

# **ASPECTS OF ANATOLIAN LINGUISTICS**

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## Anatolian Indo-European Languages in Time and Space

2nd Millennium: 16th-13thC BCE

Hittite: administrative language of Hittite Kingdom/Empire (cuneiform, Ḫattuša et alibi)

Palaic: language of Palā, NW of Halys River (cuneiform, Ḫattuša; liturgical texts)

Luvian:

Lower Land and Kizzuwatna Luvian (cuneiform, Ḫattuša, ritual incantations)

Tauriša Luvian (cuneiform, Ḫattuša, conjuration incantations)

Istanuvian Luvian (cuneiform, Ḫattuša, only incipits of ritual incantations)

Empire Luvian (administrative koiné promulgated from Ḫattuša from 14thC BCE in:

(1) Luvianisms in cuneiform in Hittite contexts

(2) hieroglyphic inscriptions of Late Hittite kings)

Iron Age Luvian (continuation of EL, 12th-7thC BCE, but mostly 10th-8th, in “New Hittite” States after fall of Hittite Empire in hieroglyphic inscriptions of southern Anatolia and Northern Syria)

1st Millennium: 7thC BCE - ca. 3rdC CE alphabetic

Carian: 7th-4thC in Egypt, 4th-3rd in Caria (Kaunos Bilingual +/- 325BCE)

Lycian: 5th-4thC (including two texts in Lycian B/Milyan)

Lydian: 5th-4thC (a few coins & seals perhaps slightly older)

Sidetic: 3rdC BCE

Pisidian: 2nd-3rd C CE (approximate)

Relevant Non-Indo-European languages:

Hattian: language of central Anatolian plateau; heavy influence on Hittite state cult and myth; also on certain areas of lexicon (flora/fauna; terms for ritualists and paraphernalia); likely moribund by OH period. No sure related languages.

Hurrian: language of upper reaches of Tigris-Euphrates region, ca. 2300-1000 BCE; as state of Mitanni a major rival of Hittites in OH period; in Early New Kingdom (Tuthaliya I onward) dynastic marriages brought heavy Hurrian influence on Hittite state cult and Hurrian-based or transmitted myths; renewed influence with marriage of Puduḫepa to Ḫattušili III in later Empire; most loanwords mediated by Luvian. Related to Urartian of area of Lake Van.

Akkadian: OH landgrants mostly in Akkadian, also bilingual compositions of OH kings; diplomatic lingua franca of Late Bronze Age, thus letters to foreign rulers and Akkadian versions of many Hittite treaties; also language of learning for scribes of Ḫattuša; some loanwords and calques.

Sumerian: strictly learned language; known from Ḫattuša mostly in lexical texts.

## Nature of Hittite Text Corpus



1. Long debate over “archive” vs. “library”, but neither modern concept likely apt. Great variety of genres (see CTH link on Hethitologie-Portal), but not all treated alike. As per van den Hout (2006: 223) [#43], fundamental division of administrative texts into records of long term interest vs. those of temporary relevance. Former were repeatedly copied, latter almost never (and surely discarded, recycled—some more quickly than others):

Texts in Multiple Copies	Texts in Single Copies
Historical prose, treaties, edicts	Correspondence
Instructions	Lists and rosters
Laws	Economic administration
Hymns and prayers	Court depositions
Festival descriptions	Cult inventories
Therapeutic rituals	Oracular reports
Mythology, Anatolian	Vows
Hattian, Palaic, Luvian, Hurrian texts	Tablet collection shelf lists
Hippological texts	Tablet collection labels

Some exceptions to this pattern are explainable: landgrant deeds clearly retain their importance, but as original **sealed** documents could not be copied (tantamount to prohibited forgery). Recopying of Sumerian and Akkadian compositions, lexical lists, and some omnia may well have been part of scribal education. Much debated is the status of non-Anatolian myths: they may have been incorporated into state festivals (like Anatolian myths); some have argued that they were recited before the Hittite court as entertainment. Most important implication is that virtually all single-copy texts in New Hittite script are assured New Hittite compositions!

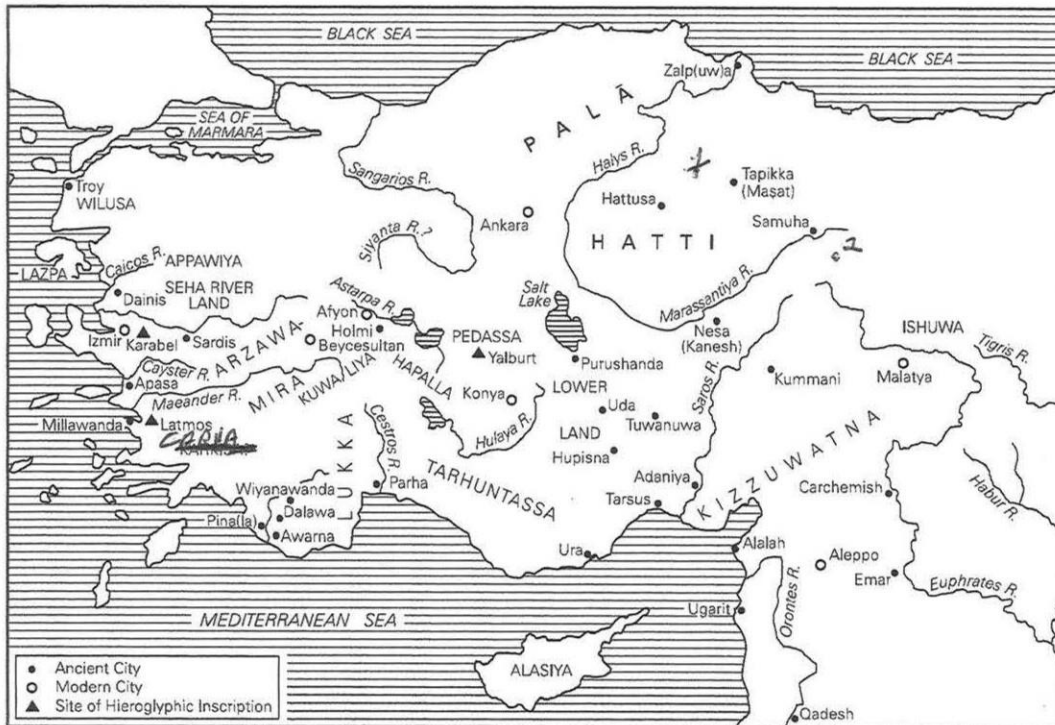
2. Major controversy exists over origins of Hittite writing, (relative) date of first use to write Hittite, and previous broadly consensus view of dating Hittite manuscripts. On the first cf. the differing views of van den Hout (2020: 38–51) [#45] and Klinger (2022: 285–95 and 303–11) [#59]. I vehemently reject claims (most recently van den Hout 2020: Chapter 5) that scribes began to write in Hittite only with the reign of Telipinu, but all or nearly all extant OH mss. may well date only from then. I also follow Klinger (2022) in upholding basic validity of contrast between Old Script and Middle Script, against van den Hout (2009 [#44] and elsewhere), et. al.

This does not mean that significant revisions are not required. First, some differences in sign shapes said to be diagnostic for OS vs. MS have been shown to be invalid, but others are. E.g., DA and IT with “stair-step” pattern of horizontals is already OS, but variants with **protruding**

middle horizontal are only MS: KBo 16.97 Vo 12  Vo 10  But NB that older variants also continue, thus only positive presence of new variants diagnostic, and absence does not exclude MS. Obviously, then, need more diagnostic signs, and entire procedure not applicable to smaller fragments!

