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Hittite nasal presents

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Infixes verbs to roots ending in a velar

2.0 In Hittite, the *n*-infix is attested only in the roots ending in a velar or in a laryngeal. In this chapter I will focus on the roots ending in a velar; first I will discuss the verbs with the infix *-ni(n)-* and then the verbs where the infix takes forms other than *-ni(n)-*.

2.1.1 There is a group of Hittite verbs where an infix *-ni(n)-* can be clearly distinguished, as there are cognate verbs with and without this infix – *harni(n)k-* ‘to destroy’ : *hark-* ‘to perish’, *huni(n)k-* ‘to batter, crack’ : *huek-* ‘to slaughter’, *istarni(n)k-* ‘to make ill’ : *istark-* ‘to ail’. Two more verbs, *ninink-* ‘to mobilize, set in motion’ and *sarnink-* ‘to compensate, exchange’, belong to this type as well; while it is disputed whether they have infixless cognates in Hittite, the infix in these verbs is confirmed by their conjugation type and their etymologies, see the respective entries below in 2.2. The alleged verb *hini(n)k-*, which is also said to belong here, does not exist, see Shatskov 2010 and the entry for *hink-* in 2.3.

2.1.2 The infix is attested in two variants, *-ni-* and *-nin-*, cf. the paradigm of the verb *harni(n)k-*:

Pres.		Pret.	
Sg.	Pl.	Sg.	Pl.
1 <i>harnikmi</i>	(<i>sarninkweni</i>)	<i>harninkun</i>	(<i>istarninkwen</i>)
2 <i>harniksi</i>	<i>harnikteni</i>	<i>harnikta</i>	<i>harnikten</i>
3 <i>harnikzi</i>	<i>harninkanzi</i>	<i>harnikta</i>	<i>harninker</i>
Ptc. <i>harninkant-</i>			

The spelling of the infix is fairly consistent, though the second /n/ of the infix can sometimes be omitted, e.g., *ḫu-u-ni-kán-za* KBo 6.2 I 15 OS, *ḫar-ni-ku-un* KBo 2.5a II 6 NH or *ni-ni-kán-zi* KUB 18.15 rev. 7 NH. Similar “defective” spellings are attested

for other verbs with *-nC-* in root-*auslaut*, e.g., *li-ku-wa-an-ni*¹⁷ KUB 9.31 I 42 (MH/NS) for *link-* ‘to swear’ and *ša-ah-ḫu-un* KBo 5.9 I 20 (NH) for *sanh-* ‘to seek’, so this phenomenon is not restricted to the *nin*-verbs, see Hoffner, Melchert 2008: 46.

The variant *-ni-* is attested in the singular of both present and preterite, while *-nin-* is more common in the plural. There are, however, certain forms that show that the alteration *-ni-/nin-* is not solely determined by singular vs. plural – there is *-nin-* in 1sg. pret. and *-ni-* in 2pl. pres. and pret. In the imperfectives and derivatives, the infix is usually spelled *-nin-*, e.g., *istarningai-* ‘ailment’, with two apparent exceptions: *sarnikzel-* ‘compensation’ and a verbal noun *ḫu-[u-]ni-ki-iš-ša-[ar]* KBo 1.51 rev. 15.

It is immediately clear from the table above that three-consonantal clusters of the shape *-nkC-* (with the exception of */nkw/*, on which see 2.1.5) are missing. In contrast, the verbs with stems ending in *-nk-* and *-nh-*, such as *lenk-* ‘to swear’, *hink-* ‘to grant’, *hink-* ‘to bow’, *hamank-* ‘to bind’, *nenk-* ‘to drink one’s fill, get drunk’, as well as *sanh-*¹⁸ ‘to seek, clean’ and *unh-* ‘to empty’, often have forms with both *-VnCC-* and *-VCC-* spellings, e.g., 3sg. pres. act. *li-ik-zi* KBo 6.2 IV 3 OS and *li-in-ga-zi* KBo 6.3 III 75 OH/NS. Note that there is a diachronic distribution of these spellings, with *li-ik-zi* being older than *li-in-ga-zi*, see below in 2.1.4.

2.1.3 This peculiar type of Hittite verbs is usually compared to Skt. 7th class presents, which also have a nasal infix *-ná:-n-*, going back to PIE **-né-* : *-n-*. Cf. the conjugation of the verb *yuj-* ‘to yoke, join’ in the present active:

Sg.	Pl.
1 <i>yunájmi</i>	<i>yuñjmás</i>
2 <i>yunákṣi</i>	* <i>yuñktá</i>
3 <i>yunákti</i>	<i>yuñjánti</i>

The shape and unique way of derivation of Hittite and Indo-Iranian infix stems leaves little doubt that they are related. Even though the Hittite the pattern *-ni-* : *-nin-*

¹⁷ Here we find also a very unusual 1pl. ending *-wanni* with double *-nn-*.

¹⁸ The forms are presented according to CHD; the issue whether there were two homonymous verbs *sanh-* is not to be discussed here; for the problem cf. Puhvel 1979: 299ff., CHD Š: 171.

does not fully match the Indo-Aryan alternation *-ná/-n-* (< PIE **-né/-n-*), it is still tempting to connect the Hittite forms of the infix with the Indo-Aryan ones, and quite a few researchers have suggested that Hittite *-ni/-nin-* goes back to PIE **-né/-n-*. If so, *sarnik-/sarnink-* is supposed to continue PIE 3sg. **sṛ-né-k-ti* : 3pl. **sṛ-n-k-énti*. The first one to suggest this was Benveniste, who claimed that the spelling *-ni-in-* in, e.g., *šar-ni-in-kán-zi* reflects a secondarily syllabic /n/ between consonants (Benveniste 1932 : 161f.). This point of view was further supported by Puhvel (1960: 25-6) and Watkins (1969: 34). Kuryłowicz (1958: 220-1) explained this spelling, very unusual for a syllabic nasal, as an attempt to make the paradigm more uniform.

Alternatively it has been proposed that the infix in Pre-Hittite was an invariable /nin/, with a regular omission of the second /n/ before consonantal clusters /kC/, caused by the difficulties in graphic representation of such clusters in cuneiform, cf., e.g., Pedersen 1938: 145, Sturtevant 1951: 127, Kronasser 1966: 435-7, Lindeman 1976: 115-6 and Strunk 1973: 59. Note that the cluster /nkw/ preserved in 1pl. pres. and pret., e.g., *iš-tar-ni-in-ku-en* KUB 3.45 obv. 4 or *šar-ni-in-ku-e-ni* KUB 22.57 obv. 4, was the only kind of cluster that could be written without graphic vowels. Strunk (ibid.) also pointed to the form of 1sg. pret.: if *-ni/nin-* reflected the original PIE ablaut with *-ni-* < **-né-* in the singular, then *har-ni-ku-un* would be the expected outcome. Such a spelling is, however, attested only once in a New Hittite text, and is likely to be a scribal error, cf. 2.1.8 below; the regular forms are *har-ni-in-ku-un*, *ni-ni-in-ku-un* etc. Therefore the Hittite infix differs from the Indo-Aryan not only in its shape but also in distribution¹⁹. Under this theory the derivation of Hittite *-ni/-nin-* immediately from PIE **-né/-n-* would be impossible.

The problem with the latter proposal is that the three-consonantal clusters of the shape *-nkC-* were often fully spelled in some other verbs, e.g., 3sg. pret. *ha-ma-na-ak-ta* and *ha-ma-an-kat-ta* along with *ha-ma-ak-ta* for *hamank-* ‘to bind’, as Viredaz (1976: 168f.) and Hart (1977: 134f.) have shown. Since the cluster /nkC/ was often

¹⁹ Besides 1sg. pret. there is also a rare *hi*-conjugation form 3sg. pret. *ni-ni-in-ga-aš* KUB 53.15 IV! 30 with *-nin-* instead of *-ni-*, expected in the singular under this theory.

spelled with an additional graphic vowel in other words, the second /n/ in the presumed infix /nin/ did not have to be necessarily omitted in writing.

In order to solve this puzzle, Hart (1977: 138) and Oettinger (1994: 320f.) proceed from a generalized full grade **-ne-*, which is preserved in some forms as /ni/, while in other forms it developed into /nin/ due to a certain process. Hart describes it as an insertion of /n/ before /k/ in a sequence *nasal - vowel - k - vowel* and adduces some examples like *za-ma-an-kur* ‘beard’ as compared to Instr. *za-ma-kur-te-et*²⁰ or *tu-ni-ik*, G.Sg. *tu-ni-in-ga-aš*, a kind of bread²¹. Oettinger (ibid.) objects that this approach cannot explain the regularity of *-nin-* in certain forms. He points out that *-nin-* occurs in those forms where we also have an *-n-* in the ending or the suffix (e.g., 1pl. pres. *-wani*, 3pl. pret. *-anzi*, 1sg. pret. *-un*, participial suffix *-ant-*). However, there are several counterexamples to Oettinger’s suggestion, such as *-ni-* used in 2pl. pres. *-teni* (*harnikteni*) or generalized *-nin-* in some derivatives, (e.g., imperfectives in *-ske/a-* or *istarningai-*).

In sum, the variation *-ni-/nin-* cannot reflect an original **-né-/n-* ablaut, but it cannot be due to alleged impossibility to spell the second *-n-* of *-nin-* before two consonants either.

2.1.4 As I argued in Shatskov 2006, the solution to this problem seems to be the diachronic distribution of the *-nCC-* spellings. Forms without /n/, e.g., *li-ik-ta*, are attested throughout the history of the Hittite language whereas forms containing /n/, e.g., *li-in-ik-ta*, appear first in the Middle Hittite period. The only exceptions are *ga-a-an-ga-aḫ-ḫi* KBo 17.1 IV 17 (OS) and *ga-a-an-ga-aḫ-ḫé* KBo 17.3 IV 13 (OS), cf. Kimball 1999: 115. However, A. Kassian pointed out to me that the spelling *-Vk-ḫV-* is extremely rare. I know of only two examples – a likely loanword *šu-ú-up-ḫa-ak-ḫi-il* (KBo 25.121 I 7 OS) and *ša-ak-ḫi* (KUB 30.10 obv. 10 OH/MS). It shall be noted that in all the other instances the latter form is spelled as *ša-a-aq-qa-a[ḫ-ḫi]* (OH/MS), *ša-*

²⁰ The *-n-* in this word is etymologically unexpected, cf. Skt. *śmāśru-* ‘beard, moustache’ < **sme/okru-*.

²¹ This phenomenon is relatively common in Hittite, though it is not a regular process, s. Melchert 1994: 171ff., Kimball 1999: 318f., cf. Carter 1977/78, Justeson, Stephens 1981, Oettinger 1994. In most examples of nasal perseveration, *-n-* appears before a dental. However, we must keep in mind that not all of these verbs have a satisfactory etymology, so in some cases this *-n-* may be original.

ag-ga-aḥ-ḥi, *ša-ga-aḥ-ḥi*, *ša-aq-qa-aḥ-ḥi* and *ša-a-ag-ga-aḥ-ḥi*, cf. CHD Š: 21f. It seems that the cluster *-kh-* is avoided in Hittite, most probably due to difficulty in pronunciation, and in case of *ga-a-an-ga-aḥ-ḥé* and *ga-a-an-ga-aḥ-ḥi* there was an anaptyctic vowel inserted. Cf. the New Hittite form *ga-an-ga-i* (KUB 7.60 II 6) that shows an extended stem *kanka-* (type II 2 a in Oettinger's classification, cf. Oettinger 1979: 420).

Kloekhorst proposes an alternative explanation for preservation of *-n-* in *ga-a-an-ga-aḥ-ḥé* and *ga-a-an-ga-aḥ-ḥi*. He argues that in a **VnKC* cluster /n/ was dropped after all vowels except *ā* (Kloekhorst 2008: 87, cf. also p. 437). But this assumption is based on just these two OS forms (*ga-a-an-ga-aḥ-ḥi* KBo 17.1 IV 17 and *ga-a-an-ga-aḥ-ḥé* KBo 17.3 IV 13), while the tendency to avoid *-kh-* clusters is certainly there. For example, there is only one instance of *ša-ak-ḥi* as opposed to numerous spellings like *ša-ag-ga-aḥ-ḥi*, *ša-aq-qa-aḥ-ḥi* or *ša-ag-ga-aḥ-ḥu-un*. These can hardly be merely alternative spellings, as the forms of *sākk-/sakk-* with the consonant cluster /kt/ are always spelled without a graphic vowel between them, cf. 2sg. pres. act. *ša-(a-)ak-ti* (never ***ša-ag-ga-at-ti* or sim.) or 3sg. pret. act. *ša-(a-)ak-ta* (never ***ša-ag-ga-at-ta* or sim.). For this reason I assume that there was a real anaptyctic vowel inserted between *-g-* and *-h-*.

All the other relevant Old Script forms show lack of *-n-* in this context: *li-ik-zi* KBo 6.2 IV 3, *ša-aḥ-zi* KBo 22.1 obv. 17, *li-ik-ta* KBo 9.73 obv. 2, *sa-aḥ-ta* KUB 43.33 obv. 4, 5, *ḥa-ik-t[(a-ri)]* KUB 36.100 + KBo 7.14 obv. 19, *ḥé-ek-ta* KBo 20.10 I 4-6, 10, *ni-i-ik* KUB 43.31 left col. 6, *ša-aḥ-te-[-ni?]* KBo 16.45 obv. 6²²

Similar spellings from later periods usually occur in Middle Hittite originals or texts copied from Old Hittite and Middle Hittite originals²³. Therefore, *-n-* is never

²² The HPM dating for KBo 9.73 and KUB 43.33 is Old Hittite or Middle Hittite. KBo 16.45 is Middle Hittite according to CHD.

²³ They are as follows: *ḥa-ma-ak-mi* KUB 50.89 NH (CTH 578); *ḥa-ma-ak-zi* KBo 13.109 MH/NS, KUB 24.9 MH/NS; *ḥa-mi-ik-ta* KBo 3.8 OH/NS, KBo 22.128 OH/NS, *ḥa-ma-ak-ta* KBo 55.179 NS, KUB 26.91 NH (CTH 183), KUB 51.33 NS, Bo 7248 n/a (CTH 670); *ḥa-am-ma-ak-ta* KUB 38.23 NS; *ḥa-mi-ik* KBo 22.128 OH/NS; *ḥa-mi-ik-ta-at* KBo 3.8 OH/NS, KBo 22.128 OH/NS; *ḥi-ik-mi* KBo 22.118 OH/NS, KUB 33.27 OH/MS; *ḥi-ik-zi* KBo 2.3 MH/NS, KBo 17.88 OH/MS, KBo 22.117 NS (CTH 470), KBo 22.189 Tudh. IV, KBo 23.91 OH/MS, KBo 39.8 MH/MS, KUB 9.28 MH/NS, KUB 17.18 NS (CTH 448), KUB 35.54 MS, KUB 35.58 NS (CTH 760), IBoT 1.36 MH/MS, Bo 4530 n/a (CTH 448); *ḥi-ik-ta* KBo 16.82 MS, KBo 20.74 MS, KBo 21.13 NS (CTH 449), KBo 27.37 NS (CTH 670), KBo 30.57 MS, KUB 58.48 (OH/NS); *ḥa-ik-ta* KBo 23.91 MS, KUB 57.26 OH/NS; *ḥa-ik-ta-ri* KUB 36.101 OH/NS; *ki-ik-zi* KUB 12.5 MH/MS; *li-ik-zi* KBo 3.29 OH/NS, KUB 7.1 OH/NS, KUB 36.127 MH/NS, KUB 40.88 NH (CTH 294); *li-ik-ta* KUB 14.1 MH/MS,

spelled in front of consonant clusters other than *-kw-* in Old Hittite, and spellings with *-n-* were first introduced in the Middle Hittite.

2.1.5 There are two possible explanations for the omission of /n/ in these verbs where it belonged to the root rather than the infix, like *sanh-* ‘to seek’ and *nink-* ‘to quench one’s thirst, get drunk’²⁴ – it could either be graphic or it could reflect certain phonetic developments.

One could argue that /n/ (or rather its allophone /ŋ/²⁵) was graphically omitted in front of two consonants by Old Hittite scribes, and then started to be spelled in this environment in Middle Hittite (so Kimball 1999: 97). If so, spellings like 3sg. ***har-ni-in-ik-zi* would be expected to appear in Middle and New Hittite texts. This is, however, not the case, and the infix is regularly spelled *-ni-* before consonantal clusters (with the exception of *-kw-*) in all periods of Hittite. Under this theory, the odd distribution of *-ni-* and *-nin-* (see above 2.1.2-3) is yet to be accounted for.

In Shatskov 2006, I argued for a Proto-Hittite/Old Hittite phonetic process that caused loss of /n/ before consonant clusters; later, in Middle Hittite, /n/ was restored analogically²⁶ in most verbs ending in *-nk-*, but not in the *-nin-*verbs. The preservation of /n/ before /kw/ in Old Hittite in contrast with its loss before /kt/, /ks/ or /kts/ can be explained as follows: the cluster /kw/ was allowed in the onset of a syllable, and therefore syllabification in 1pl. *harninkweni* and 3sg *harnikzi* was different. This solution entails that the infix had only one shape – /nin/; the variant /ni/ resulted from a regular loss of /n/ before most consonant clusters.

2.1.6 The reconstructed shape of the infix for PIE is **-né-/n-*. The shape of the Hittite infix cannot reflect the zero grade /n/ and must be based on the PIE singular

KUB 26.32 NH (CTH 124); *li-i-ik* KBo 4.14 Tudh. IV; *li-ik-du* KBo 4.14 Tudh. IV; *li-ik-te-en* KBo 16.27 MH/MS; *le-e-ek-te-en* KBo 59.183 OH/NS; *ša-aḥ-mi* KBo 17.61 MH/MS; *ša-aḥ-zi* KBo 24.1 MH/MS, KUB 24.6 MS, KUB 33.27 (*ša-aḥ[-zi]*) MS, KUB 41.4 NS (CTH 435), KBo 55.84 NS (CTH 470); *ša-aḥ-ta* KUB 33.10 OH/MS, KUB 33.5 OH/NS, KUB 7.8 MH/NS, KBo 3.8 OH/NS; *ša-a-aḥ* KUB 17.10 OH/NS; *ša-aḥ-du* KUB 7.41 MH/NS, KBo 3.8 MH/NS; *ša-a-aḥ-te-en* KUB 29.1; *ta-me-ek-zi* KUB 23.1 Tudh. IV; *u-uḥ-zi* KBo 40.343 MS, *u-uḥ-ta* KUB 31.77 NH (CTH 384).

