. *uemie/o-

This verb is cited by Friedrich (HW: 252) as uemiiia-, uimiida-, umiïa-. The stem uimiia-, however, is found only once in ú-i-mi-ia (KBo 6.3 iv 27), which is likely to be a spelling mistake (cf. the absence of the ending $-z i$ ). The stem umiia- is found only once as well, in KUB 30.42 iv 23 , which form is likely to be emended to $u$-〈e-»mi-ia-an-zi. This form therefore cannot be used as proof for an ablauting stem uem-, um-.
The verb lacks a good etymology. It has been suggested that it consists of a $u$ preverb attached to the root *hem- 'to take' (e.g. LIV ${ }^{2}$ following Melchert 1994a: 66). Semantically, however, this connection is not very appealing, and formally, we then would expect the existence of a verb *pemiie- as well. Moreover, if the HLuwian verb wami- indeed means 'to find' (often, suggested translations of HLuwian verbs are inspired by etymological connections) and is cognate with Hitt. uemiie/a-, it would provide a formal argument against a reconstruction $* u+* h_{l} e m$-. The only known Luwian cognate of the Hitt. preverb $u$ - is found in HLuw. awi- 'to come' and CLuw. aui- 'id.', showing that Hitt. $u$ - ~ Luw. au-. The HLuw. form wami- therefore would not fit a reconstruction *u $u$ h $h_{l}$ em-. We are rather dealing with a genuine PAnat. stem *uemie/o-. A structure ${ }^{* C e C-i e / o-~ i s ~ r e m a r k a b l e ~ i n ~ H i t t i t e, ~ a n d ~ e i t h e r ~ r e f l e c t s ~ a ~ v e r b ~ t h a t ~ i s ~}$ derived from a noun (e.g. uešiie/a- ${ }^{z i}$ 'to pasture' from ueši- / uešai- 'pasture' or ${ }^{\text {A.ŠÀ }}$ tere/ippiie/ $a^{z i}$ 'to plough' from ${ }^{\text {A.S.S̀ }}$ tere/ippi- 'ploughed field') or a secondary -ie/a-presens of an original root aorist (e.g. ueriie/a- ${ }^{z i}$ 'to call' from uer- ${ }^{z i}$ ). Since I know of no noun anywhere in Anatolian that could be regarded as the origin of this verb, we possibly are dealing with the latter case. Prof. Lubotsky suggests to me a connection with Skt. van- 'to win, to usurp', Av. van- 'to win' and OHG giwinnan 'to win, to get', which semantically indeed is attractive. Nevertheless, these verbs are generally reconstructed as *uen-, which means that a connection is only possible if we would be able to set up a scenario through which the rootfinal *-m- would turn into - $n$ - in IIr. and Germanic.
uen- ${ }^{z i} /$ uйan- (Ia3) 'to copulate': 3sg.pres.act. ú-en-zi (OS, often), 3sg.pret.act. ú-e-en-t[a] (KBo 3.42, 5 (but cf. Weitenberg 1984: 407-8 who doubts whether this form belongs here)); impf. ú-ua-an-ši-ke-u-en (KBo 3.60 iii 13 (but cf. Weitenberg 1984: 407-8 who doubts whether this form belongs here)), ú-ua-an-ši-kán-zi (KUB 31.64 i 7).

IE cognates: Skt. van ${ }^{i}$ - 'to love, to desire', OHG wunsc( $h$ ) 'wish', OHG wunsken 'to wish', Lat. uenus 'love, charm', TochA wañi 'joy', TochB winna 'joy', TochA winās- 'to honour'.

PIE * $h_{1 / 3}$ uénh $h_{1}-t i ; h_{1 / 3} u n h_{1}$-ské/o-
Often, this verb is cited as uen $(t)$-, on the basis of the hapax 3pl.pret.act. ú-e-en-tier (KUB 5.9 ii 43). The meaning of this form cannot be independently determined (the context is quite broken), and in my view there is no evidence that shows that uentier belongs with the other forms of uen- ${ }^{z i}$ / uuan-. I interpret it as a separate verb uentiie/a- ${ }^{z i}$.
The verb uen- ${ }^{z i}$ / uuan- is generally connected with Skt. van ${ }^{i}$ - 'to love, to desire' etc., from a root *uen $H$-. If the root-final laryngeal was $* h_{2}$ or $* h_{3}$, it would have been preserved in a paradigm *uenh $2_{2 / 3}$-ti, *unh $h_{2 / 3}$-enti (cf. e.g. ualhzi / ualhanzi from *uélh ${ }_{3} t i /{ }^{*} u l h_{3}$ énti). I therefore reconstruct *uenh $l_{1}$-.
The imperfective should go back to a preform *uñH-skéló- (cf. Skt. váñ̃chati). This latter form should regularly give **uaššike/a- (cf. haššike/a-, impf. of hanna- ${ }^{i}$ / hann- 'to sue' from $* h_{3} n h_{3}$-ske/o-), in which form the $-n$ - was analogically restored, giving uuanšike/a-. The spelling with initial $\dot{u}$ - may indicate that we have to interpret this form phonologically as /?uənske/a-/ (cf. ú-ua-a-tar 'inspection' /Ruắdr/ < *Hu-ó-tr vs. una-a-tar 'water' /uắdr/ < *uódr), which would mean that we have to reconstruct $* h_{1 / 3}$ uenh $h_{l^{-}}$(cf. Kloekhorst fthc.c for the view that initial $* h_{3}$ merges with the reflex of $* h_{1}$ - before consonants in PAnat.). An initial laryngeal would fit the Skt. perfect $v \bar{a} v a n-$ *Hue-HuonH- perfectly. $^{*}$
-ueni/-uani; -uen (1pl.act.-ending)
Anat. cognates: CLuw. -unni (1pl.pres.act.-ending) Lyd. -wv (1pl.pres.act.ending).

In the present, the ending -ueni denotes 1 plact. in the mi- as well as in the hiconjugation. It is spelled ${ }^{\circ} \mathrm{Cu}$-e-ni (OS), ${ }^{\circ} \mathrm{Cu}$-ú-e-ni (OS), ${ }^{\circ} \mathrm{Cu}-u-e-n i,{ }^{\circ} V-u-e-n i$ (OS) and ${ }^{\circ} V$-ú-e-ni (OS). When the verbal stem ends in -u-, the ending becomes -mēni (usually spelled -me-e-ni (OS) and -me-ni (OS), but once also -mi-ni (OS)), according to the sound law $*$-uu->-um-. Also when the preceding stem consists
of *CH-, we find -mèni (e.g. tu-me-e-ni < *dh $h_{3}$-uéni). This is not a "SieversEdgerton Variant" (Oettinger 1979a: 566 ${ }^{12}$; Melchert 1984a: 25), but the regular outcome due to the development ${ }^{*} \mathrm{CHuV}>\mathrm{CumV}$. In the oldest texts, we occasionally find a variant -uani (e.g. pa-i-ua-ni (OS), har-ua-ni (OS), ak-ku-uš-ke-e-ua-ni (OS)). Melchert (1994a: 138) plausibly argues that -uani in origin is the variant of -ueni that is found when the verbal stem is acentuated and therefore is unaccentuated itself (in these cases /páiuani/, /Háruani/ and $/ 2 \mathrm{k}^{\mathrm{w}}$ skéuani/), whereas -ueni is the accentuated variant (e.g. $a-t u-e-n i=/ 2 d u e e^{2} /, a-k u-e-n i=$ $/ 2 \mathrm{~g}^{\mathrm{w}}$ uéni/, cf. the plene spelling in e.g. tu-me-e-ni (OS), $u$-me-e-ni (OS)). On the basis of this alternation Melchert assumes a sound law "posttonic *-e- in open syllable >-a-" (cf. § 1.4.9.1.b).
In the preterite, the 1pl.act.-ending is -uen, which is spelled ${ }^{\circ} \mathrm{Cu}$-en (OS), ${ }^{\circ} \mathrm{V}-\mathrm{u}$ en (OS), ${ }^{\circ} V$-ú-en (MH/MS), ${ }^{\circ} \mathrm{Cu}$-e-en (MH/MS), ${ }^{\circ} V$-u-e-en (MH/MS), ${ }^{\circ} \mathrm{Cu}$-ú-en, ${ }^{\circ} \mathrm{Cu}$-u-en and ${ }^{\circ} \mathrm{Cu}$-u-e-en. This ending turns up as -men after stems in $-u$ - as well, spelled -me-en (OS) and occasionally -mé-en (OS). This ending shows no difference in form when accentuated or not (e.g. pí-ú-en =/piuén/ vs. $a$-ú-me-en $=$ /Ráumen/).
It is difficult to establish the origin of -ueni. In all other IE languages, the 1pl.act.-endings start in -m- (e.g. Skt. -mas(i), $-m a$, Gr. $-\mu \varepsilon v,-\mu \varepsilon \varsigma$, Lat. -mus, OCS $-m b$, Lith. $-m e$, Goth. $-m,-m a)$. Nevertheless, the $-u$ - of Hittite is supported by CLuw. -unni and Lyd. $-w v$. It has been suggested that formally we should rather compare -ueni with the 1dualis-ending as found in some other IE languages: Skt. $-v a s,-v a$, Av. -uuahi, -uua, OCS -vë, Lith. -va, Goth. -u, -wa.
uentiie/a- ${ }^{-3}$ (Ic1) '?': 3pl.pret.act. í-e-en-ti-er.
This verb is hapax in the following context:
KUB 5.9 ii

```
(40) \(n=a-a s ̌ ~ n a m-m a ~ u n a[-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-] m a A+N A{ }^{\text {LU }^{S} S A N G A}{ }^{U T-I l}\left[{ }^{\left[{ }^{n}\right]}\right]\)
(41) [.] \(\mathrm{x}-\mathrm{r} u\) BA.ÚŠ \(n u=u a=z a \mathrm{x}[-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}-\mathrm{x}\) x-at \(n u=u a-r=a-a s ̌=k a ́ n ~ S ̌ A ̀ ~ E ́ ~[~[x] ~\)
```



```
(43) [n]u \({ }^{?}\) MUNUS \({ }^{T M M ?}\) - \(u a-a t\) EN \(^{T M M}\) ú-e-en-ti-er
```

The context is too unclear to translate, and the meaning of $\dot{u}$-e-en-ti-er therefore remains unclear as well. Often, it is regarded as belonging with the verb uen- ${ }^{z i}$ / uuan- 'to copulate', but I do not see any semantical reason for it. Formally, ú-e-en-ti-er rather seems to belong to a further unattested verb uentiie/ $/ a^{z i}$.

иер- ${ }^{z i}$ ( Ib 1 ) 'to weave(?)': 3sg.pret.act. ú-e-ep-ta (NS).
Derivatives: uepa- (c.) 'woven fabric (?)’ (acc.pl. ú-e-pu-uš).
IE cognates: Skt. vabh- 'to bind, to fetter', Gr. ن̀paívw 'to weave', Myc. e-we-pe-se-so-me-na = غ̇F $\varepsilon \psi \eta \sigma o ́ \mu \varepsilon v a$ (fut.part.) 'which will be woven', OHG weban 'to weave', TochA wäp-, TochB wāp- 'to weave'.

PIE *( $h_{1}$ )uéb ${ }^{h}-t i$ ?
Hapax in the following context:
KBo 42.6 obv.?
(9) [...]x-ni ú-e-pu-uš ú-e-ep-ta $n u=m u$ TÚG-an=mi-i[t ...]
'[...] he uep-ed uep-s and [...] me my clothing'.
According to Neu (1998: $59^{17}$ ), it is possible that this figura etymologica has to be interpreted as "Webstücke webte er / sie" and reflects PIE *ueb ' ' 'to weave'. This may be supported by the mentioning of TÚG 'clothing' in the following sentence. According to Beekes (1969: 67), the Myc. fut.part. e-we-pe-se-so-me-na = $\dot{\varepsilon} F \varepsilon \psi \eta \sigma o ́ \mu \varepsilon v a$ points to a present $* \dot{\varepsilon} F \dot{\varepsilon} \psi \omega<h_{1} u e b^{h}-s$-, which would show that the root in fact was $* h_{l}$ ueb ${ }^{h}$ -

GIŠuera-, ura- (c./n.) 'plate, tray': nom.sg.c. ú-e-ra-aš (OS, often), ú-ra-aš (KBo 11.5 vi 7 (NS), KBo 12.106, 9 (OH/NS)), acc.sg.c. ú-e-ra-an, dat.-loc.sg. ú-e-ri (KUB 55.39 i 15), abl. ú-e-ra-za (KBo 4.14 ii 5), instr. ú-e-ri-it (KUB 7.16, 9), nom.-acc.pl.n.(?) ú-e-ra (KBo 11.32, 16), acc.pl. ú-e-ru-uš (KUB 36.83 iv 10); broken ${ }^{\text {GIŠ }}$ ú-ra-x[...] (KBo 11.32, 18).

This word denotes some kind of wooden plate on which different foods are lying. For instance,

KUB 55.39 i
(14)... $\mathrm{DUMU}^{\text {MEŠ }}$ É.GAL=ma=kán šu-uh-ha-az $Q A-D U^{\text {GIŠ }}$ ú-e-ra-an
(15) $1{ }^{\text {DUG }} K U-K U-U B$ GEŠTIN $=i=$ á $u$-da-an-zi ${ }^{\text {GIŠ }}$ ú-e-ri=ma-a=š-ša-an
(16) še-er 7 NINDA.HUUR(sic).RA SIG me-ma-al ip-pí-ía-an-za ${ }^{\text {GIŠs }} t e-p a-a s ̌-s ̌=a[]$
(17) $[k] i-i t-t a-r i n=a-a t{ }^{\text {GIŠ }} \mathrm{AB}$-ìa-aš pé-ra-an da-a-i
'The palace servants bring down from the roof a uera- together with a jug of wine. Upon the uera-, 7 thin thickbreads, meal, a vine and a spoon ${ }^{?}$ are lying.
He places them in front of the window'.

The two attestations $u$ úra-aš are found in NS texts and may not be linguistically real. To my knowledge, no good etymology exists of this word.
uer(iie/a)- ${ }^{\text {i }}$ ( $\left.\mathrm{Ib} 1 / \mathrm{Ic} 1\right)$ 'to call, to name, to summon': 2sg.pres.act. ú-e-ri-ia-ši (KUB 21.5 + KBo 19.74 iii 11), 3sg.pres.act. ú-e-ri-ìa-az-zi, ú-e-ri-az-zi, ú-e-ri-$e[z]-z i, 3 p l . p r e s . a c t . ~ u ́-e-r i-i ̣ a-a n-z i, ~ u ́-e-r i-a n-z i, ~ 3 s g . p r e t . a c t . ~ u ́-e-r i-a t, ~ u ́-e-r i-e t, ~$ 3pl.pret.act. ú-e-ri-e[r] (KUB 8.63 iv 8), ú-e-ri-i-e[-er] (KBo 4.4 ii 2), 2pl.imp.act. ú-e-ri-ía-at-tén (KUB 17.31, 17); 2sg.pres.midd. ú-e-ri-ía-at-ta-ti (KUB 6.41 iii 61), 3sg.pres.midd. ú-e-ri-ialat-ta-ri (KUB 21.29 iii 47), 1sg.pret.midd. ú-e-ri-ah-ha-ha-[a]t (KUB 26.32 i 13), 3sg.pret.midd. ú-e-ri-ia-at-ta-at (KUB 23.1+ iii 7), 2sg.imp.midd. ú-e-ri-ia-ḩu-ut (KUB 31.68, 46); part. ú-e-ra-an-za (HKM 7 obv. 10 (MH/MS)), ú-e-ri-ịa-an-t-; impf. ú-e-ri-iš-ke/a-.
Derivatives: ueriianna- ${ }^{i}$ / ueriianni- (IIa5) 'id.' (impf.2sg.pres.act. ú-e[-ri-an$n i-i s ̌-k] e-s ̌ i ~(K U B 14.16 ~ i v ~ 21) ~ w i t h ~ d u p l . ~[u ́-e-r i-a] n-[n] i-i s ̌-k e-s ̌ i ~(K U B ~ 14.15 ~+~$ KBo 16.104 iv 49)), see also $=u a(r)=$ and uerite ${ }^{z i} /$ uerit $^{\prime}$.

Anat. cognates: Pal. uer- 'to say, to call' (3sg.pres.act. ú-e-er-ti).
IE cognates: Gr. $\varepsilon$ il $\rho \omega$ 'to speak'.

$$
\text { PIE *uérh } h_{l}^{-t, * u r h_{l}-i e ́-t i}
$$

This verb is virtually consistantly spelled $u$-e-ri- and is a clear example of the -ie/a-inflection. It is remarkable, however, that we once find a participle uerantwithout the -ie/a-suffix. Since this form is from a MH/MS text, it cannot be of secondary origin and must reflect an archaism. The fact that a stem without -ie/ais found in a participle fits will with the views of Melchert 1997b, who argues that in some verbs traces of a system still can be found in which the unextended stem is found in non-present forms and the -ie/a-stem in present-forms. According to Melchert, this reflects the original opposition between an old root-
 view).
According to Oettinger (1979a: 344), ueriie/ $a^{z i}$ must be connected with Gr. عíp $\omega$ 'to speak' and reconstructed as *uerh $h_{1}$-ie/o-, a view which is generally accepted. This means that we must assume that originally we are dealing with a root-aorist *uérh $l_{1}-t$ / *urh $h_{l}$-ént besides a -ielo-present *urh $l_{l}$-ié-ti. Because of the tendency to avoid an ablaut pair ue- / $u$-, the full-grade was generalized throughout the paradigm of the aorist (attested as uerant-) and also taken over into the -ie/a-present (ueriie/a-). The only Anatolian cognate, Pal. 3sg.pres.act. uerti, may show that here the aorist-stem was generalized in disfavour of the -ie/o-present.

Note that the impf. ueriške/a-does not reflect *ueriie-ske/a- vel sim., but rather /ueriské/á-/, the regular outcome of *uerh $l_{l}$-Ské/ó- (of course replacing original *urh ${ }_{l}$-ské/óo-).
 (KUB 33.86 ii 13 (MH/NS)), 3sg.pres.act. $u$ ú-e-ri-ti-iz[-zi] (KUB 8.1 ii 4 (OH/NS)), 3pl.pres.act. úa-ri-ta-an-zi (KBo 17.3 iv 34 (OS), KBo $17.1+$ KBo 25.3 iv 39 (OS)), $u$ ú-e-ri-ta[-an-zi(?)] (KUB 36.3 obv. 2 (NS)), 3sg.pret.act. $\dot{u}-e-r i-$ te-ě̌-ta (KUB 44.4+ rev. 7 (NS)), úu-i-ri-te-ě̌-ta (KUB 36.89 rev .2 (NS)), ú-e-ri-$t[e-. .$.$] (KUB 58.112, 5); impf. u$ i-e-ri-te-eš-ke/a-.
Derivatives: ueritema- (c.) 'fear, fright' (nom.sg. ú-e-ri-te-ma-aš (KUB 28.4 obv. r.col. 21), acc.sg. ú-e-ri-te-ma-an, ú-e-ri-ti-ma-an (KUB 29.1 ii 34), dat.loc.sg. ú-e-ri-te-mi (KBo 13.245 rev. 16), nom.pl. ú-e-ri-te-mu-uš), ueritē̄̄̌š-zi (Ib2) 'to fear, to be frightened' (part. $u$-e--ri-te-iš-ša-an-t- (KUB 14.7 i 11)), ueritanu- ${ }^{z i}$, ueritenu- ${ }^{-j}$ ( Ib 2 ) 'to scare' (3sg.pres.act. $u$-e-ri-da-nu-zi (KBo 12.106 + 13.146 i 2), 3pl.pres.act. $u$ úe-ri-ta-nu-er (KUB 59.46 rev. 12 (NS)), ú-e-ri-te-nu-er (KUB 9.34 iii 30 (NS)).