Entire concept of “Middle Hittite” language and script should be abandoned: results in serious confusion of history and language. New consensus that no “Middle Kingdom” existed, nor intrusion of foreign Hurrian dynasty. Rather, with Tuthaliya I succession of dynastic marriages with Hurrian wives led to sociolinguistic change, combined with military success that

began in Early New Kingdom, but arguably with one-generation timelag. Cf. beginning of Hittite Empire with Šuppiluliuma I, but he remained Early New Kingdom (aka “Middle Hittite”) speaker. Son Muršili II begins transition to New Hittite. Boundary between Old Hittite and “Middle Hittite” (recte Early New Hittite) problematized by almost total absence of documents from period between Telipinu and Tuḫaliya I. But landgrant documents from post-Telipinu kings show no traces of securely “Middle Script” sign shapes. Thus **tentatively** OH/OS lasts to (or through) Tuḫaliya I. Early New (Kingdom) Hittite (aka MH/MS) from Tuḫaliya I (or perhaps his son Arnuwanda I) through Šuppiluliuma I. In any case, to avoid misunderstandings, one should make both historical and linguistics claims **explicitly in terms of reigns of kings**.



Map 2: Anatolia in the Late Bronze Age (H.C. Melchert)

1. Šapinuwa (Ortaköy)
2. Šarissa (Kayalipınar)

## HITTITE WRITING

### Basics

1. Borrowed (with adaptations) from Mesopotamian cuneiform (name based on signs consisting of combinations of wedge shapes pressed into clay with a stylus or incised on various materials). As used by the Hittites, system is mixed syllabic-heterographic, similar to modern Japanese (with complication that heterographic component includes both Sumerian and Akkadian). For “heterographic” instead of mostly inaccurate “logographic” as cover term for Sumerographic and Akkadographic writing see Kudrinski-Yakubovich 2016 [#67] and below.

2. Syllabograms may represent V, CV, VC or CVC sequences. When spelling Hittite, they are transliterated as lower-case italics: *nam-ma* ‘then, next’, *a-ap-pa-an* ‘behind, after’, *nu-ú* (expression of approval). Words may also be written entirely Sumerographically or Akkadographically (by convention transliterated as Roman and italic capitals respectively): LUGAL.MEŠ ‘kings’ (nom. or acc. pl.), *IŠ-PUR* ‘sent’ (pret. 3 sg.). Only when one sign alone represents an entire Hittite word may they properly be termed logograms: GAM (Hitt. *katta/kattan*) ‘down; below’, *UL* (Hitt. *natta*) ‘not’.

3. Most often we find Sumerograms with Hittite “phonetic complements”: GE<sub>6</sub>-*iš* ‘dark, black’ (nom. sg. comm.). *GUL-ah-ta* ‘struck’ (pret. 3 sg.), *EGIR-an* ‘behind, after’ (NB the Sumerograms do not equate to either a Hittite word or morpheme, only a lexeme). We also find Sumerograms with Akkadian phonetic complements: DINGIR-LU<sub>4</sub>/LA<sub>12</sub>/LÌ ‘god’ (nom./acc./gen. sg.), *RA-IŠ* ‘struck’ (past participle). **NB: in Hittite contexts the Akkadian phonetic complement is not a reliable guide to the case of the Hittite word!** Less common are Akkadographic spellings with Hittite phonetic complements: <sup>LÚ</sup>*BE-LU<sub>4</sub>-aš* ‘lord’ (nom. sg.). Rare is a Sumerogram with both Akkadian and Hittite phonetic complements: DINGIR-LÌ-*iš* ‘deity’ (nom. sg.).

4. Since Sumerographic writing without complements does not mark case on nominals, the latter is usually marked with Akkadian prepositions (**but the functions in Hittite usage often do not match those of Akkadian!**): *ŠA* LUGAL ‘of the king’ (gen. sg.), *IŠ-TU É* ‘from the house’ (abl.). Note again that the Sumerographic part cannot be properly termed a logogram: it is the combination of Akkadographic and Sumerographic spelling that equates to the Hittite words *ḥaššuwāš* and *parnaz*.

5. Hittite writes left to right and leaves spaces between words, but note that “word” refers to a phonological word: enclitics cannot stand alone and are written together with the word that “hosts” them: *pé-di-iš-ši-ma* ‘but in his place’ (/pe:di:ssi:ma/ ‘in place-his-but’). NB that since in Sumerian and Akkadian modifiers follow their head noun, the word order in Hittite of noun phrases written heterographically without phonetic complements only partially follows that of the underlying Hittite. Cf. within a few lines of each other *A-NA URU-LÌ ŠA* <sup>m</sup>*U-uh-ḥa-LÚ* ‘to the city of Ūhha-ziti’ (Hittite *Ūḥḥazitiyaš ḥappiri*) vs. *u-ni ŠA* <sup>HUR.SAG</sup>*Aš-ḥar-pa-ya* <sup>URU</sup>*Ga-aš-kán* ‘that Kaskan of Mount Asharpaya’ (Hittite *uni Ašḥarpayaš Kaškan*). Since obvious possessive relationships are often not marked at all with Sumerograms, things may become quite complicated: *ke-e-el ŠA* NAM.RA.MEŠ *ŠA* KUR <sup>URU</sup>*Ki-na-ah-ḥa iš-ḥi-ú-ul* ‘the regulation of (= for) these deportees of the land of Kinahha’ (Hittite *kēl Kinahḥaš utneyaš arnuwalaš išḥiūl*)!

6. The semantic class of nouns is often marked with a prefixed (less often suffixed) Sumerogram. Since this stands for no phonetic reality in the Hittite represented, these are superscripted: e.g., GIŠ ‘wood’ for objects *mostly* made of wood: <sup>GIŠ</sup>BANŠUR ‘table’, <sup>GIŠ</sup>e-ya-an ‘yew tree’.

### Complications

7. Against earlier claims (including GrHL<sup>1</sup> §1.46, #37), there is now a broad consensus that so-called “plene writing”, CV<sub>1</sub>-V<sub>1</sub> **and** V<sub>1</sub>.V<sub>1</sub>C, marks synchronically only vowel length (with two limited special exceptions). Any relation to accent is indirect.

8. Many cuneiform signs are “polyphonous”, being used with more than one syllabic value or being used both as a syllabogram and heterogram. In some cases there is **no** obvious connection between the different values: the same sign may stand for *ri* or *tal* in Hittite syllabic spellings (the sign in *e-et-RI-* ‘food’ and *ḫa-at-TAL-lu-* ‘door-bolt’ is the same). Only knowledge of the underlying Hittite phrase (in context) tells us to read not phonetic *mi-i ki-i* but GE<sub>6</sub>-i KI-i (*dankui daganzipi* ‘dark earth’, dat.-loc. sg.).

9. Hittite scribes also invented new values on Akkadian models. In Akkadian certain signs could be read either as C<sub>1</sub>aC<sub>2</sub> or C<sub>1</sub>e/iC<sub>2</sub>: e.g., *pát/pít*, as in *pát-tar* ‘basket’ (also *pa-at-tar*), but *píd-da-* ‘to carry’ (also *pí-id-da-*). Hittite scribes thus also come to use the sign DIN not only for *tén*, but also for *tan<sub>x</sub>*: *dan-na-at-tan<sub>x</sub>* ‘empty’ (acc. sg. comm.). And there are examples of the opposite: *pár* being used for *pe/ir<sub>x</sub>*.

