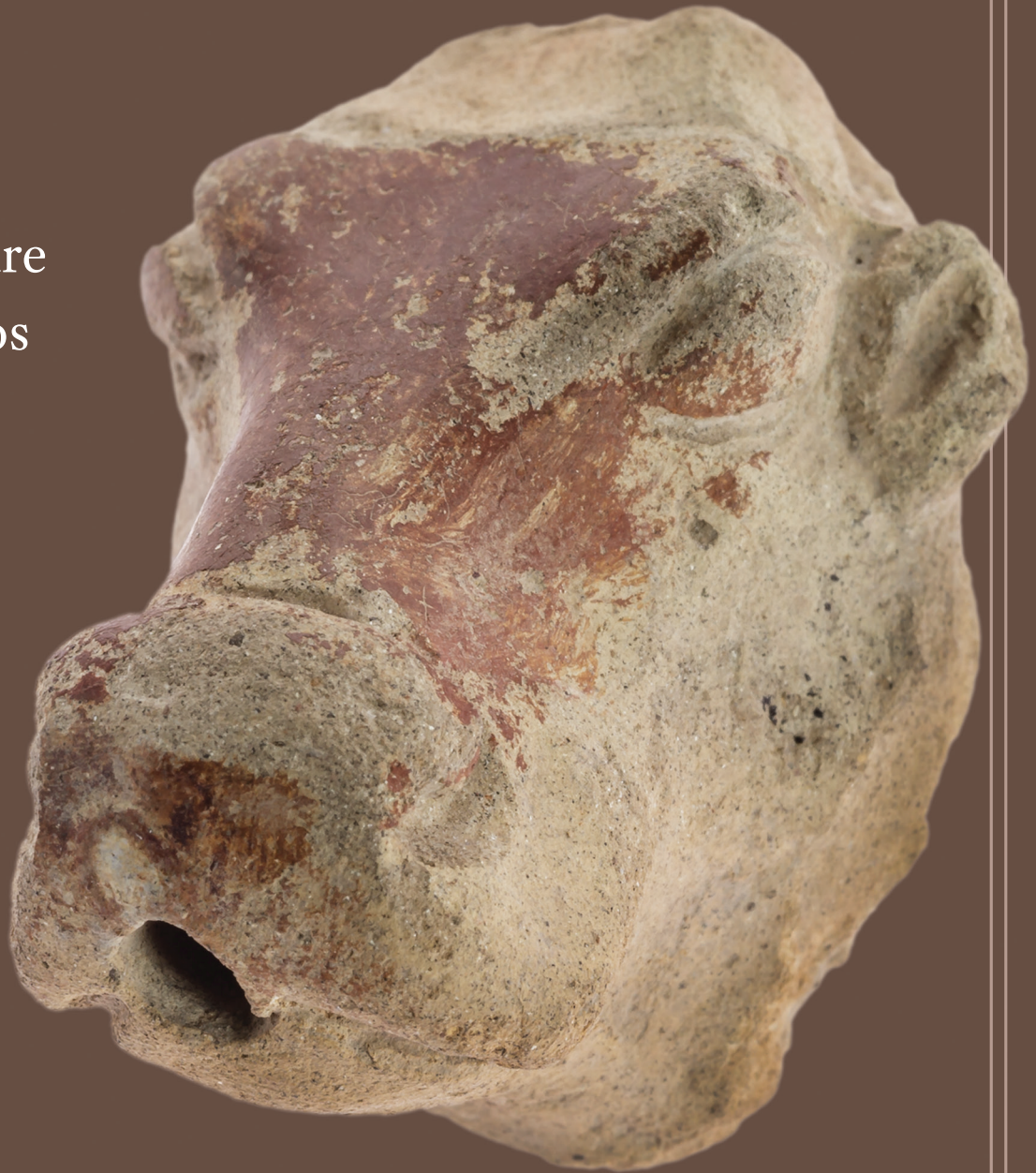


HATTANNAŠ

A Festschrift in Honor of Theo van den Hout

Edited by
Petra Goedegebuure
and Joost Hazenbos
with the assistance of
Emily Smith



INSTITUTE FOR THE STUDY OF ANCIENT CULTURES
OF THE UNIVERSITY OF CHICAGO
STUDIES IN ANCIENT CULTURES • NUMBER 5

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LINGUISTIC INTERPRETATIONS OF THE SPELLING
OF HITTITE DATIVE-LOCATIVE AND ALLATIVE
SINGULAR FORMS

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DEDICATION

It is with great pleasure that I dedicate to Theo van den Hout this brief study of the linguistic interpretation of some Hittite spelling phenomena. I consider myself lucky that I had the opportunity to study with him during the last two years that he worked as a professor of Hittitology at the University of Amsterdam, and I greatly appreciate the genuine kindness, generosity, and helpfulness he has shown to me ever since.¹

1. PHONETIC SPELLINGS OF DATIVE-LOCATIVE SINGULAR FORMS

Hittite dative-locative singular forms contain crucial information about the place of their accent. When the vowel of the ending is spelled plene, [◌]*Ci-i*, this vowel is long and accented—for example, *ták-ni-i* “earth” = /təkni:/, *ki-iš(-ša)-ri-i* “hand” = /kɪs:ri:/, *ḥa-aš-ši-i* “fireplace” = /χas:í:/, and *iš-ši-i* “mouth” = /is:í/.² But when the vowel of the ending is spelled nonplene, [◌]*Ci*, this vowel is short and unaccented, /-i/, which means that the stem of the word must have been accented, for example, *pa-aḥ-ḥu-e-ni* “fire” = /paχ^w:éni/, *me-e-ḥu-ni* “time” = /méχoni/, and *pé(-e)-ru-ni* “stone” = /péruni/.³ Such a distinction can be found in other cases as well (e.g., gen.sg. accented [◌]*Ca-a-aš* = /-Cás/ vs. unaccented [◌]*Ca-aš* = /-Cas/), but in these cases the difference in spelling is lost after the OH period.⁴ This situation contrasts with the dative-locative singular case, in which the distinction between the two allomorphs of the ending is found in texts of all periods (cf. Kloekhorst 2014, 444–60).

1 This essay was written within the context of the Dutch Research Council (Nederlandse Organisatie voor Wetenschappelijk Onderzoek)–funded project “Splitting the Mother Tongue: The Position of the Anatolian Branch within the Indo-European Language Family.” I thank Stefan Norbruis and Xander Vertegaal for valuable comments on an earlier draft of this study. A list of the abbreviations used can be found at the end of the chapter.

2 Melchert (1994, 102, 131, 185) interprets the plene-spelled dat.-loc.sg. ending [◌]*Ci-i* as an accented but phonologically short vowel, /-i/, which, because it stands in an open syllable, was allophonically lengthened (hence the plene spelling). To my mind, however, the length is phonological since it contrasts with word-final short accented /-i/, which can be found in words such as *ak-ku-uš-ki(-i)* “keep drinking!” = /ək^w:skɪ:/ < **h₁g^{wh}-ské* and *az-zi-ik-ki(-i)* “keep eating!” = /ət:sikɪ:/ < **h₁d-ské* (Kloekhorst 2014, 464–65). This short accented /-i/ is sometimes spelled plene (especially in older texts), but usually not, and is the outcome of PIE word-final *-é (Kloekhorst 2014, 464–65). The long accented /-í/ is always spelled plene, however, in texts from all periods and is the outcome of PIE word-final *-éi—for example, *ták-ni-i* < **d^hg^h-m-éi*, *ki-iš(-ša)-ri-i* < **g^hs-r-éi*, etc. (Kloekhorst 2014, 445, following a suggestion by Melchert [2011], but cf. already Eichner 1973, 77; Oettinger 1976, 31).

3 The fact that the plene-spelled dat.-loc.sg. ending bears the accent, whereas the nonplene-spelled one does not, was recognized early on (e.g., Eichner 1973, 77; Oettinger 1976, 31). Note that in *paḥḥuēni*, *mēḥuni*, and *pēruni* the exact place of the accent in the stem (whether it falls on the first or the second syllable) can be decided on the basis of the spelling of the vowels of the stem, but not on the basis of the ending: this spelling shows only that it was unaccented, not more.