PIE *u(e)rh $h_{1}-i-+{ }^{*} d^{h} e h_{1}$ ?
First it should be noted that although the bulk of the forms of this verb are spelled $\dot{u}-e-r i-$, we find two OS attestations that show $u a-r i$ - with an aberrant $-a$. The one form that is spelled $u$-i-ri- is attested in a NS text and can therefore be disregarded for etymological purposes. The fact that we find a stemerite- (ú-e-ri-ti-iz[-zi], ú-e-ri-te-eš-ta and ǔeritema-) besides a stem ue/arit- (ú-e-ri-iz-za-ašti /ueritsti/, uaritanzi, ú-e-ri-ta[-an-zi] and ueridanu-) reminds of verbs like pehute $z^{-2 i} /$ pehut-, unate ${ }_{-}^{z i} /$ unat- and uete $e^{z i} /$ uet-. These verbs all can probably be traced back to the root $* d^{\prime} e h_{1^{-}}$'to put' preceded by several univerbated elements. Therefore, it is likely that ue/arite- ${ }_{-}^{z i} /$ ue/arit- also consists of $u e / a r i-+^{\text {+ }}$ * $d^{h} e h_{l}$-. This view is also advocated by Oettinger (2001: 467), who analyses the verb as *ueri-dē- 'zur Verehrung setzen', apparently connecting the first element with uer (iie/a) ${ }^{z i}$ 'to call, to summon' (q.v.).
If this connection is correct, I would rather suggest another semantical development, namely '*to place a call $>$ *to scream (in fear) $>$ to fear'. If so, then the OS variant with $u$ ari- may show a zero-grade formation ${ }^{*} u r h_{l}-i$ - besides the $e$-grade in ueriie/a- < *uerh - -ie/o-, in analogy to which $e$-grade was introduced in uarit(e)- >> uerit(e)- after the OH period.
$u_{1} \overline{e s}$ / anz- (pers.pron. 1pl.) 'we, us’: nom. ú-e-eš (OS), ú-e-š=a (OS), acc. an-za$a \check{~(O S), ~ a n-z a-a-a s ̌, ~ g e n . s g . ~ a n-z e-e l ~(O S), ~ a n-z e-l=a ~(O S), ~ a n-z i-e l, ~ d a t . ~ a n-z a-~}$ aš, an-za-a-aš, abl. an-ze-da-az, an-zi-da-za, an-zi-e-da-za.
Derivatives: see $=(n) n a \check{s}$
Anat. cognates: CLuw. ānza 'we, us’ (dat.-acc. an-za, a-an-za, an-za-aš); HLuw. anz- 'we, us' (nom. /ant ${ }^{\mathrm{s}} \mathrm{unt}^{\mathrm{s}} /\left(\right.$ ? ) ( $a-z u$ ? $\left.-z a, a-z u^{?}-{ }^{\prime}-z a, \quad \dot{a}-z u^{?}-{ }^{\prime}-z a\right)$,
 $i a-t i$, nom.-acc.pl.n. $a-z a-i a)$.
IE cognates: Skt. vayám, asmá-, Av. vaēm, āhma- Goth. weis, uns- 'we, us', TochA was, TochB wes 'we', Gr. ä $\mu \mu \varepsilon$ 'us', etc.

PIE *uei-(e)s, *ns-
See chapter 2.1 for a treatment of these words.
$\operatorname{unešš}^{-t a}$; uašše/a- ${ }^{z i}$ (IIIb > IIIg; Ic5 > Ic1, Ic2) '(midd. intr.) to be dressed, to be covered; (midd. + acc.) to wear (something); (act. $(+=z)+$ acc.) to put on (something); (act. + acc. + dat.) to put something on on someone; (act. + acc. (+ instr.)) to clothe someone (with something), to cover someone or something (with something); (act. $+=z$ ) to clothe (oneself), to be dressed; (act. + anda) to cover (horses)': 3sg.pres.midd. ú-e-eš-ta (KBo 3.41+, 2 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 12.22 i 3 (OH/NS), KUB 9.28 i 15 (MH/NS)), ú-eš-ta (AT 454 iv 10 (NS)), 3pl.pres.midd. $u ́-e-e s ̌-s ̌ a-a n-d a(K B o 17.1$ i 24 (OS)), ú-e-eš-ša-an-ta (IBoT 1.36 i 77, ii 49, 53, 58 (MH?/MS), KUB 9.31 i 37 (MH/NS)), ú-e-eš-ša-«an->ta (HT 1 i 30 (MH/NS)), úa-aš-ša-an-da (?) (KBo 39.8 i 27 (MH/MS)), 1sg.pret.midd. ua-aš-ši-ila-ah-ha-ha-at (KUB 24.5+ rev. 15 (NS)), 3sg.imp.midd. ua-aš-ši-ía-at-ta-ru
 $a \check{s ̌-s ̌ a-a-s ̌ i ~(K U B ~} 12.58$ iii 36 (NS)), una-aš-ši-íçǎ̌i (KUB 31.69 obv. 5 (fr.), 6 (NS)), 3sg.pres.act. una-aš-še-e[z-zi] (KBo $20.18+$ KBo 25.65 rev. 3 (OS)), una-aš-še-ez-zi (KBo 13.137, 9 (OH/NS), KUB 7.53 + KUB 12.58 i 54 (NS)), [una-aš-š]e$e z-z i(\mathrm{KUB} 20.4$ i 10 ( $\mathrm{OH} / \mathrm{NS}$ )), úa-aš-ši-ez-zi (KBo 17.61 obv. 21 (MH/MS), KUB 34.76 i $2(\mathrm{OH} / \mathrm{NS})$, KUB 15.3 iv $8(\mathrm{NH})$ ), ua-aš-ši-e-ez-zi (KUB 2.6 iv 5
 (OH/NS), KUB 20.17 v 13 (OH/NS), KUB 20.80 iii 13 (OH/NS), KUB 11.32 + 20.17 v 23 (OH/NS), Bo 6472 ii 5 (OH/NS?), KUB 30.43 iii 21 (fr.) (NS)), ua-aš-ši-ía-zi (KBo 10.23+ i 11 (OH/NS), KBo 13.93, 9 (NS), KBo 15.9 iv 19 (NS), KBo 20.47, 12 (NS), KUB 4.3 ii 16 (fr.) (NS), KUB 7.60 iii 8 (NS)), [ $u a-a s ̌-] s ̌ a-$
 1pl.pres.act. u_a-aš-ša-u-e-ni (KBo 32.15 ii 12 (MS)), u_a-aš-šu-ú-e-ni (KUB 9.17,

20 (NS)), ua-aš-šu-u-e-ni (KUB 15.3 iv 12 (NH)), 3pl.pres.act. ua-aš-ša-an-zi (KUB 1.11 iv 39 (MH/MS), KUB 29.48 rev. 12 (MH?/MS), KBo 30.152+ r.col. 3 (MS), KBo 11.52 v 11 (OH/NS), KBo 21.34 + IBoT 1.7 ii 12 (MH/NS), KBo 3.2 obv. 24, rev. 35 (MH/NS), KBo 5.1 iv 17 (MH/NS), FHL 17, 2 (MH?/NS), VSNF 12.26 obv. 5 (NS), KBo 8.144 obv. 7 (NS), KUB 10.12 iv 4 (NS)), Luw. ua-aš$\check{s} a$-an-ti (KUB 1.11 iii 3 (MH/MS)), ua-aš-ši-i[ $[a-a n-z i]$ (KBo 8.52 i 45 (MH/MS)), ua-aš-ši-ía-an-zi (KUB 9.31 ii 11 (MH/NS), KUB 9.15 iii 4 (NS), KUB 15.2 i 10 (NS), KUB 43.49 rev.? 19 (NS)), ú-e-eš-ša-an-zi (KUB 29.44 iii 13 (MH/MS), IBoT 2.92, 6 (NS)), ú-e-eš-ši-ía-an-zi (KBo 12.114 obv. 13 (NS)), 1sg.pret.act. ưa-aš-ši-ía-nu-un (KUB 24.5 i 21 (NS)), úa-aš-ši-nu-un (NH, cf. Oettinger 1979a: 300), 3sg.pret.act. ua-aš-ta (KUB 13.9+ ii 4 (MH/NS)), ua-aš-ši-įa-at (KBo 4.6 rev. 13 (NH)), úa-aš-ši-[e-]et (NH, cf. Oettinger 1979a: 300), 2sg.imp.act. ú-e-eš-ši-ịa (KBo 2.9 i 29 (MH/NS)), ua-aš-ši-in $[a]$ (KUB 26.25 ii 7 (NH)), 3sg.imp.act. una-aš-ši-i-ia-a[d-d]u? (KUB 17.8 iv 18 (NS)), 2pl.imp.act. ú-e-eš-tén (KUB 13.5 iii 32 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.imp.act. ua-aš-ša-an-du (KBo 6.34 ii 50 (MH/NS), KUB 7.59 ii 14 (fr.) (MH/NS)); part. una-aš-ša-an-t- (MH/MS), una-ša-$a-a n-t-$ (KUB 7.53+ iv 15, 17 (NS)); verb.noun gen.sg. una-aš-šu-ua-aš (KBo 34.64, 5 (NS)); inf.I ųa-aš-šu-an-zi (KUB 12.19 iii $21(\mathrm{OH} / \mathrm{MS})$ ), u ua-aš-šu-u-ua$a n-z i($ KUB 2.5 ii 22 (NS), KUB 31.69 obv.? 8 (NS), KUB 55.54 obv. 12 (NS)), ua-aš-šu-u_a-an-ti (KUB 25.1 iii 46 (NS)); sup. una-aš-šu-u-u्रa-an (KUB 31.69 obv.? 9, 10); impf. u_a-aš-še-eš-ke/a- (KUB 24.7 ii 9 (NS)), una-aš-ši-iš-ke/a(KUB 26.25 ii 7 (NH), KUB 22.70 rev. 31 (fr.) (NH)), [un]a-aš-ši-ke/a- (KUB 36.10 iii 11 (NS)).

Derivatives: see uašpa-.
Anat. cognates: CLuw. unašš- 'to wear' (3pl.pres.midd. una-aš-ša-an-ta-ri).
IE cognates: Skt. váste 'to be clothed', GAv. vastè 'to be clothed', Gr. عítaı 'to wear', Goth. wasjan 'to clothe', Lat. vestis 'garment'.

PIE *ués-to; *us-ié-ti
See Neu 1968: 193 for an overview of the middle forms, and Oettinger 1979a: 299-300 for the active forms. Eichner (1969) gives an extensive treatment of the semantics of this verb.
The original inflection of the middle must have been 3sg. uešta $(\mathrm{OH} / \mathrm{NS}), 3 \mathrm{pl}$. ueššanda (OS). The forms uaššiiahhahat and u_ašsiizattaru (both NS) must be secondary rebuildings in analogy to the active stem uaššiie/a- ${ }^{z i}$, whereas uaššanda, according to Eichner (1969: 14), is influenced by CLuw. uaššandari.
The active paradigm shows quite a lot of different stems. The only OS form is found in 3sg. una-aš-še-e[z-zi] that shows a stem unašše-. This stem is found a few
more times in 3sg.-forms in $\mathrm{OH} / \mathrm{NS}$ texts. Almost all other attestations of singular forms (from MS texts onwards) show a stem uaššiie/a- ${ }^{z i}$. In the plural, the oldest forms are 1 pl . uaššaueni (MS) and 3pl. uaššanzi (MH/MS and OH/NS). The latter form turns up as ưaššiianzi in younger texts (once in a (hippological) MH/MS-text, further in NS texts). In NS texts, we occasionally find a stem unaššae- ${ }^{z i}$ (2sg.pres.act. una-aš-ša(-a)-ši, 3sg.pres.act. [unaš]šaizzi and possibly some of the NS instances of uaššanzi) and uaššiiae- ${ }^{z i}$ ([u] aššiiaizzi), both according to the productive hatrae-class. The NS forms uaššuueni probably are back-formed on 3pl.pres.act. úaššanzi, which was re-analysed as úašš-anzi. The occasional usage of the $e$-vowel in the active (ueššanzi once in a (hippological) MH/MS-text, further only in NS texts (ueššiia-)), are clearly secondary formations in analogy to the middle paradigm. All in all, we have to conclude that the oldest inflection was middle uešss- ${ }^{\text {tla }}$ besides active uašše/a- ${ }^{z i}$.
Eichner shows that the middle forms virtually always denote '(intr.) to be dressed; (trans.) to wear (something)'. With this meaning, uešta has to be equated with Skt. váste 'wears', GAv. vastē 'wears' and Gr. Eítaı, ह́бтaı 'wears' that reflect *ués-to. In 3pl.pres.midd. ueššanta ~ Skt. vásate, Gr. عĩvtal < *ués-nto, the *s probably was geminated due to contact with -n- (cf. keššar 'hand' < *g' ${ }^{h}$ és-r).
The interpretation of the active forms has caused much debate, however. Eichner (1.c.: 31f.) points to the semantic correspondence between uaššezzi, uaššiiezzi 'he dresses someone' and the causative building *uos-éie-ti as visible in Skt. vāsáyati 'he clothes (someone)', Goth wasjan 'to dress' and assumes that uaššiiezzi directly reflects *uos-éie-ti and unaššiianzi < *uos-éio-nti. Oettinger (1979a: 304) points to the fact that the oldest active forms are uaššezzi, uaššanzi and states that these cannot reflect *uos-éie/o-, but must go back to a thematic inflection *uós-e-ti, *uós-o-nti. This solution is highly unlikely in view of the absence of any other thematic verb in Hittite. Moreover, I know no other examples in IE languages of thematic verbs with $o$-grade. Oettinger's solution is therefore rightly rejected by Melchert (1984a: 31f.), who himself assumes that uaššezzi and uaššanzi are the regular outcomes of *uos-éie-ti and *uos-éio-nti. Although a development *-eie-ti>Hitt. -ezzi can hardly be denied (compare e.g. *uei(e)s 'we' > Hitt. uēš), I am not sure if *-eionti would yield Hitt. -anzi. When we compare ${ }^{\text {LÚ }}$ patte(i) ant- 'fugitive' $<{ }^{*}$ pth $h_{1}$-ei-ent- (see under pattai- ${ }^{i} /$ patti-), we would expect that *-eionti rather yields Hitt. -e(i)anzi. Moreover, Melchert's reconstructions cannot account for the geminate -šš- (as he admits himself: o.c.: $31^{64}$ ). I therefore will not follow this proposal either.
When we look at other Hittite verbs that show active as well as middle forms, we see that sometimes both paradigms use the unextended root: e.g. eš- ${ }^{a(r i)}$
besides $e \check{s c}^{z i} / a \check{s}-; n \bar{e}^{-{ }^{-} r i}$ besides $n a i-{ }^{i} / * n i$-. In other cases, we find that the middle shows an unextended form, but the active is -ie/o-derived: huett- ${ }^{\text {(t)a(ri) }}$ besides huttiie/az ${ }^{z i}$; hatt- ${ }^{a}$ besides hazziie/ $a_{-}{ }^{z i}$. These last verb show a formation $* C e ́ C-(t) o$ besides $C C-i e ́-t i$. For the root *ues-, we could therefore expect a system in which the middle uses the unextended root, *ués-to, whereas the active shows the -ie/oextended stem *us-iée-ti. As I have argued in Kloekhorst fthc.b, Hittite did not allow an alternation $\# u V-$ vs. $\# u C$. In these cases, $* \# u C$ - was analogically altered to ${ }_{u} \mu \mathrm{C}$ - and this initial cluster then had to be solved by an epenthetic vowel. If the following consonant was a stop, the epenthetic vowel was $/ \mathbf{i} /$ (e.g. uiden- 'water' /uidén-/ << *ud-én-; uekkanzi /uł̉kánt'i/ << *ukénti). In this case, I think that on the basis of *uesto, *usie/o- was altered to *usie/o-, which was realized as /uəsie/a-/. In my view, this /uəsie/o-/ then underwent the sound law *VsiV>VššV (for this development, cf. § 1.4.4.2 and the suffix -ašša- < *-osio-). So, in my view, *usiéti, *usiónti first became */uəsiéti/, /uəsiónti/, which then regularly yielded /uəSét ${ }^{\text {sid }} /$, /uəSánt ${ }^{\text {i }} \mathrm{i}$, spelled unǎ̌šezzi, uaššanzi. Already in MH times, the -iela-suffix was restored, yielding secondary uaššiiezzi, u_aššiianzi.

GIŠueššar: see ${ }^{\text {GIšunueššar }}$
úeši- / u_ešai- (c.) 'pasture': nom.sg. ú-e-ši-iš (KBo 1.45 rev.' 13), acc.sg. ú-e-ši-in (KUB 29.29, 8 (OS)), KUB 7.60 iii 29 (NS)), ú-e-še-in (KUB 7.60 iii 24 (NS)), gen.sg. ú-e-ši-ía-aš, dat.-loc.sg. ú-e-ša-i (KBo 12.3 iv 6 (OH/NS)), ú-e-ši (KBo 12.73, 3 (NS)), abl. ú-e-ši-ía-az, nom.pl. ú-e-še-eš (KBo 32.14 ii 27, 28 (MS)), ú-$e$-ša-e-eš (KUB 17.10 i 17 ( $\mathrm{OH} / \mathrm{MS}$ )), acc.pl. ú-e-ša-uš (KUB 31.64 iv 7 ( $\mathrm{OH} / \mathrm{NS}$ )), dat.-loc.pl. ú-e-ši-ía-aš (KBo 32.14 ii 29 (MS)).
Derivatives: uešiie/a- ${ }^{\text {ta(ri) }}$ (IIIg) 'to pasture (trans.); to pasture (intr.), to graze' (1sg.pres.midd. ú-e-ši-i_ia-ah-haa-ri (KBo 32.14 ii 6 (MS)), 2sg.pres.midd. ú-e-šiia at-at-ta (KUB 31.84 iii 56 (MH/NS)), 3sg.pres.midd. ú-ši-e-et-ta (KBo 17.23 obv. 4 (OS)), ú-e-ši-i-ia-at-ta-ri (KUB 26.19 ii 33 (MH/MS), KBo 32.14 ii 27 (MS)), 3pl.pres.midd. ú-e-ši-ía-an-da-ri (KUB 26.19 ii 18 (MH/MS)), 3sg.pret.midd. ú-e-še-ía-at-ta (KUB 29.1 i 33 ( $\mathrm{OH} / \mathrm{NS}$ )), ú-e-ši-et-ta-at (KUB 29.1 i 32 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.imp.midd. ú-e-ši-et-ta-ru (KUB 57.63 ii 14 (NS)); 3sg.imp.act. ú-«e-»še-ed-du (KUB 30.24 ii 4 ( $\mathrm{OH} / \mathrm{NS}$ )); verb.noun gen.sg. ú-e-ši-$i[a-u]-u a-a \check{s}(\mathrm{KBo} 9.71+\mathrm{KUB} 29.33$ i 6 (OH/NS)), ú-i-ši-ia-u-ua-aš (KBo 3.4 iii 72 (NH)); impf. ú-e-še-eš-ke/a-), see also ūēstara-.
IE cognates: OIr. fess 'food' < *ues-teh $2^{-}$, ON vist 'nutricion' < *ues-ti-, TochA wäsri 'pasture' < *ues-ri-, Av. vāstra- n. 'pasture', vāstar- m. 'herd', Lat. vēscor 'to feed oneself'.

PIE *ues-i- / *us-ei-
Friedrich (HW: 253) states that this noun actually reflects a diphthong stem *uešai- (apparently because of e.g. nom.pl. uešaēš and acc.pl. uešauš), but this is not necessary if one compares e.g. the noun hein- / heiau- 'rain', in the paradigm of which an ablauting stem heiau- can be encountered as well. This means that we have to assume an ablauting paradigm *ués-i- / *us-éi-, in which the full grade was generalized. The verb uešiie/a- ${ }^{\text {rta(ri) }}$ probably is a denominal derivative, which would explain the fact that we find -e-grade in the root, which we normally would not expect in -ie/o-derived verb (that go back to PIE *CC-ié/ó-). The OS attestation ú-ši-e-et-ta, if not to be emended to $\dot{u}$-«e-ヶši-e-et-ta, may be a last remnant of the zero-grade root $u \check{s}$-. The verb denotes 'to pasture (trans.)' as well as 'to pasture (intr.), to graze' (cf. Neu 1968: 200f.).
The IE cognates all clearly point to a root *ues- (the long - $\bar{e}$ - of Lat. vēscor 'to feed oneself' is explained by LIV ${ }^{2}$ as going back to a Narten-inflection, but in my view is just analogical after éscō 'to eat'). Note that Eichner (1973a: 79, followed by Melchert 1984a: $10^{3}$ ) derives ueši- from *ueis- 'to flourish' (Lat. vireō 'to flourish'), but the inner-Hittite connection with uešiie/a- 'to pasture' and ueeštara'herd' in my view clearly point to the root *ues- 'to pasture, to feed'.


Derivatives: see also úeši- / uešai-.
IE cognates: Av. vāstar- 'herd'.
PIE *ues-tr-
This word is hapax in the following context:
KUB 6.46 iii
(52) ${ }^{\mathrm{d}} \mathrm{UTU} \check{S} A-M E-E$ EN=İA $\check{S} A$ DUMU.LÚ.U ${ }_{19}$.LU-ut-ti $u$ ú-e-eš-ta-ra-aš
//
KUB 6.45 iii
(13) ${ }^{\mathrm{d}}[(\mathrm{UT})] \mathrm{U} \check{S} A-M E-E$ EN=İA $\check{S} A$ DUMU.LÚ.U $\mathrm{U}_{19}$.LU ${ }^{\text {LÚ } \mathrm{SIPA}-a \check{~}}$
'Sun-god of Heaven, My Lord, you are the herd of mankind'.