10. In addition to the well-known innovation of using the sign of GEŠTIN ‘wine’ as a syllabogram *wi<sub>5</sub>* based on their word /wiyan(a)-/ ‘wine’, Hittite scribes also use the sign E in the value [ja], a use not yet fully recognized: d.-l. pl. *ḫa-a-li-E-aš* of *ḫāli-* ‘pen, corral’ can only be read as *ḫa-a-li-ya<sub>x</sub>-aš* (thus correctly Kloekhorst 2008a: 272, #61). At least another half dozen examples are attested.

11. During the historical period of Hittite, Akkadian lost final *-m* (so-called “mimation”). New Hittite scribes thus begin to use *CVm* signs for just *CV*: *ú-e-TUM-un* = *ú-e-tu<sub>4</sub>-un* ‘I built’. Therefore, contrary to some claims, one cannot assume genuine geminate [-VmmV-] based solely on New Script evidence. Only Old Script evidence (or absolutely consistent geminate spellings) can determine whether a given word has a geminate /mm/ or not.

12. It is widely recognized that Hittite scribes often wrote personal and place names in their stem form (so-called “pseudo-Akkadographic spellings), either with Akkadographic prepositions *ŠA* <sup>m</sup>Šu-na-aš-šu-ra, ‘of S.’, *A-NA* <sup>m</sup>Šu-na-aš-šu-ra ‘to/for S.’ or *I-NA* <sup>URU</sup>Pa-aḫ-ḫu-wa ‘in(to) P.’ or after Sumerograms where a genitive reading is understood: DUMU <sup>m</sup>It-ti-i-li ‘son of I.’. Not sufficiently recognized is use with Hittite appellatives: *IŠTU* <sup>GIŠ</sup>lappa KÙ.BABBAR ‘with a silver scoop’, *nu* 2 <sup>NINDA</sup>zipinni *n=uš* ... *ašešanzi* ‘two z.-breads, they place them (APIC)...’ and 3 *warpuwa* ‘3 bathtubs’. Likewise the stem form stands for the nominative: (1) in lists where the latter is the “default” case (BABBAR *kappāni* GE<sub>6</sub> *kappāni* ‘white cumin, black cumin’ KUB 7.1 vs. *kappaniš* GE<sub>6</sub>); (2) in the inherited “naming formula”, which is an inserted nominal sentence ‘X (is) the name’. Cf. I.1 under nominal syntax. Such spellings have been wrongly taken as evidence for alternating gender and a non-existent “absolute” case.

## Hittite Phonology Outline

### Vowel Inventory

	Front	Central	Back
High	/i/, /i:/		/u/, /u:/
Mid	/e/, /e:/		/o/, /o:/
Low		/a/, /a:/	

#### Notes:

For all but /o/ and /o:/ both quality and length contrasts assured by minimal or near minimal pairs. Many changes affect the distribution of /i(:)/ and /e(:)/ in NH, but phonological contrast remains (most arguments of Melchert 1984 [#71] remain valid—some with non-trivial revisions).

Best synchronic & diachronic account of /o/ and /o:/ by Kloekhorst (2008a: 35–60, #61). Most instances of this vowel reflect conditioned changes of \**u/ū* or conditioned preservation of \**o/ō*. Evidence for synchronic contrast vs. /u/ and /u:/ is very limited, but exists: [so:wa-] (<šu-u-wa->) ‘to fill’ vs. su:wa-] (<šu-ú-wa-) ‘to push, reject’; pret. 1 sg. [-on] vs. acc. sg. comm. of *u*-stems [-un] (see Kloekhorst 2008a: 609 and Melchert 2020: 268–9, #82).

Hittite has contrastive short and long diphthongs [aj] and [a:j] and [aw] and [a:w] (Melchert 1984: 59–76 contra Kimball 1999: 80–81, #56), but spelling variation of long diphthongs complicates their identification.

Against Melchert 1984: 142–3 and 1994: 145-6 [#8] there is no Hittite phoneme /ɛ:/

### Consonant Inventory

	Labial	Dental	Palatal	Velar	Labiovelar	Uvular	Labiouvular
Stops							
Fortis	/p:/	/t:/		/k:/	/k <sup>w</sup> :/		
Lenis	/p/	/t/		/k/	/k <sup>w</sup> /		
Affricate		/tʰ:/					
Fricatives							
Fortis		/s/				/χ:/	/χ <sup>w</sup> :/
Lenis						/χ/	/χ <sup>w</sup> /
Nasals	/m/	/n/					
Liquids		/l/, /r/					

#### Notes:

The synchronic contrast of stops is “fortis” vs. “lenis”, which where present is implemented as long vs. short *voiceless* stops. See already Melchert 1994: 18 and Kloekhorst 2008:a 21–5 for the

length contrast. Kloekhorst (2016: 214–17, #5) and Yates (2019, #118) present arguments against voicing contrast and for long vs. short voiceless stops. First, intervocalic orthographic geminate stops close a preceding syllable (see already Melchert 1994: 147 and cf. Kloekhorst 2014: 545–6, #64). Second, pluractional *akkuške/a-* to *eku-/euk-* ‘to drink’ < \**eg<sup>w</sup>h-* suggests Hittite inherited the PIE synchronic rule of regressive voicing assimilation, but it may be a morphologized relic. Hitt. *nekuz* ‘of twilight’ < \*/*neg<sup>w</sup>t-s/* (not †*ne-ek-ku-uz*) cannot reflect the same rule (as in Lat. *noct-* [nokt-] ‘night’); similar problem with *šakuttai/āe* ‘hip(s)’ < \*/*sok<sup>w</sup>tōi*. Rather, synchronic length contrast neutralized before another stop. Third (with Kloekhorst 2014: 571–4,), Lyc. dat.-loc. pl. *ebette* = HLuv. *a-pa-tá<sup>n</sup>-za* ‘those’ shows that the result of gemination of a voiced (aspirated) stop by Čop’s Law (Čop 1970, #136) is also realized as [-tt-], thus surely also Hitt. *kappi-* ‘small’ < \*/*kombi-* via \*/*kobbi-* has synchronic [-pp-] (contra Melchert 1994: 20). Fourth, as per Pozza (2012: 270–72, #100), geminate stops after /r/ from prehistoric voiced (aspirate) stops can hardly be due to devoicing (even if the precise motivation for neutralization of the long stop is not entirely clear).

A Hittite affricate phoneme /t<sup>s</sup>:/ is assured: cf. *dalugašti* ‘in length’ with *āšzi* ‘remains’ (against Kloekhorst 2019, #66). Just as /sC/ becomes ambisyllabic at syllable boundary (/tis.ke-/ ‘step’ > [tis.ske/a-] spelled *ti-iš-ke-* and *ti-iš-ša-ke-* (Melchert 1994: 150–51, after Bernabé and Čop), likewise /e:t<sup>s</sup>.tu/ ‘eats’ > [e:t<sup>s</sup>.stu], spelled variously *e-ez-du*, *e-ez-za-ad-du*, and *e-ez-za-aš-du*.

The conditioned lowering of \**u/ū* to [o] and [o:] (Rieken 2005a: 539, #105 and Kloekhorst 2008a: 51–2) argues that the Hittite dorsal fricatives are uvular, not velar. See also Weiss 2016 [#21], but the internal evidence is more compelling.