²⁴ In some relevant verbs like *hamank-* ‘to bind’, *link-* ‘to swear’ or *unh-* ‘to clean’, *-n-* may have etymologically been an infix, but synchronically it was not perceived as such and was reanalyzed as part of the root.

²⁵ According to Kimball (1999: 157, 315f.), /n/ in position before a velar was pronounced as /ŋ/.

²⁶ Perhaps in order to maintain the uniformity of the root or in parallel to the ‘etymological restoration’ of /n/ in clitics before /m/ and /s/ in Middle Hittite, for which see Kimball 1999: 324, 333.

*-né-. The vowel *-i-* of the infix is regular, since **e > i* _{/nK} (e.g., Melchert 1994: 101, Kloekhorst 2008: 96, for a similar development in, e.g., Latin and English, see Sihler 1995: 39²⁷), and in all the verbs, *-nin-* is inserted before the root final velar. The consistent spelling of *-i-* in the forms with *-ni-* (*ḥar-ni-ik-zi*, *ḥar-ni-ik-ta*) is best explained by assuming a loss of /n/ before consonantal clusters in **harninktsi*, **harninkta*.

2.1.7 The origin of the second /n/ in *-nin-* is obscure²⁸. One of the available explanations is some kind of nasal anticipation/perseveration (so Hart 1977: 138, Oettinger 1994: 320f.), the assumption being that at some moment the occasional variant /nin/ became grammaticalized. It is true that the consistent spelling of the second *-n-* is unexpected for an irregular phonological process (cf. Oettinger's reservations (1994: 321⁶⁵) that such a generalization of marginal forms is hard to justify).

There is an alternative proposal (made already by Pedersen 1938: 146) that *-nin-* is a result of a contamination between strong (**-ne-*) and weak (**-n-*) ablaut variants of the infix.

2.1.8 The derivatives of verbs in *-nin-* show the same distribution of *-nin-* and *-ni-* as the finite forms. The second /n/ is spelled in those words where the verbal stem is followed by a vowel or *-w-*, i.e. in imperfectives²⁹, verbal nouns, abstract nouns, e.g., *nininkessar* 'mobilization'. Accordingly, it is omitted before a consonantal cluster in *sarnikzēl* 'compensation'. An interesting case is *istarningai-*. It is attested in two texts, KUB 29.1 OH/NS (I 47 *istarningais*, II 32 *istarningain*) and KBo 18.151 MS (obv. 5,

²⁷ Consider such examples as Lat. *tingō* 'to wet, dip' < PIE **teng-*, Gr. τέγγω; ModE *think* < OE *þencan*.

²⁸ A similar etymologically unexpected nasal occurs in the Slavic suffix *-nq-* < **-nan/m-*, **-non/m-* or **-nun/m-*, see Arumaa 1985: 225f. The origin of the second nasal is likewise unclear. Some scholars believe it to result from a secondary nasalization (e.g., Endzelin 1923: 13f., Vaillant 1966: 230). Manchek (1938: 87ff.) traced this suffix back to **-nant-* in participles and the 3pl. form.

²⁹ The variant *-nin-* of the infix in the imperfective forms (e.g., *ḥar-ni-in-ki-iš-ke-mi* KUB 32.130 34 MH/MS) must have been formed after the anaptyctic vowel was inserted between the stem final consonant and the imperfective suffix *-ske/a-* (Kloekhorst p.c.).

12 *istarnikaīn*)³⁰. Oettinger (1979: 139¹⁰) assumes that *istarnikaīn* is an older and genuine variant. If he is correct, by the Old Hittite period the allomorph /nin/ had not yet spread to all possible positions, i.e. before a consonant and a vowel and before /kw/. The second -n- of the infix is also omitted in a few finite forms (cf. 2.1.2 above) as well as in *hunikissar* (KBo 1.51 rev. 15, Hitt.-Akk. Vocab., NH?). It cannot, however, be excluded that the absence of the second /n/ of the infix in *istarnikaīn* etc. may be due to mere scribal mistakes.

2.1.9 Summing up, the most plausible scenario for the history of the Hittite infix is as follows:

At some moment, the generalized full grade **-né-* of the PIE infix developed into pre-Hittite **-nin-*, with raising of /e/ to /i/ before /n/ + final velar of the root. The origin of the second -n- is unclear; it could either result from nasal perseveration or from contamination of the strong and the weak stems of the infix. In Old Hittite, the second -n- was lost before consonant clusters³¹, just as the /n/ before the root-final velar in other verbs like *link-* ‘to swear’. In Middle Hittite, this /n/ was analogically restored in the relevant forms of *link-*, *nink-* etc., but not in the *nin-*verbs. As for the verbs of the *link*-type, the MS and NS spellings *linkzi* and *linkta* must reflect the actual MH and NH pronunciation, while *likzi* and *likta* follow Old Hittite orthographic tradition.

2.1.10 In the New Hittite texts and copies, the infix is sometimes spelled with -e- (*ḫar-ni-en-ku-un* KBo 14.19 II 28, III 28; *ḫar-ni-en-kán-du* KUB 26.25 11; *šar-ni-en-kán-zi* KBo 6.5 II 13; *šar-ni-en-ki-iš-ke-mi* KUB 14.14 rev. 14). Kloekhorst (2008: 92f.) argues that /i/ is lowered to /e/ before certain consonants, including /n/. If so, /e/ was first raised to /i/ before /nK/ and then lowered back to /e/ in New Hittite before /n/. See further 2.4.

³⁰ Kloekhorst (2014: 240⁸⁶⁷) notes that this text shows many spelling aberrations, cf. *ba-i-it* in rev. 19 next to typical *pa-i-it* in rev. 12 or *ta-i-iš* in rev. 11. Van den Hout (2012: 166) argues that this is one of the earliest texts completely written in Hittite.

³¹ Or, in the light of chronology of the infix discussed in 2.1.8, -ni- was reinterpreted as a positional variant of -nin-.

2.2 In this section, the five verbs with the infix *-nin-* are discussed³².

harnink- ‘to destroy’

1sg. pres. act. *ḥar-ni-ik-mi* KBo 5.13 I 9 NH, KUB 21.5 II 10 NH, KUB 31.4 + KBo 3.41 obv. 9 OH/NS; *ḥar-ni-ik-ki-mi*³³ KBo 13.78 obv. 9. OH/NS

2sg. pres. act. *ḥar-ni-ik-ši* KUB 33.120 III 8 MH?/NS; *ḥar-ni-ik-ti* KBo 4.4 III 48, IV 33 NH, KUB 14.15 IV 30 NH, KUB 14.16 III 17 NH

3sg. pres. act. *ḥar-ni-ik-zi* KBo 6.10 III 10 NS, KBo 6.11 I 9 OH/NS with dupl. KUB 29.23 6 OH/NS, KUB 4.1 III 16 MH/NS, KUB 24.8 I 6 pre-NH/NS

1pl. pres. act. *ḥar-ni-in-ku-[e-ni]* KUB 33.120 III 3 MH?/NS

2pl. pres. act. *ḥar-ni-ik-te-ni* KUB 13.4 I 13 MH/NS, KUB 14.1 obv. 68 MH/MS, KUB 33.103 II 2 MH?/NS; *ḥar-ni¹-ik-te-ni* KUB 33.103 II 4 MH?/NS ([*ḥar-ni-ik-te-ni* in dupl. KUB 33.100 12 MH?/NS)

1sg. pret. act. *ḥar-ni-in-ku-un* KBo 2.5 II 6, 7, 8, 9, 14, 16, III 52 NH, KBo 3.1 II 17 OH/NS, KBo 3.46 obv. 9 OH/NS, KBo 4.4 IV 37 NH, KBo 10.2 I 10, 16, 19, 36, 48, II 10, 12, III 3, 8, 38 OH/NS, KBo 12.8 IV 15 OH/NS, KBo 16.17 + KBo 2.5a III 20 NH, KUB 6.41 I 3 NH, KUB 13.9 + 40.62 I 2 MH/NS, KUB 14.15 IV 28 NH, KUB 14.25 I 5 NH, KUB 19.37 III 42 NH, KUB 19.49 I 38 NH, KUB 23.11 II 33 MH/NS, VBoT 58 IV 8 OH/NS; *ḥar-ni-en-ku-un* KBo 14.19 II 28, III 28 NH; *ḥar-ni-ku-un* KBo 2.5a II 6 NH³⁴

2sg. pret. act. *ḥar-ni-ik-ta* KBo 4.4 IV 46 NH, KUB 24.7 II 4, 8 NH

3sg. pret. act. *ḥar-ni-ik-ta* KBo 3.1 I 27, 28 OH/NS, KBo 4.4 I 44, II 17 NH, KBo 5.8 II 17 NH, KBo 10.2 I 5 with dupl. KBo 10.3 I 3 OH/NS, KBo 12.26 IV 13 NH, KBo 22.2 rev. 15 OS or OH/MS, KUB 9.16 IV 6 OH/NS, KUB 16.32 IV 13 NH,

³² The alleged verb *hini(n)k-* does not exist, see Shatskov 2010 and the entry for *hink-* in 2.3.

³³ The reduplication of *-kk-* in this form is quite unusual. The duplicate KUB 31.4 + KBo 3.41 obv. 9 has *ḥar-ni-ik-mi*. In another duplicate, KBo 12.22 (OH/NS) in the line I 13 we find [...]*x-ki-mi* [...]. In the autograph, the traces of the sign preceding KI do not look like belonging to IK; however, in my opinion, the photo of this fragment at the HPM website does not preclude reading this sign as IK, and a collation is necessary. The interpretation of this spelling is also difficult. Unless it was a scribal mistake in the text on which both KBo 13.78 and KBo 12.22 are based, it probably reflects a sporadic anaptyxis in the cluster /km/.

³⁴ In a few cases *-n-* is omitted before consonants, cf. 2.1.2 and Hoffner, Melchert 2008: 46f.

KUB 19.13 I 49, 51 NH, KUB 21.9 I 4 NH, KUB 26.71 IV 17 OH/NS, KUB 26.74 I 8 OH/NS, KUB 31.5 4 OH/NS; *ḥar-ni-ik-ta*¹ KUB 19.30 I 11 NH

3pl. pret. act. *ḥar-ni-in-ke-er* KBo 5.8 13, 61 NH, KBo 2.5 II 60, III 10 NH, KUB 13.9 + KUB 40.62 I 10 MH/NS, KUB 24.7 I 37 NH; *ḥar-ni-in-ker* KBo 3.46 rev. 35 OH/NS, KBo 16.17 + KBo 2.5a III 10 NH, KBo 18.115 obv. 6 NH

2sg. imp. act. *ḥar-ni-ik* KBo 4.4 I 42 NH, KBo 22.78 12' MS?

3sg. imp. act. *ḥar-ni-ik-du* KBo 22.81 9' NH (*ḥar-ni-ik[-du]*), KUB 26.25 14 NH, IBoT 1.30 obv. 8 OH ?/NS; *ḥar-ni-ik-tu*₄ KBo 11.10 III 30 MH/NS

2pl. imp. act. *ḥar-ni-ik-te-en* KBo 14.10 II 33 NH, KUB 4.1 I 35 MH/NS; *ḥar-ni-ik-tén* KBo 8.70 11 MH/MS, KUB 15.33b III 18 MH/NS

3pl. imp. act. *ḥar-ni-in-kán-du* KBo 5.3 II 7, 31, 43, 49, IV 17 NH, KBo 6.34 II 38 MH/NS, KBo 16.27 II 15 MH/NS, KUB 19.49 IV 39 NH, KUB 21.1 IV 36, 37 NH, KUB 21.42 II 4 NH, KUB 26.1 III 44 NH, KUB 26.12 II 22 NH, KUB 26.50 rev. 11 NH; *ḥar-ni-en-kán-du* KUB 26.25 11 NH

part. n.-acc. sg. neut. *ḥar-ni-in-kán* KUB 13.2 IV 19 MH/NS, KBo 14.20 I 13 NH; *ḥar-ni-in-kán-an* KUB 27.59 I 10 NS.

inf. *ḥar-ni-in-ku-wa-an-zi* KBo 4.4 II 64 NH

verbal subst. nom.-acc. sg. *ḥar-ni-in-ku-u-ar* KBo 3.4 I 36 NH

impf. 1sg. pres. act. *ḥar-ni-in-ki-iš-ke-mi* KUB 32.130 34 MH/MS

impf. 2sg. pres. act. *ḥar-ni-in-ki-eš-ke-ši* KUB 24.7 II 59 NH

impf. 1sg. pret. act. *ḥar-ni-in-ki-iš-ke-nu-un* KUB 14.16 12 NH,

impf. 3sg. pret. act. *ḥar-ni-in-ki-iš-ke-et* KBo 3.1 I 7, 17 OH/NS with dupl. KUB 11.1 I 6, 16 OH/NS, KUB 24.3 II 46 MH/NS with dupl. KUB 24.4 rev. 4 MH/MS

impf. 3pl. pret. act. *ḥar-ni-in-ki-eš-ke-er* KUB 23.11 III 12 MH/NS, KUB 26.74 4 OH/NS; *ḥar-ni-in-ki-iš-ke-er* KUB 19.11 IV 31 NH

supine *ḥar-ni-in-ki-iš-ke-u-an* KUB 48.89 obv. 8 NS

The verb *harnink-* ‘to destroy’ is related to *hark-* ‘to perish, get lost’. Semantically, *harnink-* is a causative to *hark-*³⁵. From the times of Hattusili III on, the stem *harnink-* is gradually replaced by *harganu-*, derived from the same root with the suffix *-nu-* (s. Ünal 1984: 76ff. and the entry for *harganu-* ‘to destroy’ in 4.1 below).

Puhvel (HED 3: 167) stresses that for establishing the etymology of these verbs the semantics of *hark-* ‘to perish’, rather than of its derivative *harnink-* ‘to destroy’, should be used. For this reason he rejects the traditional comparison of *harnink-* to OIr. *org(a)id* ‘to smite’ and Arm. *harkanem* ‘to smite, smash’ (this idea goes back to Cuny 1934: 205). Instead, he connects *harnink-* with Gr. ἔρχομαι ‘go’ which might be acceptable semantically, but is phonetically impossible as the *e*-coloring laryngeal, which has to be reconstructed in the anlaut of the Greek verb, would not give *h-* in Hittite (cf., e.g., Melchert 1994: 65). The Greek verb is rather related to Hittite *ār-ⁱ/ar-* ‘to arrive’ (see, e.g., Oettinger 1979: 404).

LIV: 301 lists *hark-* and *harnink-* together with the Armenian *harkanem* and Old Irish *org(a)id* under the entry **h₃erg-* ‘to disappear’, assuming that the Armenian and Old Irish verbs generalized the causative meaning, which must initially have been limited to the present infixed stem only. The problem is that there are no reflexes of the infixed stem attested in either of these languages; according to LIV, p. 301, the present stem *harkanem* is not a direct reflex of the PIE infixed stem, but is based on the aorist stem **hark-* < **h₃rk-*. The scenario, according to which both Old Irish and Armenian verbs had a nasal infix present with a causative meaning that was generalized to the entire verb and was preserved even after the infixed stem itself had disappeared, is hardly credible. Note also that the Old Irish and Armenian verbs can in fact go back to PIE **perg-*, an extended variant of the root **per-* ‘strike’ (LIV: 473), to which *har(e)-* < **pr-*, the suppletive aorist to Arm. *harkanem*, belongs, cf. the discussion in Klingenschmitt 1982: 215f. This etymology is attractive semantically, though we have to reconstruct an extended root **perg-* for these two words alone. All

³⁵ “A causative is a verb or verbal construction meaning ‘cause to Vo’, ‘make Vo’, where Vo stands for the embedded base verb” (Kulikov 2001: 886). For this function of the infix in Hittite see 7.2.1-3.

in all, the connection of OIr. *org(a)id* ‘to smite’ and Arm. *harkanem* with Hittite *hark-* and *harnink-* is questionable, and an alternative etymology for *hark-* is desirable.

In my opinion, there was a Hittite suffix *-k(k)-*, which can be seen in *hassikk-* ‘to satiate’, *malekk-* ‘to become weak’, *nink-* ‘to get drunk’, *dusk-* ‘to rejoice’ and also possibly in *mark-* ‘to divide’ (see Melchert 1994: 165, Shatskov 2015, and the entries for *hassikkanu-*, *maliskunu-*, *ninganu-* and *dusganu-* in 4.1 below). If *hark-* also contains this suffix, this verb can be compared to Toch. AB *ār-* ‘to cease, come to an end’.

Two etymologies have been proposed for the Tocharian verb. Hackstein (1998: 228ff.) derived the Tocharian verb from the root **h₃er-* ‘to rise’. Adams (2013: 51) offers several instances of the semantic development ‘to rise’ > ‘to stand’ > ‘to stop’. The Hittite reflexes of this root are *ar-^{tta}* ‘to stand’, *arae-^{zi}* and *arai-ⁱ*, see Kloekhorst 2008: 195f., 199f. This etymology precludes the connection of *hark-* to Toch. AB *ār-*. Alternatively, the Tocharian verb has been compared to Hitt. *harra-* ‘to grind’, the root being **h₂erH-* (LIV: 271f. and cf. also Malzahn 2010: 527f.).

To my mind, Hitt. *hark-* ‘to disappear’ (< **h₂er-* + **-k-*) is a better match for Toch. *ār-* ‘to cease, come to an end’ than *ar-^{tta}* ‘to stand’ etc. Hitt. *harra-* ‘to grind’ might still be related³⁶, if *hark-* goes back to **h₂rH-k-*³⁷; this is not very likely, though, as there seems to be no motivation for the semantic development ‘to disappear’ > ‘to grind’ in such a stem. For the alternative etymologies for *harra-* see the entry for *harranu-* ‘to grind’ in 4.1.

hunink- ‘to scar, crack’

3sg. pres. act. *hu-ú-ni-ik-zi*³⁸ KBo 6.2 I 16 OS; *hu-u-ni-ik-zi* KBo 6.2 I 13 OS, KBo 6.3 I 21, 25 OH/NS, KBo 6.4 I 20 OH/NS

3sg. pret. act. *hu-u-ni-ik-ta* KBo 32.32 r. Kol 5’ MH/MS

3sg. pres. mid. *hu-ni-ik-ta-ri* KBo 5.1 I 3 NH; *hu-u-ni-ik-ta-ri* KBo 5.1 IV 39 NH

³⁶ Hitt. *harra-* ‘to grind’ was compared to *hark-* already by Kronasser (1957: 121f.).