4 Cf. Kloekhorst 2014, 316–20, for an extensive description and analysis of this phenomenon.

There is one environment in which the difference between accented /-í/ and unaccented /-i/ in the dat.-loc.sg. case cannot be established, however, and that environment is when the form is followed by enclitics: in this position, the vowel of the ending virtually always shows a nonplene spelling,⁵ so also if it is spelled plene in isolation. For instance, the dat.-loc.sg. form of “hand” always shows plene spelling of its ending when it stands in isolation, *ki-iš(-ša)-ri-i*, but not when enclitics are attached to it: *ki-iš-ša-ri=ma* (not ***ki-iš(-ša)-ri-i=ma*) and *ki-iš-ri-i=t-ti* (not ***ki-iš(-ša)-ri-i-i=t-ti*) (cf. Kloekhorst 2014, 448n1755 for more examples). Likewise, for instance, *ḥa-aš-ši-i* versus *ḥa-aš-ši=ia* (not ***ḥa-aš-ši-i=ia*) “fireplace” (for attestations, cf. Kloekhorst 2014, 446n1749). This feature does not mean that in these forms the ending was unaccented: I would still analyze *ḥašši=ia* “and into the fireplace,” for example, as being accented on the ending of the noun.⁶ However, it is well possible that before an enclitic the long vowel of the accented ending was shortened: for example, /χas:í=ia/ versus isolated /χas:í/. Nevertheless, if a certain noun is attested in its dat.-loc.sg. form only with clitics attached to it, we cannot determine whether it was accented on its ending or on its stem: both the accented and the unaccented ending would be spelled nonplene before the clitic.

2. SUMEROGRAPHIC SPELLINGS OF DATIVE-LOCATIVE SINGULAR FORMS

In my 2014 book on accent in Hittite, I briefly discussed the idea that also when Hittite dat.-loc.sg. forms are spelled as a Sumerogram + phonetic complement, they reveal information about their accentuation.⁷ This idea follows from the observation that when a word in its full phonetic spelling shows plene spelling of the vowel of the dat.-loc.sg. ending, °*Ci-i*, this word is Sumerographically in principle always spelled SUMEROGRAM-*i* and not ***SUMEROGRAM-Ci*. Compare, for instance, the following cases.⁸

<i>ták-ni-i</i> “earth”	=	KI- <i>i</i> (not <i>**KI-ni</i>)
<i>ki-iš(-ša)-ri-i</i> “hand”	=	ŠU- <i>i</i> (not <i>**ŠU-ri</i>)
<i>iš-ši-i</i> “mouth”	=	KAxU- <i>i</i> (not <i>**KAxU-ši</i>)
<i>iš-ḥi-i</i> “lord”	=	EN- <i>i</i> (not <i>**EN-ḥi</i>)

The absence of spellings of the type SUMEROGRAM-*Ci* for these words is relevant, since such spellings would certainly not have been impossible. They are in fact well attested for other words—for example, °IM-*ni* “Storm-god,” LÍL-*ri* “field,” and UN-*ši* “human being.”⁹ This observation means that the choice for writing, for example, KI-*i* instead of ***KI-ni*, or ŠU-*i* instead of ***ŠU-ri*, was a deliberate one, a choice that directly correlates with the plene spelling of the dat.-loc.sg. ending in their phonetically spelled counterparts. In my 2014 book I did not, however, treat the entire material regarding this claim, and I therefore present it here.

2.1. THE SPELLING SUMEROGRAM-CI

The meaningful correlation between the spelling SUMEROGRAM-*i* and the full phonetic spelling °*Ci-i* is supported by the fact that spellings of the type SUMEROGRAM-*Ci* in fact regularly correspond to full

5 I know of only a few exceptions to this rule: [*ḥa-aš-š*]*i-i=kán* (KBo 39.73 obv.⁷ 4), *ḥa-aš-ši-i=ma=kán* (KUB 1.13 ii 26), *ḡpád-da-ni-i=ma* (KUB 9.6 i 12), *ḡpád-da-ni-i=ma-a=š-ša-an* (KUB 9.6 i 14), and [*u*]*d-da-ni-i=ma* (KUB 18.6 i 3).

6 If it had been accented on the first syllable of the word, we would expect plene spelling of the *a*, as in the nom.sg. *ḥa-a-aš-ša* = /χās:a/ and acc.sg. *ḥa-a-aš-ša-an* = /χās:an/; cf. Kloekhorst 2014, 261–63. Accentuation of the particle =*ia* “and” is unlikely, since it is a clitic.

7 Note that this observation does not hold for spellings in which Sumerograms are not phonetically complemented but are preceded by the Akkadian prepositions ANA and INA, which are used to render Hittite dat.-loc. forms Sumerographically as well. These spellings do not give any linguistic information about the phonetics and/or phonology of the underlying Hittite forms.

8 Cf. Kloekhorst 2014, 445–49, for these cases, with the places of the forms’ attestations.

9 I know of no examples of a spelling SUMEROGRAM-*ḥi* that denotes a dat.-loc.sg. form, undoubtedly because of chance: we do have spellings such as BAL-*ḥi* “I libate,” SUM-*ḥi* “I give,” and ḤUŠ-*ḥi* “he fears,” which show that there was no graphic constraint against a spelling SUMEROGRAM-*ḥi*.

phonetic spellings in which the vowel of the dat.-loc.sg. ending is spelled nonplene; compare the following examples.

<i>an-ni</i> “mother”	=	AMA- <i>ni</i> (not **AMA- <i>i</i>)
<i>an-tu-uḥ-ši</i> “human being”	=	UN- <i>ši</i> (not **UN- <i>i</i>)
<i>aš-šu(-ú)-li</i> “well-being”	=	SILIM- <i>li</i> (not **SILIM- <i>i</i>)
<i>ḫal-ma-aš-šu-it-ti</i> “throne”	=	(d/GIŠ)DAG- <i>ti</i> (not **(d/GIŠ)DAG- <i>i</i>)
^{URU} <i>ḫa-at-tu-ši</i> “Ḫattuša”	=	^{URU} GIDRU- <i>ši</i> and ^{URU} KÛ.BABBAR- <i>ši</i> (not ** ^{URU} GIDRU- <i>i</i> or ** ^{URU} KÛ.BABBAR- <i>i</i>)
<i>iš-ta-ma-ni</i> “ear”	=	^{UZU} GEŠTU- <i>ni</i> (not ** ^{UZU} GEŠTU- <i>i</i>)
<i>iš-ta-na(-a)-ni</i> “altar”	=	(GIŠ)ZAG.GAR.RA- <i>ni</i> (not **(GIŠ)ZAG.GAR.RA- <i>i</i>)
<i>kar-di-mi-at-ti</i> “anger”	=	TUKU.TUKU- <i>ti</i> (not **TUKU.TUKU- <i>i</i>)
<i>gi-im-ri (ge-em-ri?)</i> “field”	=	LÍL- <i>ri</i> (not **LÍL- <i>i</i>)
<i>pal-ši</i> “road”	=	KASKAL- <i>ši</i> (not **KASKAL- <i>i</i>)
^(d) <i>ši(-i)-ú-ni</i> “god”	=	DINGIR ^(LIM) - <i>ni</i> (not **DINGIR ^(LIM) - <i>i</i>)
<i>ši-ṽa-at-ti</i> “day”	=	UD ^(KAM) - <i>ti</i> (not **UD ^(KAM) - <i>i</i>)
<i>ti-i-e-eš-ni</i> “forest”	=	GIŠTIR- <i>ni</i> (not **GIŠTIR- <i>i</i>)
<i>ṽa-ar-ṽa-la-ni</i> “seed, progeny”	=	NUMUN- <i>ni</i> (not **NUMUN- <i>i</i>)
<i>ú-i-te(-e)-ni</i> “water”	=	A- <i>ni</i> (not **A- <i>i</i>)
<i>ú(-i)-it-ti</i> “year”	=	MU ^{KAM} - <i>ti</i> (not **MU ^{KAM} - <i>i</i>) ¹⁰

2.2. SUMEROGRAM-*I* ALTERNATING WITH SUMEROGRAM -*CI*

It cannot be denied, however, that some Sumerograms show dat.-loc.sg. forms of both the shape SUMEROGRAM-*i* and the shape SUMEROGRAM-*CI* and would therefore potentially undermine this distribution. Upon closer scrutiny, almost all these forms can be explained.

KI: This Sumerogram shows not only a dat.-loc.sg. form KI-*i* but also a form KI-*pí*. As we have seen above as well, KI-*i* can be equated with *ták-ni-i* “earth.” The form KI-*pí*, however, is generally seen as representing the form *da-ga-an-zi-pí* “(personified) earth.” So in this case, the two Sumerographic spellings represent different underlying words.

GE₆: This Sumerogram occurs with the dat.-loc.sg. forms GE₆-*i* and GE₆-*ti*. The former is generally thought to represent *da-an-ku-ṽa-i* “black, dark” (on which see further below), whereas the latter is equated with *iš-pa-an-ti* “night.”

In other cases, the situation is less clear.

AN: Its dat.-loc.sg. form occurs a few times as AN-*ši*, which clearly represents *ne(-e)-pí-ši* “heaven.” However, we find AN-*i* once as well¹¹—namely, in KUB 29.11 ii: (12) *ták-ku* ^dSÎN SI GÛB-ŠÛ UGU AN-*i* *ne-ṽa-an* . . . “if the moon’s left horn is turned upward to heaven. . . .” To my mind, this form must be a mistake. It occurs in a line that stands between two lines where KI-*i* “earth” is used in the same spot: KUB 29.11 ii (11) *ták-ku* ^dSÎN SI ZAG-ŠÛ GAM KI-*i* *ne-ṽa-an* . . . “if the moon’s right horn is turned downward to the earth . . .” and KUB 29.11 ii (13) *ták-ku* ^dSÎN SI GÛB-ŠÛ GAM KI-*i*

¹⁰ In view of MU-*an-ti* (KBo 22.2 obv. 1, OS) it cannot be excluded that some of the attestations of MU.KAM-*ti* represent /uit:ánti/.