Kloekhorst (2006a: 97–100, #4) argues compellingly that the spellings of Hitt. *tar-ḫu-zi/ta-ru-uh-zi* and *tar-uh-ḫa-an-zi* (sic!) (NB never just †*tar-ḫa-an-zi*) ‘to overcome’ show /tarχ:<sup>w</sup>-/ < \*/*terh<sub>2</sub>w-*, entirely parallel to *e-ku-zi/e-uk-zi* /ek<sup>w</sup>-/ ‘to drink’. Melchert (2011a, #76) argues that Hitt. *lāḫw-* ‘to pour’ likewise is /la:χ<sup>w</sup>-/ < \*/*lōh<sub>3</sub>w-*. Thus in both cases unitary labialized fricatives.

Kloekhorst (2008a: 29–31) argues eloquently that [j] and [w] are in complementary distribution with the respective vowels /i/ and /u/ and are thus best analyzed as mere conditioned allophones of the latter. Exception *ú-ra-a-ni* ‘burns’ [‘wra:ni] (thus with Rieken 2005a: 546 n. 51) is a lexicalized relic (perhaps even realized as a unitary rounded rhotic, as in English initial /r/).

#### Notable Consonantal Alternations

Assimilation: besides several consonant assimilations at clitic boundaries, NB unexpected (prehistoric) OH pluractional *ḫaššikke-* to *ḫanna-* ‘to judge’ and *taršikke-* to *tarna-* ‘to let’ vs. later regularized *ḫanneške-* and *tarneške-* (and others). Anaptyctic *-i-* is also real (against Melchert 1994: 150 et al.): see summary in Melchert 2012a: 178–9 [#78], following Oettinger 1979: 318–22 [#94] and Kimball 1999: 198–9 [#56].

Dissimilation: (1) *dt/tt* > *zt* (/t(:)t:/ > [t<sup>s</sup>t:]). OH remarkably preserves inherited rule, as in /‘e:t:t:u/ ‘let him eat’ > [‘e:t<sup>s</sup>.stu]. For spellings see above. (2) [w] > [m] both after and before [u]: in verbal stems in *-nu-* ([warnuweni] > [warnumeni] ‘we burn’ and likewise *-numen*, *-numar*, and *-numanzi*) and *au-/u-* ‘to see’ (*ú-me-(e)-ni* ‘we see’ and *a-ú-me-en* ‘we saw’); in acc. pl. comm. of *u-*stem adjectives (*idālamuš* ‘evil’ < [i’ta:law-o/us]), also *nemuš* ‘new’ < [‘new-o/us] and even in NH DINGIR.MEŠ-*mu-uš* ‘gods’ (= *šimuš* < [siw-o/us]).

Deletion: (1) real and not to be emended as scribal error is frequent non-writing of nasal before *heterosyllabic* stops and /t<sup>s</sup>:/ (recognized by Friedrich and Goetze). No way to determine whether



result is total loss or nasalization of preceding vowel (*mannikuwan* for *manninkuwan* ‘near’, *pagauwaš* for *\*pangawaš* ‘of all’, <sup>LÚ</sup>*šakunni* for <sup>LÚ</sup>*šankunni* ‘for the priest’, *zakilatar* for *zankilatar* ‘compensation’; *ḫu-u-ma-da-az* alongside *ḫūmandaz*, *ú-e-eš-ša-ta* with dupl. *weššanta* ‘they wear’, *išḫuzziyateš* for *\*išḫuzziyanteš* ‘belted’; *ḫu+u-it-ti-ya-zi* with dupl. *ḫu+u-it-ti-ya-an-zi* ‘they draw’, *ša-an-ḫa-zi* ‘they seek’, *ú-e-mi-ya-zi* ‘they find’). (2) Final *-r* was lost prehistorically in final position after an unaccented vowel (Neu 1982 [#93], Melchert 1988 [#72], Yoshida 1990: 108–12, #119), whence OH present medio-passive endings without *-ri* (then renewed) and also archaic nom.-acc. neut. plurals: *paprāta* ‘acts of impurity’ beside singular *paprātar*, etc. (3) A prehistoric loss of intervocalic *\*y* is still reflected in the Old Hittite oblique forms of *i*-stem adjectives such as gen. sg. *šallaš* < *\*šallayaš* (Melchert 1984: 44–5, but already seen by Sommer), renewed as *šallayaš* etc. after the matching pattern in the *u*-stems (*-u-*: *-awa-*: *-i-*: *-aya-*); also explains older *nēa-* ‘to turn’ with hiatus, mostly renewed in NH by reinsertion of yod: *nēya-*.

#### Accent

No systematic treatment possible here. See the impressive and encouraging degree of convergence between Kloekhorst (2014, #64) and Yates (2015, #22) and (2017, #117) regarding **synchronic** surface accent in Hittite, but much remains to be accounted for. Clearly some examples of mobile accent, both in the noun (nom.-acc. sg. *tēkan* [‘te:kan] ‘earth’ vs. gen. sg. *taknāš* [tak‘na:s], d.-l. sg. *taknī* [tak‘ni:] ‘in/on the earth’, and *t/dagān* [ta‘ka:n] ‘on/to the ground’) and the verb (*ēšzi* [‘e:st̪:i] ‘is’ vs. *ašanzi* [a‘sant̪:i] ‘are’, and *ašānt-* [a‘sa:nt-] ‘being’ < *\*h<sub>1</sub>ésti*, *\*h<sub>1</sub>énti* and *\*h<sub>1</sub>sónt-*). For the latter see Oettinger 1979: 86–98 and cf. Kloekhorst 2014: 650 and Yates 2015: 166, all in full agreement on the accent.

## Hittite Nominal Morphology

### 1. Nominal Stem Formation

Mostly still valid for synchrony is GrHL<sup>1</sup> Chapter 2. But NB following revisions/additions:

(1) Beside neuter stems in *-ēššar*, *-ēššn-* there is a type in *-e/iš*, *-e/iššn-*: see Rieken 1999: 386–404 [103] and Melchert 2012a [#78]. E.g., *takšeš*, *takšeššn-* ‘assemblage’ < *takš-* ‘to fit together’; *ḫaḫriš*, *ḫaḫriššn-* beside *ḫaḫri-* ‘lung’.

(2) There is also a rare previously unrecognized type of neuter stem in *-ēz(zi)*, *-ēzn-*: see Oettinger 2016: 320[#97], elaborated in Melchert 2021: 380–1[#83]. E.g., *ḫaššu(w)ēz(zi)\**, *-ēzn-* ‘kingship’ (LUGAL-(u)e/ēzzi, LUGAL-(u)e/ēzn-)

(3) The ethnic suffix actually shows an original OH threefold allomorphy *-ūma-*, *-ūmen-*, *-ūm(m)n-* (for divergent historical accounts see Oettinger 2003[#95] and Rieken 2004[#104]): NSgComm *-ūmaš*, NPIComm *-ūmeneš*, D-LSg *-ūmni*. Same original allomorphy in the noun *kutruwaš*, *kutruweneš* ‘witness’.

### 2. Nominal Inflection

#### A. Gender

(1) Hittite has only a twofold contrast in grammatical gender, common and neuter. Most alleged cases of gender alternation are non-existent. First, almost all supposed neuter variants of common gender nouns are merely spellings of the stem form (“pseudo-Akkadographic”): cf. 12 under Hittite Writing. Second, with Melchert (2000: 62–67[#73]) following Eichner 1985[#28], OH attests collective plurals beside count plurals in common gender nouns: e.g., *kalmara* beside acc. pl. *kalmaruš* ‘beams, rays’, *gul(a)šša* ‘fate’ beside <sup>d</sup>*Gul(a)ššeš/Gul(a)ššuš* ‘the Fates’. Conversely, to express count plurals to neuters OH uses the endings *-eš/-uš*: *luttaēš/luttauš* ‘(individual) windows’ to *luttāi-* ‘window’. Genuine gender alternation is very rare: NH shows neuter *memiyan-* ‘word’ beside common *memiya(n)-*, and *ištaman(a)-* ‘ear’ attests both neuter and common gender variants.