It clearly belongs with ueši- / uešai- 'pasture' (q.v.), and has a direct cognate in Av. vāstar- 'herd' < *ues-ter-. The Hittite form probably shows a thematization *ués-tro-.
uešuriie/a- ${ }^{z i}$ : see unišuriie/a- ${ }^{-2 i}$

иее̌ицае- ${ }^{z i}$ (Ic2) '?’: 3pl.pres.act. ú-e-šu-ua-a-an-zi.
To my knowledge, this verb is only attested in one context:

## KUB 17.18 ii

(10) nu GIM-an ze-en-na-an-zi nu ši-e-ni-eš ku-i-e-eš x[ ... ]
(11) ta-pu-uš-za $a-\check{s} e-s ̌ a-a n-t e-e \check{s}_{17} n=a-a \check{s} \check{s} a-r a-a d a-a n-z i n=a-a[\check{s} A-N A$

EN.SÍSKUR]
(12) pa-ra-a ap-pa-an-zi nu-u=š-ma-aš=kán EN SÍSKUR PA-NI ták-na[-aš dUTU-i]
(13) an-da ú-e-šu-ưa-a-an-zi ši-i-na-aš=m=a-an TTUP-PA ${ }^{\mathrm{HI} . \mathrm{A}}$ GIM-an [(ki-it-ta-ri)]
(14) ši-e-na-aš=kán tup-pí-aš me-mi-ia-nu-uš an-da me-mi-ía-an-zi
'When they finish, they take up the dolls that were laid down [...] on the side and they bring them to the patient. They anda $u$. the patient for the Sun-god of the earth. Just as it is laid down on the tablets of the dolls, they speak the words of the tablets of the dolls'.

On the basis of this context, the exact meaning of uešuuānzi cannot be determined. Formally, the form seems to belong with a stem uešuuae- ${ }^{z i}$. Tischler (HH: 201) translates this verb as "mit Kleidern versehen(?)", but this is clearly based on the supposed formal connection with uešš- ${ }^{t t a}$, uašše/a- ${ }^{z i}$ 'to clothe' (q.v.). In my vies, such a connection cannot be proven semantically and is formally unlikely because of the single -š- in uešuuae- vs. the consistent geminate -šš- of uešš- ${ }^{1 t a}$, unašše/a- ${ }^{z i}$.
uett-: see uitt-
ueda- $^{i}$ : 'to bring (here)': see uedae- ${ }^{z i}$
ueda- ${ }^{i}$ : 'to build': see uete- ${ }^{z i}$ / uet-
uedae- ${ }^{z i}(\mathrm{Ic} 2>\operatorname{IIa} 1 \gamma)$ 'to bring (here)': 1sg.pret.act. ú-i-da-a-mi (KBo 16.24+ i 10
(MH/MS), 2sg.pres.act. ú-e-da-a-ši (KUB 29.1 i 3 (OH/NS)), 3sg.pres.act. ú-i-da-
a-ez-zi (IBoT 1.36 i 62 (OH/MS)), ú-e-da-i (KBo 12.56, 8 (NS)), 1pl.pres.act. ú-e-da-u-e-ni (KBo 12.42 iii 6 (OH?/NS)), ú-e-da-a-u-e-ni (KUB 31.42 ii 21 (MH/NS)), 2pl.pres.act. ú-i-ta-at-te-ni (KUB 23.77+ rev. 69, 73 (MH/MS)), 3pl.pres.act. ú-e-da-an-zi (KUB 30.15 i 32 (OH/NS)), 1sg.pret.act. ú-e-da-ah-hुuun (KBo 3.6 ii $10(\mathrm{NH})$ ), 3sg.pret.act. ú-i-da-a-it (KUB 22.70 i $72(\mathrm{NH})$ ), ú-e-da$a \check{s}$ (KUB 21.9 i 7 (NH), but this form perhaps belongs with uet(e)-), 2plimp.act. $u ́$-e-ta-at-te-en (KBo 3.43 rev. 10, 11 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.imp.act. ú-i-ta-ú (Oettinger 1979a: 374); part. ú-i-da-an-t-; inf.I ú-i-du-ma-an-zi (Oettinger 1979a: 374).

PIE * ued ${ }^{h}$-o-ielo-
The oldest forms of this verb show that it originally inflected according to the hatrae-class: 1sg.pres.act. u_idāmi (MH/MS), 2sg.pres.act. uedāši (OH/NS), 3sg.pres.act. uidāezzi (OH/MS), 1pl.pres.act. uedāueni (MH/NS), 2pl.pres.act. uitatteni (MH/MS) and 3pl.pres.act. uedanzi ( $\mathrm{OH} / \mathrm{NS}$ ), and I therefore cite the verb as uedae- ${ }^{z i}$. It is almost identical in meaning to the hi-verb uda- / ud- 'to bring (here)' (udahhi, udatti, udai, udumēni, udatteni, udanzi, q.v.), which it formally resembles as well. This explains the rise of hi-inflected forms within the paradigm of uedae- in NH times (e.g. 3sg.pres.act. uedai (NS), 1sg.pret.act. uedahhun (NH), inf.I uidumanzi in analogy to udai, udahhun and utumanzi).
Verbs that belong to the hatrae-class are derived from $*_{O}$-stem nouns. In this case, uedae ${ }_{-}^{z i}$ must be derived from a further unattested noun *ueda-. Oettinger (1979a: 374) connects this form to the PIE root *ued'- 'to carry', which is satisfactory from a formal as well as semantical side. We therefore have to reconstruct *ued ${ }^{h}$-o-ie/o-. The occasional spellings with $-i$ - are probably due to the development *ueT > uit (cf. Melchert 1994a: 262 and § 1.4.9.1).
uete- $^{z i} /$ uet- (Ia1 > IIal $\gamma$ ) 'to build': 1sg.pres.act. ú-i-te-mi (Oettinger 1979a: 129), ú-e-da-ah-hูi (KUB 22.25 i 32 (NS)), 3sg.pres.act. ú-e-te-ez-zi (OS), 1pl.pres.act. ú-e-du-me-e-ni (Oettinger 1979a: 129 (NH)), 3pl.pres.act. ú-e-da-an$z i$ (ABoT 60 obv. 16 (MH/MS), often (NS)), 1sg.pret.act. ú-e-te-nu-un (OS), ú-e-da-ah-hu-un (KBo 12.38 ii 17 (NH)), ú-e-tut-un (KUB 21.11 obv. 12 (NH)), 3sg.pret.act. ú-e-te-et (OS), ú-e-da-aš (KBo 12.39 obv. 17 (NH), KUB 21.9 i 7 (NH), but the latter form perhaps belongs with uedae-)), 1pl.pret.act. ú-e-tu ${ }_{4}-m e-$ en (KBo 4.1 i $28(\mathrm{NH})$ ), 3pl.pret.act. ú-e-te-er (KBo 16.27 i 18 (MH/MS), often (NS)), 2sg.imp.act. ú-e-te (180/v, 11 (NS)), 3sg.imp.act. ú-e-te-ed-du, 3pl.imp.act. ú-e-da-an-du; part. ú-e-ta-an-t- (OS), ú-e-da-an-t-; verb.noun ú-etu $_{4}-m a r$ (KUB 13.20 i 20 (MH/NS)); inf.I ú-e-du-ma-an-zi (MH/MS); impf. ú-e-te-eš-ke/a-.

Derivatives: uetumeššar / uetumešn- (n.) 'building’ (abl. ú-e-tu ${ }_{4}-m i-e s ̌-n a-z a$ (KBo 12.125, 4)).

Anat. cognates: Lyd. wic- 'to build, to erect' (1sg.pret. wicv), dawic- 'to erect' (3sg./pl.pret. dawicil).

PIE *ue+ $d^{h} e h_{l^{-}} / d^{h} h_{l^{-}}$
In the older texts we find the forms uetezzi, uedanzi, uetenun, uetet, uedant-, uedumanzi, which all point to an ablauting stem uete $\mathbf{z}^{z i} /$ uet-, comparable to $t \bar{e}_{-}{ }^{z} i$ and especially pehute- ${ }^{z i}$ / pehut-. Only in NH times (according to Oettinger 1979a: 130 from the times of Šuppiluliuma I onwards) we find forms that can be analysed as belonging to a stem ueda- / uet- (e.g. uedahhun). These were secondarily created in analogy to the verb uedae- ${ }^{z i}$ 'to bring (here)' (which itself by that time had undergone secondary alteration to ueda- ${ }^{i}$ / uet- in analogy to the verb $u d a-{ }^{i} / u d$ - 'to bring here') on the basis of the identical form for 3pl.pres.act., which is uedanzi in both the paradigm of uete-/uet- and uedae-.
Within Anatolian, the verb uete-/uet- has been compared with the Palaic verb uite/i- (2sg.pres.act. $u ́-i-t e-s ̌ i ~ a n d ~ u ́-i-t i-s ̌ i), ~ w h o s e ~ m e a n i n g ~ i s ~ n o t ~ t o t a l l y ~ c l e a r, ~$ however. Because this verb takes arunam 'sea?' as an object, a meaning 'to build' may not be very likely, however. A connection to Lyd. (da)wic- may have more merit, however, as this verb more clearly means 'to build, to erect' and could reflect *uedē-. If so, then we are dealing with a PAnat. verb *ued ( $\bar{e}$ )-.
It is very likely that *ued $(\bar{e})$ - is the result of a univerbation of the verb $* d^{h} e h_{l^{-}}$ 'to put' with an element *ue-. The origin and meaning of this element *ueremain unclear, however.

цеиакk- ${ }^{i}$ (IIb) 'to demand, to ask': 1sg.pres.act. ú-e-una-ak-mi (KBo 53.19, 6 (MS?)), 3sg.pres.act. ú-e-una-ak-ki (KBo 5.2 i 52 (MH/NS), KBo 10.7 i 9 (fr.) $(\mathrm{OH} / \mathrm{NS})$ ), ú-e-ua-ak-k[i(?)] (KUB 14.1 rev .88 (MH/MS), cited by Oettinger 1979a: 432 as ú-e-ua-ak-ta), ú-«e-»ua-ak-ki-ez-zi (KUB 14.4 iii 20 (NH)), 3pl.pres.act. ú-e-ua-ag-ga-an-zi (KUB 9.34 ii 37 (MH/NS)), ú-e-ua-kán-zi (KUB 9.34 ii 37 (MH/NS)), 1sg.pret.act. ú-e-ua-ak-ki-nu-un (KBo 3.4 ii 11 (NH)), 3sg.pret.act. ú-e-ua-ak-ta (KUB 43.23 rev. 12 ( $\mathrm{OH} / \mathrm{MS}$ )), ú-e-ua-ki-et (KUB 12.60 i 20 ( OH ?/NS)), 2pl.imp.act. ú-i-ua-ak-«<te->-tén (KUB 15.34 iii 40 (MH/MS)); unclear: ú-e-ua-ak-u-i (KBo 4.2 iii 39 (NH), to be read as $u$-e-ua-ak$\left.k l^{\prime} ?\right)$.

PIE *ué-uoḱ-ei

This verb clearly functions as a sort of iterative/intensive of the verb uekk- ${ }^{z i}$ 'to wish, to desire, to ask for'. This is especially indicated by the fact that 1sg.pret.act. ueuakkinun (KBo 3.4 ii 11) is duplicated by the impf. uekiškenun (KBo 16.1 iii 9).
Already in older texts we find $m i$-forms besides $h i$-forms (e.g. 1 sg. pres.act. ueuakmi (MS) besides 3sg.pres.act. ueuakki (MH/NS, OH/NS)). It is nevertheless likely that the verb originally was hi-conjugated, which would better explain the -a-vocalism (ué-uok-e-i). Compare e.g. $\bar{a} k{ }^{-}{ }^{i} / a k k-$ 'to die', which also shows miinflected forms in MS texts already. In younger times we find a mi-conjugated stem ueuakkiie/a- as well.
It is likely that the verb was accentuated on the reduplication syllable as can be inferred from the almost consistent spelling of $-e$ - of its vowel (whereas pretonic *e would have given $-i$-) and the absence of plene spelling of $-a$ - in the root syllable.
Formally, *ue-uok'e-i looks like the PIE perfect of *uek', but semantically, it does not function as such. The verb ueuakk- clearly has an iterative/intensive meaning, which suggests that the reduplication was not inherited but only added in post-PIE times during the period in which the creation of the typical Anatolian reduplicated intensives was productive. Any theory in which ueuakk- is seen as reflecting a PIE perfect (or the 3sg.pret.-form ueuakta as reflecting a PIE pluperfect, cf. e.g. Jassanoff 2003: 36f.) has no merit.
The fact that this verb does not show ablaut is probably due to the fact that the regular outcome of expected *ué-uok- / *ué-uk' was ueuakk- / **uūk-, which showed an alternation that was too aberrant to be preserved. The strong stem then was generalized throughout the paradigm.
See uekk ${ }^{z i}$ for further etymology.
uez(za)pant-: see uizzapant-
$\boldsymbol{u i}$ (interjection) 'whee': ú-i (e.g. KUB 55.38 ii 19).
An onomatopoetic interjection, e.g. in KUB 55.38 ii (19) ú-i ú-i ḩal-zi-eš-ša-an-zi 'they cry ui uí', which may be the source of the verb uai- ${ }^{i}$ / ui- 'to cry' (q.v.).
uiiae- ${ }^{z i}$ 'to cry (out)': see uai- ${ }^{i} /{ }^{\text {u }}$ i-
uiian- (c.) 'wine' (Sum. GEŠTIN, Akk. KARĀNU): nom.sg. GEŠTIN-iš (KBo 6.26 i $18(\mathrm{OH} / \mathrm{NS})$ ), acc.sg. GEŠTIN-na-an (OS), GEŠTIN-an (OS), gen.sg. uni $i^{-}$ ia-na-aš (KUB 56.50 ii 5), GEŠTIN-aš (OS), instr. GEŠTIN-it.

Derivatives: ${ }^{(d)}$ Uiniiant- (c.) 'wine (deified)' (acc.sg. ú-i-ni-ia-an-ta-an (KUB 55.56 iv 16), ú-i-ni-i̇a-an-da-an (KUB 25.37 iii 17, 19)).

Anat. cognates: CLuw. uiniial- (adj.) 'of wine’ (coll.pl. ú-i-ni-į्a); HLuw. wiiana/i-, wina/i- (c.) 'vine' (nom.sg.c. /wianis/ "VITIS" wa/i-ia-ni-sa (SULTANHAN §7), wa/i-ia-ni-sá (SULTANHAN §15), wa/i-ia-ni-i-sa (SULTANHAN §23), acc.sg. /winin/ ${ }^{\text {vITIS }}$ wa/i-ni-na (KÖRKÜN §11), case? wa/i-ia-ni-[x]-i (KULULU 1 §8)).
IE cognates: Gr. oĩvoc, Foĩvoc 'wine', Lat. vīnum 'wine', vītis 'vine', Arm. gini 'wine', Alb. vẽnë 'wine'

PIE * uih $h_{1}$-on-
This word is usually written with the sumerogram GEŠTIN, which sign can be read phonetically as $\underline{n}^{n} i_{5}$ as well, however. This makes it difficult to decide whether we should read the form GEŠTIN-i $a-n a-a \check{~}$ (KUB 56.50 ii 5) sumerographically or phonetically as $u i_{5}-i a-n a-a \check{s}$. The latter reading is attractive in view of HLuw. wiiiana/i- 'vine'. Moreover, it is likely that the sign GEŠTIN only received the phonetic value $u i_{5}$ because of the fact that the 'wine'-word started in $u i-$.

See Beekes (1987) for an extensive treatment of the IE cognates of this word and for the reconstruction *uih $h_{1}$-on-o-. Note, however, that in the oldest stages of Hittite there is no proof of a thematicized stem uihlon-o- (unlike in HLuwian), on the basis of which I assume that in Hittite we are dealing with an $n$-stem *uih $l_{l}$-on- > uiian-. The nom.sg.-form GEŠTIN-iš, which is found in a NS text, could easily be influenced by the Luwian stem uiiana/i-.

uiie/a- ${ }^{z i}$ 'to send (here)': see uie- ${ }^{z i} / u i-$

GIšuieššar (n.) a tree or its wood: nom.-acc.sg. ú-i-eš-šar (KUB 7.37, 12).
This word occurs only once. Usually (HW Erg. 1: 22; Tischler HH: 184), it is cited as ${ }^{\text {GIŠuě̌šar, but the spelling actually points to unieššar. The meaning cannot }}$ be determined. Formally, it could be regarded as a derivative in -ēššar of uai- ${ }^{i}$
ui- 'to cry' (q.v.), but a meaning 'crying; cry' does not make much sense, unless we have to assume 'weeper' (cf. the weeping-willow).
uil(a/i)n- (c.) 'clay’ (Sum. IM): gen.sg. ú-il-na-a-aš (OS), ú-i-il-na-aš (OS), dat.loc.sg. ú-li-ni-i (KBo 3.46 + KUB 26.75 obv. 13 (OH/NS)), IM-ni, instr. ú-i-la-ni-it (KUB 13.2 ii 15), acc.pl. ú-i-la-a-nu-uš (OS).

This word is attested in OS texts several times and shows different spellings ( $\dot{u}$-il$n^{\circ}, u ́-i-i l-n^{\circ}, u ́-l i-n^{\circ}, u ́-i-l a-n^{\circ}, u ́-i-l a-a-n^{\circ}$, which are hard to explain from an IE point of view. I therefore assume that the word is of foreign origin.
uimiie/a- ${ }^{z i}$ : see uemiie/a- ${ }^{z i}$
${ }^{\text {NINDA }}$ ulšta- some kind of bread: case? $u$-i-i-iš-ta-aš (KUB 9.17, 16).
Anat. cognates: Pal. ulšsta- (c.) a kind of bread (nom.sg. ú-iš-ta-aš, ú-i-iš$t a[-a \check{s}])$; CLuw. ${ }^{\text {NINDA }}$ uištatnimma/i- (c.) a kind of bread (nom.sg. ui $i_{5}$-iš-ta-at-niर-imı-mi-iš, acc.sg. ui $i_{5}-i \check{s ̌}$-ta-at-ni-im-mi-en), ${ }^{\text {d }}$ Uištašša/i- (c.) 'god of the uištabread' (acc.sg. unis-i-iš-ta-aš-ši-in).

This word occurs only once, in KUB 9.17, (15) ... nu LÚ GIŠT[IR] (16) ${ }^{\text {NINDA }} \dot{u}-i-$ iš-ta-aš NINDA-an ú-un-ga-na-an-ta-an har-zi pal-ú-i[š-ke-ez-zi=ia (?)] 'The man of the forest holds a ununganant- bread of ? üšta- and cr[ies]'. The word can be compared to (or is a loan from) Pal. ul̄̆štaš (some kind of bread). Compare also Luw. ${ }^{\text {NINDA }}$ uištatnimma/i-, derived from *uištattar / uištatn-, and ${ }^{\mathrm{d}} \mathrm{U}_{\mathrm{C}}$ isstašša/i-.