¹¹ Note that some other seeming occurrences of AN-*i* are interpreted by the CHD (L-N, 448) as an Akkadographic form AN-*I*, which is a variant of AN-*E*, the Sumerographic spelling of Akkadian ŠA-ME-E “of heaven.”

ne-ja-an . . . “if the moon’s left horn is turned downward to the earth. . .” I therefore assume that, under the influence of *KI-i*, the scribe erroneously wrote *AN-i* instead of *AN-ši*.¹²

DINGIR.MAḪ: The same situation may apply to this Sumerogram. Its normal dat.-loc.sg. form is *DINGIR.MAḪ-ni* (attested dozens of times; cf. van Gessel 1998, 720–21), which can be equated with the phonetically spelled form [^d*ḥa-an-na-ḥ*]*a-an-ni* (KUB 33.59 iv 8) “to Ḥannaḥanna.” Twice, however, we find the spelling *DINGIR.MAḪ-i* (KBo 14.21 i 78; FHG 2 iii 21). The exact rationale behind these two forms escapes me, but it is relevant that on both tablets on which these forms occur, we also find the spelling *DINGIR.MAḪ-ni* (KBo 14.21 i 59; ii 18, 53; iii 47; FHG 2 iii 6). I therefore think that these two attestations of *DINGIR.MAḪ-i*, which compete with more than a hundred attestations of *DINGIR.MAḪ-ni*, do not alter the general picture that there is a distribution between *SUMEROGRAM-Ci* and *SUMEROGRAM-i*.

GUNNI: The dat.-loc.sg. form *GUNNI-i* occurs often and can be equated with *ḥa-aš-ši-i*, which always shows plene spelling of its ending. However, a form *GUNNI-ši* is attested as well, which does not match the spelling of *ḥa-aš-ši-i* and would therefore contradict our findings thus far. As I also argued in Kloekhorst 2014, 447n1753, the form *GUNNI-ši* occurs on one tablet only, KUB 20.45, where *GUNNI-i* can also be found. We may therefore see *GUNNI-ši* as a feature of this specific tablet, which does not compromise the general picture about the distribution between *SUMEROGRAM-Ci* and *SUMEROGRAM-i*.

IZI: This Sumerogram also occurs with two dat.-loc.sg. forms. The form *IZI-ni* (KBo 6.5 iv 16; Bo 3640 iii^(?) 10) can be directly equated with *pa-aḥ-ḥu-e-ni* “fire” (note that *IZI-ni* from KBo 6.5 iv 16 in fact duplicates *pa-aḥ-ḥu-e-ni* from KBo 6.3 ii 54). However, *IZI-i* also occurs (KBo 11.32 obv. 9, 13, rev. 49; KBo 13.126 rev. 11; KUB 39.70 i 14; KUB 58.98 ii 2), and its interpretation is less clear to me. Interestingly, according to the CHD (Š, 258), one of the attestations of *IZI-i* must be interpreted as <GU>*NNI-i* “fireplace.” (Note that *IZI* = *NE* and that *GUNNI* consists of the signs *KI.NE*; the CHD’s reading of *IZI-i* as <GU>*NNI-i* therefore equals <KI.>*NE-i*.)

KBo 11.32 rev. 48–50

48 . . . SILA₄ GE₆=*kán* BAL¹-*ti*

49 <GU>*NNI-i* (text: *IZI-i*) *pa[-r]a-[a KI]N⁷-an-zì* MUN-*an-zì*

50 *ša-ri-an-[z]i* . . .

He offers a black lamb. They “fully [pre]pare(?)” (the goat meat?) at/on the brazier(!) (text: in/at the fire). They salt (it) and truss/sew (it) up. [translation CHD Š, 258]

The CHD’s emendation of *IZI-i* to <GU>*NNI-i*, which is based on semantic considerations, is formally attractive as well. As we have seen above, *GUNNI-i* is the Sumerographic spelling of *ḥa-aš-ši-i* “fireplace,” in which the spelling of the ending as *-i* is regular.

In the text in which this example occurs, KBo 11.32, we find two more attestations of *IZI-i*—namely, in obv. 9 and 13. To my mind, in these contexts a translation “in/onto the fireplace” would be apt as well.

KBo 11.32 obv. 8–9

8 [E]GIR=ŠŪ^{DUG} KU-KU-BI^{HLA} *pa-ra-a šar-ni<-in>-kán-zì*

9 *GUNNI-an=kán ḥu-u-i-ja-an-zì Ì=kán^{GIS}te-pa-za IZI-i la-ḥu<-i>*

Later they replace the vessels, and they walk around the fireplace. With a ladle he pours oil on the fire/onto the fireplace(?).

¹² Note that in KUB 29.11 ii 9, the full phonetic spelling of “heaven” is used: *ták-ku^dŠĪN ZAG-aš SI-ŠU ša-ra-a ne-pí-ši ne-i-ja-an* “if the moon’s right horn is turned upward to heaven.”

KBo 11.32 obv. 12–13

12 2 NINDA.GUR₄.RA *ḥa-zi-la[-aš] pá-r-ši-la-aš pá-r-ši-ia*

13 *Ī=kán me-ma-al IZI-i šu-uḥ-ḥa-i*

14 EGIR=ŠŪ^{DUG}KU-KU-BI^{HIA} *pa-ra-a šar-ni-in-kán-zi*

15 GUNNI=*kán ḥu-u-i-an-zi*

He breaks two thickbreads of *ḥazila*-weight into crumbs and pours oil (and strews) the meal into the fire/onto the fireplace(?). After that they replace the vessels and walk around the fireplace.

The question thus arises to what extent IZI-*i* may be interpreted as an alternative way to render *ḥa-aš-ši-i* “fireplace” Sumerographically. In fact, in all attestations in which IZI-*i* occurs, a translation “onto the fireplace” would be equally fitting as “into/on the fire,”¹³ so I am inclined to answer this question positively.

^dLAMMA: This Sumerogram, which denotes the concept of the “Tutelary Deity” (for this translation, see McMahon 1991, 3), occurs with two dat.-loc.sg. forms—namely, ^dLAMMA-*ri* and ^dLAMMA-*i* (cf. van Gessel 1998, 687, for attestations). As Gregory McMahon (1991, 4–5) makes clear, the Hittite pantheon knew many tutelary deities, and it is therefore not always known to which deity a given attestation of ^dLAMMA refers. The dat.-loc.sg. form ^dLAMMA-*ri* is, on the basis of its phonetic complement, generally thought to refer to Inar(a) (McMahon 1991, 2), and this form may therefore be interpreted as representing an underlying ^d*i-na-ri* (cf. van Gessel 1998, 188, for attestations). The absence of plene spelling from the vowel of the ending in the latter form matches the Sumerographic spelling with ^c*i*. The interpretation of the form ^dLAMMA-*i* is less clear: in light of the existence of many tutelary deities, this form need not refer to Inar(a) but may represent another deity. The existence of ^dLAMMA-*ri* next to ^dLAMMA-*i* therefore does not invalidate the general picture of the distribution between the spellings SUMEROGRAM-*Ci* and SUMEROGRAM-*i*.¹⁴

MUNUS: The two dat.-loc.sg. forms of this Sumerogram, MUNUS-*ni* and MUNUS-*i*, are treated below.

ZAG: This Sumerogram occurs dozens of times with the dat.-loc.sg. form ZAG-*ni*, and this form is generally equated with *ku-un-ni* “right.” In one text, however, we find the form ZAG-*i* (KUB 59.29 ii 12), which contradicts the spelling ZAG-*ni*. Nevertheless, since the context in which ZAG-*i* occurs is rather broken, it is not clear to me whether ZAG should here be read as representing *kunna* “right” or denotes *erḥ-/arḥ-/arah-* “boundary, limit” (or is perhaps ^{UZU}ZAG “shoulder?”).

We see that the existence of some cases in which a single Sumerogram seems to have both a dat.-loc.sg. form spelled SUMEROGRAM-*i* and a form spelled SUMEROGRAM-*Ci* does not seriously undermine the assumption that the difference between these two types of spellings is linguistically relevant and correlates with the spelling of the ending in the corresponding, fully phonetically spelled forms.