(2) As in other IE languages, grammatical gender in Hittite has only a partial correlation with semantic animacy of the referent. E.g., body parts may be common or neuter, and humans and animals, while usually common, are as collectives usually neuter, due to the grammatical gender of the relevant suffixes: *antuḫšātar* ‘people, humanity’, *ašeššar* ‘assembly’ (but ÉRIN.MEŠ-*t-* ‘troops’ is common gender). Against Starke (1977: 122–6[#114]) et al., there is **no** basis for “animacy” as a grammatical feature in Hittite (cf. GrHL<sup>1</sup> §3.7): location is expressed in OH by the dative-locative for both inanimate and animate referents (GrHL<sup>1</sup> §16.72), as is removal from (§§16.68–69); *attaz* in OH/OS preceding *ḫuḫḫa[ ]* (KBo 20.31:1) cannot be anything except a form of ‘father’; the instrumental expresses the comitative with persons: *takkuššan akkantit tianzi* ‘If they have sex (lit. step) with a dead person’ KUB 29.34 iv 11 (OH/NS, Laws §190). Claims that the GenPl ending *-an* is never used with inanimate referents is falsified by *patān=za*<sup>GIŠ</sup>GÌR.GUB ‘footstool’ KBo 20.8 i 19 (OH/OS).

#### B. Number

As per 2.A (1) above, OH has collective beside count plurals. Evidence from NH compositions suggests that this feature had been lost by NH. For various uses of *-ant-* as an “individuating” marker see below 2.C (1).

## C. Case

(1) For arguments for the use of a suffix *-ant-* to mark agentive function and against claims that it has animatizing force see Melchert 2011b: 162[#77] and Goedegebuure 2018: 83–4[#35] (UN.MEŠ-*annanza* < *antuḫšatar* ‘population, inhabitants’). Nor is it “activizing”, since neuter nouns may be subjects of intransitive action verbs (GRHL<sup>1</sup> §3.9 and Goedegebuure 2018: 94–5): *ašeššar šarā tiyazi* ‘the assembly stands up’, [É-*r*]i-*kan anda āššu paidu* ‘let good enter the house!’. Against its being “personifying” in forms of address see Goedegebuure 2018: 94–100: beside voc. sg. *pētanti* to neuter *pēda-* ‘place’ we also find *aiš* ‘mouth’ and *wappu* ‘riverbank’. Individuation and agency often correlate crosslinguistically. Use of *-ant-* to enable **grammatically** neuter nouns to serve as subjects of transitive verbs may thus properly be termed “ergative”. However, as argued in full by Goedegebuure (2018), this alone does not assure an ergative **case**, and a thorough review of the facts suggests that full grammaticalization occurs only in NH (likely post-Muršili II). Evidence against this in OH and MH is plentiful: (1) individuating *-ant-* is not restricted to use with subjects (*kištanti* ‘through the famine’ vs. preceding *kāšza* ‘(a) famine’ or 9-*andaš ḫappešnaš šer* ‘on (his) nine individual members’); (2) *-ant-* also appears on common gender nouns as agents (*linkiyanteš* ‘the oath(-god)s’ in the role of pursuers < *lingāi-* ‘oath’); (3) *-ant-* occurs with intransitive subjects (*kāšš=a=za URU-az parnanzašša* [U]DU.A.LUM DÜ-*ru* ‘let both this city and house become a ram!’—*ḫappiriya-* ‘city’ is also common!). Also crucial to Goedegebuure’s argumentation is the role (since MH) of a competing means of individuation and hence also agent function on neuters (2018: 95–103): thematization with *-a-* to produce a nom. sg. in *-aš* (cf. variant *kāšš=a=za URU-aš parnašša* [U]DU.A.LUM DÜ-*ru*, but also *ḫardu=ma=at ŠA DUMU.NITA NUMUN-aš* ‘let the seed/progeny of his son keep it!’, to neut. *warwalan-*). Post-Muršili II, the spread of *-aš* in both uses restricts *-ant-* (sg. *-anza*, pl. *-anteš*) to only providing agentive forms to neuters and thus a full ergative case.

(2) As per Frantíková (2016 [#31]), in *i*-stems the D-LSg ending *-iya* marks both beneficiary and location (cf. GrHL<sup>1</sup> §3.14 n. 24, but totally overlooked §3.24!): (*ANA*) *ḫalkiya* ‘to/for Halki’, *šaniya šiwat* ‘on the same day’. With Starke (1977: 28 & 32 [#114]) it also marks goal: *zēriya allapahḫanzi* ‘spit into the fired cup’. Frantíková also refutes entirely the alleged post-OH spread of *-iya* beyond its OH usage. Restriction of this multiple use of the allative ending just to *i*-stems awaits a full explanation.

(3) More evidence now confirms that Hittite preserves traces of a NPIC ending *-aš* in *a*-stems < PIE thematic *\*-ōs*: *muriyalaš* ‘grape clusters’ in KBo 17.3+20.15+KUB 43.32 iii 27 (OH/OS) with Kloekhorst (2010: 16 [#63]), supporting [*ḫante*]z*ziyaš* ‘first, older’ in KBo 22.2 obv. 18 (OH/OS) and <sup>LÚ.MEŠ</sup>*gaenaš=še/iš* ‘his relatives’ in the Telepinu Edict KBo 3.1 i 3, 14, 25, and ii 41 (OH/NS), with Kammenhuber 1965: 216 n. 129 [#53]).

(4) Hittite has both neuter vocative singulars (Goedegebuure 2018: 94–100; see 2.C (1) above) and common vocative plurals (Sideltsev 2021: 533–4 [#111]), proven by syntax, though as elsewhere in IE languages, they are formally indistinguishable from the NomPl.

(5) Goedegebuure (2019 [#36]) reaffirms that the OH GenPl ending *-an* marks in fact **only** plural, never singular, against Kloekhorst (2017 [#65]).

### 3. Pronominal Inflection

A. Enclitic possessive pronouns (more properly adjectives) never develop dedicated ablative forms. In OH and MH where they are still in use, the instrumental forms in *-i/et* serve suppletively for the ablative. Likewise, the N-ASgNeut forms in *-e/it* serve for the N-APINeut. On the problem of the interchange of variants in *-it* and *-et* see Melchert 2009a [#74] with refs. (correcting earlier work). NH scribes in whose own speech enclitic possessives were moribund misunderstood the suppletion and falsely spread *-i/et* to the VocSg and D-LSg, a usage that never existed in the speech of any period (Ottén 1973: 55 [#99] and Melchert 1977: 259–62 [#70] against all others). As seen by Francia (1995 [#30]), OH *ištarni=šummi* ‘between us’ in dialogic contexts was misunderstood by NH scribes, who use it even in new compositions as a fixed phrase ‘mutually’ applicable to first, second and third person.

B. Goedegebuure (2014: 99–117 [#34]) has fully confirmed earlier claims of Laroche and Pedersen that *aši*, *uni*, *eni* and variants comprise a **single** paradigm that functions as the marker of distal (far) deixis in Hittite, as part of a three-way system with *kā-* ‘this’ (speaker deixis) and *apā-* ‘that’ (addressee deixis). Beginning in MH, we also find a demonstrative stem *anna/i-* that marks non-proximal deixis. Despite not (yet) being attested in Luvian, there is consensus that this deictic pronoun is a loanword from Luvian: Kloekhorst 2008a: 173–4, Melchert 2009b: 152 [#75], and Goedegebuure 2014: 218–19. Competing with native *aši*, *anna/i-* is productive in NH only in marking non-proximal temporal deixis: *annišan* ‘formerly’, *annalla/i-* ‘former, of old’.