Starke (1990: 73) suggests a connection with PIE *ueis- 'to turn', which would imply that üūsta- means 'circle-bread'. Although in principle possible, this assumption is not supported by any semantic evidence.
$\underline{n}^{\text {usisuriurie/a- }}{ }^{\text {zi }}$ (Ic1 > Ic2; IIIg) '(act.) to press (together), to be pressing, to be difficult; to tie up, to suffocate (trans.); (midd.) to suffocate (intr.); to be tied up': 3sg.pres.act. ú-i-šu-u-ri-ez-zi (154/w, 3 (NS)), ú-i-šu-ri-ía-iz-zi (KBo 27.136 ii 4 (NS)), 3pl.pres.act. ú-e-šu-ri-ía-an-zi (KUB 9.6 iii 23 (MH/NS)); 3sg.pres.midd. ú-i-šu-u-ri-i̇a-at-ta-ri (KBo 32.14 ii 49 (MS)), 3sg.pret.midd. ú-e-šu-ri-i_ia-at-ta-ti (KUB 33.11 iii 9 (OH/NS)), ú-i-šu-ri-ía-at-ta-ti (KUB 33.46 i 11 (OH/NS)), ú-i-šu-u-ri-ía-at-ta-ti (KUB 33.15, 13 (OH/NS), KUB 33.51 ii 5 ( $\mathrm{OH} / \mathrm{NS}$ )), ú-i-šu-u-ri-ía-ta-ti (KUB 17.10 iii 14 ( $\mathrm{OH} / \mathrm{MS}$ )), ú-i-šu-ri-ia-ad-da-at (KUB $33.45+$ 33.53+ ii 8 ( $\mathrm{OH} / \mathrm{NS}$ )), 3pl.pret.midd. ú-e-šu-ri-ía-an-ta-ti (KUB 33.48 i 8 ( $\mathrm{OH} / \mathrm{NS}$ )), ú-i-šu-ri-i_ia-an-ta-ti (KUB 33.37+39 iv 1, 2 (OH/NS)), ú-i-šu-u-ri-ía-
an-ta-ti (KUB 17.10 i 6, 7, 8 (OH/MS), KBo $14.86+$ KUB 33.17 i 15 (OH/NS)), [ú-i-š]u-ri-ía-an-ta-at (KUB 33.36 ii 6 (OH/MS)), ú-i-šu-ri-an-da-at (KUB 33.36 ii 8 (OH/MS)); part. ú-i-šu-ri-ía-an-t- (KBo 31.76 1.col. 9 (OH/NS), KUB 30.65 iii 2 (NS)), ú-e-šu-ri-ía-an-t- (KBo 1.42 ii 39 (NS)); verb.noun ú-e-šu-ri-ia-u-unaar (KBo 1.42 ii 26 (NS)); impf. ú-i-šu-ri-eš-ke/a-, ú-i-šu-ri-iš-ke/a-.
Derivatives: u्रešuriškattala- (c.) 'presser' (nom.sg. ú-e-šu-ri-iš-kat-tal-la-aš (KBo 1.42 ii 27 (NS)), ú-e-šu-ri-iš-ga-tal-la-aš (KBo 1.42 ii 41 (NS)), ú-e-šu-ri-iš-kat-tal-la-aš (KBo 1.42 ii 42 (NS))).


#### Abstract

Although often cited as uešuriie/a-, the MS attestations uišuriie/a- in my view show that we have to take the spellings with $-i$ - as more original (note that the spelling $u$-e-šu- is predominantly found in the vocabulary KBo 1.42). See Carruba (1966: 50-54) for an extensive semantic treatment of this verb. He also provides a morphological analysis, namely a -ie/a-derivative of a verbal noun *uisur-, of an unattested verbal root *uis- (although Carruba talks about *uesur-). Carruba connects this root with ON visna 'to wither' and Lat. viēscō 'to shrivel', but that does not seem attractive to me semantically. Also Eichner's direct comparison (1973: 77) with Slav. *vixъrъ 'whirlwind' < *uéisuro- does not make much sense to me semantically.


uit-: see uida- 'water'
uitt- (c.) 'year' (Sum. $\mathrm{MU}^{(\mathrm{KAM})}$ ): nom.sg. $\mathrm{MU}^{(\mathrm{KAM})}-z a$, acc.sg. MU-an, gen.sg. $\mathrm{MU}^{\mathrm{KAM}}-z a, \mathrm{MU}^{\mathrm{KAM}}$-aš, dat.-loc.sg. $u$-i-itit-ti (KUB 4.72 rev. 2 (OS), KUB 29.32+ iii 2 (OS)), ú-it-ti (KBo 3.22 obv. 10 (OS), KBo 3.46 obv. 14 (OH/NS), KUB 58.63 ii $^{?} 9$, Bo $69 / 465,1(\mathrm{NH})$ ), $\mathrm{MU}^{(\mathrm{KAM})}-t i$, abl. $\mathrm{MU}^{\mathrm{KAM}}-z a$, nom.pl. $\mathrm{MU}^{\text {HI.A }}-u \check{s}$, acc.pl. MU.KAM ${ }^{\text {HI.A }}-u s ̌$, gen.pl. ú-ị[(-it-ta-an)] (KUB 29.3, 2 (OS)), ú-it-ta-an (KUB 29.1+ i 22 (OH/NS), ú-i-it-ta-aš (Bo 4636 iii 10f. (OH/MS)), MU ${ }^{\text {KAM.HI.A_ }}$ $a \check{s}$, dat.-loc.pl. MU ${ }^{\text {KAM.HI.A }}-a \check{s}$.

Derivatives: *uittant- (c.) 'year’ (dat.-loc.sg. MU-an-ti (KBo 12.2 obv. 1 (OS)), uettandātar / uettandann- (n.) 'period of a year' (dat.-loc.sg. ú-e-et-t[(a-an-da$a n-n i)$ ] (KBo 3.22 rev. 64 (OS)) // ú-i-da-an-da-an-ni (KUB 26.71 i 10 (OH/NS)), $\left.\mathrm{MU}^{(\mathrm{KAM})}-a n-n i\right)$, *uittili (adv.) ‘annually' (MU-ti-li, $\left.\mathrm{MU}^{\mathrm{KAM}}-l i\right)$, see also uiz(za)pant-.

Anat. cognates: CLuw. ušša/i- (c.) 'year' (nom.sg. MU ${ }^{\mathrm{KAM}}{ }_{-i s ̌}$, acc.sg. MU ${ }^{\mathrm{KAM}}{ }_{-}$ $i n$, abl.-instr. $u s ̌-s ̌ a-a-t i, \mathrm{MU}^{\mathrm{HI} . \mathrm{A}}-t i$, $\mathrm{MU}^{\mathrm{KAM}}-t i$ ); HLuw. usa/i- (c.) 'year' (acc.sg. /usin/ (ANNUS-si-na (SHEIZAR §2), "ANNUs" u-si-na (KULULU 1 §6 (2x))), dat.loc.sg. /usi/ (e.g. ${ }^{\text {ANNUS }} u$-si (KARATEPE 1 §48), ${ }^{\text {ANNUS }} u$-si-i (KARKAMIŠ A11b
§7)), /usa/? ( ${ }^{\mathrm{ANNUS}} u$-sà ${ }^{?}$ (PALANGA §12)), acc.pl. /usint ${ }^{\mathrm{s}} \mathrm{i} / \quad\left({ }^{\mathrm{ANNUS}} u\right.$-si-zi (KARATEPE 1 §51)), dat.-loc.pl. /usants/ ("ANNUS" $u$-sá-za (AKSARAY §4a)); unclear (but perhaps nom.sg.?) /usis/ (ANNUS-siヶ-sa> (KARKAMIŠ A17b §6)); gen.adj. /usasa/i-/ (nom.sg.c. ANNUS-sa $4_{4}$-si-sá-' (HİSARCIK 1 §3)), /usisa/i-/ (acc.sg.c. "ANNUS"-si-si-na (MARAŞ 11 §8))), usalinza- (adj.) 'annual’ (nom.sg. ANNUS-sa-li-za-sa (KARKAMIŠ A11b §18a), acc.sg. "ANNUS" $u$-sa-li$z a-n a ́ ~(K A R K A M I S ̌ ~ A 13 d ~ § 10), ~ A N N U S-s a-l i-z a-n[a] ~(K A R K A M I S ̌ ~ A 4 d ~ § 1)), ~$ usali- (adj.) 'annual' (nom.-acc.pl.n. "ANNUS" u-sa-li-ia (MARAŞ 3 §6), acc.pl. ANNUS+ANNUS-la/i/u-zi (TELL TAYINAT 2 fr. $2 \mathrm{~b}-\mathrm{a}$ )); Lyc. uhe/i- 'year' (dat.-loc.sg. uhi, dat.-loc.pl. uhe, gen.adj.nom.sg.c. uhahi, gen.adj.dat.-loc.sg. uhahi), uhazata- 'yearly tribute' (coll.pl. uhazata).
IE cognates: Gr. हैtoc, Fétoc 'year’, Lat. vetus ‘old’, Skt. vatsará- 'year’ PIE *uet-

See Rieken (1999a: 25-28) for a detailed treatment of this word. On the basis of the fossilized gen.sg. $\mathrm{MU}^{\mathrm{KAM}}-z a$ in the phrase $\mathrm{MU}^{\mathrm{KAM}}-z a$ mēhur 'the time of the year', Rieken assumes an acrostatic root noun *uot-s, *uot-m, *uet-s, *uet-i. According to her, the ${ }^{*} e$-grade stem generalized throughout the paradigm. This -e- was phonetically raised to $i$ between $*_{u}$ and a dental consonant (cf. Melchert 1994a: 262). The older form uett- is still visible in $u$-e-et-t $[(a-a n-d a-a n-n i)]$ (KBo 3.22 rev. 64 (OS)) and in some forms of the derivative uiz(za)pant-, uez(za)pant(q.v.). Although the forms with the spelling $u$-it- in principle could be read ú-etas well the spellings with $\dot{u}-i-i t$ - indicates that the vowel $-i$ - is real.
The Luwian forms show a different formation, namely ušša/i- (in my view, HLuwian shows $u s a / i$ - as well, and not an $i$-stem as cited in Hawkins (2000: 630), which can be seen in the dat.-loc.pl. usanz instead of **usiianz). It is generally accepted that this form reflects *ut-s-o-, a thematization of the $s$-stem *uet-osthat is found in other IE languages (Gr. हैंтoc, Fétoç 'year', Lat. vetus 'old'). Hitt. uitt-, however, probably reflects the old root noun.
uida- (gender unclear) 'water': dat.-loc.sg. ú-i-ti, abl. ui $i_{5}-t a-a z$, dat.-loc.pl. \& ui $i_{5}-$ ta-aš.

Anat. cognates: CLuw. uida- 'wet' (dat.-loc.pl. ú-i-da-an-za).
PIE * ued-o-?
This word occurs a few times only:
KBo 3.8+ iii (OH/NS)
(1) šal-li-iš ÍD-aš ḩu-un-hu-ma-az-zi=ši-it ḩa-mi-i[k-ta]
(2) $n=a-a \check{s}-t a$ an-da $\mathrm{KU}_{6}-u n$ I-NA ha-an-ti-ia-ra ú-i-ti
(3) ha-mi-ik-ta HUR.SAG ${ }^{\text {HI.A }}$ pár-ga-mu-uš ha-mi-ik-ta
'The great river bound its flow. And he bound the fish in the h. $u$.. And he bound the high mountains';
ibid.
(18)
... nu hu-uk-ki-iš-ke-ez-zi ${ }^{\mathrm{d}}$ Kam-ru-ši-pa-aš
(19) GAL-in ÍD-an n=a-aš-ta an-da ha-an-ti-ía-ra $\mathrm{KU}_{6}$-an ú-i-ti
(20) hu-uk-ki-iš-ke-ez-zi GAL-iš ÍD hu-un-hu-ma-az=ši-it
(21) EGIR-pa la-a-at-ta-at an-da $\mathrm{KU}_{6}$-uš ha-an-ti-ía-ra-aš la-at-ta-at
'Kamrušepa conjures the great river. She conjures the fish in the h. $\underset{\sim}{u}$.. The great river, its flow, was released again. The fish in the h.'s was released';

KUB 21.19 +1303/u + 338/v (+) KUB 14.7 iii (NH) (see Sürenhagen 1981: 94)
(11) ... KUR ${ }^{\text {URU }}$ Ne-ri-i $[k]$
(12) huu-u-da-ak=pát ka-ru-ú-i-li-ia-aš $A-N A$ LUGAL $^{\text {MEŠ }} \mathrm{x}[. .$.
(13) har-kán-za e-eš-ta nu KASKAL ${ }^{\text {MEŠ }}$ an-da ua-ar-hu-e-e[š-šar e-eš-ta]
(14) $n u=k a ́ n{ }^{\text {URU }} \mathrm{Ne}-r i-i k-k a_{4}-a s ̌$ URU-aš ${ }^{\mathrm{NA}_{4}} a-k u$-uš GIM-an [uni $\left.i_{5}-t i(?)\right]$
(15) an-da e-eš-ta nu=kán ḩal-lu-ú-ua-aš \& ui $i_{5}$-ta-aš kat[-ta-an e-eš-ta]
(16) $n u=k a ́ n{ }^{\mathrm{URU}} N e-r i-i k-k a_{4}-a n$ URU-an ${ }^{\mathrm{NA}_{4}}{ }^{\prime}$ - $-k u$-un GIM[-an]
(17) ḩal-lu-ua-az uís-ta-az ša-ra-a ú-da-ah-ḩu-u[n nu=kán KUR URU $N e-r i-i k]$
(18) $A$-NA ${ }^{\hat{d} U}{ }^{\text {URU }}$ Ne-ri-ik $\operatorname{DUMU}=K A$ ha-an-da-aš še-er $d[a-a h-h u-u n]$
'The land of Nerik was soon gotten lost for the older kings $x[.$.$] , and on the$ roads there was brushwood. The city of Nerik was like a pebble in the [u.(?)], and was down in the deep $\underset{\sim}{u}$.. And I lifted the city of Nerik like a pebble out of the deep $\underset{\sim}{u}$., and I took the land of Nerik, for the sake of the Storm-god of Nerik, your son'.

The forms could either belong to a stem uid- or a stem uida-. In all contexts, a meaning 'water (vel sim.)' would fit. This is especially the case for the first context, where we read about 'fish in the $\underset{\text { u .'. It therefore is generally agreed that }}{ }$ in one way or another the word has a connetion to PIE *uódr 'water'.
Kronasser (1966: 162) assumes that these words show a root noun *ued'water', a view that has been followed for many years.
Starke (1990: 568), however, states that the word is likely of Luwian origin: "Die späte Bezeugung wie insbesondere auch der Gebrauch des Glossenkeils [...]
sprechen indessen wohl eher für k.-luw. Herkunft". He translates the word as 'wet' and claims to have found the same word in genuine CLuwian as well, namely in Ú.SAL ${ }^{\text {HIAA }}-a n-z a$ ú-i-da-an-za (KUB 35.45 ii 6), which he translates as "den feuchten Wiesen". In his view, CLuw. uida/i- (as he analyses the stem) reflects a vrddhi-formation *uēd-o-, derived from *uód-r. The reconstruction with ${ }^{*} \bar{e}$ apparently is given in order to explain Luw. $-i$-, since ${ }^{*} e$ in principle yields Luw. - $a$ -

Rieken (1999a: 76), however, points to the fact that there are indications that an *e develops to Luw. $i$ when between $\underset{\sim}{u}$ and dental consonant (as in Hittite, see Melchert 1994a: 262) and implies that a reconstruction *ued-o- is possible as well. She follows Starke in assuming that the Hittite forms are Luwian borrowings: "Angesichts der Beschränkung von uid(a)- auf eine luw. Ausdrucksform, ein Glossenkeilwort und zwei Belege aus einem stark luwisierten Text ist luw. Herkunft sehr wahrscheinlich" (1999a: 77).

All in all, I think it is best to assume that the forms found in Hittite contexts belong to a stem uida- and are borrowings from the CLuw. adjective uida- 'wet' that reflects *ued-o-.
uida- 'to bring (here)': see uedae- ${ }^{z i}$
uida- 'to build': see uete- ${ }^{\text {zi }} /$ uet-
uite- 'to build': see uete- ${ }^{z i}$ / uet-
uitēn-: see unātar / unitēn-
uitriš- (n.) a disease of bone and skin?: nom.-acc.sg. ú-it-ri-iš (KBo 9.4 iii 39), [ú$i t-r] i-i s ̌(K B o ~ 17.54 ~ i ~ 12) . ~$

This word is found in the Ritual of Tunnauiia:

KBo 9.4 iii
(35) SAG.DU-aš ḩu-u-ul-ta-ra-am-ma-an
(36) $m u-u ́-d a-i d-d u \quad . .$.
... ha-ǎ̌-ti-ịa-ǎ̌
(39) ma-a-lu-li-íla-aš ú-it-ri-iš-š=a KI.MIN
'Let it remove the $h$.-sickness of the head! .... Likewise the $\underline{\mu}$.-sickness of bone and skin?!'.

It is not clear what kind of disease the word denotes.

uizzapant-, uez(za)pant- (adj.) 'old, grown old': nom.-acc.sg.n. ú-iz-z[a-p]a-an (KUB 17.21 i 16 (MH/MS), ú-iz-za pa-a-an (KBo 1.42 iv 42 (NH)), nom.acc.pl.n. ú-iz-za-pa-an-ta ((KUB 17.21 i 16 (MH/MS)), ú-e-ez-pa-an-ta (KUB 5.10, $5(\mathrm{NH})$ ), ú-e-ez-za-pa-an-ta (KUB 5.10, $10(\mathrm{NH})$ ).

PIE "*uet-s *h $h_{l}$ poi-h ${ }_{l}$ i-ent-"
This word occurs a few times only, denoting the weariness of objects that have to be renewed: compare e.g.

## KUB 17.21 i

(6) nu šu-me-eš=pát $\mathrm{DINGIR}^{\text {MEŠ }}$ DINGIR $^{\mathrm{MES}_{-}}$-aš iš-ta-an-z[a-n]i-it še-ek-te-n $[i]$ ...
(14) nam-ma š[u]-me-en-za-an DINGIR ${ }^{\text {MEŠ }}$-aš $k u$-e $\operatorname{ALAM}^{\mathrm{HIIA}}=K U-N U$ Š $A$

## KÚ.BABBAR GUŠKIN

(15) nu-u=š-ša-an [k]u-e-da-ni DINGIR ${ }^{L M}$-ni $k u$-it tu-e-ek-ki-i=š-ši


'You, o gods, must know with your divine spirit .... . And further whatever statues of you, o gods, of silver (or) gold (there are), and on whatever god (of them) on his body whatever thing has grown old, and whatever utensils of the god have grown old, no-one has renewed them like us';

KUB 5.10 i
(2) ... $n u$ LÚ $^{\text {MEŠ }}$ É.DINGIR ${ }^{L I M} p u$-nu-uš-šu-u-e-en $U M-M A ~ S ̌ U-N U-U=M$-MA
(3) $B I-I B-R U$ GUŠKIN=ua- $a=z z i-i n-z a-p u-u s ̌-s ̌ i-a s ̌ «=u a-a=z\rangle »{ }^{\text {LU }} \mathrm{NAR}$
da-a-i-ia-at
(4) EGIR-pa=ma=ua-r=a-aš na-ú-i DÙ-an-za TÚG.GÚ.È.A HUR-RI GUŠKIN=ua ku-e
(5) DINGIR ${ }^{L U M}$ ua-aš-ša-an har-zi nu=ua-r=a-at ú-e-ez-pa-a-an-ta? GIšhu-lu-ga-an$n i-e \check{\text { š-š }}=a=u a$
(6) ar-ha du-uূa-ar-na-an-za ${ }^{\text {KUŠ }}$ NÍG.BÀR =ua IŠ-TUÉ.GAL ${ }^{L L M}$ pé-eš-ke-er
(7) $n u=u a-r=a-a t ~ n a-u ́-i ~ p i-i a-a n{ }^{\operatorname{EZEN}_{4} a s ̌-r a-h i-t a-a s ̌-s ̌ i-i n=u a ~ k u-u a-p i ́ ~ i-i ́ a-a n-z i ~}$
(8) $n u=$ ua $A$-NA DINGIR ${ }^{L I M} I S ̌$-TU É.GAL ${ }^{L I M} 1$ KUŠ KÙ.BABBAR SÍG SA SÍG $_{5}$ SÍG

$$
\begin{aligned}
& \text { ZA.GÌN } 1^{\text {NU-TUM KUŠ }} \text { NÍG.BÀR }{ }^{\text {HI.A }}=i a
\end{aligned}
$$

$$
\begin{aligned}
& \mathrm{SA}_{5} \text { SÍG ZA.GÌN }{ }^{\text {KUŠ }} \text { NÍG.BÀR }{ }^{\mathrm{HI} . \mathrm{A}}=\stackrel{i}{a} a \\
& \text { (10) Ú-UL pí-i-e-er }{ }^{\text {síqu}} \text { šu-ri-ta=ua ú-e-ez-za-pa-an-ta }
\end{aligned}
$$

'We asked the men of the temple, and they said: 'A musician has stolen golden zinzapu-shaped rhytons but he has not been making them back yet. The golden Hurrian clothes which the deity is wearing have grown old and the chariot is broken apart. They used to give the curtain from the palace but it has not been given yet. When they make a ašrahitašši-feast, they used to give to the deity one hide, silver, red wool, blue wool and one unit of curtains from the palace. Now they have made an ašrahitašši-feast but they have not given silver, red wool, blue wool nor curtains. The šurita-wool has grown old'.

In the vocabulary KBo 1.42 iv 42, ú-iz-za pa-a-an glosses Akk. $L A-B I-R U$ 'old', showing a clear word space between uizza and pān. On the basis of this attestation, Güterbock (1955: 64f.) suggested that the word is a univerbation of uitt- 'year' (q.v.) and pānt- 'having gone' (see paili- ${ }^{z i} /$ pai-) and that it originally meant 'the year has gone'. Rieken (1999a: 26) states that therefore ue/izza must be interpreted as the original nom.sg. of uitt- 'year'. This interpretation is unlikely in my view, however, since an interjection of a loose sentence 'the year has gone' is quite ungrammatical. Moreover I cannot envisage how such an interjection would develop into an inflecting adjective.
It therefore might be better to interpret *ue/izza as gen.sg., univerbated with a *pānt- that agrees with the noun it determines, so that uizza pānt- originally meant 'having gone with regard to the year(s)', which developed into 'having gone weary'.