13 KUB 58.98 ii (2) [NINDA.GUR₄.RA KU₇ *pár-ši-ia n=*] *a-an=kán IZI-i pé-eš-ši-ia-zi* “He breaks a sweet bread and throws it into the fire/into the fireplace(?)”; KUB 39.70 i (11) [. . . nu A-N]A EN.SISKUR (12) [ZA.ḤUM ŠA] KAŠ *ar-ḥa da-a-i nu=kán* ^{GIS}*lu[-u-e-e]š-ni* (13) [*an-da ši-ip-pa-an-ti n=a-at=kán ki-iš-ta-nu-zi n=a[-at š]a-ra-a* (14) [*da-a-i n=a-at=kán IZI-i iš-ḥu-ua-a-i* “He takes the pitcher of beer from the patient and pours (it) onto the incense and extinguishes it. He lifts it (sc. the incense) up and throws it into the fire/onto the fireplace(?)”; HT 5, (6) [. . . n=a-a] *t=kán IZI-i iš-ḥu-u-ua-a-iz-zi* “He will pour it into the fire/onto the fireplace(?)”; KBo 13.126 rev. (10) *ma-a-an=za DINGIR^{MES} MUNUS^{MES} . . .* (11) *IZI-i pé-ia-an-te-eš ma-a-an=za UDUN ḥar-š[a-aš . . .]* (12) . . . *pé-e-ia-an-te-eš₁₇ nu-u=š-ma-aš=kán x[. . .]* (13) *IZI-na-az ḥu-u-it-ti-ia[-an-ni-i]š-ga-m[i²]* “Whether you female deities have been sent to the fire/to the fireplace or have been sent to the bread-oven . . . I will be attracting you back from the fire.” Especially in the latter context, where IZI-*i* contrasts with UDUN *ḥarš[aš]* “bread-oven,” a meaning “fireplace” seems to fit well.

14 In fact, this distribution may now be used to argue that the attestations of ^dLAMMA-*i* do not represent a form of Inar(a) but must denote the name of a different deity.

2.3. SUMEROGRAM-*i* NEXT TO [◌]A-*i* AND [◌]U-*i*

There is, however, one extra factor we need to take into account. As we have already seen above, the Sumerographic spelling GE₆-*i* corresponds to the full phonetic spelling *da-an-ku-ua-i* “dark” and not to a form containing a plene spelled ending -*Ci-i*. Likewise, I have already remarked (in Kloekhorst 2014, 459n1810) that the Sumerographic spelling LUGAL-*i* probably represents an underlying phonetic spelling **ha-aš-šu-i*¹⁵ and not a spelling ending in -*Ci-i* (cf. also the few attestations LUGAL-*u-i*).

The same phenomenon can be found in the following words.

“bovine”: The dat.-loc.sg. form GU₄-*i* belongs to a *u*-stem noun (cf. nom.sg. GU₄-*uš*, acc.sg. GU₄-*un*; the further phonetic shape of the word is unknown, however),¹⁶ so that its underlying form must have ended in [◌]u-*i*.

“evil”: The dat.-loc.sg. form HUL-*i* belongs to the *u*-stem adjective *idālu-/idālay-* and represents the full phonetic form *i-da-a-la-u-i* or *i-da-a-lu-i*, which ends in [◌]u-*i* (cf. also the Sumerographic spellings HUL-*u-i* and HUL-*lu(-u-i)*).

“eye”: The dat.-loc.sg. form IGI^{HIA}-*i* (KUB 33.98 iii 19) belongs with *šakuua-*, so we can predict that its underlying form must have been **ša-a-ku-i* and thus ended in [◌]u-*i*.

“Sun-god”: The dat.-loc.sg. form ^dUTU-*i* belongs to the *u*-stem name *^daštanu-/^deštanu-/^dištanu-* (cf. nom.sg. ^dUTU-*uš*, acc.sg. ^dUTU-*un*), so its underlying form must have ended in [◌]u-*i*: **^daš/eš/iš-ta-nu-i*.

“table”: The dat.-loc.sg. form ^{GIS}BANŠUR-*i* belongs to a *u*-stem word (nom.sg. ^{GIS}BANŠUR-*uš*, acc.sg. ^{GIS}BANŠUR-*un*), so its underlying form must have ended in [◌]u-*i* (the further phonetic shape of the word is unclear, however).

“thickbread”: The dat.-loc.sg. form NINDA.GUR₄.RA-*i* (KBo 30.109 obv. 7) belongs to the noun *harši-/haršai-* and represents the full phonetic form *har-ša(-a)-i*, which ends in [◌]a-*i*.

“wood”: The dat.-loc.sg. form ^{GIS}-*i* belongs to the *u*-stem noun *tāru-* and represents the full phonetic form *ta-ru-ú-i* (cf. also the spelling ^{GIS}-*ru-i*), which ends in [◌]u-*i*.

The conclusion that must be drawn on the basis of all these forms is that the Sumerographic spelling SUMEROGRAM-*i* represented not only full phonetic spellings ending in [◌]Ci-*i* but also spellings ending in [◌]a-*i* and [◌]u-*i*. In other words, in all cases in which a word ended in the sign -*i* preceded by a (C)V-sign, [◌](C)V-*i*, the corresponding Sumerographic spelling is SUMEROGRAM-*i*.

This phenomenon muddles the correlation between the spelling SUMEROGRAM-*i* and the place of the accent. For instance, there can be no doubt that GE₆-*i* = *da-an-ku-ua-i*, HUL-*i* = *i-da-a-la-u-i*, IGI^{HIA}-*i* = **ša-a-ku-i*, and NINDA.GUR₄.RA-*i* = *har-ša(-a)-i* were accented on their stems: /tánk^wāi/ (Kloekhorst 2014, 395–96, 690), /itálaui/, /sāk^wi/, and /χársāi/ (cf. Kloekhorst 2014, 395), respectively.¹⁷ This insight means that the spelling SUMEROGRAM-*i* does not always indicate that the underlying form was accented on its ending, as it applies only to forms that correspond with a full phonetic form ending in -*Ci-i*. If the underlying

15 Note that, for example, Puhvel (HED 3, 240) states that this word is possibly attested phonetically as “]ha-as-su-u-ú-i” in KUB 7.7, 8. However, Puhvel correctly warns that this word possibly could be acephalic as well, and then would not belong to the paradigm of “king.” And indeed, when looking at the photo of this tablet (, available through Hetkonk, hethiter.net/: fotarch Phb03621), we see that traces of a broken sign are present to the left of the HA sign and that there clearly is no word space between these traces and HA. We should therefore transliterate the form as [. . .]x-ha-aš-šu-u-ú-i, which makes its identification as the phonetically spelled dat.-loc.sg. form “king” virtually impossible.

16 Cf. Kloekhorst 2008, 507–8, where it was hypothesized that the word underlying “bovine” was **kuuāu-*.

17 This placement of the accent on the stem in all likelihood goes for LUGAL-*i* = **ha-aš-šu-i* as well: /χás:ui/; cf. Kloekhorst 2014, 459n1810.

form ended in *°a-i* (as in ablauting *i*-stems) or *°u-i* (as in *u*- and *ua*-stems), the accent need not have been on the ending.

2.4. SUMEROGRAM-*I* VERSUS SUMEROGRAM-*CI*: CONCLUSIONS

All in all, it seems justified to maintain my 2014 idea that the spelling of Hittite dat.-loc.sg. forms as a Sumerogram + phonetic complement contains linguistically relevant information. When in its full phonetic spelling a dat.-loc.sg. form shows the plene-spelled ending *°Ci-i* (which therefore must have been accented, /-í/), the corresponding Sumerographic spelling is in principle always SUMEROGRAM-*i*. By contrast, when in its full phonetic spelling a dat.-loc.sg. form shows the nonplene-spelled ending *°Ci* (which therefore must have been unaccented, /-i/, indicating that the word was accented on its stem), the corresponding Sumerographic spelling is in principle always SUMEROGRAM-*CI*. Note that this does not mean that the Sumerographic spelling SUMEROGRAM-*i* automatically corresponds to a full phonetic spelling ending in *°Ci-i*; it can also correspond to words ending in *°a-i* or *°u-i*, and these words need not have been accented on their ending.

In fact, it has now become clear that when attaching a phonetic complement to a Sumerogram, the scribe in principle always used the last sign of the fully phonetically spelled word. This practice implies that the scribe always had the Hittite phonetic spelling in the back of his mind, even when writing Sumerographically.

3. THE PHONETICS OF SOME HITTITE DATIVE-LOCATIVE SINGULAR FORMS

A combination of the insights discussed in sections 1–2 provides us with a powerful tool for determining the place of the accent in Hittite dat.-loc.sg. forms even when they are rarely attested or found only in Sumerographic spellings. It must be emphasized that this matter is not trivial. Within the Hittite nominal system, all oblique cases (except the locative, if this case has a separate form)¹⁸ have, in principle, the same accentuation.¹⁹ This characteristic means that if one can determine the place of the accent in the dat.-loc.sg. form of a certain word, one can predict the accentuation of all other oblique cases of that word as well. Therefore, all new knowledge that can be gained about the accentuation of the dat.-loc.sg. form of a specific word can have an impact on our knowledge of the phonological shape of the entire paradigm of that word.