C. Also a loanword from Luvian is the universal quantifier *dapi(t)-* ‘all, entire, every’ and its extended form *dapiant-*, as demonstrated by Oettinger (2006: 1329–32 [#96]), against Kimball (2016 [#58] with totally illicit emendations) and Bauer (2020: 60 [#2]).

D. Much debated are the word class and meaning of the derivatives of demonstratives *kāša*, *kāšatta/kāšma*, *āšma*. I contend they are best taken as traditionally: attention-seeking interjections ‘look here!’ and ‘look there!’, **but** often not best translated thus (or at all). In their most frequent, dialogic contexts their function is to insure that an interlocutor is paying close attention, whether they are human (ritual client, correspondent, oath taker) or divine (in rituals and prayers). Outdated is claim of Hoffner (1968 [#38] and GrHL<sup>1</sup> §§24.27–30) that *kāša* and *kāšatta/kāšma* mark “present relevance”—correlation is correct, but epiphenomenal. With Rieken (2009 [#107]), they have deictic force, speaker- and addressee-oriented respectively, as illustrated in following (Mašat Letter HKM 2 from king): ŠA ANŠE.KUR.RA.HI.A=mu kuit uttar ḫatrāeš n=āšta kāšma ANŠE.KUR.RA.HI.A karū parā neḫhun n=an=za=kan menaḫḫanda au ŠA ŠEŠ<sup>m</sup> Himu-DINGIR-LI=ma kuit uttar ḫatrāeš n=an=kan kāša parā neḫḫi ‘As to the matter of the horses that you wrote me about, I have already sent the horses. See them coming towards (lit. opposite) you! But as to the matter of the brother of Himuili that you wrote me about, I am sending him (momentarily/as I speak).’ In OH *kāšatta* has the force of *kāšma*. All agree that *āšma*, which should mean ‘look over there!’, in most instances (arguably all) has a negative “dissociative” effect, marking something as unwanted by the speaker or addressee (see Hoffner 2002–2003 [#41]): *āšma=tta armaḫḫun* 𐎠IŠKUR-nit nakkīt ‘(Beware,) I have impregnated you with the mighty Storm-god’.

## Hittite Verbal Morphology

### 1. Stem Formation

Major revision vs. GrHL<sup>1</sup> lies in *mi*-verbs with stems said to be in “-*e/a*”. Synchronic class reflects at least six historically different sources, but mutual influence has obscured inherited situation. Very limited current attestation in OH/OS justifies just three synchronic types: purported distinctions based only historical hypotheses unjustified (e.g., GrHL<sup>1</sup> §§12.21–22 [#37] and Kloekhorst 2008a: 119–20 [#61]). Only one of these actually has descriptive -*Ce/a*- allomorphy.

#### (1) *mi*-verbs with stems in -*Ce/a*-:

As is the case with the suffixes -*ye/a*- and -*ške/a*- (see GrHL<sup>1</sup> §§12.28–34), even the OH distribution of the -*e*- and -*a*- variants within the paradigm is not assured, but -*e*- in the Pres. and Pret. 3 Sg. and -*a*- in the Pres. 3 Pl. and participle seem reasonably certain (exx. in boldface are OH/OS): ***arūwezzi*** ‘becomes free’, ***lukkezzi*** ‘sets fire to’, ***šuwezzi*** ‘rejects’, ***tayezzi*** ‘steals’; *kappuwēt* ‘took account of’ (OH/MS), *šuwet* ‘rejected’ (MH/MS); *kappuwanzi*, *lukkanzi*, *šuwanzi*; *kappuwan*, *kappūwanteš*, *kappūwantaš*, *lukkan*, *lukkanduš*, *šullant/da* ‘(being) arrogant’ (no -*e*- variants occur in Pres. 3 Pl. or participle).

(2) *mi*-verbs with stems in -*Ce/u/a*-: these differ from the preceding class in having an allomorph -*Cu*- in the Pres. and Pret. 1 Pl., the verbal noun and the infinitive, which then triggers dissimilation of -*Cuw*- > -*Cum*-. Against GrHL<sup>1</sup> §§12.21–22 it is **not** at all certain that all attested stems have the same historical origin, nor that the -*Cu*- allomorph is necessarily the older variant in all of them. The partial paradigm of *uwate/a*- ‘to lead hither, bring’ (almost exclusively of humans and animals) is illustrative:

Present Indicative		Preterite Indicative	
Singular	Plural	Singular	Plural
<i>uwatemi</i>	<i>uwateweni</i> , <i>uwatewani</i> , <i>uwatummēni</i>	<b><i>uwatenun</i></b>	<i>uwatewen</i>
<i>uwateši</i>	<i>uwatetteni</i> , <i>uwatettani</i> , <i>uwadatēni</i>	<i>uwatet</i>	
<b><i>uwatezzi</i></b> , <i>uwatezi</i> , <i>uwadazzi</i>	<b><i>uwatanzi</i></b> , <i>uwadanzi</i>	<b><i>uwatet</i></b>	<b><i>uwater</i></b> , <i>uwatēr</i>

#### (3) *mi*-verbs with stems in -*Ci/u/a*-:

This class has not been properly distinguished from the preceding, but overwhelming use of the unambiguous <ni> sign compels reading /i/ vocalism in three of four cases, and the *hi*-conjugation variant Pret. 3 Sg. *hulliš* only makes sense if the regular Pret. 3 Sg. was *hullit*. Synchronic existence of the class is independent of the historical explanation of the /i/ vocalism. Attested forms of *hulli/a*- ‘to defeat, contravene’ and *zinni/a*- ‘to finish, put an end to’ will suffice for illustration (NB the less than regular distribution of -*i*- and -*a*- just like that for -*e*- and -*a*-): *zinnami*; ***hullaši***, *zinniši*; ***hulli/azzi***, *zinnizzi*; ***zinnaweni***, *zinnumēni*; *hullatteni*, *zenatteni*; *hullanzi*, ***zinnanzi***; ***hullanun***; ***hullit***, *zinnit*; *hullumen*; *hullir zinnir*; *hulladu*, *duwarnadu*; *duwarnandu*. These verbs tend to become *hi*-verbs in -*a*- in NH (for one account of which see Melchert 2022a: 107–11 [#84]).

## 2. Verbal Inflection

Aside from very minor details, the verbal endings of Hittite remain those long established. The assertion of Kloekhorst (2010: 18 [#63]) that NH tends to merge the *mi*- and *hi*-conjugations is a gross exaggeration—several major classes show only extremely sporadic interference. But fully justified is his criticism of presentation in GrHL<sup>1</sup> §§11.10–16: **systematic** changes from OH to NH must be recognized and distinguished from sporadic interference. Some of the former are presented here:

### *mi*-conjugation

(1) Pres. 2 Sg. ending *-ši* is replaced by the *hi*-ending *-ti* in stems ending in a **consonant**: *ēpši* ‘you take’ → *ēpti* etc.

(2) Pret. 2 Sg. *-š* in stems ending in a **vowel** is replaced by *-t*, merging with the Pret. 3 Sg. ending *-t*: NH *šulliyat* vs. *iyas* (MH/MS) and NH *tittanut* vs. *paḥšanuš* (OH/OS).