See for further etymology the separate lemmas uitt- 'year' and paii- ${ }^{z i}$ / pai- 'to go'.
$-z$ (abl.-ending): see $-(\bar{a}) z$
$=z$ (enclitic reflexive particle): $=z$ (e.g. $t a-a=z$ (OS), $k i-i-i=z$ (OS), $n u=m u-u=z$ $(\mathrm{OS})),=(z) z a$ (e.g. $n u=z a, n u-u=z-z a$ (OS)).
Anat. cognates: Pal. $=\boldsymbol{t i}=$ ? (reflexive particle?); CLuw. $=\boldsymbol{t i}$ (reflexive particle); HLuw. $=\boldsymbol{t i},=\boldsymbol{r i} /=\mathrm{di} /($ reflexive pron. 3sg.); Lyc. $=\boldsymbol{t i}$ (reflexive particle).

PAnat. *=ti
The oldest spellings of this particle are $=z$. From OS texts onwards, the spelling $=(z) z a$ is generalized.
The reflexive particle is found in most other Anatolian languages as well, all going back to PAnat. *=ti (HLuw. /=di/ probably shows lenition).
In Lydian, the reflexive particle is $-s,-i s$, which, according to Melchert (1991a: 135-142), goes back to *-soi,
In HLuwian, the form of the reflexive particle differs per person. We find $=m i$ for the $1 \mathrm{sg} .,=t i$ and $=r i /=\mathrm{di} /$ for 2 sg . and $=t i,=r i /=\mathrm{di} /$ for 3 sg . (the old reflexive particle from $*=t i$ ), The reflexives $=m i$ and $/=\mathrm{di} /$ are probably innovated on the basis of $*=t i$, combining the consonant of the enclitic pronouns $=m u$ 'me' and $=d u$ 'you' with the $-i$ of $*=t i$.
The development $*=t i>$ Hitt. $=z /=t^{\mathrm{s}} /$ is supported by the occasional OS spelling $-z a /-t^{\mathrm{s}} /$ of the 3 sg. pres.-ending $<*$ - $t$.
$-z a$ (abl.-ending): see $-(\bar{a}) z$
$-\boldsymbol{z a}$ (3sg.pres.act.-ending of the $m i$-flection): see $-z i$
$\boldsymbol{z} \overline{\boldsymbol{a}} \boldsymbol{h}^{\boldsymbol{i}}{ }^{\boldsymbol{~}} / \boldsymbol{z a} \boldsymbol{a} \boldsymbol{h} \boldsymbol{h}$ - (IIa2) 'to hit, to beat': 1sg.pres.act. za-ah-mi (KUB 43.71 rev .3 (NS), KUB 26.91 i 8 (NS)), 3sg.pres.act. $z a-a-h i(K B o 6.25+$ iii 7 (OH/NS), KUB 26.12 ii 16 (NH)), za-ah-zi (KUB 13.4 iii 38 (OH/NS)), 1pl.pres.act. $z a-a h-h u-u-$ e-ni (KBo 3.60 ii 17 (OH/NS)), 3pl.pres.act. za-ha-an-zi (KUB 5.7 i 32, 35 (NS)), 3sg.pret.act. za-ah-ta (KUB 33.110 ii 6 (MH/NS)), 3pl.pret.act. za-ah-he-er (KUB 17.21 iv 2f. (MH/MS)), 3sg.imp.act. $z a-a h-d u$ (KUB 43.35, 10 (OS?, MH/MS?)), 3pl.imp.act. za-ha-an-d[u] (KUB 13.4 iii 39 ( $\mathrm{OH} / \mathrm{NS}$ )); 3sg.pres.midd. za-ah-ta-ri (KUB 5.1 iv 72 (NH), KUB 5.18 rev. 6 (NS), KUB 50.79 obv. ${ }^{?} 4$ (NS)), 3pl.pres.midd. za-ah-ha-an-da (KBo 23.92 ii 14 (OH/NS)).

Derivatives: see also zahhai- / zahhi-, zahrai- and zahhurae-.
IE cognates: Gr. $\sigma \tilde{\eta} \mu \alpha$ ‘sign, mark', Gr. $\sigma \tilde{\omega} \mu \alpha$ 'corpse', oĩtoc 'grain, food’. PIE *tióh $h_{2}$-ei $/ * t i h_{2}$-énti ?

It is not easy to determine whether this verb originally was hi- or mi-conjugated since we find forms of both conjugations in older texts (e.g. zāhi (OH/NS) vs. $z a h d u(\mathrm{MH} / \mathrm{MS}))$. Nevertheless, it is likely that the hi-conjugation was the older (likewise Oettinger 1979a: 446). Firstly because the mi-conjugation is the productive one and secondly because we would otherwise not be able to explain how the stem final $-h$ - was retained, as $* h_{2}$ was regularly lost before most consonants (e.g. *Ceh ${ }_{2}-t i$ should have yielded ${ }^{* *} C \bar{a} z i$ ). This means that we have to reckon with an original ablaut $z a \bar{a}-{ }^{-} / z a h h-$ - (the stem $z a h h$ - is still visible in 1 pl.pres.act. zahhuueni and 3pl.pret. zahher: in younger Hittite, the lenited variant $-h$ - from the 3sg.pres. $z \bar{a} h i$ is spreading through the paradigm, yielding forms like 3pl.pres.act. zahanzi).
Phonologically, zāh-represents /t ${ }^{\mathrm{s}} \mathrm{a}^{2}-/$, which can go back to either $* T s o h_{2^{-}}$or *tioh $2_{2}$. Oettinger (1979a: 447 with reference to Schindler) suggests a reconstruction $* d s$-eh $h_{2}$ - on the basis of a connection with Gr. $\delta \alpha i ̈ l ~ ' i n ~ b a t t l e ' ~<~$ *das-. This is quite improbable as the $a$ of das- requires $* h_{2}$ or a vocalized nasal.
In my view, we should rather reconstruct a root $*$ tieh $_{2^{-}}$(structurally like ${ }^{*}$ pieh $_{2^{-}}$ or *Kieh $2_{2}$ ): a reconstrucion *tióh $2_{2}$-ei would perfectly account for Hitt. zāhi. The weak stem ${ }^{*}$ tih $h_{2}$-énti probably should have given ${ }^{* *}$ zihhhanzi, however (although zahhanzi could be possible if we assume an intermediate stage ${ }^{*}{\underset{\lambda}{2}}^{2} h_{2}$-enti, cf. zanu- 'to make cook' < *tih $h_{1}-n e u-$ ), which implies that an analogical rebuilding to zaḩhanzi has taken place on the basis of verbs like hāǎsi / haššanzi, aki / akkanzi, uāki / uakkanzi. Janda (2005) also assumes that zāh- / zahh- reflects a root *tieh $2^{-}$ 'to strike' and adduces Gr. $\sigma \tilde{\eta} \mu \alpha$ 'sign, mark' < *tié $h_{2}-m n$ "the beaten one", Gr.
$\sigma \tilde{\eta} \mu \alpha$ 'corpse’ < *tióh $h_{2}$-mn "the killed one" and oĩtoc 'grain, food' < *tih ${ }_{2}$-tó"threshed" as IE cognates.
zaha- (n.) object of silver or gold, used in cultus: nom.-acc.pl. za-ha (KUB 2.3 i 42, KUB 20.28 i 4, 11).

This word occurs a few times only:
KUB 2.3 i
(41) GAL ME-ŠE-DI pa-iz-zi
(42) $n u$ LUGAL-i ta-pu-uš-za za-ha KÙ.BABBAR da-a-i
'The head of the bodyguards goes and places silver zaha's to the side of the king';

KUB 20.28 i
(3) LUGAL-uš MUNUS.LUGAL-aš-š=a a-ra-an-da

(5) tá=k-kán an-da ú-da-a-i
'The king and the queen stand. The head of the bodyguards holds the golden $z a h a$ 's and brings (them) inside';

KUB 20.28 i
(9) [ $]$-an $p a-i z-z i{ }^{\text {NINDA }}$ ha-a-li-in
(10) [ a]n-da da-ga-a-an da-a-i
(11) [nu? GAL ME-Š]E-DI za-ḩa GUŠKIN pé-e-da-i
(12) [ $] x$ NINDA $h a-a-l i-i n ~ s ̌ e-e r ~ d a-a-i$
'[ ... ] goes. The hāli-bread [...] he places on the ground. The head of the bodyguards brings away the golden zaha's. [ ... ] places the hāli-bread on top'.

Apparently, the word denotes some kind of silver or golden objects which are brought and taken away by the head of the bodyguards. Possibly it is used to lay bread upon, if we are allowed to deduce that from the last cited context.

The presence of a single $-h-$, which is difficult to explain from an IE point of view, may indicate that the word is of foreign origin.
zahhai- / zahhi- (c.) 'battle, war' (Sum. MÈ): nom.sg. za-ah-ḩa-iš (KBo 2.5 iii 31 (NH)), acc.sg. za-ah-ha-in (KBo 3.7 iii 23 (OH/NS)), za-ah-ha-en (KBo 3.9 obv.

3 (OH/NS)), za-ah-hi-in (KBo 5.6 iii 29 (NH), KUB 4.1 iii 14 (MH/NS)), gen.sg. $z a-a h-h i-i a-a \check{s}$ (MH/MS), dat.-loc.sg. za-ah-hi-ia (OS), abl. za-ah-hi-ia-az (MH/MS), za-ah-hi-ia-za, za-ah-ha-ia-az (KUB 34.23 ii $2(\mathrm{NH})$ ), instr. za-ah-hait (KUB 19.36 iv $10(\mathrm{NH})$ ), acc.pl. $z a-a h-h a-u s ̌ ~(K U B ~ 36.7 \mathrm{~b}+$ iv $16(\mathrm{NH})$ ).
Derivatives: zahhiie/a- ${ }^{\boldsymbol{z}}$ (Ic1) 'to battle (someone)' (1sg.pres.act. za-ah-hi-ia-mi (MH/MS), 2sg.pres.act. za-ah-hi-ia-ši (MH/MS), 3sg.pres.act. za-ah-hi-e-ez-zi (MH/MS), 1pl.pres.act. za-ah-hi-ia-u-e-ni, 2pl.pres.act. za-ah-hi-ia-at-te-ni (MH/MS), 3pl.pres.act. za-ah-hi-ia-an-zi, 1sg.pret.act. za-ah-hi-ia-nu-un, 3sg.pret.act. za-ah-hi-ia-at (MH/MS), 3pl.pret.act. za-ah-hi-er; 1sg.pres.midd. za-ah-hi-ía-ah-ha (MH/MS), za-ah-hi-ía-ah-ha-ri (MH/MS), 3sg.pres.midd. za-ah-hi-i_ia-at-ta-ri (MH/MS), 1pl.pres.midd. za-ah-hi-i_ia-u-ua-aš-ta-ti, za-ah-hi-ia-u-ua-aš-ta, 2pl.pres.midd. za-ah-hi-ia-ad-du-ma (MH/MS), 3pl.pres.midd. za-ah-hi-ia-an-da, 1sg.pret.midd. za-ah-hi-ia-ah-ha-at, 3sg.pret.midd. za-ah-hi-ia-at-ta ( $\mathrm{OH} / \mathrm{NS}$ ), za-ah-hi-ia-at-ta-at, 1sg.imp.midd. za-ah-hi-i $a-a h-h[a-r u](\mathrm{OH} / \mathrm{NS})$, 2sg.imp.midd. za-ah-hi-ia-ah-hu-ut (MH/MS), 2pl.imp.midd. za-ah-hi-ia-ad-du$m a-a t$; part. za-ah-hi-ia-an-t-; inf.I za-ah-hi-ia-u-ua-an-zi; impf. za-ah-hi-iš$k e / a-$ ), zahzahhiiela- ${ }^{-i}$ (Ic1) 'to battle fiercely' (impf. za-ah-za-ah-hi-eš-ke/a(KUB 46.45 rev.? 9)).

PIE * tieh $2_{2}$ oi- $/ *$ tieh $_{2}-i-$ ?
The noun zahhai- clearly is a derivative of the verb $z \bar{a} h h^{i} / z a h h-$ 'to hit, to beat' (q.v.). The verb zahhiie/a-- 'to battle', however, is a derivative of zahhai-.

The etymology of both words depends on the interpretation of zāh-/zahh-, which I have reconstructed as reflecting a root $* t i e h_{2}$-. If this is correct, then zahhai- reflects *tiéh ${ }_{2}$-oi-. We have to assume that the full-grade generalized through the paradigm, which is a common phenomena in diphthong-stems. Note that zahhiiie/a-, which reflects virtual *tieh ${ }_{2}$-ie/o- (or *tieh $h_{2}$-i-ie/o-?) shows a different development than *teh $h_{2}-\underset{C}{e} / o->t_{a}^{i} e / a-{ }^{z i}$ 'to steal' (q.v.).
zahanettienna- (adj.?) '?’: abl. za-ha-ne-et-ti-en-na-za (KUB $20.54+$ KBo 13.122 vi 3,4$)$.

This word occurs in one context only:
KUB 20.54 + KBo 13.122 vi (with additions from KUB 55.2 obv. 5 - rev. 2)
(1) [DUM]U É.GAL te-ez-z[(i héée-eš ${ }^{\text {MUNUS ŠU })] . G I ~ t e-e z-z[i ~ . . . ~ l e-e ?] ~}$
(2) $\dot{u}$-una-at-te-ni UM-M[(A DUMU É.GAL $\check{s})] u$-up-pa-ía-za=ua $p i^{i}-\mathrm{x}[\ldots U M-M A$ ? ${ }^{\text {MUNUS }}$ Š(U.GI)]
(3) nu=ua ku-e-ez-za šu-up-pa-i[a-az] UM-MA DUMU É.GAL za-ha-n[e-et-ti-en-
$n a-z a=u a \ldots . . . U M-M A^{\text {MUNUSS ŠU.GI] }}$
(4) $n u=$ ú $a$ ku-e-ez-za $z a-h a-n e-e t-t i-e n-n a-z a ~ U M-M A$ [(DUMU É.GAL ap)- ... ]
(5) ${ }^{\mathrm{d}} \mathrm{UTU}-a \check{s}=u a$ an-na- $a z[(U)] M-M A{ }^{\text {MUNUSS }}$ ŠU.GI $n u=u a-r=a-a \check{s} \mathrm{G}[(\mathrm{IM}-a n$ ${ }^{\mathrm{d}} \mathrm{UTU}-u s{ }^{\text {s. }} . .$. ]
‘The palace servant says: 'Open up!'. The Old Woman says: '[...] you [must not?] come'. Thus the palace servant: 'From the pure [...]'. [Thus?] the Old Woman: ‘From which pure one?'. Thus the palace servant: 'From the zahanettienna- one [...]'. [Thus the Old Woman]: 'From which zahanettienna- one?'. Thus the palace servant: ['...] from the mother of the Sun-god'. Thus the Old Woman: 'When the Sun-god [...] them [...]'.

The context is too unclear for me to do a suggestion about the meaning of the word. If however zahanettiennaza functions on a par with šuppaiaza, it might have to be interpreted as an adjective. Tischler (HH: 204) translates "Örtlichkeit im Tempel, 'Schrein'?’, but this does not seem probable to me.

GIŠ $_{\text {zaharti-: see }}{ }^{\text {GIŠ }}$ zahurti-
zahhel(i)- (n.) 'weeds': nom.-acc.sg. or pl. za-ah-hé-li (KBo 6.34+ iii 45).
This word occurs only once:
KBo 6.34 + KUB 48.76 iii
(39) nu kiš-an te-ez-zi ku-iš=ua=kán ke-e
(40) li-in-ga-uš šar-ri-ez-zi nu-u=̌̌-ši ${ }^{\mathrm{d}} \mathrm{IM}-a \check{s}$
(41) ${ }^{\text {GIŠ }} \mathrm{APIN}$ ar-ha du-ua-ar-na-a-ú
(42) $[n=a]-a \check{s ̌-t a ~} I \check{S}$-TU IM.ŠU.NÍG.RIN.NA GIM-an=ma' $\dot{u}$-el-ku
(43) ša-r[a]-a Ú-UL ú-ez-zi $n=a$-aš-ta $a-p e ́-e l-l=a$
(44) IŠ-TU A.ŠÀ = $\check{S} U$ ZÍZ-tar ŠE ${ }^{A M}$ ša-ra-a le-e
(45) ú-ez-zi $n=[a]-a s ̌-t a ~ U G U ~ z a-a h-h e ́-l i ~ i-i ́ a-t a-r u ~$
'He says thus: 'Who will transgress these oaths, for him the Storm-god must break the plough.'. When, however, out of the oven grass does not come up, out of his field grain barley must not come up, (but) zahheli must go up'.

It is possible that zahheli means something like 'weeds'. The word either must be interpreted as a nom.-acc.sg. of a stem zahheli-, or as a nom.-acc.pl. in -i of a stem zahhel-.

Tischler (HH: 204) states that zahheli is "möglicherweise bloß Verschreibung für hahheli- ds.", apparently assuming that $z a-a h-h e ́-l i$ is wrong for $h a^{\prime}-a h-h e ́-l i$, writing ZA (所) for HA (届). Problematic for this idea, however, is the fact that hahhal- 'greenery, vegetation' (q.v.) never shows a form hahhel-, and that the oblique cases of hahhal- always show geminate -ll- (e.g. nom.-acc.pl. hahhalli).
${ }^{\text {GIŠ̌ }}$ zahrai- (c.) 'knocker(??)': acc.sg. za-ah-ra-in (KBo 6.10 ii 11 and duplicates). PIE * tieh ${ }_{2}$-r-oi- ??

This word occurs in one context only, namely in $\S 126$ of the Hittite Laws:
KBo 6.10 ii (with duplicates)
(11) ták-ku I-NA KÁ É.GAL ${ }^{\text {GIŠ }}$ za-ah-ra-in ku-iš-ki ta-i-e-ez-zi
(12) 6 GÍN.GÍN KÙ.BABBAR $p a-a-i$
'If someone steals the zahrai- on the gate of the palace, he will pay 6 shekels of silver'.

From this context, it is not exactly clear what kind of object zahrai- refers to. Formally, one could think of a connection with the verb $z \bar{a} h-{ }^{i} / z a h h-$ 'to beat, to hit' (q.v.), which possibly could indicate that zahrai- denotes 'knocker (on a door)'. If this is true and if $z a \bar{h}-/ z a h h-$ indeed goes back to a root *tieh $h^{-}$, zahraicould reflect *tieh $h_{2}$ r-oi-. Note that this word then would show that $* V h_{2} R V>$ Hitt. VhRV (cf. also ${ }^{\text {GIŠ }}$ māhla- and ${ }^{\mathrm{UZU}}$ muhrai-/mahrai-).
zahhurae- ${ }^{\text {zi }}$ (Ic2) 'to break, to crush': 3sg.imp.act. za-ah-hur-ra-id-du (KBo 10.45 iii 38 (MH/NS)), za-ah-hu-ra-id-du (KUB 41.8 iii 29 (MH/NS)); impf. za-ah-hu-ra-iš-ke-ez-zi (KUB 33.120 ii 31 (MH/NS)), z[a-a]h-[h]u-ri-eš-ke-ez-zi (KUB 36.7a iii 36 (NS)), za-ah-ri-eš-ke-ed-du (KUB 33.93 iii $34=23$ (NS)); broken: za-ah-hu-r[a-...] (VSNF 12.131 i 4 (NS)).

PIE * tieh $h_{2}$-ur-o-ie/o-?
This verb occurs in a few contexts only. For instance,
KUB 33.93 ii
(23) ${ }^{\mathrm{d}}$ Ta-aš-mi-šu-un=ma=ua ḩa-ah-ha[-ri-in G]I-an ma-a-an ar-ha
$z a$-ah-ri-eš-ke-ed-du
'Let him break Tašmišu off like a h. reed';

KUB 36.7a+ iii
(35) [n]u=ua-r=a-an ha-ah-ha-ri-in GI-an G[I]M-an ar-ha le-e (36) $z[a-a] h$ - $[h] u$-ri-eš-ke-ez-zi
'Let her not break him off like a $h$. reed';
KUB 41.8 iii (with additions from dupl. KBo 10.45)
(27) ... $n u-u=s \check{s}-m a-a \check{s}[(\mathrm{GAM}-a n)] \mathrm{KI}-a s ̌$
(28) GUL-ua-an-na-aš $k[(i-s ̌) a-r u \mathrm{UG}] \mathrm{U}=m a$ ne-pí-iš pa-ak-ku-šu-ar
(29) ki-ša-ru пи AN[-za ... (x)] an-da za-ah-h $u-r a-i d-d u$
'May the earth below you become the GUL-uanna- and may the sky above become the crusher, and may the sky(?) crush [...] therein' (cf. CHD P: 59).