3.1. SOME KNOWN EXAMPLES

In my 2014 book, I already treated several examples for which our new knowledge about the interpretation of the spelling of dat.-loc.sg. forms provides new and interesting linguistic information. Here I briefly summarize a few important cases.²⁰

“heart”: *kar-ti-i* (~ ŠÀ-*i*) = /kərtí/ < PIE dat.sg. **krd-éi*.

“moment”: *lam-ni-i*, *la-am-ni-i* = /lamní/, contrasting with ŠUM-*ni* “name” = /lámni/.

“basket”: *pád-da(-a)-ni* = /p(ə)t’áni/ < PIE **pth₂-én-i*, but the form *pád-da-ni-i* represents /p(ə)t’aní/, which is the result of an inner-Hittite accent shift of /p(ə)t’áni/ to /p(ə)t’aní/.²¹

18 In Kloekhorst 2018, 194, I argued that in the paradigm for “hand” the instrumental form also shows an accentuation that differs from the one found in the dat.-loc.sg. form: inst. *ki-iš-šar-ta* = /kɪs:árt:/ versus dat.-loc.sg. *ki-iš(-ša)-ri-i* = /kɪs:rí/. I regard this situation as potentially original (PIE inst. **g^hs-ér-t* vs. dat.sg. **g^hs-r-éi*), and one should therefore be careful not to project the accentuation of a given dat.-loc.sg. form too easily onto its corresponding instrumental form.

19 In fact, this principle goes for the nominal systems of all Indo-European languages and is a feature inherited from PIE.

20 Cf. Kloekhorst 2014, 450–62, for elaborate treatments of these words.

21 Cf. Kloekhorst 2020, 2022 for the postulation of a phoneme /t’:/ for Hittite.

“blood”: *iš-ḥa-ni* = /iʃχ:áni/ < PIE **h₁sh₂-én-i*, but the form *iš-ḥa-ni-i* represents /iʃχáni/, having undergone an accent shift like that in “basket”; the later-attested form *e-eš-ḥa-ni* represents /ʔésχ:ani/, which has taken over the accentuation and root vocalism of nom.-acc.sg. *e-eš-ḥar* = /ʔésχ:ər/ < **h₁ésh₂-r*.

“forehead”: the adverb *ḥa-an-ti-i* (~ SAG.KI-i) = /χəntí/ < PIE dat.sg. **h₂nt-éi* (accentuation matched by abl. *ḥa-an-ta-a-az* = /χəntáts/), but *ḥa-an-ti* = /χánti/ < PIE loc.sg. form **h₂ént-i*.

“house”: *pár-ni* (~ É-ni) = /párni/, which indicates that *per/parn-* goes back to a PIE static paradigm **pér-r/*pér-n-*.

“foot”: GÎR-i represents underlying **pa-ti-i* or **pa-di-i* = /patí/ < **pod-éi*, the accentuation of which is corroborated by gen.pl. *pa-ta-a-an* = /patán/, dat.-loc.pl. *pa-ta-a-aš* = /patás/, and inst. *pa-te-et* = /patét:/ < **pod-V°*.

“river”: ÍD-i represents underlying **ḥa-pí-i* = /χapí/, the accentuation of which is corroborated by all.sg. *ḥa-pa-a* = /χapá/.

“star”: MUL-i = /χ(ə)strí/ (besides nom.sg. *ḥašterza*) < PIE **h₂str-éi*.

“woman”: MUNUS-i (also MUNUS-ni-i) probably represents underlying /k^wní/ (through **k^wnái/* < PIE **g^wn-éh₂-i?*), whereas MUNUS-ni probably represents /k^wáni:/, in which the accentuation of nom.sg. MUNUS-*anza* = /k^wánts/ < **g^wén-h₂-s* and acc.sg. MUNUS-*na-an* = /k^wán:an/ < **g^wénh₂-(o)m* has been introduced.

“much, many”: the OH form *me-ek-ki-i* “greatly” is not an old nom.-acc.sg. form of the adjective *mekki-/mekkai-* but rather an old dat.-loc.sg. form /mek:í/ of the adjective *mēkk-*, which thus originally must have been accentually mobile—for example, acc.sg.com. *me-e-ek-kán* = /mék:an/ versus dat.-loc.sg. *me-ek-ki-i* = /mek:í/, ultimately reflecting a PIE pattern.

3.2. SOME NEW EXAMPLES

To these interesting cases treated in my 2014 book, we can now add the following observations.

“bed”: The Sumerogram GÍŠ.NÁ has been equated with Hittite *šašt(a)-* “bed” by, for example, Johannes Friedrich (HW 287) and Johann Tischler (HHwb 229). The dat.-loc.sg. form GÍŠ.NÁ-i (KBo 22.231 rev. 10; KUB 17.25 i 2; KUB 17.26 i 2) implies that its underlying form was accented on its ending (or that the stem was a *u-* or *ua-* stem). This situation contrasts with the word *šašt(a)-*, the dat.-loc.sg. form of which is spelled *ša-aš-ti*, which must have been accented on its stem, /sásti/. The Sumerogram GÍŠ.NÁ therefore cannot be equated with *šašt(a)-*.²²

“brother”: The dat.-loc.sg. form ŠEŠ-ni indicates that this form was accented on its stem, and we therefore may assume an underlying **ne-ek-ni* = /nékni/. This interpretation implies that the paradigm of *nekna-* (only one form of which is phonetically attested—namely, voc.sg. *ne-ek-na* = /nékna/) was accented on its stem throughout the paradigm: nom.sg. ŠEŠ-aš = /néknas/, acc.sg. ŠEŠ-an = /néknan/, dat.-loc.sg. ŠEŠ-ni = /nékni/, and so forth.

“disease”: The Sumerogram GIG is generally equated with *erman-/arman-*. The Sumerographically spelled dat.-loc.sg. GIG-i (KUB 5.1 i 76, NH/LNS), therefore, must represent a form of *erman-/arman-* with an accented ending, probably **ar-ma-ni-i* = /ərm(a)ní/. However, the phonetically spelled dat.-loc.sg. form *er-ma-ni* (KUB 8.62 i 19, NS) must have been accented on its stem, probably /ʔérm(a)ni/. The two forms thus contradict each other. However, since *er-ma-ni* has clearly

²² This argument had already been made on other grounds by Siegelová (1971, 20–21; cf. also CHD Š, 309–10).

introduced the stem vocalism of the nom.-acc.sg. form *e-er-ma-an* = /ʔérmən/²³ and is therefore innovative versus the expected original form with a stem *arman-* (as is attested in the derived verb *armanije/a-zi* “to be(come) ill”), we may assume that the accentuation of *er-ma-ni* = /ʔérm(a)ní/ is innovative as well and that the accentuation of GIG-*i* = **ar-ma-ni-i* = /ərm(a)ní/ is more archaic.

“Fate-goddess”: The dat.-loc.sg. form ^d*gul-ši* (KUB 5.1 i 48), with a nonplene spelling of the ending’s vowel, indicates that the stem in this name must have been accented. This position is problematic, however, since the generally accepted etymology of the name ^d*gulša-* traces it back to a PIE zero-grade formation **k^wls-o-* (cf., e.g., Kloekhorst 2008, 492–93, with references), which from a PIE point of view can hardly have been accented on its root. Fortunately, Willemijn Waal’s (2014) demonstration that the sign *gul* in this word should be read Sumerographically, ^dGUL(-*aš*)-*ša*²⁴ and that its underlying form was probably *kuṽanša-* or *kuṽašša-* makes it easier to understand the dat.-loc.sg. form, which we now should transliterate as ^dGUL-*ši*. Following Waal’s argumentation, it should represent an underlying **kuṽanši* or **kuṽašši*, which was accented /k^wá(n)s:i/.

“honey”: The Sumerographically spelled dat.-loc.sg. form LĀL-*t[i]* (KBo 15.10 i 31, MH/MS) indicates that the accentuation in this word must have been on its stem, and we therefore could assume that it represents an underlying form **mi-li-it-ti* = /milit:i/, reflecting a virtual PIE **mél-it-i*. However, the one attestation *ma-li-it-ti* (Bo 3757 ii 5), which Frank Starke (1990, 163n627a) and Jaan Puhvel (HED 6, 154), for example, cite as a dat.-loc.sg. form to *militt-*, would fit LĀL-*t[i]* as well. The form *ma-li-it-ti* is interesting since, as Starke (1990, 163n627a) already noticed, the spelling *ma-l*° represents an initial cluster /ml-/.²⁵ I have therefore argued that the original paradigm of “honey” must have been hysterodynamic, **mél-it*, **ml-it-ós*, **ml-it-éi* (Kloekhorst 2008, 580). This paradigm has now become impossible, however, since the nonplene spelling of the vowel of the dat.-loc.sg. ending in *ma-li-it-ti* shows that the ending was unaccented. We therefore now must assume that the accent lay instead on the suffix and that the original paradigm of “honey” was in fact proterodynamic, thus implying that the suffix contained a full grade. The question then arises whether this full grade was **-éit-* or **-iét-*. A preform **ml-éit-i* should regularly have yielded Hittite */mléti/, spelled **ma-le-e-ti*, with lenition of the **t*. This form does not fit the spelling *ma-li-it-ti*, where we find geminate (i.e., fortis) *-tt-*. We therefore should instead assume a preform **ml-iét-i*, which should regularly yield Hittite */mliét:i/, with geminate *-tt-*. We would expect that a form */mliét:i/ would phonetically be spelled **ma-li(-i)(-e)-et-ti*, and it is therefore interesting to note that the form that is usually cited as *ma-li-it-ti* can in fact be read *ma-li-et-ti* = /mliét:i/ as well. (The sign E/IT is ambiguous regarding its reading—it can be read both *et* and *it*.) We may therefore view *ma-li-et-ti* as the direct reflex of PIE **ml-iét-i*, which justifies the reconstruction of the PIE paradigm of “honey” as **mél-it*, **ml-iét-s*, **ml-iét-i*.