### *hi*-conjugation

(1) *hi*-verbs with stems ending a stop or *-h* replace it with *-mi*: *šalikmi* ‘I penetrate’, *ākmi* ‘I die’, *naḥmi* ‘I take fright’.

(2) There is no pres. 3 sg. *hi*-ending †*-ai* (correctly Kloekhorst 2010: 19 contra GrHL<sup>1</sup> §11.13). Rather, stems ending in a consonant shift at least in part to the class of *hi*-verbs in *-a-*, and we thus find NS *ārrai* for *ārri* ‘washes’, *mallai* for *malli* ‘grinds’, *šipandai* for *šipanti* ‘libates, offers’, *waštai* for *wašti* ‘sins’, etc. This also applies to *lahūwai* for *lāhui* ‘pours’, since the latter is [‘la:χ<sup>w</sup>-i] with a stem-final labiouvular consonant. Likewise, as per Kassian-Yakubovich (2002: 42 [#54]), there is no Pret. 3 Sg. ending †*-aš*: MH/MS examples such as *šipant/daš* ‘libated’ and *ištappaš* show merely the same shift to the stem class in *-a-*.

(3) As per Melchert (1994: 148 [#8]), after an insight of Warren Cowgill, in OH *hi*-verbs with stems in *-ai/e/i-* have a **long** diphthong *āi* **only** in the Pres. 3 Sg. of monosyllabic stem, where it results from a prehistoric contraction: Pres. 3 Sg. *pāi* ‘gives’ but Inv. 2 Sg. *pai*; Pres. 3 Sg. *dāi* ‘puts’ but Pret. 3 Sg. *daiš*. Likewise we find only *-ai-* in other paradigm cells in OH. Largely preserved in MH/MS, but sporadic spread of *āi* begins to appear: *dāiš* and *piddāiš* ‘ran’. While a few exx. with a short diphthong are attested in NH, the spread of *āi* outside the Pres. 3 Sg. becomes the norm: Inv. 2 Sg. only *pāi* and Pret. 3 Sg. *pāiš* beside older *paiš*. The verb *nai-* ‘to turn’, which shows only short *nai-* outside Pres. 3 Sg. *nāi* in MH/MS, has almost entirely *nāi-* in NH.

(4) Noticed but underappreciated has been the fact that **all** classes of **polysyllabic** *hi*-verbs regularly have a **short** diphthong in the Pres. 3 Sg. in OH: *pēdai* ‘carries off’, *udai* ‘brings’, *šunnai* ‘fills’, *tarnai* ‘lets go’, *āppai* ‘is finished’, *mēmai* ‘speaks’, *(i)yannai* ‘starts in motion’, *ḫalziššai* ‘calls’. This prehistoric shortening of *-āi* when **unaccented** begins to be undone rarely already in OH/OS: *ḫuttiannāi*, *tarnāi*, and *ḫalziššāi* in immediate succession beside *ḫuttiannāi* (KBo 17.43 i 11) vs. expected *tarnai* *ibid.* i 3. This “restoration” of *-āi* by analogy to monosyllables spreads greatly in NH, though *-ai* does persist.

(5) In stems ending in a stop, *-šš-*, or *-h(h)-*, Inv. 3 Sg. *-u* gives way in NH to the *mi*-ending *-(d)du* (*t:u*): *akdu*, *ḫašdu*, *kūruriyaḫdu*, *šakdu*.

### 3. Medio-Passive Inflection

(1) Finding of (Yoshida 1990: 95–102 [#119]) remains valid: OH present indicative m.-p. endings lacked *-ri* except in type in *-āri* < *\*-ōri*, whence mostly restored in MH and NH; but preterite endings ending with *-ti* lost the *-i*. With (Neu 1968a: 34 [#91]), motivation for both was to align m.-p. with active in having *-i* in present and none in preterite.

(2) Despite appearance only in NH, *kuenati* ‘was killed’ must be archaism: NB *-i* and use of ending *-ati* without *-tt-* (cf. (4) below!). Also confirms that distribution of m.-p. endings with and without *-tt-* **unrelated** to contrast of active *mi-* and *hi-* conjugations.

(3) Against GrHL<sup>1</sup> §11.17 and Yoshida (2016b: 366 [#121]) rare Pres. 3 Sg. ending *-atta(ri)* exists (Melchert, forthcoming a [#87]): assured in atelic *weh-<sup>atta(ri)</sup>* ‘to spin; roam (etc.)’ vs. telic *weh-<sup>ta(ri)</sup>* ‘to happen; pass (away)’ and thus likely also in *parh-<sup>atta(ri)</sup>* ‘to chase’.

(4) Against Yoshida (2016a: 499, 501, [#120] and *passim* and 2016b: 362–3), **no** MH/NH **passive** forms in *-tta+* are formal renewals of OH transitive media tantum, but are all new passives to the active verbs that have replaced the OH “deponents”: *hannata[t]* ‘was judged’ to *hanna-<sup>i</sup>* ‘judges’ and EGIR-*pa huittiyattat* ‘was renewed’ (lit. ‘was dragged (out) again’) to *hue/ittiya-<sup>mi</sup>* ‘draws, pulls’. **All** NH transitive actives form passives with endings in *-tta+*.

(5) **All** OH transitive media tantum are renewed by actives in NH and most already entirely replaced. Against Yoshida (2016a: 506–7) no correlation between OH transitive m.-p. *-ari* and renewal by active *hi-*verbs. Two real patterns: first, stems in *CaCCa-* **are** renewed as active *hi-*verbs in *-ai*, **regardless** of the OH Pres. 3 Sg. ending: not only *hanna-<sup>a(ri)</sup>* ‘sues; judges’ and *hatta-<sup>a(ri)</sup>* ‘pricks, slits’, but also *šarra-<sup>ta(ri)</sup>* ‘transgresses’. Second, stems in *-ya<sup>ta(ri)</sup>* or Pres. 3 person in *-ya<sup>(ri)</sup>* join the expansive active type in *-y(e)a-*: not only *wešiya-<sup>ta(ri)</sup>* ‘pastures’ and *zahhiya-<sup>ta(ri)</sup>* ‘fights’, but also *huett(i)-<sup>a(ri)</sup>* ‘draws, pulls’ and *parš(i)-<sup>a(ri)</sup>* ‘breaks in two’.

(6) Purely formal renewal of *-a(ri)* by *-tta(ri)* as claimed by Yoshida is extremely limited: OH Pres. 3 Sg. *halziya(ri)* ‘is called’ expectedly becomes *halziyattari* (see 4 above); autocausative *nē(y)a<sup>(ri)</sup>* ‘turns (intr.)’ persists to end of Hittite, but is often renewed as *nēyatta<sup>(ri)</sup>*; anticausative *lagāri* ‘topples’ is replaced at least once by *lagāittari*.

(7) As per Inglese (2020: 268 [#48]), against previous claims, core of OH m.-p. are media tantum expressing spontaneous change of state events (*kiš-* ‘to happen; become’, *kištanziya-* ‘to become famished’, *lukk-* ‘to grow bright’, *marri-* ‘to stew (intr.)’, *tuhhuš-* ‘to come to an end’, *wr-* ‘to burn’, *zē(ya)-* ‘is cooked done’). Those for states and changes in bodily posture, translational motion and emotions exist (the last against Inglese 2020: 269, but NB are not subject controlled: *lēlaniya-* ‘to become angry’, *nahšariya-* ‘to take fright’), but not for verbs of perception (correct Inglese, loc. cit.). Oppositional medio-passives for “direct reflexives” (e.g. ‘to wash/adorn oneself’), reciprocals, and passive are present, but marginal, while “indirect reflexives” (e.g. ‘to take for oneself’) are lacking. Beginning in OH but expanding thereafter, use of the “reflexive” particle *-za* marking “subject affectedness” first reinforces the m.-p. for “direct reflexives” and reciprocals, but then tends to give way to active plus *-za*. On the other hand, (see both Inglese 2020: 270 and Melchert forthcoming a) use of the passive expands markedly. See Inglese 2020: 270 and Chapter 3 for arguments that the media tantum are the original core of the m.-p. and that the oppositional functions develop from them, with anticausatives being pivotal.