³⁷ If so, **CRHC-* and **CRC-* both yielded **CaRC-* in Hittite.

³⁸ Yates (2015: 174) argues that this spelling shows that the initial syllable was accented in this word. In my opinion, this is rather a misspelling, see Kloekhorst 2008: 363.

3sg. pret. mid. *ḥu-u-ni-ik-ta-at* KBo 5.1 I 44 NH; *ḥu-ni-ik-ta-at* KUB 59.40 rev. 6 OS?

part. n. sg. com. *ḥu-u-ni-kán-za* KBo 6.2 I 15 OS, KBo 6.5 I 3 OH/NS; *ḥu-u-ni-in-kán-za* KBo 6.2 I 14 OS, KBo 6.3 I 22, 23 OH/NS, KBo 6.4 I 21 OH/NS

verbal subst. nom.-acc. sg. *ḥu-[u-]ni-ki-iš-ša-[ar]* KBo 1.51 rev. 15 NS

Most of the contexts for *hunink-* come from two texts, viz. the Laws and KBo 5.1 (CTH 476, Papanikri).

In the Laws, this verb is used twice, both times in regard to incurring some damage to a human being:

KBo 6.2 I 13 (#9) [*ták-k*]u LÚ.U₁₉.LU-*aš* SAG.DU-*SÚ* ku-iš-ki *ḥu-u-ni-ik-zi* (...)

(14) *ḥu-u-ni-in-kán-za* 3 GÍN KU.BABBAR *da-a-aš* “If anyone injures a person’s head (...), the injured party took 3 shekels of silver” (Hoffner 1997: 22f.)

KBo 6.2. I 16 (#10) *tak-ku* LÚ.U₁₉.LU-*an* ku-iš-ki *ḥu-ú-ni-ik-zi ta-an iš-tar-ni-ik-zi* “if anyone injures a (free) person and temporarily incapacitates him” (Hoffner 1997: 23f.)

In KBo 5.1, *hunink-* refers to damaging furniture. E.g., KBo 5.1 I 2 *ma-a-an MUNUS-za ḥar-na-a-ú-i e-eš-zi* (3) nu ^{DUG}DÍLIM.GAL *ḥar-na-a-u-wa-aš ḥu-ni-ik-ta-ri na-aš-ma* ^{GIŠ}GAG *du-wa-ar-na-at-ta-ri* “if a woman sits down on the birthing seat and the pan cracks or a peg breaks...” (s. HED 3: 381 for the translation).

The context in KUB 59.40 is broken, so the meaning of *hunink-* in this text cannot be established. In the wordlist KBo 1.51, verbal noun *hunikissar* translates Akk. *ṭibihdu*, which means ‘slaughter’³⁹. This meaning is the same as the meaning of *hukissar* from the verb *huek-* ‘to stab, slaughter’, from which *hunink-* is derived (see more on this issue below).

An infinitive of *hunink-* is attested twice in KUB 5.6 (CTH , Oracle inquiry). KUB 5.6+ IV 7 *hūninkuwanzi kuit ANA* ^DUTU-ŠI *IŠTU* SU^{MEŠ} *areskanzi* (8) nu *ŪL SIxSÁ-ri nu DINGIR* ^{LUM}*piran tiyanna SIxSÁ-at* “what concerns *h.*, they investigate

³⁹ The fragment is damaged, and HW² H: 723 notes that the reading of both *hunikissar* and *ṭibihdu* is not entirely reliable.

through exta for his Majesty, it is not ascertained. Stepping before a deity is ascertained.”

KUB 5.6+ IV 12 *hūninkuwanzi kuit* SU^{MEŠ} *purammema* NU.SIG₅-ta (13) [*nu=ká*]n^DLAMMA^{URU} *Taurissa piran tiyanna* S_IxSÁ-at “what concerns *h.*, p.-exta are unfavourable. Stepping before the Tutelary Deity of Taurissa was ascertained”.

Beckman (2011: 205) translates *hūninkuwanzi* as ‘the beating’. Ünal (2005: 80) similarly translates it as ‘zerschlagen’ and assumes that it describes breaking a statue or a jar (ibid. 91). These passages are indeed obscure, but in my opinion *huninkuwanzi* may well mean ‘(to) slaughter’ here and refer to a possible course of actions to appease gods. If so, the semantics of both the infinitive and the abstract noun of *hunink-* are similar to that of the parent verb *huek-*.

Puhvel (HED 3: 381) translates *hunink-* as ‘to bash, batter, crack’. However, *hunink-* hardly means simply ‘to bash’ or ‘to hit’: in this meaning the Laws use the verb *walh-* in #3 “if anyone strikes a free man or woman so that he dies” (Hoffner 1997: 18). The translation ‘to batter’ does not fit paragraph 9⁴⁰, unless we take SAG.DU-SÚ as referring to the whole person rather than to his or her head. Hoffner (1997: 176) discusses the previous interpretations of *hunink-* and translates the verb as ‘to damage, injure’, with a remark that “the nature of the head injury is unclear”.

Indeed, *hunink-* in paragraphs 9 and 10 is likely to denote some kind of specific injury rather than an injury in general, since the adjacent paragraphs in the Laws deal with blinding (to which knocking out a tooth is added in a later version: paragraphs 7 and 8), breaking a limb (paragraphs 11 and 12), and biting off a nose (paragraphs 13 and 14). Considering that *hunink-* is plausibly interpreted as ‘to crack’ in KBo 5.1, in the Laws the verb may mean making an open wound or a cut that results in a scar on the face (#9) or an infection (#10).

In a later version of the Laws, KBo 6.4 I 22, *hunink-* is replaced by a hapax *hapallasai-*, which was compared by van Windekens (1979: 916) to Gr. ἄπελος and Toch.A *päl* ‘wound’. According to Beekes (2010: 115) and Adams (2013: 414), this

⁴⁰ *takku* LÚ.U₁₉.LU-as SAG.DU-SÚ *kuiski hūnikzi* “if anyone injures a person’s head” (Hoffner 1997: 22f.)

connection is “highly uncertain”. It is, however, still possible both semantically and formally under the reconstruction of the root as **h₂pel-* ‘wound’. Puhvel nevertheless prefers Hoffner’s comparison of *hapallasai-* to Hitt. *hupallas-* ‘skull’ or ‘scalp’ (HED 3: 116).

Hunink- itself is usually connected with *huek-* ‘to slaughter, stab’. The latter verb typically has (sacrificial) animals as its objects, with one exception⁴¹. The derivation of *hunink-* from *huek-* is doubted by Puhvel for the reason that *huek-* is already a transitive verb (HED 3: 382), but this is not necessarily a problem. First, the verbal nouns *hunikissar* and *hukissar*, derived from *hunink-* and *huek-*, respectively, have the same meaning ‘slaughter’. Second, in the languages of the world causative markers may in some cases have non-causative semantics (e.g., Aikhenvald 2011); thus, the Hittite verbs with the suffix *-nu-* are not always causatives, even though the primary function of this suffix was derivation of causatives, see further 4.14 and 7.2.

Therefore, Puhvel’s objection to the traditional etymology is not valid. If *huek-* actually means ‘to stab’ rather than ‘to slaughter’, and *hunink-* means ‘to cut, scar’, as argued above, the difference between *huek-* and *hunink-* could be aspectual, that is, *huek-* has a punctive and *hunink-* has an iterative or intensive value. In fact, already Strunk (1979: 244) assumed that the difference between these two verbs is aspectual: in his terminology, *huek-* is ‘konfektiv - punktativ’ (punctive), whereas *hunink-* is ‘infectiv-terminativ’ (durative/imperfective-telic). See further chapter 7 on the function of the infix.

Puhvel’s (HED 3: 382) connection of *hunink-* (but not *huek-*) to Gr. ἄγνομι ‘break’, Toch AB. *wāk-* ‘to split’ is attractive semantically, but weak formally. Since Kammenhuber (1961: 47) the Greek and Tocharian verbs have instead been compared to Hittite *wāk-/wakk-* ‘to bite’ (PIE **weh₂g-*, LIV: 664). The root **weh₂g-* would not give Hitt. *hunink-* and *huek-* unless we suggest some kind of laryngeal metathesis **wh₂g-* > **h₂ug-* and a later analogical full grade for *huek-*.

⁴¹ KBo 3.34 I 17-18 *s=an mSarmāssūi mNunnūi=ya sakuwa=sma huekta* “(he) killed him before the eyes of S. and N.”. In this passage from the Palace Chronicles (CTH 8.A), the object is a human being. The action, however, could be similar to that of slaughtering animals.

Strunk (1979: 242ff.) compared *huek-* and *hunink-* to the Old Persian imperfect *avajam* ‘poke out an eye’, reconstructing PIE **h₂weg^h-*. Puhvel (HED 3: 330) adds other possible cognates, suggested originally by Čop: Gr. ὀφνίς, Lat. *vōmis*, OHG *waganso* ‘plowshare’, Old Prussian *wagnis* ‘coulter’.

Since the original meaning of this root in Hittite is ‘to cut’, ‘to split’ or similar, as argued above, it is likely to be cognate with Gr. ὀφνίς, Old Prussian *wagnis* etc. The missing reflex of the initial laryngeal in ὀφνίς (< **h₂wog^{wh}nis*) might be due to the Saussure’s effect (loss of a laryngeal in the environments **#_Ro* and **oR_C*, see further Nussbaum 1997, esp. p. 182, but cf. van Beek 2011, Pronk 2011). The connection of *huek-* and *hunink-* to Old Persian *vaj-* is less certain due to the difference in semantics. However, the meanings of its cognates in modern Iranian languages (Beluj. *gwaht*, *gwatk/gwaj-* ‘to root out, pull out, dig’, Zazaki *vetiš/vežen-* ‘to take, bring out’ and so on, see Cheung 2007: 204) indicate that ‘to dig out, pull out’ is likely to be the original meaning for this root in Iranian. If so, the Iranian verbs may still be related, assuming the semantic development ‘to cut, split’ > ‘to harrow’ > ‘to dig (out)’ > ‘to pull out’.

istarnink- ‘to make ill’

2sg. pres. act. *iš-tar-ni-ik-ši* KBo 3.28 II 16 OH/NS

3sg. pres. act. *iš-tar-ni-ik-zi* KBo 6.2 I 16 OS; *iš-tar-ni-ik-za* KBo 40.272 5 MS

1pl. pret. act. *iš-tar-ni-in-ku-en* KBo 3.45 obv. 4 OH/NS

3sg. pret. mid. *iš-tar-ni-ik-ta-at* KBo 3.34 II 39 OH/NS

2sg. imp. act. *iš-tar-ni-ik* KBo 3.28 II 16 OH/NS

This verb is generally connected with the verb *istark-* ‘to become ill, ail’ (with the secondary stem *istar(ak)kiye/a-*). These verbs are often intransitive or impersonal; but they can also be used transitively with an explicit subject, e.g., *na-an i-da-lu-uš GIG-aš iš-tar-ak-ta* ‘A bad disease ailed him’ (KUB 14.15 II (6)), s. HED 1/2: 475, Kloekhorst 2008: 417.

Some scholars assume that *istark-* has a voiceless velar in the auslaut of this root (Kloekhorst 2008: 484). This is based on two assumptions. First, it was suggested that the loss of a velar in *iš-tar-zi* KUB 8.38 + KUB 44.63 III 9 reflects a regular phonetic process that was conditioned by the quality of the consonant. That is, **k* was lost between a resonant and a consonant, while **g^(h)* was preserved (HED 3: 156, Kloekhorst 2008: 305, 417f.). That would mean that in all the other forms with the preserved *-k-*, like *iš-tar-ak-ta* above, it was restored. Moreover, if *iš-tar-zi* in KUB 8.38+ III 9 (MH/NS) is not a scribal mistake and reflects the actual pronunciation, the rare spelling *ḥa-ma-an-zi* in IBoT 2.122 7 would similarly show that PIE voiced aspirates were also lost between consonants (*hamank-* ‘to bind’ ultimately goes back to PIE **h₂emǵ^h-*, see the respective entry). In my view, *iš-tar-zi* can be explained in several other ways and does not prove that the final consonant in this root was **k* or **ḳ*.

The other reason to reconstruct a voiceless velar for this root is the frequent spelling *-kk-* in the stem *istar(k)kiye/a-*: *iš-tar-ak-ki-ya-zi* KBo 21.21 III 4 MS, *[i]š-tar-ak-ki-et* KBo 5.9 I 15 NH, *iš-tar-ak-ki-ya-at* KUB 14.16 III 41 NH, *[i]š-tar-ak-ki-ya-at-ta-at* KUB 14.15 II 13 NH. Single *-k-* in this stem is also attested – *[i]š-tar-ki-ya-az-zi* KBo 5.4 rev. 38 NH, *iš-tar-ki-et* KUB 19.23 rev. 12 NH, *iš-tar-ki-at* KBo 4.6 obv. 24 NH. Oettinger (1979: 197) and Melchert (1994: 153) argued that voiced stops were geminated after /r/ in this position, since we find geminated spellings also in *harp-* ‘to change allegiance, join with’ (**h₃erb^h-*) and *parkiya-* ‘to lift’ (**b^herǵ^h-*). Kloekhorst (2008: 417) is correct, however, that we only have one such spelling for *parkiya-* and two more for *harp-*, so they look exceptional in their paradigms, unlike *istarakkiye/a-*. Note that Kimball (1999: 283) believes that *-pp-* after *-r-* in *karp-* ‘to seize’ indeed stands for a voiceless labial (**kerp-*) and sees here a parallel to *istarakkiye/a-*. But, if the geminated *-kk-* in *istarakkiye/a-* indeed points to a PIE voiceless velar, one would expect a geminated *-kk-* in *markiye/a-* ‘to object to, disapprove of’ as well, as it goes back to **mrk-ye/o-* (Kloekhorst 2008: 559). Since there are no such spellings attested for *markiye/a-*, the geminated *-kk-* in *istarakkiye/a-*

is not indicative of the quality of the velar. Summing up, there is no indisputable indications that the final *-k-* of *istark-* reflects a voiceless velar.

Assuming a voiceless consonant in the auslaut, Kloekhorst compares *istark-* to Lith. *teršiù* ‘befoul’, Lat. *stercus* ‘excrement’, all from PIE **(s)terk-*. This root also has infixed forms, although these are limited to nominal derivatives: Bret. *stroñk* ‘excrements’, Welsh *trwnc* ‘urine’. But the proposed semantic development ‘to befoul’ > ‘to ail’ is far from compelling.

A comparison with Lith. *sergù* ‘am ill’, OCS *sraga*, Toch. A *särk*, Toch. B *sark*, OIr. *serg* ‘illness’ is perfect semantically. However, the initial consonant cluster *st-* in Hittite does not match the anlaut in the other languages. Puhvel adduces one more possible instance of such a correspondence: Hitt. *istanza-* ‘soul’ and Lat. *sensus* ‘feeling’, OHG *sin(n)* ‘sense, mind’, Lith. *sintėti* ‘to decide, think’ (HED 1/2: 477)⁴². A similar case can be Lith. *sérgėti* ‘to guard, watch’ and OCS *strešti* (Ivanov 1965: 65 and note 40), where clearly cognate words have the same variation. Still, Hittite initial *st-* : initial *s-* in Baltic and elsewhere is not regular. Prof. Lubotsky points out to me that this etymology can still be salvaged if one assumes an initial cluster /ts/, even though the anlaut of the alleged PIE root **tserg^(h)-* might look unusual⁴³.

Eichner (1982: 16ff.) connected Hitt. *istark-* to Skt. *trh-* ‘to crush’ (aor. *atrham* (AV), pres. *trṇedhu* (AV)), reconstructing PIE **(s)terg^h-* ‘smash’. EWAia states that the etymology of this verb is unclear (EWAia I: 636). On the formal side this comparison seems perfect. The semantic development of the Hittite verb is also conceivable – Puhvel (HED 1/2: 476) states that the original meaning of the Hittite verb was likely ‘to cause pain’ and that this development has a parallel in English *ail* < Old English *eglan* ‘to cause pain’.

Less likely is the comparison of *istark-* with Gr. στρηγγάλη ‘cord, noose’, Lat. *stringō* (<**strengō*) ‘to draw tight’, Old English *stearc* ‘stiff’, *strec* ‘firm’, OHG *strang*

⁴² This etymology is also far from certain, cf. the alternatives listed in Kloekhorst 2008: 415. One more possibility is perhaps a connection to Hurr. *istan(i)-* ‘Inneres’, ‘Herz’ (for the Hurrian word see Wegner 2000: 195).

⁴³ See Kroonen, Lubotsky 2009 and Kroonen 2013: 476f. for other etymologies involving the initial cluster **ts-*.

‘cord’, *strengi* ‘stiff’ and so on (s. HEG I-K: 434, HED 1/2: 477, Kimball 1999: 430f.). Oettinger (1979: 143) adds here Gr. στέργω ‘to love’.

Summing up, there are several possible etymologies for *istark-*. On the whole, the comparison with Skt. *trh-* ‘to crush’ is plausible both formally and semantically; in this case, we would have parallel infixed formations in Sanskrit and Hittite. Nevertheless, this connection is not certain.

ninink- ‘to set in motion, disturb’

1sg. pres. act. *ni-ni-ik-mi* KBo 18.81 left edge MS, KUB 36.35 I 4 MH?/NS

2sg. pres. act. *ni-ni-ik-ši* KBo 18.36 17 NS

3sg. pres. act. *ni-i-ni-i[k-z]i* KUB 43.31 left. col. 10 OS?; *ni-ni-ik-zi* KBo 11.14 IV 19 MH/NS, KUB 8.28 rev. 14 OH/NS, KUB 13.2 III 18 MH/NS, KUB 19.13 I 28 NH, Bo 86/299 III 37 NH

1pl. pres. act. *ni-ni-in¹-ku-u-e-ni* KUB 50.6 III 43 NH

2pl. pres. act. *ni-ni-ik-te-ni* KUB 12.63 obv. 37 OH/MS

3pl. pres. act. *ni-ni-in-kán-zi* KBo 16.25 I 31 MH/MS, KUB 20.84 obv. 4 NS, KUB 30.56 III 15 NS, KUB 54.98 14 NS, Bo 86/299 III 37 NH; *ni-ni-kán-zi* KUB 18.15 rev. 7 NH

1sg. pret. act. *ni-ni-in-ku-un* KBo 3.4 II 8 NH, KBo 16.14 II 15 + KBo 16.8 II 30 NH, KUB 21.38 obv. 24 NH

3sg. pret. act. *ni-ni-ik-ta* KBo 16.17 III 35 NH, KUB 1.1 II 42 NH, KUB 14.1 obv. 45 MH/MS, KUB 34.49 rev.7 MH/MS, KUB 23.91 3 NH; *ni-ni-in-ga-aš* KUB 53.15 IV! 30, 33 NS

3pl. pret. act. *ni-ni-in-ke-er* KUB 14.1 obv. 71 MH/MS; *ni-ni-in-ker* KUB 18.27 7 NH

2sg. imp. act. *ni-ni-ik* KUB 19.39 III 11 NH, KUB 31.68 obv. 22 NH

2pl. imp. act. *ni-ni-ik-tén* KBo 50.268 I 14 MS?