“mountain”: The word underlying the Sumerogram ḪUR.SAG is unknown. On the basis of the dat.-loc.sg. form ḪUR.SAG-*i*, which is often attested, we can now assume that this word was in its oblique cases accented on its endings.²⁶ However, the two attestations of a dat.-loc.sg. form

23 Cf. Kloekhorst 2014, 163, for a discussion of the spelling *er-m*° in the dat.-loc.sg. form versus *e-er-m*° in the nom.-acc.sg. form.

24 Especially the forms ^dGUL-*aš* (instead of ^dGUL/*gul-ša-aš*), ^dGUL-*an* (instead of ^dGUL/*gul-ša-an*), and ^dGUL^{HLA}-*uš* (instead of ^dGUL/*gul-šu-uš*—note the Sumerographic plural marker!) cited by Waal 2014, 1020, are convincing arguments to read the sign GUL here as a Sumerogram. Ilya Yakubovich’s attempt to explain away these Sumerographic spellings (Yakubovich 2014, 292; cf. Melchert 2016, 356–57) is ill founded and totally unconvincing (see now also Waal 2019).

25 This cluster is also attested in the adjective *maliddu-* = /ml°/ “sweet” (next to *miliddu-* = /milit:u-/) and is known from, for example, Greek βλίττω “to gather honey” < **mlit-ie/o-*.

26 Unless the underlying word is a *u-* or *ua-* stem, which seems to be excluded by the dat.-loc.sg. form ḪUR.SAG-*ri*; the latter points instead to a stem ending in *-r-*.

ḪUR.SAG-*ri* (KUB 29.1 i 14, NS; KBo 40.335 ii 7, NS) instead seem to point to accentuation of the stem. One explanation could be to assume that these two attestations represent a word different from ḪUR.SAG-*i*. Another possibility is that they are the result of an analogical accent retraction like that in *išhanī* >> *ēšhani* “blood.” This possibility implies, however, that the paradigm of “mountain” contained forms in which the accent lay on the stem, not on the ending. If this is the case, the word for “mountain” would originally have been an accentually mobile *r*-stem, like the word for “hand” (*keššar*, *kiššeran*, *kišraš* = /k:és:ər, k:is:éran, k:is:rás/) or the word for “star” (*hašterza*, MUL-*i* = /χ(ə)stérts, χ(ə)strí/).

“oil”: The dat.-loc.sg. form *Ī-i* (KBo 32.14 iii 10, rev. 29, MH/MS; KUB 8.67, 7) points to an underlying form **ša-ak-ni-i* = /səkní/, the accentuation of which is corroborated by the gen.sg. form *ša-ak-na-a-aš* = /səknáš/.

“queen”: It is generally accepted that the Hittite word underlying the Sumerogram MUNUS.LUGAL was **haššuš(ša)ra-*. Its dat.-loc.sg. form is often attested as MUNUS.LUGAL-*ri*, including in OS texts, implying accentuation of the stem: /χás:us:ri/. However, we also find a few attestations of MUNUS.LUGAL-*i* (KBo 10.25 ii 27, OH/NS; KBo 40.135 rev. 9, OH/NS; KUB 9.34 i 9, MH/NS), the status of which is not fully clear to me. In one case (KBo 40.135 rev. 9) the form directly follows LUGAL-*i*, so we may assume that the spelling with *-i* was taken over from this form (where the spelling is regular, since it represents **ha-aš-šu-i*). In the other two cases the forms are used independently, so the spelling with *-i* may have to be taken seriously. If so, it would point to accentuation of the ending: /χás:us:rí/. This accentuation would, in principle, fit the fact that there are other indications that originally the feminizing suffix *-š(ša)r(a)-* was desinentially stressed in its oblique cases.²⁷ This place of accentuation would mean, however, that these spellings represent archaic forms, whereas the renewed form, /χás:us:ri/, is well attested already in OS texts, thus making this chronology rather shaky.

“son”: On the basis of dat.-loc.sg. DUMU(.NITA)-*li*, it is clear not only that the stem of the underlying word ended in an *-l-* (as is generally recognized; cf. also nom.sg. DUMU-*la-aš*, acc.sg. DUMU-*la-an*) but also that it was accented on its stem in its oblique cases.

“soul”: The Sumerographic spelling ZI-*ni* implies that the underlying form was **iš-ta-an-za-ni*, which was accented on its stem: /istántsaní/ or /istantsáni/.²⁸

“Storm-god”: The phonetics underlying the Sumerogram ^dIM/^dU “Storm-god” are unknown, but on the basis of the dat.-loc.sg. forms ^dIM-*ni*/^dU-*ni* and ^dIM-*un-ni* we can now tell not only that his name ended in *-unn-* but also that the name was accented on its stem in its oblique cases. In that sense, it is interesting to note that the Luwic name of the Storm-god, *tarḫu(a)nt-*, which is often thought in one way or another to be cognate to the Hittite form, is in its oblique cases accented on its ending, as is clear from Hieroglyphic Luwian (DEUS)TONITRUS-*hu-ti-i* = /tarχ^wntí/ (Vertegaal 2018, 178–79) and Lycian dat.sg. *trqñti* = /trk^wntí/ (Kloekhorst 2013, 138).

27 Cf. Kloekhorst 2014, 80–81. Note that on the basis of the onomastic element *-hšušar*, which is found in many personal names in Old Assyrian texts from Kültepe/Kaniš and is generally equated with the Hittite word for “queen,” we may assume that this word originally was athematic: nom.-acc.sg. **haššuššar* < **-sr* (Kloekhorst 2019, 95–97). We therefore can now reconstruct an original paradigm like *keššar/kiššer-/kišr-* “hand”—namely, nom.sg. */χás:us:ər/, acc.sg. /χas:uséran/, gen.sg. /χas:us:rás/, dat.-loc.sg. /χas:us:rí/, etc. When the noun was thematicized, the stem accentuation was generalized, yielding */χás:us:ra-/, to which the dat.-loc.sg. form MUNUS.LUGAL-*ri* = /χás:us:ri/ belongs.

28 Cf. Kloekhorst 2014, 271n995, for the possibility that the original form of this word was **ištānzana-*, implying an underlying */istántšana-/, which would have yielded MH and NH /istántšana-/, with accentuation on the first *a*.

“thunder”: Although the Sumerogram BÚN is usually equated with *tetḫeššar* “thunder,”²⁹ this does not fit the dat.-loc.sg. form BÚN-*mi* (KUB 5.1 iv 71). Instead, this form indicates that the underlying word in this case is *tetḫima*- “thunder.” Moreover, the form BÚN-*mi* shows that its dat.-loc.sg. form, **tetḫimi*, was accented on its stem: /tétḫimi/ or (less likely) /tetḫími/.

“tongue”: The Sumerographically spelled dat.-loc.sg. EME-*i* (KBo 39.8 ii 29; iii 53; IBoT 4.12 iii 7) seems to point to a form that was accented on its ending. This spelling contrasts with the phonetically spelled form of the dat.-loc.sg. of “tongue,” *la-a-li*, which clearly was accented on its stem, /láli/ (cf. the nonplene spelling of the vowel of the ending and the plene spelling of the *a* of the stem). I therefore regard the Sumerographic forms EME-*i* as mistakes: in all three cases, the form EME-*i* follows KAXU-*i* “in/to the mouth,” and I assume that the spelling with -*i* was taken over from here.

4. THE PHONETIC SPELLING OF ALLATIVE SINGULAR FORMS

Our finding that the spelling of the ending of the dat.-loc.sg. in Hittite is linguistically relevant, also when it is spelled as a phonetic complement to Sumerograms, raises the question to what extent this fact holds for the other oblique case whose ending ends in a vowel—namely, the allative singular.