The verb clearly means 'to break, to crush' and seems to have a stem zahhurae-. The one attestation showing a stem zahrae- (KUB 33.93 iii $34=23$ ) may have to be emended to $z a-a h-<h u->r i-e s ̌-k e-e d-d u$ (a sort of haplography of $\mathrm{HU}(\mapsto)$ and RI ( 4 (X)?). The verb belongs to the hatrae-class, which are denominative verbs derived from $* O$-stem nouns, which indicates that zahhurae- is built on a unattested noun *zahhura- 'crusher, breaker' (cf. Rieken 1999a: 356 ${ }^{1759}$ ). This noun easily can be seen as a derivative of the verb $z \bar{a} h{ }^{-}{ }^{i} / z a h h-$ 'to beat, to hit' (q.v.). If this latter verb indeed reflects a root *tieh $2^{-}$, zahhurae- goes back to virtual *tieh ${ }_{2}$-ur-o-ie/o-.
${ }^{\text {(GIŠ) }}$ zahurti- (c./n.) some chair or couch: nom.sg.c. za-hur-ti-iš, acc.sg.c. za-hुur$t i-i n$, nom.-acc.sg.n. za-ḩur-ti, gen.sg. za-hur-ti-aš, dat.-loc.sg. za-hur-ti (OS), za-hur-ti-ía, acc.pl. za-hur-ti-uš.

This word clearly denotes a wooden object to sit or lie upon, as can be seen e.g. in KUB 20.11 ii (8) ... UGULA ${ }^{\text {LÚ.MEŠ }}$ ALAM.ZU $9(9){ }^{\text {GIŠ }}$ za-hur-ti-ía e-ša 'the head of the clowns sits down on the $z$.' or KUB 36.104 rev . (5) za-hur-ti-i=š-ši ki-it-ta 'he lies on his $z$. . Because of the fact that the word is consistently written with the sign HAR/HUR, the word could be read zaharti- as well. Consensus has it, however, to cite zahurti-.

The single spelling of $-h$ - is indicative for a foreign origin of this word, because PIE * $h_{2}$ yields fortis $-h h$ - unless it stands in leniting position. One could suggests that we have to interpret the word as /tshurti-/ and that the single spelling of $-h$ - is due to the fact that it is part of an initial cluster /tsh-/. In the one case where we are sure to deal with such an initial cluster, we regularly find the spelling zašh-,
however, namely in za-aš-ha-i- 'dream' /tsHai-/ < * $d^{h} h_{1} s h_{2} o i-$. This indicates that zahurti- stands for $/ t^{s}$ ahurti-/ (or /t ${ }^{s}$ aharti-/), having a real single $-h$-, which points to a non-IE origin, in spite of its OS attestation. The fact that the word is of nonIE origin could explain the variation in gender.
$\boldsymbol{z a i}{ }^{\boldsymbol{i}} / \boldsymbol{z i} \boldsymbol{i}-(\mathrm{IIa} 4>\mathrm{Ic} 2)$ 'to cross, to cross over': 2sg.pres.act. $z a-a-i t-t \boldsymbol{i}$ (KBo 4.3 i 19 (NH), KUB 19.53 ii 9 (MH/MS), KUB 6.41 ii $8(\mathrm{NH})$, KBo 4.7 ii $11(\mathrm{NH})$ ), $z a-a$ - $[i]-i t-t i \quad(K B o \quad 5.13$ i 31 (NH)), zạ-á-š[i] (KUB 33.124 iv 1 (NS)), 3sg.pres.act. za-a-i (KBo 6.2 ii 31 (OS), KUB 31.81 obv. 1 (OS), KBo 6.3 ii 53 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 6.5 iv 14 ( $\mathrm{OH} / \mathrm{NS}$ ), KBo 8.38 obv.? 7 (NS), KUB 22.29 rev. 3 (NS), KUB 36.25 i 15 (NS), KUB 21.29 ii 42 (NH)), 2pl.pres.act. zi-iš-te-e-n[i] (KUB 26.87, 11 (OH/NS)), 3pl.pres.act. za-a-an-zi (KUB 46.38 i 16 (NS)), za-an-zi (KUB 25.14 iv 13 (OH/NS)), 1sg.pret.act. [z]é-eh-hu-un (KBo 16.10, 5 (NH)), zi-ih-ḩu-un (KBo 10.2 ii 18, iii 31 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 23.21 rev. 27 (MH/NS))), 3sg.pret.act. za-a-iš (MH/MS, often), za-a-i-iš (KBo 12.39 i 18 (NS), KUB 14.8 rev. 11 (NH)), za-iš (HKM 46 obv. 7 (MH/MS)), za-a-it (KUB 33.106 iii 10 (NS)), 1pl.pret.act. za-i-u-en (KUB 31.101, 11 (MS)), 3pl.pret.act. za-a-er (KUB 18.24 iii 16 (NS), KUB 49.11 ii 24 (NS)), 2pl.imp.act. za-it-te-en (KUB 31.101, 7 (MS)), za-at-tén (KUB 40.1 obv. 6 (NS)); verb.noun za-a-u-[ar] (KUB 3.95, 1 (NS)); impf. za-iš-ke/a- (KUB 31.130 rev. 7 ( $\mathrm{OH} / \mathrm{MS}$ )), za-aš-ke/a- (KUB 33.117 obv. 10 (NS)), za-a-iš-ke/a- (KUB 33.124 iv 2 (NS), KUB 8.50 ii 10 (NS)), za-a-eš-ke/a- (KBo 12.44, 7 (NH)).

Derivatives: $\boldsymbol{z i n u} \boldsymbol{z}^{\boldsymbol{z}}$, $\boldsymbol{z a i n u} \mathbf{-}^{z i}$ (Ib2) 'to make cross' ([z]i-nu-uz-zi (KBo 10.11 i 7 ( $\mathrm{OH} / \mathrm{NS}$ )), zi-nu-e-er (KBo 3.46 i 19 ( $\mathrm{OH} / \mathrm{NS}$ )), zi-nu-uš-ke-ez-zi (KBo 6.3 ii 52 ( $\mathrm{OH} / \mathrm{NS}$ )); zi-i-nu-uš-ke-ez-zi (KBo 6.2+19.1 ii 30 (OS)); zi-e-nu-uš-ke-ez-zi (KBo 6.5 iv 12 ( $\mathrm{OH} / \mathrm{NS}$ )); za-nu-ma-an-zi (KBo 22.6 i $20(\mathrm{OH} / \mathrm{NS})$ ), za-nu-um$m a-a n-z[i]$ (KUB 23.101 iii 8 (NH)); za-i-nu- (IBoT 4.242, 3, KBo 35.227 obv. 9 (NS), KUB 1.8 iv 19 (NH)); za-a-i-nu- (IBoT 4.242, 5, IBoT 3.148 iii 42 (MH/NS), KBo 10.44 obv. 19 (NS), KBo 3.6 iii 77 (NH))).

IE cognates: Skt. at- 'to wander, to roam'; Gr. हैtı 'further, beyond', Skt. áti 'beyond, over', Lat. et 'and', Goth. ip 'and, but' ??

PIE * $h_{1} t-o i-* h_{1} t-i-? ?$
The oldest forms of this verb clearly belong to the dāi/tiianzzi-class: zāitti, zāi, zištēni, zehhun. In younger Hittite, we find forms that inflect according to the hatrae-class (zāši, zānzi, zait, zatten). Despite its archaic formation (the dāi/tiiianzi-class is a closed category and almost all verbs that inflect thus have a good IE etymology), the verb has never received a credible etymology.

The dāi/tiianzi-class consists of two types of verbs. Firstly, we find one verb that reflects a root that ends in -i-, namely nai- ${ }^{i} /{ }^{*} n i-$ 'to turn' < *neiH-. The other verbs reflect a formation $* C C$-oi- $/ * C C-i$, i.e. the zero-grade of a root followed by an ablauting *-oi-/-i-suffix (cf. Kloekhorst fthc.a).
In the case of zai-/zi-, this means that we are either dealing with a root zaiending in $-i$-, or with a stem $z$-ai-. As the sound $z$ - either reflects $* T s$ or an assibilated $* t$ before $* i$, the possibilities in the first case are limited. If we have to reckon with a root zai-, than it either reflects *tiei-, which is unlikely because of the two $i$ 's, or $*$ Tsei-, which is an impossible PIE root structure. I therefore assume that zai-/zi- goes back to an -oi-/-i-suffixed formation $* z-a i-/ z-i-$.
If $z a i-/ z i-$ indeed is to be analysed as $z-a i-/ z-i-$, then $z$-, which is phonetically [ts-], must reflect the zerograde of the root. This means that the root could be *Tes-. Another possibility arises, however, if we look at the prehistory of halzai- ${ }^{i}$ / halzi- 'to shout'. This verb reflects a formation $* h_{2} l t-o i-/ * h_{2} l t-i$ - of which the assibilated variant of the root-final $* t$ of the weak stem $\left(* h_{2} l t-i->\right.$ halzi-) was generalized throughout the paradigm. If a similar scenario could apply in the case of zai-/zi-, we can assume that it reflects a root *Het-.
When looking for roots having either the structure *Tes- or *Het-, I only found one verb within the IE languages that would be connectible to Hitt. zai-/zi- on semantic grounds, namely Skt. at- 'to roam, to wander'.
Until now, Skt. at- is usually connected with Lat. annus and Goth. apna- 'year' $<* h_{2}$ et-no-, implying a reconstruction $* h_{2}$ et-. Such a reconstruction is impossible for Hittite, however, as $h_{2} t-i$ - should have given **hazi-. The question is, of course, whether Skt. at- indeed is to be connected with the word for 'year'. Semantically it is not imperative and in my view less probable than a connection with Hitt. 'to cross (over)'.
If Skt. at- and Hitt. zai-/zi- indeed belong together, then we have to reconstruct a root $* h_{1 / 3} e t$-, which makes a connection with lat. annus and Goth. apnaimpossible. I am wondering to what extant the root $* h_{1 / 3} e t$ - is further connectible with the adverb * $h_{1}$ eti 'beyond, over', the semantics of which are strikingly similar to at least the Hittite verb. If these belong together, we can reconstruct a root *h $h_{l}$ et- (visible in Skt. at- 'to roam, to wonder') of which the -oi-/-i-suffixed formation ( ${ }^{\prime} h_{1} t-o i-/ * h_{1} t-i-$ ) yielded Hitt. zai-/zi-.
The causative of this verb is attested with several stems: z zinu-, zanu-, zainu-, $z \bar{a} i n u$-. The stem z$\overline{\bar{z}} n u$ - (with OS attestations) is clearly the original one, reflecting $* h_{1} t-i-n e u-$. Note that in this form the $-i$ - is retained, in contrast to zanu- 'to make cook' $<$ *tih $h_{1}$ neu-. The stem zainu- is clearly a younger form, built on the 3 sg.pres. $z a \bar{a}$. The one NH attestation zanu- is likely to be emended $z a-\langle i->n u-$.
zakkar: see šakkar, zakkar / šakn-
(URUDU/GIŠ) $\boldsymbol{z a k k i}$ - (c.) 'bolt' (Sum. MUD): nom.sg. za-ak-ki-iš, za-ak-ki-eš, acc.sg. $z a-a k-k i-i n$, gen.sg. $z a-a k-k i-i, a s a^{2}(\mathrm{KUB} 29.11+\mathrm{KBo} 36.48$ ii 4), dat.-loc.sg. $z a$ $a k-k i-t i-i(K B o 5.11$ i 1, KBo 5.11 i 25), za-ak-ki-ti (KUB 26.23 ii 13), acc.pl. $z a$ $a k-k i-u s ̌, z a-a k-k i-e-e s ̌(K U B 13.1 i 25)$.

For an extensive treatment of the semantics of this word see Boysan-Dietrich 1987: 133f. She concludes that zakki- denotes a bolt that can close doors, windows but also covers of chests. It is either made of wood (GIŠ) or metal/copper (URUDU). The dat.-loc.sg. zakkitĭ shows a Hurrian case-ending, which indicates that the word is of Hurrian origin.
zalla- (gender unknown) 'trot': acc.sg.? za-al-la-an (KUB 9.1 i 12, 20), abl. za-al-la-az (KUB 29.40 ii 12 etc.), Luw.abl.-instr. za-al-la-ti (KBo 3.5 i 7, 12, 66).
Anat. cognates: CLuw. zallauuar (n.) 'gait, driving' (nom.-acc.pl. \& za-al-la-u-ua-ra (KUB 44.4+ rev. 5)).

This word occurs in hippological texts only. According to Kammenhuber (1961a: 366), the word is of Hurrian origin. She interprets zallati as a Hurrian gloss of Hitt. pennai 'to make trot' and zallaz (found in the expression zallaz uua- 'to trot') as the Hittite borrowing of that word. Starke (1990: 546), however, interprets the word as Luwian, and states that zallati is the Luw. abl.-instr. of a stem zalla-, which is the source of hittitized zalla- of which we find the abl. in zallaz uua-. Melchert (1993b: 275) follows Starke and adduces a Hitt. acc.sg. za-al-la-an (KUB 9.1 i 12, 20). The latter forms are in such broken contexts, however, that we cannot decide whether they really mean 'trot' there. According to Starke (1990:544f.), the stem zalla- is found in the Luwian word zallauuar (n.) 'gait, driving' (attested with gloss wedge in Hittite context: KUB 44.4+ rev. 5) as well. No further etymology.
${ }^{(D U G)} \boldsymbol{z a l h} \boldsymbol{a} \boldsymbol{i} \boldsymbol{i}$ (n.) vessel used in rituals: nom.-acc.sg. $z a-a l-h a-a-i$ (e.g. IBoT 2.14 i 4), za-al-ha-i, abl. za-al-ha-ía-az, instr. za-al-ha-a-it, za-al-ha-it.

PIE * $t h_{2}-\bar{o} i-? ?$
Although this word shows the archaic diphthong-inflection, no IE etymology has been offered to date, as far as I am aware. If the connection between zaluganu- ${ }^{z i}$ and dāluki- (see their respective lemmas) indeed proves that an initial dental was
assibilated before $* l$ in Hittite, I am wondering to what extent we can connect zalhāi- to the root *tleh $2^{2}$ - 'to carry'. Semantically a meaning 'carrier' would fit well for zalhāi-, and formally a reconstruction ${ }^{*} t h_{2}-\bar{o} i$ - (with generalized zerograde out of the oblique stems) would regularly yield Hitt. /t 1 H ( $\mathrm{a} i-/$, spelled zalhāi-.
zaluknu- ${ }^{z i}$ (Ib2) 'to postpone, to delay': 1sg.pres.act. za-lu-ga-nu-mi (KUB 31.38 obv. 37 ( $\mathrm{OH} / \mathrm{NS}$ )), 3sg.pres.act. za-lu-ga-nu-zi, za-lu-uk-nu-za (KUB 26.17 i 9 (MH/MS)), 1pl.pres.act. [z]a-lu-ga-nu-um-me-e-ni (KUB 49.2 i 6 (NS)), 3pl.pres.act. za-lu-ga-n[u]-an-zi (KUB 55.43 i 14 (MH/MS)), 1pl.pret.act. za-lu$k a_{4}$-nu-me-en (KUB 18.36, 12 (NS)); 3pl.pres.midd. za-al-ka ${ }_{4}$-nu-an-ta-ri (KUB 13.1 iv 22 (MH/MS)); verb.noun za-lu-ga-nu-mar (KUB 21.38 i 34, $36(\mathrm{NH})$ ); impf. za-lu-ga-nu-u[̌̌-ke-ši] (KUB 21.38 obv. 25 (NH)).

Derivatives: zalukē̌̌̌s- ${ }^{z i}$ (Ib2) 'to take long' (3sg.pret.act. za-lu-ki-iš-ta (KUB 18.59 + KUB 6.9 ii 13 (NS)), za-lu-keš[-ta] (KUB 50.77 + KUB 49.73 r.col. 5 (NS))).

PIE *dlug ${ }^{h}$ -
The one attestation $z a-l u-u k-n u-z a$ (note the very archaic 3 sg.pres.-ending $-z a$ instead of $-z i$ ) proves that the stems of these verbs are zaluk-nu- and zaluk-ēšš-. It has always been noted by scholars that these verbs closely resemble daluknu- ${ }^{z i}$ 'to lengthen' and dalukēšš-zi 'to become long' not only from a formal point of view, but from a semantical point of view as well. Since Laroche (1950: 41), however, the two stems dalug- and zalug- are regarded as separate forms: the former is seen as a cognate to Skt. dīrghá-, Gr. סo入ıxós 'long' etc., and the latter as a cognate to Gr. $\lambda \eta \not \gamma \omega$ 'to end'. This has found wide acceptance: for instance, Eichner (1973a: $85^{11}$ ) reconstructs daluki- as *dlh $h_{1} g^{h}{ }^{\circ}$ - and $*$ zaluki- as $* \operatorname{slh}_{1} g o ́-;$ Melchert (1994a: 67) similarly reconstructs $* d l-(e) u g^{h}$ - and $* s l-(e) u g$ - respectively (with different enlargements).
In my view, however, the words zaluknu- and zalukē̌̌š- are semantically that similar to daluknu- and dalukēšš- that they must be cognate in one way or another. This view was also expressed by Oettinger (1979a: 249), who explains the formal difference between the two stems as reflecting ablaut. He states that zlreflects *dl- whereas dal- goes back to *dol-. This is supported by the fact that the adjective daluki- shows a few plene spellings da-a-lu-, which indicate that it reflects a full grade form *dólug-i-, whereas the derived verbs in -nu- and -ēšš- in principle should use the zero-grade stem: $* d l u g^{h}$-néu- and $* d l u g^{h}-e ́ h_{l} s h_{l}$-. If we assume that in Hittite an initial dental assibilated before $* l(* \# T l->$ Hitt. \#zl- as in
zalhāi- < *tlh $h_{2}-\bar{o} i-$ ), then *dlug-néu- and *dlug ${ }^{h}$-é $h_{1} s h_{l^{-}}$regularly would yield Hitt. zluknu- and zlukēšš-. The verbs daluknu- and dalukēšš- probably are to be interpreted as /talugnú́-/ and /talugéS-/ (cf. the one attestation da-a-lu-ke-eš-zi), having restored the full grade of the adjective and subsequently its $t$-.

See at taluki- / talugai- for further etymology.
${ }^{\text {GIŠ}}$ zaluuani- (c.) 'plate (vel sim.)': nom.sg. [ $\left.{ }^{\mathrm{GIS}}\right] z a ̣-l u$-uạ-nị-ị̌̌ (KBo 3.34 iii 19), [ ${ }^{\mathrm{GI}]}{ }^{\mathrm{s}}$ za-lu-uạ-ni-ičs (KBo 3.34 iii 22), ${ }^{\mathrm{G} I \mathrm{~S}_{z}}$ z-lu-ua-ni-iš (KBo 3.34 iii 25), dat.loc.sg. ${ }^{\text {GIŠ }}$ za-lu[-ua-n] $i(K B o 3.34$ iii 19)

This word occurs in one context only:

> KBo 3.34 iii
> (15) $A$-HII LUGAL $A$-NA $P[A-N I A-B I]$ LUGAL ku-i-e-eš e-eš-kán-ta ${ }^{\mathrm{m}}[A m]-m u$-na
> (16) DUMU ${ }^{\text {URU }}$ Šu-uk-z[i-ia ] $a-a p-p a-a n-n=a{ }^{\mathrm{m}}$ Pí-im-pí-ri-it [DUMU ${ }^{\mathrm{UR}]}{ }^{\mathrm{U}}$ Ni-na-aš-ša

> (18) $k i-i t-t a{ }^{\mathrm{G}}\left[{ }^{\text {LS}} \mathrm{BANŠ}\right] \mathrm{UR}-u(\check{s})=\check{s}-m a-a s ̌ k i-i t-t a$
> (19) $\left[^{\text {GIŠS }}\right] z a ̣-l u-u a q-n i ̣-i s ̌[=(s ̌)-m a-a s ̌] ~ k i-i t-t a ~ h a-p a-s ̌ u-u s ̌ ~ G I S ̌ z a-l u[-u a-n] i ~ z i-k a ́ n-z i$
'Those who sit as brothers before the father of the king, Ammuna the son from Šukziia and behind (him) Pimpirit the son of Ninašša, these were the sons of his heart. A chair is placed before them. A table is placed before them. A zaluuani- is placed before them. They put hapaša-'s on the zaluuani'.