3pl. imp. act. *ni-ni-in-kán-du* KBo 5.3 IV 41 NH, KUB 13.1 I 22 MH/MS, Bo 86/299 III 41 NH

2sg. pres. mid. *ne-ni-ik-ta-ti* KBo 10.12 II 23 NH; *ne-ni-ik-ta-ri* KBo 10.12 II 30 NH

3sg. pres. mid. *ni-ni-ik-ta-ri* KBo 5.4 rev. 43 NH, KBo 24.4 rev.! 10 NS, KUB 13.4 III 38 MH/NS with dupl. KUB 13.5 III 8 MH/NS, KUB 21.1 III 46 NH, KUB 31.86 IV 2,3 MH/NS, Fs. Laroche 142: 24; *ni-ni<-ik>-ta-ri* KUB 24.14 IV 18b NH

3sg. pres. mid. *ni-ni-in-kán-ta* KBo 8.47 obv. 10 NS, KUB 8.1 III 21 OH/NS, KUB 23.72 rev. 18 MH/MS

3sg. pret. mid. *ni-ni-ik-ta-ti* KUB 23.28 12 OH/NS; *ni-ni-ik-ta-at* KBo 5.8 I 33, II 11 NH, KBo 16.8 I 9 NH; *ni-ni-ik<-ta>-at* KUB 53.15 IV! 31 NS

3pl. pres. mid. *ni-ni-in-kán-ta-ti* KBo 49.11 Rs? l. R. 6 NS

3sg. imp. mid. *ni-ni-ik-ta-ru* KBo 39.8 IV 31 with dupl. KBo 9.106 III 45 MH/NS and KBo 44.17 3 IV 114 MH/MS

2pl. imp. act. *[ni]i?-ni-ik-du-ma-at* KBo 16.24 I 18 MH/MS; *ni-ni-ik-tum-ma-at* KUB 31.55 obv. 15 MH/NS

part. n. pl. com. *ni-in-in-kán-te-eš* KUB 5.20 I 39 NH, KUB 30.45 III 13 NS, KUB 43.57 IV 25 MH/NS

part. n.-acc. sg. neut. *ni-ni-in-kán* KBo 16.8 II 11 NH, KBo 16.97 rev. 5, 16 MH/MS, FHG 16 II 17 NS

Inf. *[ni-]ni-in-ku-u-an-zi* KUB 1.9 III 12 NH

Verbal noun g.sg. *ni-ni-in-ku-wa-aš* KUB 20.66 III 3 OH/NS, KUB 30.55 rev.? 6, KUB 44.33 I 4 OH/NS

impf. 3sg. pres. act. *ni-ni-in-ki-eš-ke-ez-zi* KUB 44.64 I 19 NS; *ni-ni-in-ki-iš-ke-ez-zi* KUB 31.141 6 NH, KUB 33.106 I 6 NH

impf. 3pl. pres. act. *ni-ni-in-ki-eš-kán-zi* KBo 22.87 rev. 7; *ni-ni-in-kiš-kán-zi* KBo 2.6 II 55 NH

impf. 3pl. imp. act. *ni-ni-in-ki-iš-kán-du* Bo 86/299 III 38 NH

impf. 3pl. pres. mid. *[ni-ni-in-k]i-iš-kán-ta* KBo 16.24 I 17 MH/MS

impf. 3sg. pres. act. *[ni-]ni-in-ki-iš-ke-et-ta-at* KUB 34.51 8 NS

The Chicago Hittite Dictionary provides multiple translations for this verb, among them ‘to set in motion’, ‘to move’, ‘to behave in disorderly manner’, ‘to disturb’, ‘to break open’. Ünal (1996: 34f.) suggests ‘to disturb’ as the basic meaning of this word, which indeed fits many contexts much better than some of the meanings provided by CHD like ‘to break open’ or ‘to behave disorderly’.

In a few instances, *ninink-* is used intransitively. In KUB 8.28 obv. 17 [*takk*]u INA^{ITU} 10^{KAM} d^d *ningaš ni-n[i-ik-zi]* “If in the 10th month the god Ninga g[ets] moving”, (similar in obv. 2, 4, 7, 10, 14, 20) and rev. 13-14 *mān* d^d [*ningaš*] *ni-ni-ik-zi* “when the God Ninga gets moving” the form *ninikzi* seems to be intransitive, cf. CHD L-N: 441, but this text is poorly preserved. In KUB 13.2 III 17, 18 active forms of *ninikzi* correspond to middle forms in the duplicate KUB 31.86 IV 1-3 and seem to be used intransitively: [(DINGIR^{MEŠ}-y)]a *kuwapi ēššanzi nu ANA PANI DINGIR^{MEŠ} lē kuiški ni-ni-ik-ta-ri* (KUB 40.56 II 24-25 *ni-ni-i[n-kán-za?]*; KUB 13.2 III 17 *ni-ni-ik-zi*) INA É.EZEN=ya *lē kuiski ni-ni-ik-ta-ri* (KUB 13.2 18 *ni-ni-ik-zi*). “When they are worshipping the gods, let no one become disorderly before the gods, and let no one become disorderly in the festival house (but let the reverence be observed toward all classes of priests)”, s. CHD L-N: 441. (Both KUB 31.86 and KUB 13.2 are New Hittite copies of a Middle Hittite text.)

Neu (1968b: 78) finds a similar situation in KUB 13.4 III 36ff. with *ni<ni>kzi*, which corresponds to *niniktari* in the duplicate. CHD L-N: 441, however, takes this verb as *nink-* ‘to get drunk’: ŠÀ É DINGIR^{LIM} *nasma tamēdani* É^É *karimme kuiski nikzi n=as=kan mān ŠÀ É DINGIR^{LIM} ni-ni-ik-ta-ri nu hallūwāin iyazi n=asta EZEN₄ zahzi*. “(If) in a temple or other sacred building some... -person gets drunk(?), if he becomes disorderly inside the temple, so that he causes a quarrel, and disrupts a festival”.

Since the root structure of all the other *nin-*verbs in Hittite is either *CeRC-* or *CReC-*, it is safe to assume that *ninink-* goes back to **neiK-* or, less likely, **nieK-* (cf. Oettinger 1979: 143). On the assumption that *ninink-* means ‘to rise’, Benveniste (1954: 40) suggested the following cognates for this verb: Lith. *su-ninkù*, *-nìkti* ‘to

become involved, assault', OCS *vъz-niknŋti* 'to rise, appear' with aor. *nikъ* (cf. HEG N: 329f., Eichner 1982: 19, Fraenkel 1962: 503 and see Hock 2015: 704 for more Baltic cognates). The root is presented as **neik-* 'to rise' in LIV: 451, with Greek *νεῖκος* 'quarrel' added as a nominal derivative. On the basis of Lith. *(ap-)ninkù* and Hitt. *nini(n)k-* an infixed stem can be reconstructed for PIE.

The meaning of the suggested Slavic cognates is disputed⁴⁴. Nevertheless, since *ninink-* means 'to set in motion, disturb' rather than 'to rise', it is better compared directly to Lith. *ap-ninkù*, *-nikti* 'to assault, beset', *į-nikti* 'to get down to, engage, attack', *ap-nikti* 'to energetically get down to; beset'⁴⁵, while the relation to OCS *vъz-niknŋti* 'to rise, appear' is less apparent. The root **neik-* seems to denote some kind of energetic approaching (similarly Beekes 2010: 1002, contra LIV: 451 'sich erheben').

sarnink- 'to compensate'

1sg. pres. act. *šar-ni-ik-mi* KBo 6.2 IV 48' OS with dupls. KBo 6.3 IV 46 OH/NS and KUB 29.19 6 OH/NS, KBo 12.58 rev. 7 NH, KUB 13.35 34 NH, KUB 14.4 III 27 NH, KUB 26.69 VIII(?) 6 NS, KUB 31.58 Rs 10 NH, IBoT 3.122 + KUB 31.66 Rs V 28' NH

3sg. pres. act. *šar-ni-ik-zi* KBo 6.2 I 5, II 54, IV 48, 56 OS, KBo 6.3 I 12, II 7, II 49, IV 54, 55, 57 OH/NS KBo 6.4 I 5, IV 3, 11 OH/NS, KBo 6.5 II 14, III 10, IV 8 OH/NS, KBo 6.10 II 18' OH/NS, KBo 14.21 I 37 NH, KBo 19.4 IV 5 OH/NS, KBo 27.16 II 7 MH/NS, KUB 8.81 III 5,6 MH/MS, KUB 13.7 I 13 MH/NS, KUB 13.35 II 44 NH, KUB 16.37 IV 3 NH, KUB 29.20 6 OH/NS, KUB 36.127 rev. 14 MH/MS,

⁴⁴ The Etymological Dictionary of the Slavic Languages (ESSJa 25: 110, 114-5, cf. also the notes by V. Trubačev in the Russian edition of Vasmer (Vasmer 1964-73 III: 74-5)) connect OCS (*vъz*)-*niknŋti*, Lith. *su-ninku* etc. with OCS *po-niknonti* 'to droop', Old Polish *niknŋć* 'disappear', Lith. *nykti* 'disappear' and further to Old Russian *nicъ* 'down', Latv. *nīca* 'down the river', Skt. *nīcā* 'below'. It is argued that the semantic difference between these words is due to the preverbs (cf. Bulg. *nikna* that means both 'to grow' and 'to bow', as well as Czech *niknouti* 'disappear' and 'to sprout'). The dictionary gives the following basic meanings for this single root: 'to fall on, run against', 'to rise, grow' and 'to come down, disappear'. But this connection is impossible: the Baltic verbs in *-nikti* did not have laryngeal in the root and cannot be compared to Skt. *nīcā* (< **ni-h₃k^w*-, cf. Skt. *ni* 'downwards') and its cognates in Baltic and Slavic languages, see Derksen 2008: 352f.

⁴⁵ Note that the electronic version of the *Lietuvių kalbos žodynas* (<http://lkzd.lki.lt/Zodynas/Visas.asp>) gives two more verbs, namely *ap-nikti* and *į-nikti* 'to pester, bother' in a separate entry. While synchronically they may be considered homonymous to *ap-ninkù*, *-nikti* 'to assault, beset' and *į-nikti* 'to get down to, engage, attack', there is no doubt they go back to same PIE root.

KUB 39.54 rev.? 5 NH, KUB 46.42 Rs III 7, IV 6 NS, Bo 6481 7 NS; [(šar-ni-ik)]-za KBo 6.2 IV 55 OS (with dupl. KUB 6.3 IV 54 -zi) OH/NS

1pl. pres. act. šar-ni-in-ku-e-ni KUB 22.57 obv. 4 NH; šar-ni-in-ku-u-e-[ni] KBo 24.123 obv.[?] 2 NS

2pl. pres. act. šar-ni-ik-te-ni KUB 13.4 IV 31 pre-NH/NS, KUB 26.19 II 26 MH/MS, KUB 26.40 108 MH/MS

3pl. pres. act. šar-ni-in-kán-zi KBo 6.3 II 7, 9, 13 OH/NS, KBo 11.32 obv. 14 OH/NS, KUB 13.9 III 10 MH/NS, KUB 16.39 II 15, 16 NH; šar-ni-en-kán-zi KBo 6.5 II 13 OH/NS; šar-ni-kán-zi KBo 11.32 obv. 8, 47 OH/NS, KUB 50.44 I 8 NH, KBo 13.72 rev. 6 NH, KuSa 1.9 rev. 5 NS

1sg. pret. act. šar-ni-in-ku-un KUB 13.35 I 34, II 40 NH

3sg. pret. act. šar-ni-ik-ta KUB 14.8 rev.32 NH, KUB 14.14 rev. 12 NH, KUB 31.73 7 NH

1pl. pret. act. šar-ni-in-ku-en FHL 2 11 NS

3pl. pret. act. šar-ni-in-ker KBo 16.61 rev.? 5 MS?, KUB 14.14 obv. 10 NH; šar-ni-ke-er KuSa 1.3 obv. 16 NS

3sg. imp. act. šar-ni-ik-du KBo 3.1 II 52, 55, 59 OH/NS, KUB 11.1 IV 21 OH/NS; šar-ni-ik-tu KBo 16.45 obv. 14 MS, KBo 22.52 II 4, 5 NS

3pl. imp. act. šar-ni-in-kán-du KBo 16.61 obv.? 12 MS?

part. n. sg. c. šar-ni-in-kán-za KUB 14.29 I 6 NH, KBo 16.6 II 4 NH, KUB 16.66 obv. 16 NH; šar-ni-ik-kán-za KuSa 1.27 9 NS

part. n.-acc. sg. neut. šar-ni-in-kán KUB 21.27 IV 36 NH

Inf. šar-ni-in-ku-u-wa-an-zi KUB 16.77 III 6 NH; šar-ni-in-ku-wa-an-zi KUB 16.77 III 8 NH

Verbal noun g.sg. šar-ni-in-ku-wa-aš KBo 2.2 III 33, 35 NH; šar-ni-in-ku-u-wa-aš KBo 2.2 III 40 NH

Verbal noun n.pl. šar-ni-in-ku-e-eš⁴⁶ KBo 2.2 IV 8 NH

⁴⁶ On this form see Neu 1982: 124f., 147.

impf. 1sg. pres. act. *šar-ni-ki-eš-ke-mi* KBo 6.28 rev. 17 NH; *šar-ni-in-ki-iš-ke-mi* KUB 14.14 rev. 8, 21 NH; *šar-ni-in-ki-eš-ke-mi* KUB 14.14 rev. 21 NH; *šar-ni-en-ki-iš-ke-mi* KUB 14.14 rev. 14 NH

impf. 2sg. pres. act. *šar-ni-in-ki-iš-ke-ši* KBo 34.22 + obv.⁷ 7 OH/MS, KUB 31.133 17 OH/NS, ABoT 44 I 38 OH/NS

impf. 1pl. pres. act. *šar-ni-in-ki-eš-ke-u-e-ni* KUB 23.72 obv. 28 MH/MS

impf. 1sg. imp. act. *šar-ni-in-ki-iš-ki* KBo 3.1 III 75 OH/NS

impf. 1sg. imp. act. *šar-ni-in-ki-iš-ke-ed-du* KBo 6.28 rev. 21 OH/NS, Bo 86/299 II 77 NH

The verb *sarnink-* is usually transitive, but it can also be used absolutely (i.e. with no overt direct object), cf. KBo 6.2 II 54 *šēr=šit=wa šar-ni-ik-mi nu šar-ni-ik-zi* “(If a slave burglarizes a house and his owner says:) I will make compensation for him, he shall make compensation”, see CHD Š: 282 and 285f. for the argument structure of *sarnink-*.

It is likely that the verb has inner-Hittite cognates as well. Kloekhorst (2008: 734f.) suggested that *sarnink-* is related to *sarku-* ‘eminent’ and *sarkiške/a-* (for which only the imperfective stem is attested⁴⁷), which, according to him, means ‘to be good’. As a parallel for the semantic development in **sark-* ‘to be good’ > *sarnink-* ‘to compensate’, he cites Dutch *vergoeden* ‘to compensate’, derived from *goed* ‘good’.

The contexts for *sarkiške/a-* can be interpreted in different ways. The Chicago Hittite Dictionary translates *sarkiske/a-* as ‘to ascend(?)’: KUB 24.7 IV 25 MUŠEN *HURRI*^{HLA} *araiskanzi* (26) [...] *šar-kiš-kán-zi n=at nepisi* [...] “the shellducks, however, fly up(?), [...] ascend(?) and they [...] into(?) the sky” CHD Š: 267.

According to HEG S: 901ff., there is also an imperfective form *sarkiskesi* in KUB 31.127 I 8ff. *handanza=kan* (9) *antuhsas tuk=pat āssus n=an zik=pat šar-ki-iš-ke-ši* ^dUTU-*uš* “der gerechte Mensch (ist) dir teuer und ihn erhebst du immer wieder, o Sonnengott”. Kloekhorst translates this as ‘When righteous, a man is dear to you, and

⁴⁷ Hoffner reads alleged *šar-ki-iz-zi* in KBo 26.30 II 32, translated by Akkadian hapax *šitlû*, as *hūr-zq-ki-iz-zi*, s. CHD Š: 264. Note that *sarkiskanzi* can also be derived from **sarkiye/a-* or **sarkess-*, cf. Oettinger 1979: 245.

you are therefore always good to him, o Sun-god.’ CHD Š: 273, however, reads the form as *šar-[l]i-iš-ki-ši* from *sarlai-* ‘to exalt’.

While the Hittite data are inconclusive, in my opinion, Kloekhorst’s interpretation of *sarkiške/a-* is supported by its etymology. The comparison with Toch. B *šärk-* ‘to excel?’ (s. Kronasser 1957: 123, 127) allows for reconstruction of the meaning ‘to be good’ for this root. Importantly, the Tocharian verb has a nasal-infix present as well, which would allow for a reconstruction of an infix present to this root already in PIE, see Peyrot 2013: 540ff. However, the meaning of this verb is not certain, and it could also mean ‘to take care of’, see Malzahn 2010: 939f.

Since Pedersen (1938: 145), *sarnink-* has also been compared to Lat. *sarciō* ‘to repair’ (e.g., LIV: 536, **serk-*).