It is well known that the all.sg. ending has two allomorphs: one in which the vowel of the ending is spelled plene, °*Ca-a*, and one in which the vowel is spelled nonplene, °*Ca*. Moreover, it is generally agreed that the plene-spelled version must have been accented, whereas the nonplene-spelled version was unaccented (Kloekhorst 2008, 161). For instance, *ki-iš(-ša)-ra-a* = /k:is:râ/ “hand,” *ta-ak-na-a* = /t(ə)knâ/ “earth” versus *a-aš-ka* = /ʔáska/ “gate,” *ne(-e)-pí-ša* = /népisa/ “heaven,” and *šu-u-uh-ḫa* = /sóḫ:a/ “roof.” Also when an enclitic is attached, all.sg. forms sometimes show plene spelling of their ending when they are accented—for example, *iš-ša-a-a=š-ma* (KBo 17.2 i 6, 8, OS) = /is:â=sma/ “to their mouth”—but this practice is not consistent: *iš-ša-a=š-ša* (KBo 3.38 obv. 4, OH/NS), *iš-ša=ma-a=š-ši* (KBo 13.100, 7, NS).³⁰

The place of the accent in these all.sg. forms is always the same as in the corresponding dat.-loc.sg. forms: *ki-iš(-ša)-ra-a* ~ *ki-iš(-ša)-ri-i* = /k:is:rî/, *ta-ak-na-a* ~ *tâk-ni-i* = /t(ə)knî/, and *iš-ša-a-a=š-ma* ~ *iš-ši-i* = /is:î/ versus *a-aš-ka* ~ *a-aš-ki* = /ʔáski/, *ne(-e)-pí-ša* ~ *ne(-e)-pí-ši* = /népisi/, and *šu-u-uh-ḫa* ~ *šu-u-uh-ḫi* = /sóḫ:i/. The all.sg. form, too, is therefore potentially an important case for determining the place of the accent in the oblique cases of a given word. Moreover, just as word-final long accented /-î/ is retained as such throughout Hittite, word-final long accented /-â/ also seems to have retained its length throughout the attested period of Hittite: compare the fact that ^É*ḫištā*, a cultic building, in principle always shows plene spelling of its *a*—^É*ḫi-iš-ta-a*, ^É*ḫe-eš-ta-a*—whether it is attested in OS, MS, or NS texts (for attestations, cf. Kloekhorst 2014, 350n1362, 359n1395, 363n1425). In theory, the difference between all.sg. forms that are accented on their ending (spelled °*Ca-a*) and those that are accented on their stem (spelled °*Ca*) should therefore be detectable in texts from all periods. Unfortunately, this is hardly the case in practice: the allative is lost as a living case after the OH period, so we do not have many attestations of all.sg. forms from later texts. As a consequence, to determine the accentuation pattern of a given word, the all.sg. case is much less useful than the dat.-loc.sg., simply because it is much less often attested.

5. THE SUMEROGRAPHIC SPELLING OF ALLATIVE SINGULAR FORMS

Since we have seen above that dat.-loc.sg. forms that are spelled as a Sumerogram plus phonetic complement reveal important linguistic information, it is worthwhile pursuing to what extent this is true of the all.sg. case as well.

²⁹ Cf. the alternation between EZEN₄ BÚN-*na-aš* “festival of the thunder” (KUB 5.4 i 17, 27; iii 4) and EZEN₄ *te-et-ḫe-eš-na-aš* (KUB 5.4 i 38; ii 21); see HEG III 349; cf. also HW 279; Tischler, HHwb 216; Weeden 2011, 261.

³⁰ The difference between the two ways of spelling may be diachronic: in OH, the length of the /â/ was retained, even in word-internal position, whereas after the OH period it was shortened.

Let us look first at two all.sg. forms that were petrified as adverbs—namely, *āppa* “back, afterward” and *šarā* “upward.” The former shows a consistent nonplene spelling of its final vowel, *a-ap-pa*, whereas the latter shows a consistent plene spelling, *ša-ra-a*. When these words are spelled Sumerographically with a phonetic complement, they appear as EGIR-*pa* and UGU-*a*,³¹ respectively (never **EGIR-*a* and **UGU-*ra*). On the basis of these words, we may assume that also in the all.sg. cases there is a correlation between the full phonetic spelling of the ending and its spelling as a phonetic complement after Sumerograms: when the vowel of the all.sg. ending of a word is spelled nonplene, °*Ca*, in full phonetic spelling, this word is Sumerographically spelled SUMEROGRAM-*Ca*, whereas when the vowel of the all.sg. of a word is spelled plene, °*Ca-a*, in full phonetic spelling, the word is Sumerographically spelled SUMEROGRAM-*a*. And since the full phonetic spelling of the all.sg. ending gives information about the accentuation of the word, we may conclude that the phonetic complements do too.

When looking at other all.sg. forms that are spelled Sumerographically, we see that our postulations on the basis of *āppa* and *šarā* are confirmed.

<i>a-ku-ua-an-na</i> “drinking”	=	NAG- <i>na</i> (never **NAG- <i>a</i>)
<i>kat-ta</i> “downward”	=	GAM- <i>ta</i> (never **GAM- <i>a</i>)
<i>ku-un-na</i> “right”	=	ZAG- <i>na</i> (never **ZAG- <i>a</i>)
<i>pár-na</i> “house”	=	É- <i>na</i> (never **É- <i>a</i>)
<i>tu-un-na-ak-ki-iš-na</i> “inner room”	=	É.ŠÀ- <i>na</i> (never **É.ŠÀ- <i>a</i>)

Also in other cases where we do not have the full phonetic spelling, we can still argue that the rule above is correct.

KASKAL-*ša* “road” should correspond to a phonetically spelled **pal-ša*, which is also the all.sg. form we would expect on the basis of the dat.-loc.sg. form *pal-ši* ~ KASKAL-*ši*. Both forms were accented on their stem: /pálsi/ and /pálsa/.

GÛB-*la* “left” belongs to a word whose underlying form we do not know. On the basis of this spelling (not **GÛB-*a*), we may assume that it was accented on its stem, as confirmed by the corresponding dat.-loc.sg. form GÛB-*li* (not **GÛB-*i*).

ḪUR.SAG-*a* “mountain” belongs to a word whose underlying form we do not know. On the basis of this spelling (not **ḪUR.SAG-*Ca*), we may assume that the word was accented on the ending in its oblique cases, as confirmed by the numerous dat.-loc.sg. forms ḪUR.SAG-*i* (cf. the discussion above).

ḠIS-TIR-*na* “forest” should correspond with an underlying form **ti-i-e-eš-na*, which is also the form we would expect on the basis of the corresponding dat.-loc.sg. form ḠIS-TIR-*ni* = *ti-i-e-eš-ni*. Both forms were accented on their stem: /tiés:ni/ and /tiés:na/.

In some other cases, things are less straightforward.

ÍD-*a* “river” is attested in KBo 22.2 obv. 3 (OS), and its spelling matches the full phonetic spelling *ḫa-pa-a* (KUB 13.3 iii 29, 32), both pointing to a form that is accented on its ending, /ḫapá/. This accentuation is confirmed by the dat.-loc.sg. form ÍD-*i*, which would match a form **ḫa-pí-i* (unattested as such), representing /ḫapí/. However, we also find the Sumerographic spelling ÍD-*pa* (KBo 10.11 i 3 ([Í]D-), OH/NS; KBo 13.137, 7, OH/NS), which points instead to a form that is accented on its stem. Since both attestations of ÍD-*pa* are from NS texts, I assume that they represent forms in which the accent of the direct cases was introduced. We therefore may assume that the word for “river” was originally inflected nom.sg. */ḫápas/ (or */ḫáps/?), acc.sg. */ḫápan/, gen.sg. */ḫapás/,

31 Admittedly, UGU-*a* is attested only once, in KBo 6.34 iii 18.

dat.-loc.sg. /χapá/, and all.sg. /χapá/ and that in the all.sg. at a certain point in time the stem of the nominative and accusative forms was introduced, yielding /χápa/, spelled *ÍD-pa*.

^{URU}MUL-*ra* “Star(-city)” belongs to the paradigm of ^{URU}*hašter(a)*- (e.g., acc.sg. ^{URU}*ha-aš-te-ra-an*, gen.sg. ^{URU}*ha-aš-ti-ra-aš*), which must be connected with the Hittite word for “star,” *hašter-*. As we have seen above, the dat.-loc.sg. form of “star,” MUL-*i*, points to a desinentially stressed form */χ(ə)strí/. The spelling of the all.sg. form of the city name, ^{URU}MUL-*ra*, points instead to a form with accentuation on its stem: /χ(ə)stéra/. We may therefore assume that in the city name the stem accentuation (nom.sg. *hašterza* = /χ(ə)stérts/) was generalized, whereas in the noun itself the original accentual mobility was retained. Alternatively, we may assume that the city name was in fact thematic /χ(ə)stéra-/ and thus forms a derivation of the original athematic noun /χ(ə)stér-, χ(ə)strV-/.

^{DUG}ÚTUL-*ša* “pot” is attested in the OS text KBo 17.43 i 15, 16, for example, and its spelling implies that the underlying form was accented on its stem. However, the dat.-loc.sg. form ^{DUG}ÚTUL-*i* (e.g., KBo 6.2 i 56, OS) implies that its underlying form was accented on its ending. The information of both forms is thus contradictory: is the word for “pot” in its oblique cases accented on its stem or on its ending? Since both forms are attested in OS texts, I am hesitant to assume that the one has undergone an accent shift that the other one has not. So perhaps we should assume that there are two different words here that underlie these forms.