It is possible that hapaša-denotes 'dish' (cf. $\mathrm{HW}^{2} \mathrm{H}: 218$ ), so zaluuani- probably denotes a table or plate on which the dishes are placed. No further etymology.
zama(n)kur (n.) 'beard': nom.-acc.sg. za-ma-kur (KUB 30.10 ii 8 (OH/MS), KUB 31.127 i 11 (OH/NS)), za-ma-an-kur (KBo 21.20 i 25 (NS), KUB 35.45 ii 33 (NS)), za-ma-an-gur (KUB 24.12 ii 21, iii 7, 34 (NS)).

Derivatives: šamankuruant- (adj.) 'bearded' (nom.pl.c. ša-ma-an-ku-úr-ua-an-te-eš (KBo 3.8 iii $25(\mathrm{NH})$ ), acc.pl.c. [ša-m]a-an-ku-úr-ua-du-uš (KBo 3.8 iii 7 (NH))).
IE cognates: Skt. śmáśru- 'beard', Arm. mawrow-k' ‘beard', Lith. smãkras, smakrà 'chin', Alb. mjekër 'chin, beard'.

PIE *smók-ur
It is remarkable that all attestations with $-n$ - are found in NS texts (including the derivative šamankuruant-), whereas the variant za-ma-kur (attested twice, so it
cannot be disregarded as a form to be emended to za-ma-<an-»kur) is attested in a $\mathrm{MH} / \mathrm{MS}$ and an $\mathrm{OH} / \mathrm{NS}$ text. Does this indicate that the original form was zamakur in which a nasal was inserted in NH times only? If so, then it would explain the fact that all IE cognates lack a nasal (Skt. śmáśru-, Arm. mawrow-k‘ 'beard’ etc. < *smók-ru-).
The other IE languages show a preform *smók-ru-, whereas Hittite points to $*_{s m o ́ k}$-ur (note that if za-ma-kur is the original form, it shows lenition of $* k$ to Hitt. single $-k$ - due to the preceding *ó, cf. § 1.4.1). This indicates that the PIE form *smók-ur only after the split-off of Anatolian was metathesized to *smok'ru.
The word zama(n)kur is consistently spelled with $z a$-, whereas the derivative šamankuruant- is spelled with $\check{s} a$-. The origin of this $z$ - has been debated. E.g. Oettinger (1994: 322) argues that we are dealing with a sporadic development of $*_{s}>z$ in a nasal environment. This is quite $a d h o c$, however, and does not explain the $\check{s}$ - in šamankuruant-. The only other case where initial ${ }^{\prime} s$ - ends up as Hitt. $z$ is in zakkar 'faeces', which has an oblique stem šakn- with $\check{s}$ - (see at šakkar, zakkar / šakn-). In my view, it is remarkable that in both zama(n)kur and zakkar only the nom.-acc.sg.n.-form shows $z$ - and not the oblique stem or derivatives. I therefore want to propose that the development $*_{s-}>z$ - is due to a false analysis of the syntagms *tod smók'ur and *tod skórr (or whatever preceding pronoun) as *tod 'smóḱur and *tod 'skórr respectively. Note that this only happened when we are dealing with $*_{s C}$ - (cf. šakkar < *sok'r, but also e.g. šahhhan 'corvée' < *séh ${ }_{2} n$, šākan 'oil’ < *sóg ${ }^{\prime \gamma h} n$, etc.).
zamna/i- (unclear) '?': case? za-am-ni-ša-an (KBo 3.8 iii 11), za-am-na-aš (KBo 3.8 iii 29).

These words occur in the following contexts only:

KBo 3.8 iii
(10) ... ú-li-pa-na-an pár-ga-u-e-i
(11) ḩa-mi-ik-ta UR.MAH za-am-ni-ša-an
(12) ha-mi-ik-ta
'He tied the ulipa- on the high (place), he tied the lion zamnišan',
besides
ibid.

$$
\begin{equation*}
\ldots \quad u ́-l i-i p-z a-a(n)=\check{s}-s ̌ a-a n \tag{28}
\end{equation*}
$$

(29) [pár-ga-u-]e la-a-ad-da-at UR.MAḢ za-am-na-aš la-a-at-ta-at
'He released the ulipza- on the high (place), he released the lion zamnaš'.
It is not clear what case-forms the two words represent nor what they mean.
(4) zammurae- $^{z i}$ (Ic2) 'to insult, to slander': 3sg.pres.act. za-am-mu-ra-a-ez-zi (KUB 14.1 i 38 (MH/MS), KUB 13.20 i 27 (MH/NS)), za-am-mu-ra-e[z-zi] (KBo 16.25 iv 27 (MH/MS)), [za-a]m-mu-ra-e-ez-zi (KBo 8.35 i 25 (MH/MS)), 3pl.pres.act. za-am-mu-ra-a-an-zi (KUB 23.72 rev. 26 (MH/MS)), 1sg.pret.act. > za-ти-ra-пи-ип (KUB 19.23 obv. 3), 1pl.pret.act. za-am-mu-ra-u-e-en, za-am-mи-ra-a-u-e-en, 1sg.imp.act. za-am-mu-ra-al-lu (KUB 36.85, 7); inf.I za-am-mu-ra-u-ua-an-zi.
Anat. cognates: CLuw. zammurai- (n.) 'insult, slander' (nom.-acc.sg. za<-am>-mu-ra-i), zammuratt(i)- (c.) 'insult, slander' (dat.-loc.sg. 4 za-am-mu-ra-at-ti).

This verb is attested from MH times onwards. It clearly belongs to the hatraeclass, which consists of denominative verbs derived of ${ }^{*} O$-stem nouns. In this case, the verb probably is derived from a noun *zamтига-. A few times the verb is preceded by a gloss wedge, which can indicate a foreign origin.

A nominal stem zammura- is attested in CLuwian, where we find the nouns zammurai- and zammuratt-, both meaning 'insult, slander'. It is therefore likely that the Hittite verb zammurae- is built on a Luwian nominal stem zammura'insult, slander'. Further etymology of this form is unknown.
zankila- ${ }^{\boldsymbol{i}}$ / zankil- (IIa1 $\gamma$ ) 'to fine, to punish': 3sg.pres.act. za-an-ki-la-i (KBo 2.4 1.edge 4 (NS)), 3pl.pres.act. za-an-ki-la-an-zi (KUB 21.29 iii 33, KUB 23.123, 5, KUB 13.4 iv 10), 3pl.imp.act. za-an-ki-la-a-an-du (KUB 9.15 ii 22 (NS)).
Derivatives: zankilatar / zankilann- (n.) 'penalty, fine' (nom.-acc.sg. za-an-ki-la-tar, dat.-loc.sg. za-an-ki-la-an-ni (KUB 5.5 iv 15), nom.-acc.pl. za-an-ki-la$\operatorname{tar}^{\text {HI.A }}$ (KUB 5.6 ii 48), za-an-ki-la-tar-ril ${ }^{\text {HI.A }}$ (KUB 5.6 iii 34)).

$$
\text { PIE } * s h_{2} n k-i+* l(o) h_{l^{-}} ? ?
$$

This verb on the one hand shows the $\operatorname{tarn}(a)$-inflection in 3sg.pres.act. zankilai and on the other the hatrae-class inflection in 3pl.imp.act. zankilāndu. The 3pl.pres.act.-forms zankilanzi can belong to both. Since both inflections are productive in NH times, we cannot decide what the original inflection was. Nevertheless, it is not likely that the hatrae-class inflection is original, since verbs of this class do not show secondary influence by the $\operatorname{tarn}(a)$-class. Therefore,

Oettinger's citation (1979a: 34) of this verb as zankilae- is incorrect. Rieken (1999a: 480, following Eichner 1973a: $98^{78}$ ) assumes that "zankilae-" is derived from an -il-stem noun *zankil-, but this is then equally incorrect.
I am wondering to what extent we can compare the inflection of zankila- ${ }^{i}$ to $l \bar{a}^{-}{ }^{i}$ / l- 'to let go' and assume an old univerbation of a noun *zanki + lāi / lanzi. Oettinger (1979a: $152^{40}$ ) suggests as a root etymology a connection with Lat. sanciō 'to make holy, inviolable' and sacrāmentum 'security, deposit', which words probably reflect $*_{s} h_{2} n k$ - and $*_{s} h_{2} k$ - (cf. Schrijver 1991: 97). If this root etymology is correct, we have to interpret *zanki as an old dat.-loc.sg. of a noun *zank- that reflects *sh ${ }_{2} n k$-. The original meaning of the verb then may have been something like 'to let go into security'. Nevertheless, the formal side of this etymology, namely the development of initial $*_{s}$ - into Hitt. $z$-, is highly dubious. Oettinger (l.c.) assumes that " $s>z$ im Anlaut in Nachbarschaft von $n$ ", but his examples in favour of this development, zena- and zamankur, to which he adds zakkar, zapnu- ${ }^{z i}$, zalugnu- ${ }^{z i}$ and zinni- ${ }^{z i} /$ zinn- in 1994: 323-4, have to be explained otherwise (see their respective lemmas).
$\boldsymbol{z a n u} \boldsymbol{z}^{z^{i}}$ 'to cook (trans.)': see $z \bar{e}^{-a(r i)} / z-$
$z a n u-{ }^{z i}$ 'to make cross': see $z a i-^{i} / z i-$
zappiie/a- ${ }^{-{ }^{i}}$ (Ic1) '(act.) to drop, to drip; (midd.) to leak': 3sg.pres.act. za-ap-pi-ia$z i$ (KUB 9.15+39.52 iii 29, 30), 3pl.pret.act. za-ap-pí-e-er (KUB 48.7 iii 3, 12), za-ap-pí-i-e-er (KUB 48.7 iii 8), 3sg.pres.midd. za-ap-pí-ia-at-ta (KBo 3.23 i 11, KUB 13.2 ii 38), za-ap-pí-ia-at-ta-ri (KUB 31.86 ii 18, KUB 31.89 ii 7); impf. $z a$-ap-pí-iš-ke-ez-zi (KUB 30.10 ii 15).

Derivatives: zappi- ‘leak’ (abl. za-ap-pí-ia-az (KUB 9.15 iii 8, 13)), zapnu- ${ }^{z i}$ (Ib2) 'to sprinkle' (3sg.pres.act. za-ap-pa-nu-uz-zi (KBo 5.2 i 51, KUB 7.1 i 28, KBo 39.156 iii 16'’), za-ap-nu-uz-zi (KUB 39.71 i 28, KUB 9.6 i 38), 3pl.pres.act. za-ap-pa-nu-ưa-an-zi; impf. za-ap-pa-nu-uš-ke-ši (HKM 10 rev .31 (MH/MS))).

Oettinger (1979a: 528) suggests to connect zappiie/a- with ModHG Saft 'juice', but this word rather belongs rather with Lat. sapiō 'to have taste, to know' < *sHp- (cf. Schrijver 1991: 93-4), which makes a connection with zappiie/a-zi highly unlikely. Moreover, the formal side is difficult, because $*_{s}$ - does not normally yield Hitt. $z$-. Note that Oettinger (1994: 321f.) tries to fix this problem by posing a sporadic development by which initial $*_{s}$ - can yield Hitt. $z$-, namely
through "Fernassimilation durch Nasal". In this case, $z$ - must then have originated in the causative zapnu- ${ }^{\text {zi }}$. All other examples that Oettinger adduces in favour of this development, zakkar, zalugnu- ${ }^{-i}$, zamankur, zankila- ${ }^{i}$ / zankil-, zena-, and zinni- ${ }^{z i}$ / zinn-, must be explained otherwise, however (see their respective lemmas).
Mechanically, zappiie/a- should be reconstructed as *tiop-ie/o-, which in my view could easily be onomatopoetic (cf. e.g. ModEng. drip).
\& zaršiial (c.) 'safeconduct, warranty': acc.sg. \& za-ar-ši-i_ia-an (KUB 14.3 ii 61), gen.sg. \& za-ar-ši-ịa-aš (KUB 14.3 ii 62), dat.-loc.sg. \& za-ar-ši-íla (KUB 14.3 ii 64).

This word is consistently written with a gloss wedge, which points to a foreign (Luwian?) origin. No further etymology.
zarzur- (n.) 'concoction': nom.-acc.sg. za-ar-zu-úr (KUB 42.107 iii 13 (OH/NS)), za-ar-zu-u-ur (KUB 31.57 iv 18 (OH/NS)), za-ar-zu-ú-úr (KUB 34.89 obv. 6 (OH?/MS)), [za-a]r-zu-úr (KUB 34.89 obv. 1 (OH?/MS)).

This noun is treated by Rieken (1999a: 359) who convincingly assumes that it means 'concoction'. She argues that the word is of Luwian origin, because of the occurance of $z$ before dark vowels. This is not imperative however (cf. $z \bar{a} h h^{i}$ / zahh-, zalhāi- and zaluknu- ${ }^{z i}$ ). Rieken suggests a connection with the root $* k^{\prime} e r h_{2-}$ 'to mix' and unconvincingly reconstructs * ${ }^{\prime}$ or $h_{2}-k_{6}^{\prime} h_{2}$, with loss of the first laryngeal in o-grade form and of the second one in Auslaut, and with syllabification of $*^{r} r$ to $-u r$ as supposedly in Luw. gurta- $<*^{\prime} g^{h} r d^{h}-o$ - and HLuw. zura/in- 'horn' < *krn-. I can offer no alternative, however.
zašhai-: see tešha-
zašgaraiš / zašgarišš- (n.) 'anus': nom.sg. za-aš-ga-ra-iš (KBo 17.61 rev. 14 (MH/MS)), dat.-loc.sg. za-aš-ga-ri-iš-ši (KBo 17.61 rev .14 (MH/MS)).

PIE *skōr $+{ }^{*} h_{l} e h_{3}$-es-
This word clearly is a compound of zakkar 'dung' (see šakkar, zakkar / šakn-) and aiš- / išš- 'mouth' (q.v.). See there for further etymological considerations.
${ }^{(\mathrm{GIS})} \boldsymbol{z} \overline{\boldsymbol{a}} \boldsymbol{u}$ (n.): nom.-acc.sg. $z a-a-u$.

This word occurs quite often in rituals and probably denotes some kind of container, vessel or plate. It is usually accompanied with the adjective KÙ.BABBAR 'silver' or GUŠKIN 'gold'. Once we find an attestation where $z \bar{a} u$ bears the determinative GIŠ 'wood' (KUB 59.19 v 7 : GIŠ $z a-a-u$ KÙ.BABBAR), which might indicate that in principle a $z \bar{a} u$ is made of wood, but that in rituals silver or golden ones were used. Note that the word is consistently spelled ${ }^{\circ} a-u$, which is remarkable. The only other instance of a spelling ${ }^{\circ} a-u$ is $\check{s} i-i-i s ̌-h a-u$ 'sweat' (q.v.): in all other cases we find ${ }^{\circ} a$ - $u$. If this spelling is to be interpreted as /t $t^{s} \overline{\mathrm{a}} \mathrm{o} /$, it is likely that the word is not of IE origin.
zazhai-: see tešha-
$z \bar{e}_{-}^{a(r i)} / \boldsymbol{z}$ - (IIIIa) 'to cook (intr.), to be cooked': 3sg.pres.midd. ze-e-ía (KBo 17.36 ii 11 (OS)), zé-e-a-ri (KUB 53.11 ii 6 (MS), KBo 5.1 i 29, 36 (MH/NS), KBo 15.49 i 13 (MH/NS)), zé-e-ía-ri (KBo 8.91 i 6 (MS), KUB 32.49a iii 25, 33, 25, etc. (MH/MS)), zé-a-ri (ABoT 20+ rev. 6 (MH/MS)), zé-ia-ri (KUB 60.121 obv. 7 (MS), KUB 2.6 v 8 ( $\mathrm{OH} / \mathrm{NS}$ ), KUB 32.128 ii 27 (MH/NS), KUB 7.4, 13 (NS)), ze-ía-ri (KUB 7.13 rev. 17 (NS)), [z]ééi-e-ri (KBo 18.201 rev .8 (NS)), 3pl.pres.midd. zé-ia-an-ta (KBo 4.9 i 23 (NS)), 3pl.pres.act. zé-e-a-an-ta-ri (Bo 69/601 iii 4 (NS)); part. ze-e-an-t- (OS), zé-e-an-t- (OS), zé-ía-an-t-, zé-e-ia-an-t-, ze-ia-an-t-.

Derivatives: $\boldsymbol{z a n u -}{ }^{z^{i}}$ (Ib2) 'to cook (trans.)' (3sg.pres.act. za-nu-uz-zi (OS), za$n u-z i$, 3pl.pres.act. $z a-n u-a n-z i$ (OS), za-nu-ua-an-zi, 3sg.pret.act. za-nu-ut, 3pl.pret.act. za-nu-er; inf.I za-nu-ma-an-zi; impf. za-nu-uš-ke/a-).

PIE *tiéh $h_{1}$ o, *tih $h_{1}$ neu-
This verb is usally cited as zeia-, zea- or ziia-. This is misleading as $-a$ - is not part of the stem but the 3sg.pres.midd.-ending. The one form [z]é-i-e-ri (KBo 18.201 rev. 8), which seems to indicate a stem zeie- besides zeia-, is to be interpreted as $z e ́-i-i a_{x}-r i$ (cf. Melchert 1994a: 35). The verb is written with either the sign ZÉ or with ZI. The latter sign can also be read $z e$, and therefore all attestations point to a stem $z \bar{e}$-. In the causative $z a n u{ }^{z i}$ (probably /t'nu-/), we find a stem $z$-. I therefore cite the verb as $z \bar{e}^{-a(r i)} / z$-.

An ablaut $z \bar{e}-/ z$ - can only be explained if we assume a 'preform' $* z e h_{l^{-}} / * z h_{l^{-}}$. The origin of $z$ - is difficult, however, and opinions differ. For instance, Oettinger (1979a: 515) reconstructs ${ }^{*}$ seih $_{l^{-}}$(Lat. sinere 'to let'), whereas Melchert (1994a: 118) reconstructs *teih $l_{13^{-}}$(Lat. tītio 'fire-brand'). LIV' $^{2}$ also reconstructs *teih $l^{-}$ but connects this with OIr. tinaid 'to melt'. All reconstructions seem unlikely to
me, as I do not see how s seih $_{1}$ - or $*$ teiH- would yield $z$ - (Melchert's assumption (l.c.) that $* t$ assibilates before $-e i$ - as well is totally ad hoc). In my view, only a preform * tieh $_{l^{-}} / * t i h_{l^{-}}$would be able to explain the outcome $z \bar{e}$ - / $z$ - (note that *tih $h_{l}$ neu- probably phonetically became *tia $h_{l}-n e u-$, yielding Hitt. /ts$ə n u-/$, spelled zanu-, which contrasts with *h $h_{1}$ ti-neu- > zinu- 'to make cross').
Within Hittite, a connection with zinni- ${ }^{z i} / z i n n-$ 'to stop, to finish' is likely on formal grounds as the latter verb probably reflects *ti-ne- $h_{l}$-. This could mean that the middle $z \bar{e}-/ z$ - originally meant 'to be brought to its end $>$ to be cooked; to cook (intr.)'. If this indeed is the semantical development displayed by $z \bar{e}-/ z-$, one may wonder if connecting $z \bar{e}$ - / $z$ - with IE words like Lat. tītio 'fire-brand' or OIr. tinaid 'to melt' makes much sense.
$z e(i) a$-: see $z \bar{e}^{-a(r i)} / z$ -
zēna- (gender unknown) 'autumn’: gen.sg. zé-e-na-aš (KUB 38.32 rev .21 , IBoT 2.93, 8, KBo 13.248 i 13), dat.-loc.sg. zé-e-ni (often), zé-ni.