Note that the second *-n-* is missing in *šar-ni-kán-zi* KuSa 1.9 rev. 6, *šar-ni-ke-er* KuSa 1.3 obv. 16 and *šar-ni-ik-kán-za* KuSa 1.27 9. It is hardly a mere omission of the sign IN (*šar-ni-<in->kán-zi* and *šar-ni-<in->ke-er*), as the form *šar-ni-ik-kán-za* shows. Such spellings are not confined to the Kušakli texts, but it is remarkable that forms with *-nin-* are not attested in Kušakli. It is likely to be just a coincidence, but one may wonder if this spelling actually reflects a local variety, or perhaps an unconventional orthography of a scribe.

2.3 In this section, I discuss several other Hittite verbs that contain or may contain the infix *-n-*.

This reflex of the PIE infix differs significantly from the *-ni(n)-* in *sarnink-* ‘to compensate’ etc., on which see above 2.2. The reason for a different development of the infix is not entirely clear. Kloekhorst (2008: 153ff.) argued that in *hamank-/hamink-* ‘to wrap, tie’ and *tamink-* ‘to attach’ the form of the infix was conditioned by the /m/ in the root. As for the other verbs treated in this section, in most cases there are alternative etymologies, which presuppose a radical *-n-*. Therefore, it is *-ni(n)-* that is generally believed to be the regular reflex of the PIE nasal infix.

hamank-, hamink- ‘to wrap, tie’

1sg. pres. act. *ha-ma-an-ga-aḡ-ḡi* KBo 12.96 I 20 MH/NS; *ha-ma-an-ak-mi* KBo 23.113 III 20 NS, KBo 33.216 obv. 9 NS; *ha-ma-an-ga-mi* KUB 9.31 III 24 MH/NS, KUB 9.32 obv. 10 MH/NS, KUB 41.18 II 12 MH/MS?; *ha-ma-an-kám-mi* KBo 13.72 obv. 6 NS; *ha-ma-ak-mi* KUB 50.89 II 18 NS; ?[*ha-me-*]*in-ki-mi* IBoT 3.99 12 NS

3sg. pres. act. *ha-ma-an-ki* KBo 4.2 I 28, 31, 34, 36 pre-NH/NS, KBo 5.1 IV 7 MH/NS, KBo 5.2 III 22 MH/NS, KBo 10.41 obv. II 5 MH/NS, KBo 12.112 obv. 6, 7, 9 MH/NS, KBo 35.94 7, 10 NS, KBo 40.133 6 NS, KBo 52.26+ obv. II 40 MH/NS, KUB 9.22 II 27 MH/MS, KUB 11.20 I 6 NS, KUB 24.10 obv. II 5 MH/NS, KUB 47.35 I 13 NS, HT 1 III 14 MH/NS; *ha-ma-ak-zi* KUB 24.9 + obv. II 47 MH/NS; *ha-ma-an-zi* KBo 25.184 III 3⁴⁸ OH/NS, IBoT 2.122 7 NS; *ha-ma-an-ga-zi* KUB 4.47 obv. 19, 20 NS

3pl. pres. act. *ha-ma-an-kán-zi* KBo 21.34 III 43, IV 13, 15 MH/NS, KBo 44.222 12 NS, KUB 1.13 III 5 MH/NS, KUB 10.91 II 4 OH/NS, KUB 17.18 III 16 MH/NS, KUB 39.24 rev. 5 NS, KUB 41.31 II 13 MS?, KUB 43.49 rev.? 13, 15 NS, HT 1 III 15 MH/NS, *ha-ma-an-ga-an-zi* KUB 9.31 III 25 MH/NS, KUB 9.32 obv. 11 MH/NS, KUB 41.18 II 13 MH/MS?; *ha-am-ma-an-kán-zi* KUB 38.26 obv. 21 NH; *ha-me-en-kán-zi* KBo 56.25 5 NS; *ha-me-in-kán-zi* KUB 39.14 I 51, 52 OH/NS, KUB 39.7 II 19 OH/NS, KUB 39.8 I 16 OH/NS; *ha-mi-in-kán-zi* KUB 2.3 II 24 OH/NS

1sg. pret. act. *ha-ma-an-ku-un* KUB 58.108 IV 12 MH/NS

3sg. pret. act. *ha-ma-na-ak-ta* KUB 14.4 II 10 NH; *ha-ma-an-kat-ta* KUB 32.133 I 5 NH, KUB 38.32 obv. 7 NS; *ha-ma-ak-ta* KUB 26.91 obv. 9 NH, KUB 51.33 I 13 NS; *ha-am-ma-ak-ta* KUB 38.23 6 NS; *ha-am-mi-in-ga-aš* Bo 3463 II 10 NS

3sg. pret. mid. *ha-mi-ik-ta* KBo 3.8 + KUB 7.1 III 3, 4, 8, 9, 10, 11, 12, 13, 35, 36, 37, 38, 39, 42 OH/NS, KBo 22.128 + III 3, 5, 6 OH/NS; *ha-mi-ik-ta-at* KBo 3.8 + KUB 7.1 III 33, 34, 40, 41 OH/NS, KBo 22.128 III 4 OH/NS, IBoT 3.107 3 OH/MS

3pl. pret. mid. *ha-me-en-kán-ta-at* KBo 12.100 I 9 NS; *ha-me-in-kán-ta-at* KBo 12.100 I 19, 20 NS; *ha-me-en-ga-an-ta-at* KBo 12.100 6, 7 NS; *ha-me-in-kán-ta-at* KBo 12.100 4, 10 NS

⁴⁸ Kassian, Korolëv, Sideltsev 2002: 102 emend to 3pl. *ha-ma-an-<kán>-zi*. But the context is broken, so *hamanzi* may just as well be a phonetically real form rather than a misspelling of /h(a)manktsi/ or /h(a)mankantsi/.

3pl. imp. act. *ḥa-ma-an-kán-du* KUB 21.38 obv. 64 NH; *ḥa-me-in-kad-du* KBo 10.45 IV 27 MH/NS; *ḥa-mi-in-kán-du* KUB 41.8 IV 25 MH/NS

Part. n.sg. c. *ḥa-ma-an-kán-za* KBo 17.105 III 17, 20 MH/MS, KUB 59.43 I 14 NS; *ḥa-mi-in-kán-za* KUB 27.67 + II 13 MH/NS; *ḥa-me-in-kán-za* KBo 6.3 II 11 OH/NS, KUB 27.67 + III 18 MH/NS; *ḥa-am-me-en-kán-za* KBo 6.5 III 6 OH/NS

Part. n.-acc. sg. n. *ḥa-ma-an-kán* KUB 12.51+ I 8 NS, KUB 15.31 II 21 MH/NS, KUB 15.32 II 16 MH/NS, KUB 22.20 2 NS, KUB 33.67 I 15 OH/NS, KUB 42.12 VI 2 NH, KUB 58.107 IV 10 MH/NS; *ḥa-mi-in-kán* KBo 17.15 rev.? 12 OS, KUB 9.28 IV 3 MH/NS, KUB 15.34 I 30 MH/MS, KUB 30.10 obv. 20 OH/MS

Part. n. pl. c. *ḥa-ma-an-kán-te-eš* KBo 23.43 + III 10 MS; *ḥa-ma-an-ga-an-te-eš* KUB 45.26 + KBo 27.159 II 13 OH/NS; *ḥa-mi-in-kán-te-eš* KBo 23.74 II 13 OH/MS, KUB 2.3 II 24 OH/NS

Part. acc. pl. c. *ḥa-am-mi-in-kán-du-uš* HKM 116 39 OH/NS

Verbal noun n.sg. *ḥa-me-en-ku-wa-ar* KBo 1.38 rev. 6 NS

Verbal noun g.sg. *ḥa-ma-an-ku-wa-aš* KUB 20.66 III 4 OH/NS; *ḥa-me-en-ku-aš* KUB 42.64 rev. 5 NH, KUB 42.73 obv. 10 NS; *ḥa-me-en-ku-wa-aš* KUB 30.48 14 OH/MS; *ḥa-mi-in-ku-wa-aš* KBo 13.61 rev. 7 NS; *ḥa-mi-en-ku-wa-aš* KUB 42.58 obv. 1 NS

Impf. 1sg. pres. act. *ḥa-me-in-ki-eš-ke-mi* KBo 11.11 I 5 NS

Impf. 3pl. pres. act. *ḥa-mi-in-ki-iš-ke-er* KBo 3.1 III 48 OH/NS

Melchert (1984: 168) notes that the best translation for *hamank-* would be ‘intertwine, wrap around’. Puhvel (HED 3: 67) also remarks that *hamank-* has a more restricted meaning than *ishai/ishi-* ‘to tie’.

The alteration *-a-/-e-/-i-* in the root is rare, and the distribution is as follows. In the singular present and preterite active we find *-a-*, with the sole exception of *ḥa-am-mi-in-ga-aš* in Bo 3463 II 10 (NS). In the middle voice, we have *-i-* and *-e-*. Elsewhere, both *-a-* and *-i-/-e-* are frequent. The only Old Script attestation, *ḥa-mi-in-kán* KBo 17.15 rev. 12, shows *i*, which would suggest that *hamink-* was the original stem of the participle (and 3rd plural). The forms with *-e-* occur usually in NH and NS

texts, with the exception of *ḥa-me-en-ku-wa-aš* KUB 30.48 14 (OH/MS); on this topic see further 2.4. Such a distribution suggests that *hamank-* corresponds to the strong stem and *hamink-* corresponds to the weak stem. Note nevertheless that the stem *hamink-* is attested in Old Hittite texts and its copies, while *hamank-* only appears in Middle Hittite texts and its copies.

The double *-mm-* is probably graphic (s. Kimball 1999: 97f.). It is not easy, however, to find a motivation for a more complicated spelling. I assume that this spelling was introduced to show that the first *-a-* was phonetically real, even if it is of secondary origin (on the epenthesis in the anlaut consonant clusters, see Kassian, Yakubovich 2002); under this view, *-mm-* in *hammankanzi* becomes comparable to *-mm-* in *dammeshā-* ‘punishment’ < **demh₂-sh₂ó-* as compared to single *-m-* in *damāss/damess-* ‘to oppress’ < **dmeh₂s/dmh₂s-* (for the etymology of these words see Kloekhorst 2008: 822f., 825f.)

It is remarkable that /n/ is often spelled in *hamank-* before a consonant cluster, cf. e.g., 3 Sg. Pres. *ḥa-ma-an-ga-zi* KUB 4.47 obv. 19, 20 NS, 3 Sg. Pret. *ḥa-ma-an-kat-ta* KUB 38.32 obv. 7 NS, KUB 32.133 I 5 NH. In this respect, *hamink-* differs from verbs with the infix *-nin-* and also *tamink-* ‘to attach’ that are generally believed to have an infix and always have /n/ omitted before a consonant cluster other than /kw/. By contrast, *hamank-* often keeps /n/ in this position in Middle and New Hittite, similarly to *link-* ‘to swear’, *nink-* ‘to get drunk’ etc., see further 2.1.4-5.

The root etymology for *hamank/hamink-* is established beyond reasonable doubt. It is related to Gr. ἄγχω ‘to squeeze, bind’, Lat. *angō* ‘to bind, press together’, Skt. *āṃhas-* ‘narrowness’ (Pokorny 1959: 42f.) and goes back to PIE **h₂emǵ^h-* ‘to lace, tighten’ > ‘to restrict, confine’ (HEG A: 142f., LIV: 264f.). According to Gonda 1957: 33ff., the meaning of **h₂emǵ^h-* was rather ‘(to be) narrow’. It is important that no infixed formations to this root are attested in other IE languages⁴⁹.

⁴⁹ Alternative etymologies have been proposed. Schmitt-Brandt (1967: 108) and Melchert (1984: 168) compared *hamank-* to PIE **menk-* (German *mengen* ‘to mix’). The alleged prefix **h₃e-* was found in Hittite *hatk-* ‘to shut’ < **ha + *teg-* ‘to cover’. But this etymology is implausible, since **menk-* rather means ‘to press, knead’, and there is no reliable independent evidence for the prefix **h₃e-* (later, Melchert adopted another etymology for *hatk-*, s. Melchert 1994: 64).

Pedersen (1938: 197) connected *hamank-/hamink-* to the root **anǵh-* indirectly, via a variant **Hwanǵh-* that could be seen on OCS *vezati* ‘to bind’. The provenance of the initial /v/ in the Slavic verb is unclear; it is believed to have been added in analogy to OCS *viti* ‘to twine, wind’ or as a way to avoid hiatus (being a form parallel to the standard variant *oꝛꝓ*

By contrast, the prehistory of the attested stem *hamank-/hamink-* remains disputed. Van Brock (1962: 32) argued that *hamank-* (along with *tamink-* ‘to attach’) continues an infixed present stem. While this proposal has gained wide recognition (e.g., Oettinger 1979: 148-9, HED 3: 67-8, LIV: 264-5), the exact details are unclear.

One of the problems with van Brock’s account is different development of the allegedly parallel formations *tamink-* and *hamank-*, which show different vocalism and belong to different conjugations.

Another problem is that in contrast to *nin-*verbs and *tamink-* that follow the *mi-* conjugation, *hamank-* has forms of both the *hi-* and *mi-* conjugation. The *mi-* conjugation endings in 1sg. pres. and pret. of this verb may be explained as an attempt to avoid *-kh-* clusters, see further 2.1.4, while *-ta* in 3sg. pret. usually occurs in texts that seem to be New Hittite. On the contrary, instances of 3sg. pres. *hamanki* are much more numerous than *hama(n)kzi* and difficult to explain as late and/or secondary. Therefore, it appears that this verb originally belonged to the *hi-* conjugation (cf. Melchert 1984: 167f., Kloekhorst 2008: 279).

According to the classical reconstruction of PIE infixed stems, one would expect a nasal present made to the root **h₂emǵ^h-* to be **h₂mnéǵ^h-ti/*h₂mǵ^h-énti*, which in Hittite would have yielded something similar to **hammikzi/**h(a)manganzi*, with the *e*-grade in the strong stem and the *a*-grade in the weak stem. These hypothetical forms match neither the ablaut (*a-* in the strong stem and *-i-* in the weak stem), nor the conjugation type of the actually attested forms. In my opinion, all the attempts to derive *hamank-/hamink-^{hi}* from **h₂mnéǵ^h-ti/*h₂mǵ^h-énti* are implausible. Therefore, *hamank-/hamink-* cannot be a regular development of a PIE nasal infix stem, unless one operates with a chain of unparalleled and ad hoc analogical levellings⁵⁰.

‘to narrow down’ (cf. Vasmer 1964-73 I: 374). Nevertheless, **Hwong^h-*, whatever its origin might be, could hardly develop into **hmonk-*, reflected in Hitt. *hamank-*.

⁵⁰ Cf. the development of these forms according to Puhvel (HED 3: 67-8): “... **A₁m-n-éǵ^h-ti* > **hamnekzi* and weak forms in **A₁m-m-ǵ^h-*, e.g., 3 Pl. pres. act. *hamankanzi*. From the latter type were formed new analogical paradigms (cf. Skt. *yujjāti* and Lat. *iungō* from **yu-n-g-*), thus *hamangahhi* after the model of *gangahhi* (from *gank-*) and *hamankun* following, e.g., *linkun* (from *link-*). After the restoration of the weak grade in the form **nen-* (**hamnekzi* : **hamnenkanzi*, like, e.g., *sarnikzi* : *sarninkanzi*), phonetic change (**mn* > *m[m]*) once more ruined the paradigm, yielding **ham(m)ekzi* : **ham(m)enkazi*; the strong form is seen in *hamikta*, and the weak ones remained as alternatives to *hamank-* (as in, e.g., *hamankanzi* : *hamenkanzi*, *hamankant-* : *ham[m]enkant-*), creating the illusion of a : e ablaut.” There are multiple objections to this view. To name a few: the weak stem in OS was *hamink-* (*ha-mi-in-kán* KBo 17.15 rev. 12); the geminated *-mm-* < **-mn-* in spellings of both *hamank-* and *tamink-* occurs only in NS texts, though under Puhvel’s theory

Recent etymological accounts of this verb start with the assumption that *hamank-/hamink-* is a *hi*-conjugation verb with a reflex of an **ó*-grade in the singular, even though there are no attested forms with a plene spelling ***ha-ma-a-an-ki*. The lack of such spellings is not surprising, as we would expect to see them mainly in OS texts⁵¹, in which the relevant forms of *hamank-* are not attested. Kloekhorst (2008: 279f.), therefore, reconstructs the preform of *hamank-/hamink-* as **hmónġ^h-/*hmnġ^h-*⁵², with the ablaut **-ó-/ø*, typical for the *hi*-conjugation, and an anaptyctic /i/ in the cluster **CNNC* (ibid. 60f., 154f.)⁵³. Alternatively, Melchert (2013b: 138ff.) argues against the anaptyctic /i/ (cf. also Kloekhorst 2014b) and assumes the ablaut **-ó-/é-* (ibid. 141) of the type postulated by Jasanoff (e.g., 2003: 69ff.).

Since the stem *hamink-* is usually spelled with *-i-* in OS and MS texts⁵⁴ (4x with *-i-* vs. 1x with *-e-*, *ha-me-en-ku-wa-aš* KUB 30.48 14 MS), *hamink-* hardly contains the anaptyctic /i/ pace Kloekhorst. However, if *hamank-/hamink-* reflects **hmónġ^h-/*hménġ^h-*, one has to assume that a non-ablauting infix *-n-* was inserted into a stem **hmóġ^h-/*hméġ^h-*⁵⁵, and the resulting formation ended up in the *hi*-conjugation in Hittite. While it cannot be excluded that there were two different types of infixed stems in PIE, I do not think that the peculiar case of *hamank-/hamink-* is enough to justify a reconstruction of a distinct *hi*-conjugation nasal-infix class⁵⁶.

Note that pre-Hittite **hmonġ^h-/*hmnġ^h-* could be the source of *hamank-/hamink-*. Even though there is no indication of the anaptyctic vowel in the weak stem *hamink-* (see above), in my opinion there is another possible case where *CminC-* reflects

it should have been spelled regularly in OS and MS texts as well, as in, e.g., *gimm(ant)-* ‘winter’ (cf. Melchert 1994: 153; Kimball 1999: 321f.).

⁵¹ In later periods, the plene spelling is often omitted, cf. *kank^{-hhi}* ‘to hang’, with plene spellings (e.g., *ka-a-an-ki*) attested only in OS texts.