ŠĀ-*ta* “heart” is attested several times³² and corresponds to the phonetically spelled form *kar-ta* (KBo 17.65 rev. 46 [for this form, cf. Beckman 1983, 163]; KBo 24.61 rev. 11).³³ Both spellings indicate that the accent was on the stem, /kárta/. Its corresponding dat.-loc.sg. form *kar-ti-i* ~ ŠĀ-*i* points instead to /kérti/, with the accent on the ending, however. Since this latter accentuation must be archaic (reflecting PIE **krd-éi*), we would expect that the all.sg. form was originally accented on the ending as well: **kar-ta-a* ~ *ŠĀ-*a* = /kértá/.³⁴ This reasoning implies that in the original */kértá/ an accent retraction to /kárta/ has taken place. We could assume that this change happened by analogy to the accentuation of the nom.-acc.sg. form *kir*, *gir* = /kír/.³⁵ However, in other cases where we encounter such a generalization of the accentuation of the direct cases, the stem of these cases was also introduced (e.g., dat.-loc.sg. *išhanī* “blood” >> later *ēšhani* [after nom.-acc.sg. *ēšhar*] or dat.-loc.sg. *išši* “mouth” >> later *aiišši* [after nom.-acc.sg. *aiiš*]), so we would expect an outcome ***ki-ir-ta* = /kírta/.³⁶ I am therefore not fully sure how to interpret ŠĀ-*ta* = *kar-ta*.

Although these latter four cases require making some extra assumptions, I do not think that they seriously undermine the basic principle that even when all.sg. forms are written Sumerographically—that is, as a Sumerogram plus phonetic complement—the spelling of the ending reveals information about the accentuation of the underlying word.

32 E.g., KBo 4.12 obv. 32; KUB 6.45 iv 46; KUB 13.33 ii 12; KUB 17.28 ii 56; KUB 31.77 iii 17.

33 The one attestation in KUB 1.16 iii 58 may have to be emended to *kar-ta*<-a=t-ta> “to your heart”; cf. the context: (57) . . . *nu=z=(š)a-an* (58) [*ud-da-*]*a-ar=me-et ha-at-ta<-tar>=me-et-t-a kar-ta<-a=t-ta> ši-iš<-ša>-at-ti* “you will im<p>ress my [wo]rds and my wisd<om> onto <your> heart” (note that *kar-ta*<-a=t-ta> is not the only form that needs emendation and that in KUB 1.16 iii 63 we also find *kar-di<-i=t-ti>* “in <your> heart”; cf. Kloekhorst 2014, 451).

34 It is, in principle, possible that the forms *kar-ta-a=š-ma* (VBoT 58 i 13) and *kar-da-a=š-ma* (KUB 31.4 + KBo 3.41 obv. 9) “into their heart” were accented on their ending because, before an enclitic, the length of the vowel of the accented ending was not always spelled.

35 See Kloekhorst 2014, 426, for the reading of the nom.-acc.sg. form of “heart” as *ki-ir*, *gi-ir* instead of *ke-er*, *ge-er* as advocated in Kloekhorst 2008, 469.

36 Likewise, the dat.-loc.sg. form KE/I-E/IR-*ti* (KBo 3.21 iii 12, 16, 22, 26, MH/MS) may be read as *ki-ir-ti* and analyzed as /kírti/, in which the nom.-acc.sg. stem *kir* = /kír/ has been carried over into the original dat.-loc.sg. form *kar-ti-i* = /kérti/. It therefore need not represent *ke-er-ti* = /kérti/, an old loc.sg. form < PIE **kérd-i*, as argued in Kloekhorst 2014, 451.

6. CONCLUSION

We can conclude that the Hittite dat.-loc.sg. and all.sg. forms reveal important information about the place of the accent in them also when they are spelled as a Sumerogram plus phonetic complement. It is thus of paramount importance in the linguistic treatment of Hittite nouns to look closely at the spelling of these cases.

ABBREVIATIONS

Abbreviations in this chapter are those used by the Chicago Hittite Dictionary (<https://isac.uchicago.edu/research/publications/chicago-hittite-dictionary>).

BIBLIOGRAPHY

Beckman, Gary M.

1983 *Hittite Birth Rituals*. 2nd ed. Studien zu den Boğazköy-Texten 29. Wiesbaden: Harrassowitz.

Eichner, Heiner

1973 "Die Etymologie von heth. *mehur*." *Münchener Studien zur Sprachwissenschaft* 31: 53–107.

Kloekhorst, Alwin

2008 *Etymological Dictionary of the Hittite Inherited Lexicon*. Leiden Indo-European Etymological Dictionary 5. Leiden: Brill.

2013 "Ликийский язык" [The Lycian Language]. In *Языки мира: реликтовые индоевропейские языки Передней и Центральной Азии* [Languages of the World: Indo-European Relict Languages from West and Central Asia], edited by Yuri B. Koryakov and Andrej A. Kibrik, 131–54. Moscow: Academia.

2014 *Accent in Hittite: A Study in Plene Spelling, Consonant Gradation, Clitics, and Metrics*. Studien zu den Boğazköy-Texten 56. Wiesbaden: Harrassowitz.

2018 "The Origin of the Proto-Indo-European Nominal Accent-Ablaut Paradigms." In *100 Jahre Entzifferung des Hethitischen: Morphosyntaktische Kategorien in Sprachgeschichte und Forschung. Akten der Arbeitstagung der Indogermanischen Gesellschaft vom 21. bis 23. September 2015 in Marburg*, edited by Elisabeth Rieken, 179–203. Wiesbaden: Reichert.

2019 *Kanišite Hittite: The Earliest Attested Record of Indo-European*. Handbuch der Orientalistik 132. Leiden: Brill.

2020 "The Phonetics and Phonology of the Hittite Dental Stops." In *Hrozný and Hittite: The First Hundred Years*, edited by Ronald I. Kim, Jana Mynářová, and Peter Pavúk, 147–75. Culture and History of the Ancient Near East 107. Leiden: Brill.

2022 "Ejective Stops in Hittite: Evidence for a Phonemic Length Distinction." *Bulletin of the School of Oriental and African Studies* 85, no. 2: 149–63.

McMahon, Gregory

1991 *The Hittite State Cult of the Tutelary Deities*. Chicago: Oriental Institute.

Melchert, H. Craig

1994 *Anatolian Historical Phonology*. Leiden Studies in Indo-European 3. Amsterdam: Rodopi.

2011 "Hittite Auslautgesetze Revisited." Paper presented at the Thirtieth East Coast Indo-European Conference, Harvard University, June 8.

2016 "Formal and Semantic Aspects of Hittite *Gul(aš)ša*- 'fate.'" In *Studies in Honour of Ahmet Ünal*, edited by Sedat Erkut and Özlem Sir Gavaz, 355–59. Istanbul: Arkeoloji ve Sanat Yayınları.

Oettinger, Norbert

1976 *Die militärischen Eide der Hethiter*. Studien zu den Boğazköy-Texten 22. Wiesbaden: Harrassowitz.

Siegelová, Jana

1971 *Appu-Märchen und Hedammu-Mythus*. Studien zu den Boğazköy-Texten 14. Wiesbaden: Harrassowitz.

Starke, Frank

- 1990 *Untersuchungen zur Stammbildung des keilschrift-luwischen Nomens*. Studien zu den Boğazköy-Texten 31. Wiesbaden: Harrassowitz.

van Gessel, Ben H. L.

- 1998 *Onomasticon of the Hittite Pantheon*. Leiden: Brill.

Vertegaal, Xander

- 2018 “Signs of Length: Towards an Interpretation of Non-filling Plene Spellings in Hieroglyphic Luwian.” *Indo-germanische Forschungen* 123: 159–210.

Waal, Willemijn J. I.

- 2014 “Changing Fate: Hittite *gulš*-/GUL-š-, ^d*Gulšeš*/^dGUL-šeš, Cuneiform Luwian *gulzā(i)*-/GUL-zā(i)-, Hieroglyphic Luwian REL-za- and the *Kuwanšeš* Deities.” In *Proceedings of the Eighth International Congress of Hittitology*, edited by Piotr Taracha, 1016–34. Warsaw: Agade.
- 2019 “Fate Strikes Back: New Evidence for the Identification of the Hittite Fate Deities and Its Implications for Hieroglyphic Writing in Anatolia.” *Journal of Cuneiform Studies* 71: 121–32.

Weeden, Mark

- 2011 *Hittite Logograms and Hittite Scholarship*. Studien zu den Boğazköy-Texten 54. Wiesbaden: Harrassowitz.

Yakubovich, Ilya

- 2014 “The Luwian Deity Kwanza.” *Aramazd* 8: 282–97.