Derivatives: zēnant- (c.) 'autumn’ (nom.sg. zé-na-an-za (KUB 21.11 rev .4 ), gen.sg. zé-e-na-an-da-aš, zé-e-na-an-ta-aš, zé-na-an-da-aš, dat.-loc.sg. zé-e-na-an-ti)

PIE *tiéh ${ }_{1}$-no-
Friedrich (HW) cites this word as commune, giving a nom.sg. zenaš. I have not been able to find this form, however: all cases of zēnaš that I could find had to be interpreted as gen.sg. Just as we find hamešhant- 'spring' beside hamešha- 'id.' and gimmant- 'winter' beside gimm- 'id.', we here find zēnant- beside zēna-.
Oettinger (1979a: $152^{40}$ ) states that zēna-reflects *seno- 'year', showing a development $*_{s-}>z$ - in nasal environment. He repeats this view in 1994: 323, adducing Lyc. -snñi 'year(?)'. I am rather sceptical about this etymology as I do not think that such a phonetic development can be established for Hittite. Moreover, I find it semantically unlikely that a word 'year' would develop into 'autumn'.
I would rather suggest a tie-in with $z \bar{e}^{-a(r i)} / z$ - 'to cook $<*$ to bring to its end' and zinni- ${ }^{z i} /$ zinn- 'to stop, to finish' and reconstruct *tiéh $h_{1} n o-$ '*the closening (season) $>$ autumn'.
zenna-: see zinni-zi/zinn-
zenni-: see zinni- $^{\text {zi}} /$ zinn-
-zepa-: see at ${ }^{(\mathrm{f})}$ tagānzepa-
zēri- (n.) 'cup' (Sum. ${ }^{\text {DUG }} \mathrm{GAL}$ ): nom.-acc.sg. ze-e-ri (KUB 17.3+ iv 31 (OS)), all.sg. ze-e-ri-i ia (KBo 17.3+ iv 32, (OS)).
Derivatives: ${ }^{(\text {GIŠ) }}$ zeriialli- (n.) 'cup-holder' (nom.acc.sg. zé-e-ri-i_a-al-[li] (KBo 27.42 ii 29), zé-ri-i̇la-al-li (KBo 4.9 v 18), z[é-r]i-íla-al-li (KUB 10.21 ii 7), ${ }^{\text {GIŠ }} z e$ -$r[i-i l a-a l-l i(?)](K B o ~ 21.78 ~ i i ~ 1)), ~ g e n . s g . ~ z e ́-r i-i ́ l a-a l-l i-a s ̌ ~(K U B ~ 42.87 ~ v ~ 16)), ~ z e ́-~$ ri-ia-li-ia-aš (KUB 55.54 obv. 32)).

PIE *tiéh ${ }_{1}-r i-$
Although this word is attested in its phonetic form only twice (both in OS texts), its sumerogram ${ }^{\text {DUG }}$ GAL is attested quite often. The sign ZI can be read $z i$ as well as $z e$, so $\mathrm{ZI}-e-r i(-)$ can be interpreted as $z \bar{e} r i-$ as is indicated as well by the spelling zé-ri-ia-al-li of the derivative.

Formally, the word could be a deverbative noun in -ri-, like ešri- 'shape', edri'food' and auri- 'lookout' from $e \check{s} \Sigma_{-}^{z i} / a \check{s ̌-}$ 'to be', ed- ${ }^{z i} / a d-$ 'to eat' and $a u-{ }^{i} / u$ 'to see' respectively. In that case zerri- would be derived of the verb $z \bar{e}-$ - ${ }^{a(r i)}$ 'to cook', which might make sense from a semantic point of view as well: 'the cooking cup'.
$-\boldsymbol{z i}$ (3sg.pres.act.-ending of the $m i$-flection)
Anat. cognates: Pal. ${ }^{\circ} \boldsymbol{C}-\boldsymbol{t i},{ }^{\circ} \boldsymbol{V}-\boldsymbol{t t i},{ }^{\circ} \boldsymbol{V}-\boldsymbol{t i}$ (3sg.pres.act.-ending); CLuw. ${ }^{\circ} \boldsymbol{C}-\boldsymbol{t i}$, ${ }^{\circ} \boldsymbol{V}-\boldsymbol{t t i},{ }^{\circ} \boldsymbol{V}-\boldsymbol{t i}$ (3sg.pres.act.-ending); HLuw. - $\boldsymbol{t i}=/-\mathrm{ti} /$ or $/-\mathrm{di} /$, $\boldsymbol{- r \boldsymbol { i }}=/-\mathrm{di} /$ (3sg.pres.act.-ending); Lyc. - $\boldsymbol{i i},-\boldsymbol{d i}$ (3sg.pres.act.-ending).

PAnat. *-ti
IE cognates: Skt. $-t i$, Gr. $-\tau$, Lith. $-t i$, Lat. $-t$, Goth. $-t$.
PIE *-ti

Although the bulk of the attestations the 3 sg.pres.act.-ending of the miconjugation show $-z i$, we occasionally find $-z a$ as well: $e$-eš-za (KBo 6.2 iv 54 (OS)), har-za (KBo 9.73 obv. 12 (OS), KBo 24.9 i 5 (OH/MS)), iš-tar-ni-ik-za (KBo 40.272, 5 (MS)), pu-uš-za (KBo 8.128 1.col. 3 (OH/NS), KUB 34.10, 6 (fr.), 9 ( OH/NS), KBo 13.36 rev. 4 (fr.), 7, 10, 13 (fr.) (OH/MS?)), šar-ku-e-ez-za (KBo 25.196, 4 (OS); but interpretation not fully certain), [šar-ni-ik]-za (KBo 6.2 iv 55 (OS) // šar-ni-ik-zi (KBo 6.3 iv 54)), ta-ru-uh-za (KUB 43.75 rev. 9 $(\mathrm{OH} / \mathrm{NS})$ ), $z a-l u-u k-n u-z a$ (KUB 26.17 i 9 (MH/MS)). These forms are clearly archaic and show that the original ending of the 3sg.pres.act. was $-z a=/-\mathrm{t}^{\mathrm{s}} /$, to
which already in pre-Hittite times an extra -i was added in analogy to -mi, -ši, -ueni and -ttēni. In the other Anatolian languages, we find the ending /-ti/ as well as $/-\mathrm{di} /$, the latter being the lenited variant.
These endings clearly belong with e.g. Skt. -ti, Gr. - tı, Lith. $-t i$, Lat. $-t$, Goth. $-t$, etc. $<$ PIE *- $t i$.
ziiala-: see $z \bar{e}^{-{ }^{\text {a(ri) }}} / z$ -
zūk / tu- (pers.pron. 2sg.) 'you (sg.)': nom.sg. zi-i-ik (OS), zi-ik (OS), zi-g=a (OS), acc.sg. tu-uk (MH/MS), gen.sg. tu-e-el (OS), tu-e-l=a (OS), tu-el (MH/MS), dat.-loc.sg. tu-uk (MH/MS), abl. tu-e-da-az, tu-e-ta-az.

Derivatives: zikila 'you yourself' (zi-ki-la (MH/MS)).
Anat. cognates: Pal. $\boldsymbol{t} \overline{\boldsymbol{u}} / \boldsymbol{t} \overline{\boldsymbol{u}}$ 'you (sg.)' (nom.sg. ti-i, $t i=$, acc.-dat.sg. tu-ú); CLuw. $\boldsymbol{t} \overline{\boldsymbol{l}}$ 'you (sg.)' (nom.sg. $t i-i, t i-i-i=h-h a, ~ t i-i=h-h a)$; HLuw. $\boldsymbol{t i} / \boldsymbol{t} \boldsymbol{u}$ 'you (sg.)' (nom.sg. $t i=h a=w a / i=z a$ (ASSUR letter $g \S 52$ ), dat.-loc.sg. $t u-u$ (ASSUR letter $f$ $\S 16)$, abl.-instr. $t u-w a / i-r i+i(A S S U R ~ l e t t e r ~ f \S 10)$ ).

PAnat. * $\bar{\imath} / * t u$ -
IE cognates: Skt. tvám, acc. tvắm, GAv. tuū̄m, acc. $\theta \beta q$, TochB tuwe, TochA $t u$, Gr. $\sigma \varepsilon ́$, Dor. $\tau \bar{v}$, Lat. $t \bar{u}$, Goth. $p u$, Lith. $t u ̀$, OCS $t y$.

PIE *tih,${ }^{*} t u-$
See chapter 2.1 for a detailed treatment of these forms.
$\boldsymbol{z i k}(\boldsymbol{k}) \boldsymbol{e} / \boldsymbol{a} \mathbf{-}^{z i}$, impf. of $d a i^{-}{ }^{i} / t i-$ (q.v.)
zinna-: see zinni- $^{z i} /$ zinn-
zinail- (n.) a food-stuff: nom.-acc.sg. zi-na-a-il (Bo 3123 iv 6 (OS), KUB 42.107 iii? 11 ( $\mathrm{OH} / \mathrm{NS}$ )), zi-na-il (KBo 11.41 i $8(\mathrm{OH} / \mathrm{NS})$ ), [z]i-en-na-el (IBoT 2.93 rev . 14 ( $\mathrm{OH} / \mathrm{NS}$ ) ).

See Rieken 1999a: 488f. for attestations and interpretation of this word. She convincingly argues that the word is of Hattic origin. The NS form [z]i-en-na-el may show lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before $-n-$ (cf. § 1.4.8.1.d) as well as fortition of OH intervocalic /n/ to $\mathrm{NH} / \mathrm{N} /(\mathrm{cf}$. § 1.4.7.2.e).
zinakki- (c.) a plant(-product): nom.sg. zi-na-ak-ki-iš (KUB $7.53+$ KUB 12.58 i 47).

The word occurs only once, in a list of ingredients for cultic matters. Its meaning is unclear and therefore no etymology.
zinni- ${ }^{\text {zi }} /$ zinn- (Ia1 > IIa1 $\gamma$ ) '(act.) to stop, to finish, to be ready with; to destroy; (midd.) to go to the end': 1sg.pres.act. zi-in-na-ah-hi (KBo 15.25 obv. 12 (MH/NS)), 2sg.pres.act. zi-in-ni-ši (KUB 29.1 i 5 (OH/NS)), 3sg.pres.act. zi-in$n i-z[i]$ (KBo $20.10+25.59$ i 5 (OS), $[z i-i] n-n i-i[z-z i]$ (KUB 60.41 rev. 19 (OS)), zi-in-ni-iz-zi (MH/NS, NH), ze-en-ni-iz-zi (NH), zi-in-na-a-i (NH), zi-in-na-i (NH), ze-en-na-i (NH), 1pl.pres.act. [z]i-in-na-ú-e-ni (KBo 17.25 ii 2 (OS)), zi-in-nu-um-me-e-ni (KUB 13.35+ iv 3 (NS)), 2pl.pres.act. ze-en-na-at-te-ni (KUB 43.22 iv 15 (NS)), 3pl.pres.act. zi-in-na-an-zi (OS), ze-en-na-an-zi (NH), 1sg.pret.act. zi-in-ni-nu-un (NH, Oettinger 1979a: 311), zi-in-na-ah-hu-un (NH), ze-en-na-ah-hu-un (NH), 2sg.pret.act. zi-in-ni-it (KBo 3.21 ii 2 (OH or MH/NS), 3sg.pret.act. zi-in-ni-it (MH/NS, NH), ze-en-ni-it (NH), 3pl.pret.act. zi-in-ni-er (KUB 29.54 iv 12 (MH/MS)), 3sg.imp.act. ze-en-ni-eš-du (Bo 2968 obv.? 10), zi-in-na-a-ú (KBo 4.4 ii 13 (NH)), 2pl.imp.act. zi-in-na-at-tén (HKM 72 obv. 15 (MH/MS), KUB 31.64 iii 20 ( $\mathrm{OH} / \mathrm{NS}$ )); 3sg.pres.midd. zi-in-na-at-ta-ri (NH), ze-en-na-at-ta-ri (NH), 3pl.pres.midd. zi-in-na-an-ta-ri (IBoT 1.36 iii 51 ( $\mathrm{OH} / \mathrm{MS}$ ), NH), 3sg.pret.midd. zi-in-na-at-ta-at (HKM 80 obv. 8 (MH/MS), NH); part. zi-in$n a-a n-t$-, ze-en-na-an-t-; verb.noun zi-in-nu[-mar] (cf. Oettinger 1979a: 312); inf.I zi-in-ni-u-an[-zi] (KUB 34.9, 4 (OH/NS)); impf. zi-in-ni-iš-ke/a- (NH).

PIE *ti-ne- $h_{1}-$, *ti-n- $h_{l^{-}}$
In the older texts, this verb is consistently spelled zi-in-. Only in NH times, we find spellings with ze-en-, which is due to the lowering of $\mathrm{OH} / \mathrm{i} /$ to $\mathrm{NH} / \mathrm{e} /$ before -n- (cf. § 1.4.8.1.d). The older attestations show an ablaut between zinni- (zinniši, zinnizzi) in the singular and zinn- (zinnanzi) in the plural. Already in OS we find that, on the basis of the analysis of zinnanzi as zinna-nzi, that the stem zinnabecomes productive, giving e.g. 1pl. zinnaueni (OS), instead of the more original zinnummēni (although the latter form is found in a NS text only). From MH/NS onwards, we find $\operatorname{tarn}(a)$-class inflected forms like zinnahhi and zinnāi.

The ablaut found in the oldest forms, zinni- ${ }^{z i}$ / zinn- is only explicable if we assume ${ }^{*{ }^{\circ}} \mathrm{Ceh}_{l^{-}} /{ }^{*}{ }^{\circ} \mathrm{Ch}_{l^{-}}$(thus Oettinger 1979a: 152). Melchert (1984a: 114) correctly remarks that despite this attractive interpretation, the verb is consistently spelled zi-in-ni- instead of expected *zi-in-ne-. Therefore, Melchert states that the verb cannot be cited as zinne- (as e.g. Oettinger does) but must be rendered zinni"whatever the explanation of the $i$ vocalism" (l.c.). Perhaps we are dealing with
some kind of raising of $* z i n n e \bar{z} i$ to zinnizi because of the phonetic environment (cf. § 1.4.9.1).

Oettinger (1979a: 152) gives two possible reconstructions for this verb, namely * tineh $_{1}$ - and ${ }^{*}$ sineh $_{1}$-. He favours the latter, because of a possible connection with Lat. sinere 'to allow, to let, to permit'. I do not understand the semantic connection, however. A meaning 'to allow, to permit' is quite something else than 'to stop, to finish, to be ready with': the meanings are rather opposites. Also formally, the connection is problematic as I do not think that sineh $_{1-}$ would yield $z i-:$ there are many Hittite words starting in ši- $<{ }^{*} s i-$, also when containing nasals.

In my view, we therefore rather reconstruct *tinéh $h_{l}$-ti, tinh $l_{l}$-énti. These forms would regularly yield pre-Hitt. *zinēzi / zinnanzi, after which the -nn- of the plural was generalized throughout the paradigm and the $-\bar{e}$ - of the singular was raised to $-i$.
I would suggest that the root ${ }^{t i e h} h_{1}$ - is the same as the one visible in $z \bar{e}^{-a(r i)} / z$ 'to cook (intr.), to be cooked', which therefore must be interpreted as originally denoting 'to be brought to its end'. This would indicate that of the root *tieh $h_{1}$ the meaning 'to end, to finish' is primary, and not 'to cook', which makes a tie-in with OIr. tinaid 'to melt' (cf. at $z \bar{e}^{-{ }^{a(r i)}}$ ) less likely.
Note that in *ti-n-eh $h_{l}$ - the $t$ is assibilated with retention of the $-i$ - (so also zinu- ${ }^{z i}$ 'to make cross' $<{ }^{*} h_{1} t-i-n e u-$ ), which contrasts with zanu- ${ }^{z i}$ 'to make cook' < *tih ${ }_{1}$-neu-.
${ }^{\text {MUNUS }}{ }^{\text {zintuhi- (c.) 'girl' (Sum. }}{ }^{\text {MUNUS }}$ KI.SIKIL): gen.sg.(?) zi-in-tu-hi-ia-[aš?], nom.pl. zi-in-tu-hi-e-eš (OS), zi-in-tu-hi-eš (OS), zi-in-tu-ḩi-i-e-eš, zi-tu-hुi-i-$e-[e s ̌]$, gen.pl. zi-in-tu-ḩi-ía-aš.

According to Friedrich (HW, Erg. 3: 38), ${ }^{\text {MUNUS }}$ zintuhi- alternates with ${ }^{\text {MUNUS }}$ KI.SIKIL in parallel texts, which would determine its meaning as 'girl'. The word probably is of foreign (Hattic?) origin, which can be seen by the occurrence of the single $-h$ - which is hard to explain from an IE point of view.
zinu- ${ }^{z i}$ 'to make cross': see $z_{a i-}{ }^{i} / z i-$
zinnuk '?': zi-in-nu-uk (VBoT 1, 26)
This word occurs only once, in the first Arzawa-letter:
VBoT 1
'I heard everything zinnuk'.

We know that this letter is written by an Egyptian person, which might explain the aberrantness of this form. It could perhaps be built on the verb zinni- ${ }^{z i} /$ zinn'to be finished', and then mean something like 'I heard that everything is finished'. This is quite speculative, though.
zipa-: see šipa-, zipa-
-zipa-: see at ${ }^{(\mathrm{f})}$ tagānzepa-
zipat, zipattan(n)i (uninfl.) a small measure unit, especially for food: zi-pát (OS), zi-pát-ta-an-ni (OS). zi-pád-da-ni (OS)

The exact meaning of these words is not clear. Like many other measure units, they probably are of a foreign origin.
zizzahi- (c.) Hurrian term, denoting some ritual beverage: acc.sg. zi-iz-za-hi-in (KUB 15.1 i 17).

The word occurs in Hurrian texts quite often. Only once we find it in a Hittite text:

KUB 15.1 i

$$
\begin{equation*}
\ldots{ }^{\mathrm{d}} H e ́-p a ́ t=u a \tag{15}
\end{equation*}
$$

(16) me-mi-iš-ke-ez-zi I[-NA] KUR URU GIDRU-ti=u ${ }^{\text {U }}=m u$
(17) $z i-i z-z a-h i-i n i-i[a-a n-d] u$ INA KUR $M u-k i s ̌=m a=u a=m u$
(18) GEŠTIN $i$-i $a-a n-d u$
'Hepat says: In Hatti they have to make zizzahi- for me, but in Mukiš they have to make wine for me'.

It clearly denotes some kind of beverage.
In Friedrich HW Erg. 3: 38, this form is mistakenly regarded as a variant of zizzuhi- (vessel for wine). It clearly is of Hurrian origin.
zizzipanti- ${ }^{\text {SAR }}$ (c.) a herb: nom.sg. zi-iz-zi-pa-an-ti-iš (KBo 13.248 i 11).

The word occurs only once in a list of herbs. Its exact meaning is unknown and therefore no etymology.
${ }^{\text {ún }}$ zuhri-: see uzuhri-
\& zūūa- (c.) 'bread, food' (Sum. NINDA): nom.sg. NINDA-aš (KUB 3.105 i 2), acc.sg. \& zu-u-ua-an (KUB 36.5 i 4, KUB 13.4 iv 67, 71, KUB 13.4 ii 20, KUB 13.6 ii 8), zu-u-ua-an (KUB 41.25 obv. 7), gen.sg./dat.-loc.pl. \& zu-u-ua-aš (KUB 13.17 iv 34 ).

Derivatives: see zuuae- ${ }^{i j}$.
See Otten (1971b: 14) for an extensive treatment. In KUB 36.5 i 4 we find KAxU-aš \& zūuan as a parallel of KUB 33.112+ iii 9 NINDA-an KAxU-i, which indicates that $<z \bar{u} u a$ - is the word behind NINDA. The almost consistent use of gloss wedges with this word indicates foreign (Luwian?) origin. Unfortunately no further etymology.
zииае- ${ }^{z i}$ (Ic2) '?': 3sg.pres.act. zu-ua-a-iz-zi (KBo 12.89 iii 8), 3sg.pret.act. zu-ua-a-it (KBo 12.89 iii 17).

This verb occurs twice in one context only:

KBo 12.89 iii

'He z.-s smoke. [.....] they curse. And Kamrušipa [....] looked: 'What is this?.
[......] (s)he went to the festival and [call]ed upon the big [gods] and [called upon] the small gods and [....] called upon the pure eagles. [...] was not there
and $[\ldots \ldots .$.$] it. They come and the wind [\ldots$.$] them. They [\ldots$.$] and the smoke (...)$ them. [...] he $z$.-ed smoke'.

It is quite unclear what the context refers to. The only thing that is clear, is that zuuae- has tuhhuuai- / tuhhui- 'smoke' as its object. An exact meaning is beyond our grasp.
Formally, the verb belongs to the hatrae-class, which consists of denominative verbs derived from $*_{o-s t e m}$ nouns. In this case, zuuae- seems to derived from a noun *zuua-. It is unclear whether this *zuua- can be equated with (\&) zūua'bread, food' (q.v.). If so, then zuuae- should mean something like 'to eat' or similar, but this is highly speculative, of course.


[^0]:    ${ }^{283}$ Although I certainly do not claim exhaustiveness for this category.
    ${ }^{284} \mathrm{I}$ am aware that this latter category is quite arbitrary.
    ${ }^{285}$ Sturtevant's A Hittite Glossary (1931, second edition 1936), Tischler's Hethitisch-Deutsches Wörterverzeichnis (1982) and Tischler's Hethitisches Handwörterbuch (2001) are all mere glossaries: they only cite the stem of a Hittite word with its translation without giving (much) linguistic information.

[^1]:    ${ }^{286}$ Kindly provided to me by prof. Tischler, for which I am very grateful.

[^2]:    PIE *sth $2_{2}$-ent-i-on-