⁵² The expected outcome of a syllabic /n/ is *-an-* and perhaps *-a-*, for the discussion see Kimball 1999: 243ff., 252f., therefore **h₂mnġ^h-* should have developed into *h(a)mank-*. Theoretically, 3pl. pres. *hamankanzi* (e.g., KUB 10.91 II 4 OH/NS) may go back to such a stem as well, but it is attested in the Middle Hittite texts at the earliest, whereas *haminkanzi* occurs in the copies of Old Hittite texts. Still, as a mere speculation, if *h(a)mank-* reflects **h₂mnġ^h-*, *hamink-* could be originally a distinct middle stem with an *e*-grade.

⁵³ Similarly, Oettinger (1979: 139f.) argued that in the weak stem of some verbs there was an insertion of an anaptyctic vowel rather than vocalization of a sonant, e.g., *linganzi* instead of ***alnganzi* < **h₁lng^h-énti*. Melchert (1994: 71) also suggested that there were no vocalization of the sonant in the weak stem **dmh₂s-* of the verb *damass-/damess-*.

⁵⁴ For the alteration of *-i-* and *-e-* in New Hittite forms cf. 2.4.

⁵⁵ Note that **hmóġ^h-/*hméġ^h-* shows a Schwebe-ablaut next to **h₂emġ^h-*, attested in other languages, cf. LIV: 264f. Cf. further 2.4.6.

⁵⁶ The *hi*-conjugation of some other infixed verbs (*tarna^{-hhi}* ‘to let go, allow’, *sanna^{-hhi}* ‘to conceal’, *sunna^{-hhi}* ‘to fill’) can be explained differently; besides, none of these verbs reflects the ablaut **-ó-/é-*. See also 6.3.5. below.

**CmnC-*, namely, *tamink-*. This is a *mi*-conjugation verb and it is not supposed to have an *e*-grade in the weak stem, but such an interpretation seems to be the only possible option for the forms like *ta-mi-in-kán-za* KBo 15.28 obv. 12 MS or *ta-mi-in-kán-ta-r[i]/a[n]* KBo 15.33+ I 7 MH/MS. Unless *tamink-* goes back to a Narten present, which is unlikely, it can hardly reflect a morphological *e*-grade, and I have to assume that there was some kind of specific development in the weak grade **tmnk-*, which could be applicable to **h₂mnk-* as well. Recently, Kloekhorst (2014: 69f.) has argued that *(C)*rnk-* yields *(C)*rink-*, so *hamink-* may well be a phonetically regular outcome of the weak stem **hmnġ^h-*.

Summing up, there is little doubt that the verb *hamank-/hamink-* goes back to PIE **h₂emġ^h-* ‘narrow’ (Gonda) or ‘to tighten’ (LIV). The details remain obscure, however. Both hypothetical stems **hmónġ^h-*/**hmnġ^h-* and **hmónġ^h-*/**hménġ^h-*, either of which could yield *hamank-/hamink-* in Hittite, are not compatible with an expected PIE infixed stem **h₂mnéġ^h-*/**h₂mġ^h-*.

Since there are no infixed formations to this root attested in other IE languages, *hamank-/hamink-* is very likely to be a post-PIE, that is, a proto-Anatolian or a proto-Hittite development. Some other examples of post-PIE infixed stems in Anatolian and other branches could be OE *standan* ‘to stand’ (**steh₂-*, LIV: 591, but cf. Kroonen 2013: 473), OCS *ležo* ‘to lie down’ (**leg^h-*, LIV: 398) and Hitt. *galank-* (see the respective entry below).

Alternatively, /n/ in **h₂monġ^h-* could result from a secondary nasalization. Insertion of a nasal before a stop is in no way regular in Hittite, but it also is not unknown, cf., e.g., *salig-* ‘to touch’ with a single nasalized form *ša-li-in-kán-zi* in KBo 29.133 III 2 (Oettinger 1994: 319⁵⁴). The insertion of /n/ in **h₂moġ^h-* could have been triggered by the preceding /m/, cf. the unetymological /n/ in *zamankur* ‘beard’ and *samankurwant-* ‘bearded’; in *hamank-* this secondary -n- could have been reanalyzed as a part of the root. However, to my knowledge, there are no certain examples of such an irregular /n/ to be generalized through the whole paradigm.

While both suggested scenarios for the appearance of /n/ in *hamank-/hamink-* are hypothetical, I conclude that this verb is not a direct reflex of a PIE verbal stem.

hinik/hink- ‘to grant, bestow’

1sg. pres. act. *hi-ik-mi* KBo 22.118 9 NS, KUB 33.27+ I 38 MS; *hi-in-ik-mi* KUB 33.112+ III 14 NS, KUB 36.5 I 2 NS, HT 25+ rev. 2; [*hi-i*]*n-ga-mi* KBo 29.2 II 8 NS

2sg. pres. act. *hi-in-kat-ti* KUB 56.19 I 15 NS

3sg. pres. act. *hi-ik-zi* e. g. KBo 2.3 II 49 MH/NS, KUB 9.28 II 24 MH/NS, KUB 17.18 I 21 NS, KBo 39.8 III 40 MS, KUB 35.54 II 29 MS; IBoT 1.36 II 25, IV 20 MH/MS; *hi-in-ik-zi* KUB 7.5 I 20 MH/NS, HT 39 rev. 14 NS; *hi-in-ga-zi* KBo 5.1 I 40 MH/NS

1pl. pres. act. *hi-in-ku-wa-ni* KUB 17.28 I 11 NS

3pl. pres. act. *hi-in-kán-zi* e. g. KBo 6.3 III 64 OH/NS, KBo 10.20 I 35 NS, KBo 11.18 V 16 NS, KBo 21.1 III 5 NS, KUB 17.27 II 9, KUB 17.35 III 15 NH, KUB 22.70 rev. 64 NH; *hi-in-ga-zi* KBo 6.3 III 67 OH/NS

1sg. pret. act. *hi-in-ku-un* KBo 3.6 II 13 NH

3sg. pret. act. *hi-ni-ik-ta* KBo 3.7 II 23 OH/NS, KUB 34.16 III 4 NS; *hi-ik-ta* KBo 21.13 IV 8 MH/NS; *hi-in-ik-ta* KBo 16.83 III 5 NS; *hi-in-kat-ta* KBo 3.34 II 3 OH/NS, KUB 8.45 obv. 6 NS; *he-en-ik-ta* KBo 6.29 I 21 NH

1pl. pret. act. *hi-in-ku-u-e-en* KUB 36.82 6 NS

3pl. pret. act. *hi-in-ker* KBo 3.55 obv. 3 OH/NS

2sg. imp. act. *hi-in-ga* KBo 5.9 III 16 NH

3pl. imp. act. *hi-in-kán-du* KUB 13.2 III 41 MH/NS, KUB 31.84 III 69 MH/NS

inf.I *hi-in-ku-wa-an-zi* KBo 11.73 obv. 6 OH/NS

impf. 3sg. pres. act. *hi-in-ki-iš-ke-ez-zi* KUB 35.54 II 18 MS

According to Hart (1976), the form *hi-ni-ik-ta* in KUB 34.16 III 4 and KBo 3.7 II 23 is to be distinguished from *hink-* ‘to grant’ and belongs to *hinik-* ‘to moisten’ with the infix *-nin-*, cf. also HED 3: 315f. As I argued in Shatskov 2010, both these forms belong to *hink-*. My arguments are as follows. First, the spelling *hi-ni-ik-* is rare but still attested for *hink-*, cf. KUB 57.91 rev. IV 5 *I-NA* UD.2.KAM [] (6) 1 UDU *hi-ni-*

ik[- “in the 2nd day ... consign(s) one sheep”. Second, Hart argued that *hinikta* in KBo 3.7 II 23 must be a 3sg. pres. middle rather than a 3sg. pret. act. and thus it cannot belong to *hink-*, but this is not valid as well, as we have another preterite form, *ú-e-ek-ta*, in a similar context in the next sentence⁵⁷.

Therefore, the forms *hi-ni-ik-ta* and *hi-ni-ik[-* belong to *hink-* ‘to grant’. However, *hi-ni-ik-* must be a distinct stem rather than just a graphic variant of *hi-in-ik-*. Indeed, there are rare spellings like *ša-na-aḥ-ti* (KBo 4.414 II 37 et passim, Tudh. IV or Supp. II) vs. common *ša-an-aḥ-ti* or *wa-la-aḥ-zi* (e.g., KBo 17.43 I 12, 13 OS) vs. *wa-al-aḥ-zi*. Nevertheless, to my knowledge, there is only one other instance of a similar alteration for -NI-/IN-, namely 1sg. *ta-me-ni-ik-mi* Bo 3445 11 MS; 3sg. *da-mi-ni-ik-zi* KBo 17.105 IV 3 MH/MS and 3pl. *ta-me-ni-kán-zi* KBo 20.116 Rs (?) 10 MH/NS; as I will argue in the respective entry, there are reasons to distinguish *tamenik-* as a separate stem.

Now, KUB 34.16 III 4 and KBo 3.7 II 23, where *hi-ni-ik-ta* is attested, are NS copies of Old Hittite texts. Therefore, *hinik-* may be an archaism, reflecting a full grade of the infix, similarly to *tamenik-* under the analysis proposed here. Fully parallel to *tamink-* and *tamenganu-* there is *hinganu-*, a *nu*-verb derived from *hink-*. This would mean that the variation -ni/n- of the infix was abandoned in these two verbs and -n- of the zero grade was reinterpreted as a part of the root, cf. 2.5.3 below. In *hink-*, this must have happened earlier, as we find *hinganu-* in the copies of Old Hittite texts, though it sometimes alternates with *hink-*, cf. *hinganuanzi* in KBo 21.108+ V 5 and *hinkuwanzi* in dupl. KBo 11.73 obv. III? 6, both OH/NS.

Thus far no fully compelling etymology for *hink-* ‘to grant’ has been found, see Kloekhorst 2008: 269ff. If -ni/n- is an infix and does not belong to the root, *hink-* may be compared to Goth. *aigan* ‘to own’, Skt. *īśe* ‘to possess’ and Toch.B *aik-* ‘to know’, PIE **h₂eik-*, see LIV: 223, Kroonen 2013: 8, Adams 2013: 107f. Since infixes verbs

⁵⁷ KBo 3.7 II 21 H^{UR.SAG}Zaliyanū hūmandas han[tezzis[?]] (22) mān INA^{URU}Nerik hēuš (23) hi-ni-ik-ta nu^{URU}Neriggaz (24) LÚ^{GIŠ}PA NINDA harsin pēdāi (25) nu^{HUR.SAG}Za[lin]ū heiūn ú-e-ik-ta (26) n=an=si NINDA [...]x pēdai “(The divine mountain) Ziliyana is first (in rank) of all (the gods). When he has allotted rain to (the town of) Nerik, the herald brings forth a loaf of *harši*-bread from Nerik. He had asked Zaliyanu for rain, and he brings it to him [on account of?] bread...” (Beckman 1982: 19).

often have a causative meaning (see 7.2.3), *hink-* ‘to grant, bestow’ would be a plausible match for the root meaning ‘to own’.

Hitt. *hink-*^a ‘to bow’ has sometimes been viewed not as a different verb, but as a result of a semantic development from *hink-* ‘to grant’ (HED 3: 295f., Garcia-Ramon 2001: 135f., Kloekhorst 2008: 269f.). I, however, follow Oettinger (1979: 176f.) in assuming that *hink-*^a is related to Skt. *ac-*, *añc-* ‘to bend’, PIE **h₂enk-*, cf. also LIV: 268 and the entry for *hinganu-* ‘to bow’ in 4.1.

galank- ‘to soothe’

3sg. imp. act. *ka-la-an-kad*⁵⁸-*du* KUB 33.68 III 15 OH/MS

Part. n.sg. c. *ka-la-an-kán-za* KBo 17.105 III 16 MH/MS; *ka-la-a-an-kán-za* KUB 24.2 I 13 NH; *ka-la-an-ga-an-za* KBo 45.247 IV 6 NS; *ga-la-an-kán-za* KBo 16.24 + 25 I 46 MH/MS, KBo 16.102 I MH/NS; *ga-la-an-ga-an-za* KBo 15.1 I 37 NS; *ga-la-an-ga-za* KBo 15.1 I 18 NS

Part. n.pl. c. *ga-la-an-kán-te-eš* KBo 15.10 I 32 MH/MS, KBo 34.46 II 3 MS?

The only attested finite form, *ka-la-an-kad-du*, preserves *-n-* before a consonant cluster. Oettinger (1979: 149) and Kloekhorst (2008: 428) assign this verb to the *hi*-conjugation, despite its *mi*-conjugation ending, for the following reason: the vocalism *-a-* in the root is characteristic of *hi*-verbs (*kānk/kank-*), while *mi*-verbs made from roots with a similar auslaut display *-i-* (*link-*, *nink-*). In my view, *galank-* may just as well be a *mi*-conjugation verb, reflecting a zero grade **glnĝ-*. Other likely examples of the zero grade of the infix are *tamink-* ‘to attach’, *link-* ‘to swear’ and *unh-* ‘to clean’, see the respective entries and 2.4.4-5.

The verb *galank-* and the related noun *galaktar* ‘soothing substance, balm’ are usually compared to Gr. γάλα(κτ)- ‘milk’, Lat. *lac(t)-* ‘milk’, Lith. *glėžnas*, ON. *klökr* ‘tender’. The PIE root can be reconstructed as **gleĝ-* (HED 4: 19) or **gleĝ^h-* (Kloekhorst 2008: 428), and *galank-* would then reflect **gl-ŋ-ĝ/ĝ^h-*. The derivational

⁵⁸ The reading *-kid₉-* in the online edition by Rieken at the HPM website is unlikely, see Hoffner, Melchert 2008: 18, note 22. The vowel here must be graphic in any case.

history of *galaktar* is a matter of discussion. Kammenhuber (1954: 418), Kronasser (1966: 89) and Rieken (1999: 379ff) assume that /n/ was lost in *galaktar*. However, we have already seen that in Middle Hittite /n/ could have been restored in this environment, as can be seen, e.g., in *kalankaddu*. The complete lack of -n- in forms of *galaktar* seems to support Puhvel's suggestion (HED 4: 19f.) that *galaktar* was derived from an infixless verbal stem. Carruba (1994: 51) analyzed *galaktar* as **gleĝ-t-ŕ* and assumed a PIE age for the stem **gleĝ-t-*. The problem with this reconstruction is that **e* in **gleĝ-t-* could not yield -a- in *galaktar*. Rieken (1999: 379f.) argues that the suffix was **-tro-*. In Hittite, this suffix is found also in *sāwītra-*, *sāwātar* 'horn', but this word might be a Luwian borrowing, for the discussion see Kloekhorst 2008: 740f. Whatever the suffix in *galaktar* might be, this noun is hardly a derivative of the attested verbal stem *galank-*.

There are no verbal forms attested for this root in other Indo-European languages; therefore it is likely that *galank-* was formed in Anatolian or Pre-Hittite. For similar conclusions regarding *hamank/hamink-* see the respective entry and cf. 2.4.5.

kunk- 'to sway?'

1sg. pres. act. *ku-un-ku-u-e-ni* KUB 14.10 IV 20 NH, ?KUB 24.4 obv. 13 MH/MS (*ku-un-ku[-]*)

Part. n.-acc. sg. n. *ku-un-ga-an* KBo 22.112 3 NS, KUB 7.10 I 6 n.A., KUB 42.94+ IV 13' NS, KUB 43.42 3' NS

Impf. 1sg. pres. act. *ku-un-ku-uš-ke-nu-un* KBo 20.82 II 14 OH/NS

Impf. 3sg. pres. mid. *ku-un-ki-iš-kán-ta-ri* KUB 29.1 III 44 OH/NS

?Impf. 3sg. imp. act. *ku-un-ku!-uš-k[án-du]* KUB 13.2+ III 52 MH/NS

Supine *ku-un-ki-eš-ke-u-wa-an* KUB 24.7 IV 39 NS, KUB 33.93+ III 13 NS; *ku-un-ki-iš-ke-u-wa-an* KUB 36.60 + 24.8 III 7 OH/NS

kun(n)ikunk-:

Impf. 3sg. pres. mid. *ku-un-ni-ku-un-ki-iš-ke-et-ta* KBo 10.24 III 10 OH/NS

The meaning of this verb is elusive. The following translations have been suggested: ‘to rise’ (Oettinger 1979: 179, Neu 1968: 102), ‘to clean(?)’ (Hoffner 1998: 58), ‘to lock, shut’ or ‘to hide’ (HEG Š: 984). Taracha (1999: 676ff. and 2000: 130ff.) argued that *kunk-* means ‘to look at’ and ‘to secure’ (with *anda*). So far the most plausible interpretation has been Puhvel’s ‘to sway, shake’ (HED 4: 250), as it fits or is at least acceptable in the majority of contexts, in which *kunk-* is attested.

The contexts are as follows:

KUB 14.10 IV 19-20: *nu=kan* ^{URUDU} *ZI.KIN.BAR-as* ^{GIŠ} *sarpaz kunkuweni* is translated by CHD as follows: “(It must be found out why there is dying.) We are dangling on the point of a needle”.

Kunk- is found in other ritual texts, including the ritual for the foundation of a temple (CTH 414): KUB 29.1 III 41-44: *nu=ssan DINGIR*^{MEŠ} *esantari, nu=za=an É-as BELU*^{MEŠ} ^{-TIM} *LUGAL-us MUNUS.LUGAL-s=a DAM*^{MEŠ} *pahhuwarses esantari n=at=za=kan sāsas mahhan kunkiskantari* “The gods are seated; the housemasters, king and queen, the morganatic wives [and] children, take their seats and they sway⁵⁹ like wild goats” (see HED 4: 249, sim . CHD Š: 301).

In mythological texts, this verb is used several times in supine constructions with *dai-/ti-* or *tiye-*. Here the meaning ‘to dangle, sway’ is contextually plausible as well, cf. KUB 33.93 III 12-4 [^D*Kumar*]*bis=za a[si] DUMU.NITA-an duskiskewan dā[is n]=an kunkeskewan [dāis]* “Kumarbi began to rejoice in this son and started dandling him” (HED 4: 249), cf. also KUB 24.7 IV 39 *n=an kunkeskeuwan dāis* and KUB 36.60 + 24.8 III 7 *n=an kunkiskewan dāis*.

However, there are passages where the meaning ‘to shake, sway’ fails to persuade:

KUB 7.10 I (dupl.to KUB 42.94+ rev. IV 10ff., CTH 448) 1 *kāsa apēdani uddani* (2) *pedi kūš tarpaliyēs* (3) *karū arandari* (4) *nu=wa=za kūš sikten apūs=wa=za* (5) *namma lē sekteni* (6) *AŠRU=wa=kan karū anda ku-un-ga-an* “These substitutes are already standing in (this) place for that matter. So pay attention to these. Do not pay attention to those. The place has already been *k.-ed*”.

⁵⁹ For the interpretation of Hitt. *sāsa-* as ‘wild goat’ see recently Oettinger 2015.

Kümmel (1967: 129f.) leaves *kungan* without interpretation: “Die Stätte ist bereits früher ge....t”. Taracha (2000: 51) gives the following translation: “Die Stelle ist schon längst ‘gesichert’[?] worden”.

The meaning “to shake, sway” can hardly pass here, cf. Puhvel’s translation “The pit [has] already [been] broken in” in HED 4: 249. He assumes a special meaning for *anda kunk-* ‘to prepare’, literally ‘to shake in’, which, however, besides this passage is only found in KUB 13.2+ III 52 in a poorly preserved context (cf. Miller 2013: 230f., 384); in addition, the proposed semantic development is dubious.

Another obscure context is KBo 10.24 III 9-10: *lamniy=as seszi ta=as=za ku-un-ni(-)ku-un-ki-iš-ke-et-ta*. Singer (1983: 61) renders this passage as follows “it [thread[?] (*kapnuessar*)] rests for an hour and then it rises gradually (or rises to the right)[?]”. Puhvel translates this as “it lies still for a while; then it is shaken vigorously”. Note that while *kunnikunk-* can be plausibly analyzed as a reduplicated stem of *kunk-* (cf. *pariparai-* and *parai-* ‘to blow a horn’), it may also be two separate words, *kunni* ‘to the right’, and and a form of *kunk-*. Finally, one more obscure passage is KBo 20.82 II 14 (CTH 434) LUGAL MUNUS.LUGAL *kunkuskenun*⁶⁰ ‘I k.-ed king (and) queen’. Unfortunately the context is lost.

Summing up, the meaning ‘to shake, sway’ works well for most passages. Still, it is hardly applicable in KUB 7.10 I 6 and does not make much sense in KBo 20.82 II 14 “I swayed king (and) queen”.

Syntactically, *kunk-* shows different properties in various passages. In KUB 14.10 IV 19-20, *kunk-* is obviously intransitive. By contrast, in KBo 20.82 II 14 *kunkuskenun* is transitive, as are all the usages with supine. There are some labile verbs in Hittite that may be used both transitively and intransitively, e.g., *wahnu-* ‘to make turn, encircle, swing’, but they are not numerous.

The etymology of *kunk-* depends on its interpretation. If we stick to the meaning ‘to rise’, then the connection to Skt. *śvañc-* ‘to bow down’, *uc-chvañc-* ‘to stand up’ is possible (Oettinger 1979: 180, LIV: 340f.). If we accept Puhvel’s translation, then his

⁶⁰ We would expect to see /i/ or /e/ here, i.e. ***kunke/iskenun*, cf. Neu-Otten 1972: 186⁹. Puhvel (HED 4: 249) suggests that this could be a reduplicated stem *kun-ku(nk)-ske-*. Cf. also *ku-un-ku!-uš-k[án-du]* in KUB 13.2+ III 52.

connection of *kunk-* to Gr. κυκάω ‘shake’ and PIE **keuk-* (HED 4: 250) is acceptable⁶¹. Nevertheless, without an established meaning any comparison necessarily remains tentative.

link- ‘to swear’

3sg. pres. act. *li-ik-zi* KBo 3.29 16 OH/NS, KBo 6.2 IV 3 OS, KUB 7.1 II 12 pre-NH/NS, KUB 36.127 rev. 16 MH/MS, KUB 40.88 III 17 NH; *li-in-ga[?]-zi* KBo 6.3 III 75 OH/NS, KBo 15.1 II 7 NS, KUB 43.76 rev. 5 NS; *li-in-ik-zi* KUB 54.1 II 13 NS

1pl. pres. act. *li-in-ku-u-e-ni* KUB 31.42 III 16 MH/NS; *li-ku-wa-an-ni*⁶² HT 1 I 34 MH/NS with dupl. KUB 9.31 I 42 MH/NS; *le-en-ku-u-e-ni* VS NF 12.125 7 NS

3pl. pres. act. *li-in-kán-zi* KUB 13.13 rev. 5 OH/NS (dupl. to *li-ik-zi* KBo 6.2 IV 3 OS), KUB 17.21 IV 15 MH/MS

1sg. pret. act. *li-in-ku-un* KBo 9.73 obv. 3 OS?/MS?, KUB 13.35 I 30 NH, KUB 14.3 I 33 NH, KUB 30.10 obv. 12 MH/MS; *le-en-ku-un* Bo 299/1986 II 4

3sg. pret. act. *li-ik-ta* KBo 4.14 IV 53 Tudh. IV, KBo 9.73 obv. 2 OS, KUB 14.1 obv. 27 MH/MS, KUB 26.32 I 4 NH; *li-in-ik-ta* KBo 4.3 II 28 Murš. II, KUB 5.6 IV 22 NH; *li-in-kat-ta* KBo 4.7 III 11 Murš. II, KUB 6.41 III 52 Murš. II, KUB 7.41 I 12 MS?, KUB 21.7 III 6 NH; *le-en-kat-ta* KUB 21.37 obv. 25 NH, Bo 299/1986 II 38 NH; *li-in-kán¹-ta* KUB 13.35 I 9 NH; *li-in-ke-eš-ta* KUB 14.14 obv. 15 Murš. II

1pl. pret. act. *li-in-ku-en* KUB 36.106 obv.6 OS?/MS?; *li-in-ku-u-en* KUB 23.29 8 NH; *le-en-ga-u-en* HT 1 I 43 MH/NS

3pl. pret. act. *[li-i]n-ke-er* KBo 8.35 II 28 MH/MS; *li-in-ker* KBo 16.27 II 3 MH/MS, KUB 23.59 I 4 NS

2sg. imp. act. *li-i-ik* KBo 4.14 I 41 Tudh. IV; *li-in-ki* KUB 14.3 II 6 NH

3sg. imp. act. *li-ik-du* KBo 4.14 IV 54 Tudh. IV

2pl. imp. act. *li-ik-te-en* KBo 16.27 II 5 MH/MS; *le-e-ek-te-en* KBo 59.183 rev. 2 NS; *le-en-ik-ten* KUB 26.1 III 54 Tudh. IV, *li-in-ik<-tén>* KUB 26.1 I 3 Tudh. IV

3pl. imp. act. *li-in-kán-du* KUB 13.35 I 8 NH

⁶¹ Note that there might be an infixed counterpart in Greek, if κυρκανάω ‘to contrive, mix’ < *κυρκανάω, cf. HED 4: 250.

⁶² A Luwoid form according to HED 5: 85, cf. 1pl. pret. act. *le-en-ga-u-en* further in l. I 42.

Part. n.sg. c. *li-in-kán-za* KUB 7.41 I 15 MS?

Part. n.-acc. sg. n. *li-in-ga-an* KUB 14.1 obv. 79, rev. 53 MH/MS, KUB 30.51 I 18 NH; *li-in-kán* KUB 30.45+ II! 23 NH; *le-en-qa-an* Bo 299/1986 II 50, 55 Tudh. IV

Part. acc. sg. c. *li-in-kán-ta-an* KUB 58.85 III 4 NH

impf. 3sg. pret. act. *li-in-ki-iš-ke-et* KUB 14.1 rev. 51 MH/MS; *li-in-kiš-ke-et* KBo 6.34 III 14 MH/NS

impf. 3pl. pret. act. *li-in-ki-iš-ke-er* KUB 48.110 III 7 MH/NS

impf. 2pl. imp. act. *li-in-ki-iš-ke-tén* KUB 13.3 II 26 MH/NS

The verb *link-* is sometimes spelled with *-e-*, e.g., *le-en-kat-ta* KUB 21.37 obv. 25, *le-en-ga-u-en* HT 1 I 43 or *le-en-ik-ten* KUB 26.1 III 54. We find similar forms with *-e-* also in *hamank/hamink-* ‘to bind’ and *tamink-* ‘to attach’ as well as in the *nu-* verbs *linganu-* and *tamenkanu-*, while in *nin-*verbs spellings with *-e-* are rare. See further 2.1.9 and 2.4.

Since Hrozny, *link-* has been compared to Lat. *ligāre* ‘to bind’ (PIE **leiǵ*, LIV: 403f.). Even though this etymology is attractive both semantically and formally, it is often rejected on the grounds that in other infixed verbs made from roots of this type the infix is *-nin-* rather *-n-*, so one would expect ***lini(n)k-*, cf., e.g., Kloekhorst 2008: 527 for this line of argumentation. An alternative etymology by Sturtevant, which has enjoyed more popularity, connects *link-* with Gr. ἐλέγχω ‘put to shame, prove wrong’ (PIE **h₁leng^h*, LIV: 247). The semantic affinity is less evident in this case, even if one brings into equation OHG *ant-lingen* ‘to answer’ with the putative original meaning ‘dagegenschwören’ (cf. HEG L-N: 61, Kloekhorst 2008: 527f., HED 5: 96).

Still, I prefer the connection to Lat. *ligāre*. The *-n-* grade of the infix is preserved in some forms of *tamink-* ‘to bind’ (see below) and *unh-* ‘to clean’, therefore generalization of *-n-* was a possibility for an infixed verb. (For the hypothesis that some of the *nin-*verbs were recent formations in Hittite see 2.4.4.)

tamink- ‘to attach’

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/MS, *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 with dupl. *ta-mi-[ni[?]]-kán-[zi]* KUB 25.48 + KUB 44.49 obv. II 28 MH/NS; *?ta-me-en-kán-z[i]*⁶³ KUB 21.34 rev. 11 NH

3pl. pret. act. *da-me-in-ker* VBoT 58 I 40 OH/NS

3sg. pres. mid. *ta-me-ek-ta-ri* KUB 7.41 I 26 MH/MS?, KUB 41.8 I 5 MH/NS; *da-me-ek-ta-ri* KBo 10.45 I 19 MH/NS; *dam-me-ek-ta-ri* KUB 21.29 IV 9 NH

3sg. pret. mid. *ta-me-ek-ta-at* KBo 17.105 IV 4 MH/MS; *ta-me-ek-ta-ti* KBo 42.74 7 NS

3sg. imp. mid. *ta-me-ek-ta-ru* KUB 9.4 II 2 MH/NS

Part. n.sg. c. *ta-mi-in-kán-za* KBo 15.28 obv. 12 MS; *da-me-in-kán-za* KBo 9.125 I 6' MH/NS

Part. n.-acc.sg. n. *ta-me-in-kán* KUB 60.67 6 NS

Part. acc.sg. c. *da-mi-in-kán-ta-a-an* KBo 15.34 II 30 MH/NS; *[t/da-]mi-in-kán-da-an* Bo 6575 II 6 n.a.; *ta-mi-in-kán-ta-a[n]*⁶⁴ KBo 15.35 I 4 MH/MS

Part. n.pl. c. *da-mi-en-kán-te-eš* KUB 4.1 III 19 MH/NS; *ta-me-en-kán-te-eš*₁₇ KUB 48.123 IV 8 NS

Part. acc.pl. c. *dam-me-en-kán-du-uš* KUB 24.7 III 70 NS

Inf. *[t/d]a-me-en-ku-wa-an-zi* KUB 23.94 2 NS

Verbal noun *dam-me-in-ku-wa-ar* KUB 24.13 II 5 MH/NS; *dam-me-en-ku-u-wa-ar* KBo 18.24 I 6 NH

Impf. 3sg. pres. mid. *dam-me-en-kiš-ke-et-ta* KUB 13.4 I 26 MH/NS

Similarly to *hamank/hamink-* ‘to wrap, tie’ and *link-* ‘to swear’, the *e*-vocalism or broken spellings are frequent in New Hittite texts or New Hittite copies, e.g., *da-me-in-ker* VBoT 58 I 40, *da-mi-en-kán-te-eš* KUB 4.1 III 19, *dam-me-en-kiš-ke-et-ta* KUB 13.4 I 26, *dam-me-in-ku-wa-ar* KUB 24.13 II 5, but the few relevant MS forms have

⁶³ This is the transliteration by Kloekhorst (2008: 824). Hagenbuchner 1989: 224 prints the form as *ta-me-en-kán-d[u]*. Since there almost no traces left of the last sign, both interpretations are possible.

⁶⁴ Thus Glocker 1997: 60. Kloekhorst 2008: 824 gives the form as *ta-mi-in-kán-ta-r[i]*, but *anda daminkantan* is used also in KBo 15.34 II 30, a copy of the same ritual, in a similar context, see Glocker 1997: 49f.

-i-: *ta-mi-in-kán-ta-a[n]* KBo 15.33 + 35 I 7' and *ta-mi-in-kán-za* KBo 15.28 obv. 12. For the -e/i- alternation see further 2.4. The middle forms, on the contrary, always have -e-, even in the MS texts, e.g., *ta-me-ek-ta-at* KBo 17.105 IV 4 MH/MS or *ta-me-ek-ta-ri* KUB 7.41 I 26 MH/MS⁶⁵.

Note that active forms of *tamink-* are not numerous, and at least half of them are or can be interpreted as intransitive, which is unusual for infixes. Cf. the following examples:

VBoT 58 I 39 *ki-iš-ši-ra-^raš^r-mi-iš-wa* GAL-ri-ya an-da da-me-i[n-kán-za] (40) [GÌR^{MEŠ}]-YA da-me-in-ker “Meine Hand (ist) am Becher festgekl[e]bt, meine [Füße] haben sich festgeklebt.” (Rieken, electronic edition at the HPM website).

KUB 23.1 III 8 *nu-ut-ták-kán ma-a-an* LÚ^{URU} *Ha-at-t[i ?]* (9) an-da ta-me-ek-zi “If [some] Hittite attaches himself to you (...and he brings up again some slander concerning My Majesty,)” (Beckman 2011: 59, similarly Kühne, Otten 1971: 12f.)⁶⁵.

A less clear example is KUB 25.48 + KUB 44.49 obv. II 26 *nam-ma ŠA GAB.LÀ[(L Ì.DÜG.GA te-pu i-ya-an)]* (27) *nu-uš-ša-an ku-e-[(d)]a-ni-ya A-NA ħi-li-[(iš-tar-ni)]* (28) *te-pu ta-mi-[ni?]-kán-[(zi)]* “Ferner ist ein (Klumpen) aus Wachs (und) Feinöl gemacht; und von jenem kleben sie an (jeden einzelnen) *hilištarni*-Gegenstand ein wenig daran an” (Haas 1992: 103-104). Here, *tepu* can be an object, but it can also be an adverb; for the adverbial use of *tepu* see HEG T: 312-313.

However, there might be a transitive form as well, although it is found in a partly broken context, if -at- in l. 11 is construed as the object:

KUB 21.34 rev. 9 *nu INIM KUR^{TI}* (rev. upper edge 1) [*I-N*]A É.GAL^{LIM} *še-ek-kán-du* [(x)] (2) [*na-a*]t-kán ta-me-en-kán-d[u] “Let them in the palace know about the matter of the land, and let them attach? it ”⁶⁶.

The etymology of *tamink-* is clear: it is related to Skt. *tañc-* ‘to pull together’, Lith. *tánkus* ‘dense’, PIE **temk-*⁶⁷ ‘to join, coagulate, solidify’ (LIV: 625f., Pronk

⁶⁵ The pronoun -tta- can formally be accusative as well; however, in this case one would then expect to find another noun in dative in this sentence, which would refer to an object to which this person is attached.

⁶⁶ Beckman (2011: 163) translates *tamink-* here as ‘to care about(?)’.

⁶⁷ **m* is reconstructed solely on the Hittite evidence: all other languages show assimilation **mk-* > **nk-*.

2013: 11ff.). Pokorny 1959: 1068-9 and EWAia I: 614-5 do not mention *tamink-* and present this root as **tenk-* ‘zusammenziehen, gerinnen’. The Hittite verb has an infixed counterpart in Sanskrit, *ā-tanakti* (van Brock 1962: 32, LIV: 625, Oettinger 1979: 145, Melchert 1984: 168f., contra Strunk 1973: 64¹⁶). Therefore, an infixed stem for this root can be securely reconstructed already for PIE. The details of the prehistory of *tamink-* are still unclear, however.

The verbs *tamink-* and *hamank-/hamink-* have often been considered together and viewed as morphologically similar reflexes of PIE infixed stems (e.g., Oettinger 1979: 148, cf., however, Melchert 1984: 167-8), but they are definitely to be kept apart. First of all, *hamank-/hamink-* has *-a/i-* ablaut and belongs to the *hi*-conjugation, while *tamink-* is only attested with the *-i-* in the root and clearly belongs to the *mi*-conjugation. Also important is the fact that *hamank-* often displays *-n-* before a cluster of two consonants. By contrast, *tamink-* never shows *-n-* before a consonant cluster, though the consonant is present in the derived verb *tamenganu-*.

However, it is yet to be explained how exactly a reconstructed PIE nasal present Sg. **tṃnékti* : Pl.: **tṃnkénti* (LIV: 625f.) could yield Hitt. *tamink-*. Oettinger (1979: 145) proposed the following development: Sg. **tṃnékti* > Proto-Hittite **tamnekzi*, Pl. **tṃnkénti* > Proto-Hittite **tamnkanzi*. After **-mn-* had been assimilated to *-mm-*, which is then simplified in the singular, the outcome is the attested form *tamekzi*; the variant *tamenikzi* is the result of an insertion of *-ne-* to *tamekzi* by analogy to *harnikzi* with an anaptyctic vowel inserted between /m/ and /n/ in order to block assimilation in the cluster /mn/. The plural stem **tamnenkanzi*, analogical to **harnenkanzi*, resulted in *tamink-*; the variant *tamenikanzi* is formed after *tamenikzi*. There are several objections to this proposal. The spellings like *da-mi-ni-ik-zi* are Middle Hittite, whereas *tamekzi* is New Hittite. The spelling *dam-me-* appears only in New Hittite texts and copies (see Otten 1973: 51ff., Kimball 1999: 97f. on this phenomenon), and the alleged development **mm* > *-m-* is not phonologically regular, cf., e.g., *gimm(ant)-*, s. Melchert 1994: 153; Kimball 1999: 321f.

Melchert (1984: 189) suggested a different chain of developments: Sg. **tṃ-né-k-ti* > **tamnekti* > *tammekzi*, Pl.: **tṃ-n-k-énti* > **tamnkanzi* > **tamankanzi* (via

anaptyxis). In the attested stem *tamink-*, the single *-m-* was generalized from the plural while the *-e-* grade was imported from the singular stem. This development is possible, but is not likely for the reasons I will give below.

Melchert's account is based on the assumption that all forms of this verb belong to the same stem. In my opinion, we are dealing with at least two different stems, since *ta-me-ek-ta-at* and *da-mi-ni-ik-zi*, attested next to each other in the lines 3 and 4 in KBo 17.105 IV, can hardly be merely different representations of a single stem */t(a)mink-/*. The middle forms that consistently show *-e-* vocalism (e.g., *ta-me-ek-ta-ri* KUB 7.41 I 26 and *ta-me-ek-ta-at* KBo 17.105 IV 4⁶⁸) are likely to have never had an infix, for */e/* did not change to */i/*, and therefore they reflect a distinct stem *t(a)mek-*⁶⁹. For other examples of different stems for active and middle voice cf. 1.5.

Furthermore, the spellings *ta-me-ni-ik-mi* (Bo 3445 11 MS), *da-mi-ni-ik-zi* (KBo 17.105 IV 3 MH/MS) and *ta-me-ni-kán-zi* (KBo 20.116 Rs (?) 10 MH/NS) are often considered to be graphic variants for *d/ta-mi-in-k-*; i.e., all instances of *t/da-mi-ni-ik-* would stand for */t(a)mink-/*. The spelling variants *ta-me-ni-ik-mi* (Bo 3445 11) and *ta-me-ek-zi* (KUB 23.1 III 9) would then be similar to *ḫa-ma-na-ak-ta* (KUB 14.4 II 10) and *ḫa-ma-ak-ta* (e.g., KUB 26.91 obv. 9). Such an alternation would be extremely rare; in fact, it is attested only in one other verb, *hink-* 'to grant': *ḫi-ni-ik-ta* KBo 3.7 II 23, *ḫi-ik-ta* KBo 21.13 IV 8, *ḫi-in-ik-ta* KBo 16.83 III 5 and *ḫi-in-kat-ta* KBo 3.34 II 3. However, even more important is the complete lack of spellings like **ta-me-in-ik-mi* or **da-mi-in-ik-zi* (the expected spellings for */t(a)minkC-/*). Therefore, in my opinion, there are two distinct stems, */t(a)menik-/* and */t(a)mink-/*, that go back to the singular and plural of the infixed stem, respectively, see further 2.4.4.

Therefore, I agree with Hart (1977: 139f.) who suggested that *ta-me-ni-ik-mi*, *da-mi-ni-ik-zi* and *ta-me-ni-kán-zi* belong to a distinct stem and reflect the full grade of the infix *-ni-* < PIE **né*⁷⁰. The vocalism *-i-* in *tamenik-* may be explained as the result

⁶⁸ The sign IK may be read both as */iK/* and */eK/*. In fact, it denotes a front vowel followed by a velar.

⁶⁹ The stem **tmek-*, however, implies that there was a Schwebeablaut in this root, for the other IE languages continue **temk-* (LIV: 625), see further 2.5.5.

⁷⁰ The full grade of the infix is, however, not expected in the 3pl. form. Does it mean that at some point the logic behind the *-ni/n-* alteration was no longer understood and both *-ni-* and *-n-* spread to parts of the paradigm where they did not belong?

of the development **tamenenk-* > **tamenink-*⁷¹, but it can also be explained as a graphic peculiarity of replacing the sign NE with NI in non-initial syllables, see 2.5.3 and 3.2.1.3-5.

At the same time, Hart's assumption that all the other forms of *tamink-* reflect an infixless stem **tmek-* is probably not justified. According to Hart, /n/ before *k* is to be explained as a nasal perseveration. This is improbable, as this was not a regular process in Hittite (cf. 2.1.3), whereas in *tamink-* -n- is regular before -kV-. In my opinion, active forms with -n- like *ta-mi-in-kán-za* and *da-me-in-ker* must be weak stems with the zero grade of the infix preserved along with the strong stem *ta-me-ni-ik-mi*.

Now let us return to the issue whether *t(a)menikzi/taminkanzi* can reflect PIE **tm-né-k-ti/tm-n-k-énti*. The regular reflex of a syllabic nasal in Hittite is either /aN/ or /a/, see Melchert 1994: 125ff., Kimball 1999: 242ff, 252f., Kloekhorst 2008: 84. Accordingly, the weak stem **tm-n-k-énti* should yield /tamankanzi/ or /tmankanzi/ rather than *taminkanzi* in Hittite. However, in the case of **tmnk-* we have two adjacent nasals flanked by two consonants, and the fate of this sequence in Hittite is disputed. Recently, Kloekhorst (2008: 84, 2014: 69f.) has argued that an anaptyctic vowel /i/ regularly developed in a sequence **(C)Rnk-*, which eventually resulted in Hitt. *(C)Rink-*. Alternatively, the vocalism -i- in the weak stem *tamink-* (instead of the expected **tamank-*) could also be explained as the result of analogy to other *mi*-verbs with a similar auslaut, like *link-* 'to swear'. A phonetically regular source of *tamink-* would be an *e*-grade stem **tménk-*, but such a formation would be unparalleled for a weak stem of a *mi*-verb. Since the rule **(C)Rnk-* > *(C)Rink-* explains not only the weak stem *tamink-*, but also the weak stem *hamink-* (see above a detailed discussion of this verb), I prefer to take *tamink-* as a regular phonetic outcome of **tmnk-*.

The shape of the strong stem is more problematic. The front vowel between /m/ and /n/ in *ta-me-ni-ik-mi*, *da-mi-ni-ik-zi* is difficult to explain, since PIE strong stem **tm-ne-k-* should have yielded Hitt. ***tamnek-*, cf. *samnanzi* 'to create' < **smn-énti*

⁷¹ This -i- is usually explained as a result of raising before nasal + stop (Melchert 1994: 101, 139, Kimball 1999: 157f.). However, one must take into account the a fairly common view that /e/ and /i/ merged in Middle Hittite (see, e.g., Kimball 1999: 69ff.). Cf. also 2.4.

(Oettinger 1979: 104) or < **sm-no-ye/o-* (Kloekhorst 2008: 718). This unetymological -*e-/i-* is perhaps also to be explained as anaptyctic /i/ that appeared in the strong stem by analogy to the weak stem.

Summing up, this verb is likely to have employed several stems: *t(a)menik-*, *tame/ink-* and *t(a)mek-*. Moreover, *t(a)menik-* seems to reflect a strong stem with the infix in the form -*ni-*, whereas *tame/ink-* reflects the weak stem with the infix in the form -*n-*. If so, the PIE ablaut *-*ne-/n-* of the infix is preserved in this verb.

2.4 The -*e-/i-* variation in Middle and New Hittite.

Some of the verbs discussed in this chapter show an alternation between -*e-* and -*i-* before -*n-*. In the case of *hamank/hamink-* and *tamink-*, it is difficult to determine a diachronic distribution between the two variants. We can only say that -*e-* starts to occur in NH texts and copies. The verb *link-* is often attested in instructions, historical texts and treaties which are easier to date. The spelling with -*e-* is consistent in the Bronze Tablet (Bo 299/1986; *le-en-ku-un* II 4; *le-en-kat-ta* II 38; *le-en-qa-an* II 50, 55) and in KUB 26.1 *le-en-ga-nu-nu-un* III 47, *le-en-ga-nu-ut* III 17 *le-en-ik-ten* III 54 with the sole exception *li-in-ik<-tén>* I 3 (CTH 255, instructions of Tudhaliya IV for princes), both composed in the time of Tudhaliya IV. In contrast, it is virtually absent in earlier texts, with the exception of *le-en-kat-ta* KUB 21.37 obv. 25 (NS, CTH 85, Conflict between Urhi-Tešub and Hattusili III). In *lingai-* ‘oath’, spellings with -*e-* (*le-en-ki-(ya-)aš*) occur in KBo 10.12 II 33, III 24 (CTH 49.II, Treaty with Aziru of Amurru), a document from Suppiluliuma I’s reign, and in the Tawagalawa letter (*le-en-ga-uš* KUB 14.3 II 52), as well as in rituals and instructions from the time of Suppiluliuma II. Since spellings with -*e-* are absent in the texts of Mursili II and Muwatalli, I believe that the spelling *le-en-kV-* became preferred sometime near the end of Hattusili III’s reign. Nevertheless, the continued spelling of these words with -*i-* may be explained as habit of a certain scribe or scribes, as some documents of Tudhaliya IV and Suppiluliuma II still have *link-* and *lingai-*.

In other verbs, *-e-*, instead of the expected *-i-*, appears earlier, sometimes attested already in MS texts, cf. *ḫa-me-en-ku-wa-aš* KUB 30.48 14 OH/MS, cf. also the form *pít-te-nu-ut* KBo 32.14 III 9 MH/MS (cf. the entry for this verb in 4.1).

Given that spellings with *-e-* instead of *-i-* become frequent in *link-*, *tamink-* and *hamink-*, but are relatively rare⁷² in *nin-*verbs or *nink-* ‘to get drunk’, I believe that these new spellings are based on some real phonetic changes which were blocked by a preceding /n/⁷³.

Conclusions

2.5.1 Most verbs discussed in this chapter have good root etymologies, and in several cases (*ninink-*, *tamink-* and perhaps also *istarnink-* and *kunk-*), there are corresponding infix formations in other Indo-European languages as well⁷⁴.

None of these verbs, however, displays an alternation between **-ne-* in the strong stem and **-n-* in the weak stem which would have been a faithful reflection of the reconstructed PIE alternation **CR-né-C-/CR-n-C-*⁷⁵. Certain forms of the verbs *tamink-* and *hink-* are likely to preserve this pattern (see the respective entries in 2.3 and 2.5.3 below), but both verbs seem to have eventually generalized the weak stem. The verbs *link-* and *kunk-*, if they indeed are infix verbs, generalized the weak stem already in the prehistory of Hittite. The infix *-nin-* is a Hittite innovation, which is probably based on the full grade **-ne-* of the infix. The origin of the second *-n-* is not clear, however.

The verbs *hamink-* and *galank-* have good root etymologies, but have no infix counterparts in other languages. Since a derivation of *hamink-* from the reconstructed PIE nasal infix stem requires too many analogical changes, it is tempting to explain it

⁷² I know of the following examples: *ḫar-ni-en-ku-un* KBo 14.19 II 28, III 28 (CTH 61, Annals of Mursili II); *ḫar-ni-en-kán-du* KUB 26.25 11 NH (CTH 122, Treaty of Suppiluliuma II with Talmi-Tešub); *šar-ni-en-ki-iš-ke-mi* KUB 14.14 rev. 14 NH (CTH 378, Plague Prayers of Mursili II); *šar-ni-en-kán-zi* KBo 6.5 II 13 OH/NS (CTH 291, Laws).

⁷³ Oettinger 1979: 135³ suggested that the sign NI was regularly used instead of NE outside the root syllable, cf. further 3.2.1.3.

⁷⁴ Eichner (1982: 18f.) listed 5 cognate infix formations in other IE languages for the Hittite verbs of the type *harnink-*, but some etymologies are untenable (Lat. *vinco* and Skt. *vinak-* are not related to Hitt. *huek-*), and the verbal stem *hinik-* is in fact a variant of *hink-* ‘to give, grant’, see the respective entry).

⁷⁵ On the infix stems in PIE see LIV: 17 and cf. 1.8 above.

as an Anatolian (or Hittite) innovation, cf. the respective entry and 6.3.5. In my opinion, the single case of *hamank/hamink-* is not enough to assume an infixed *hi-* conjugation verbal type with *ó/é* ablaut for PIE⁷⁶.

2.5.2 Kloekhorst (2008: 152) argues that the development of the infix in *tamink-* was conditioned by the quality of the preceding resonant. If the resonant was /m/, then the infix was reflected as *-Vn-*, otherwise it developed into *-nin-*. But Kloekhorst's approach fails to account for the case of *galank-* which he considers to contain a PIE infix as well (Kloekhorst 2008: 428f.).

He argues that, originally, the infix was a suffix and the would-be infixed stems began as **CrC-én-ti/*CrC-n-énti*. After subsequent metathesis and prenasalisation, the stem **CR-né-ⁿC-ti/*CR-n-C-énti* was the last formation common to Anatolian and the other IE languages. In Anatolian, the nasalization of the velar (but not laryngeals) developed into a full nasal consonant, and **tmnéⁿk-ti* was simplified into *tménk-ti*. The weak stem **CR-n-C-énti* changed to **CRnnC-énti* after the full grade **CRnenC-ti*, and an anaptyctic vowel /i/ developed in the sequence **C(R)nnC-*. The final developments were the change of /e/⁷⁷ to /i/ before /nk/ and the loss of /n/ before consonant clusters.

Some aspects of the suggested history of infixed verbs in Hittite (Kloekhorst 2008: 153ff.) are ad hoc and not convincing (e.g., the generalization of a prenasalisation, for which there are no other examples, or the assumed change **Cmne- > *Cme-* in order to explain **tmékti < *tmnékti* (ibid. 154), which did not take place in *samnanzi* 'to create' < **sm-no-ye/o-* (cf. ibid. 718)). Besides, *hink-*, *kunk-* and *link-* do not fit this scenario either.

2.5.3 Certain forms of the verbs *tamink-* and *hink-* are best explained as having the infix *-ni-*. The sign NI in *hi-ni-ik-ta* KUB 34.16 III 4 (OH/NS) and KBo 3.7 II 23

⁷⁶ The shift of other Hittite infixed verbs, namely *tarna-* 'to let go' and *sunna-* 'to fill', to the *hi-* conjugation is best explained as conditioned by the vocalism **-o-* of the stem, which was due to the root-final **h₃*, that is **sunoh₃-ei < *sunóh₃-ti < *sunéh₃-ti*, see further 3.2.2.

⁷⁷ In Kloekhorst 2014: 69f., he argues that /i/ changes to /i/ in this environment as well.

(OH/NS), *hi-ni-ik[-* in KUB 57.91 rev. IV 5 (NS) as well as *ta-me-ni-ik-mi* Bo 3445 11 (MS), *da-mi-ni-ik-zi* KBo 17.105 IV 3 (MH/MS) and *ta-me-ni-kán-zi* KBo 20.116 Rs (?) 10 (MH/NS) is hardly just a graphic variant for IN here, see the respective entries. That is, *hi-ni-ik-ta* stands for /hinik-ta/ rather than for /hink-ta/. Above it is argued that the variant *-ni-* in the stems *hinik-* and *tamenik-* reflects the full grade of the PIE infix **-né-*. These forms are archaic, and eventually both verbs generalized the weak stem with the zero grade of the infix.

The *-i-* of the full grade *-ni-* is difficult to explain. Theoretically, it could indicate that *-ni-* goes back to *-nin-* with a regular loss of *n* before a consonant cluster. However, as we will see later on, it is better explained as a result of either graphic habit or a retraction of the accent to the root, see details in 3.2.1.3-5.

2.5.4 In my view, some of the *-nin-* verbs were formed relatively late in the prehistory of Hittite. There are several arguments in favor of this suggestion. First, there are no infixed verbs to the roots with a final stop in other Anatolian languages. Among the *-nin-* verbs, only *ninink-* and *sarnink-* have reliable infixed counterparts in the other IE languages. Second, in Hittite, *-nin-* occurs only in verbs with a velar consonant in the auslaut of the root: there are no infixed formations to roots ending in a dental or a labial stop, though they seem to have been quite numerous in PIE (e.g., Skt. *limpáti* ‘to smear, anoint with’, Lith. *limpù* ‘to stick to’, PIE **leip-* ‘to adhere, stick to’; Skt. *bhinátti*, Lat. *findō*, PIE **b^heid-* ‘to split’). Third, the infix in *tamink-*, *hink-*, *link-* and possibly *kunk-* is *-ni-* or *-n-* and not *-nin-*. At a certain moment in the prehistory of Hittite, the infix in *tamink-*, *hink-* and *link-* was reanalyzed as a part of the root. This theory is supported by the fact that the nasal is also preserved in the derived *nu-*verbs (e.g., *damenganu-*), while in case of *nin-*verbs, *harganu-* has replaced *harnink-*. The infix *-nin-* continued to enjoy limited productivity, and the *nin-*verbs that do not have infixed counterparts in the other IE languages (*harnink-*, *hunink-* and perhaps *istarnink-*) may be relatively recent formations.

It is not entirely clear why *tamenik/tamink-*, *hinik-/hink-* and *link-* did not align themselves to the *nin-* type. I assume that in the case of *hink-* and *link-*, originally there

were cognate verbs **hik-* and **lik-*, reflecting infixless stems of the same roots⁷⁸, which were lost at a relatively early stage in the prehistory of Hittite; afterwards, the infix in *hink-* and *link-* was reanalyzed as a part of the root. Another assumption that would need to be made is that the infixless counterpart of *ninink-* was lost later than those for *hink-* and *link-*, after the infix had developed into *-nin-*. This of course is impossible to prove, but I do not think that such a scenario is inconceivable.

2.5.5 The verb *hamank-/hamink-* ‘to wrap, tie’ must be a post-PIE formation. It seems to have been derived from **h₂móǵ^h-*/**h₂még^h-* or **h₂móǵ^h-*/**h₂mǵ^h-* by adding an *-n-*, the origin of which is not entirely clear (see the respective entry in 2.3). The data of other Indo-European languages rather point to a different position of the vowel in the root, **h₂emǵ^h-*, see LIV: 264f. Such alternation of the position of the vowel within the root is called *Schwebeablaut*. This phenomenon has been recently studied by Ozoliņš (2015), who states (op. cit. 147) that the so-called State II (**h₂móǵ^h-* or **h₂még^h-* in case of the root **h₂emǵ^h-*) is the product of various secondary developments, and is often conditioned by derivational or phonological processes. This provides further support for a secondary origin of *hamank-/hamink-*. If one distinguishes a distinct middle stem *t(a)mek-* for *tamink-* ‘to attach’, this stem must also be of secondary origin, since the cognates of the root in other Indo-European languages point to **temk-* (LIV: 625f.).

⁷⁸ Similarly to *sark-* ‘to be good’ : *sarnink-* ‘to compensate’, *istark-* ‘to get ill’ : *istarnink-* ‘to make ill’.