## Hittite Syntax (Selected Topics)

### I. Nominal Case Syntax

1. Nominative case is the “default” case in Hittite: it thus often appears in lists and in “hanging topics” even where the underlying syntax calls for an object case (which also is used in both contexts). Despite repeated claims, there is no *casus absolutus*, *indefinitus*, *commemorativus* or *cas onomastif* with a zero ending. These are instances of spellings with the stem form (see Hittite Writing 12). This includes the so-called “naming formula”, an inserted nominal sentence, which also shows the expected nominative: *namma=kan ANA* <sup>d</sup>IM *manuzziya kuiš TI*<sub>8</sub><sup>MUŠEN</sup> *GUŠKIN ŠUM=ŠU Eribuškiš* *GEŠTU-ni=kan neyanza n=an=ši=kan arḫa danzi* ‘Furthermore, the eagle of gold—its name is Eribuski—which is turned towards the ear of (the statue of) the Storm-god of m., they take away it away from him’ (see Patri 2007: 67–8 [#16] for more exx. but wrong analysis!). With Zeilfelder (2001 [#122] and 2014: 208 [#123]) the only true syntactic use of the stem form is in the VocSg.

2. On the syntax of the vocative see Sideltsev 2021 [#111] and for theoretical aspects 2023 [#112], showing that vocatives appear initially, medially, and finally. Appositional direct address occurs, but far less often than claimed in GrHL<sup>1</sup> §§16.16–16.17.

3. Against multiple claims, the ASg in OH with *huwai-* ‘to go, walk (sic!)’ does not express goal, but is an idiom for ‘to go around, circle’: *ḫaššan=kan 1-ŠU [(huwāi)] mān=ašta LUGAL-i NIN.DINGIR-aš ḫandāētta* ‘She (the N.D-priestess) goes around the hearth once; when the N.D-priestess draws even with the king...’. See correctly Goedegebuure 2014: 281–2 [#34]. Likewise with the king and queen as object (KBo 17.1 i 3’, OH/OS).

4. The misnamed “accusative of direction” in OH actually marks a goal (as it does in PIE). With elimination of the only alleged example with animate referents (see 3 above, end), it occurs just three times, always with inanimate referents, just like the allative, which has mostly replaced it. Despite persistent unjustified doubts, the case marking direction toward is the ablative (see Melchert 1977 passim [#70] after Goetze and Garstang-Gurney), which marks direction from and toward and relative location: *kunnaz* ‘from/to/on the right’.

5. As already in GrHL<sup>1</sup> §§16.68–16.69 (but still not always acknowledged), already in OH/OS the “dative of disadvantage” used of persons from whom something is taken is extended to use of the D-L to express removal from a place, competing with the ablative: *[(irm)]a(n)=šmaš=kan dāḫḫun kardi=šmi=ya=at=kan dāḫḫu[n (ḫarša)]ni=šmi=ya=at=kan dāḫḫun* ‘I have taken the sickness from you. I have both taken it from your heart(s) and taken it from your head(s)’. The usage continues through MH and NH.

6. The D-L is the regular case of the comparandum in the comparative use of adjectives: *iški<š>=šet=ašta iškiši GAL-li [paltan]aš=šiš<sup>1</sup>=a(š)ta palta[n]ī šalliš* ‘his (the ritual substitute’s) back is large(r) than (his, the ritual client’s) back; his shoulder is large(r) than (his) shoulder’ (part of a long set of such clauses, OH/NS). Very attractive is suggestion of Cotticelli-Kurras (2000: 38 [#24]) that the comparative with the dative-locative reflects its use instead of the ablative to express separation (see 5 above), supported by use of *-(a)šta*. This also accounts for solitary instance (in *same* passage) of ablative instead: *kapru=ššet=ašta kapruaz GAL-li* ‘his *kapru* is larger than his *kapru*’ (hyperclection by NH copyist, based on knowledge of OH use of D-L where he would use ablative).



## II. Pronominal Syntax

1. Third person subject clitics never occur in sentences with **transitive** verbs with or without explicit direct objects (Garrett 1990 [#32], following Watkins). This fact allows one to decide the function of several inconveniently homophonous enclitic pronouns: (1) OH NPIComm and N-APINeut *-e* (*t=ēšta pānzi* and *n=ē zanuānzi*); (2) NH NPIComm and N-ASg./Pl.Neut *-at* (see text sample); (3) NSgComm and APIComm *-aš* (see text sample).

2. For the phonological ordering of enclitic pronouns based on maximizing onsets and avoiding hiatus see independently Widmer (2012: 330 [#116]) and Agbayani and Golston (2012: 9–10 [#23]). For the incompatibility of those in “Slots 2 and 4” (GrHL<sup>1</sup> §30.19) as reflecting a crosslinguistically established constraint hierarchy see Widmer 2012: 327–9. For an account in terms of the Person Case Constraint see Lyutikova and Sideltsev 2020 [#69]: the gist in 29–36 and a fully elaborated formal analysis 37–75.

3. For all syntax of the Hittite demonstrative (deictic) pronouns see Goedegebuure 2014 [#34]: Chapters 3–5.

4. On the (probable) use of *kā-...kā-* to mark reciprocals and its more assured alternatives, as well as a complete review of *all* reciprocal constructions in Hittite see Inglese 2017 [#47].

## III. Syntax of Determiner Phrases

A. Basic word order: Demonstrative+Number+Attributive Adjective+Adnominal Genitive + Head Noun. Evidence: *apāt karuwili tallayaš* Ĭ.DÛG.GA ‘that old fine oil of the *t.*-vessel’; *apēdani ŠA* <sup>f</sup>*Danuḫepa* DUMU=ŠU *ḫarganaš memini* ‘in that matter of the ruination of the son of D.’; *kāš* 6 ME ÉRIN.MEŠ ‘these six hundred troops’; 2 GAL *laleš* ‘two large tongues’.

B. With Rieken (2017 [#110]) adjectives may be attributive, “depictive”, or predicative. Against previous claims, participles and adjectives in *-want-* behave like other adjectives: <sup>URU</sup>*Iyaruwattan=ma* URU-*an* *dannattan purut* ‘the city I. as empty soil/earth’ (restrictive, a defining quality) vs. *nu=mu=kan* ŠEŠ=YA *kue kī* KUR.KUR.ME.EŠ *ḫdannatta* ŠU-*i* *dāiš* ‘These lands that my brother put into my hand empty/unpopulated’ (condition when given). Likewise then with participles: *kīy=ašta* *warān pahhur* ‘this burning fire’ vs. [*g*] *aggapan zanuandan tianzi* ‘They set out a *gaggapa*-animal, cooked’. And with adjectives in *-want-*: *wēššanda=ma* *išharwantuš* TÛG.HI.A-*uš* ‘they are wearing bloodred/blood-stained garments’ (defining feature of the *ḫantašepa*-deities) vs. [(*mā*)]<sup>MUSEN</sup> *ḫaranan ḫušuwandan appanzi* ‘If/whenever they catch an eagle alive’.

C. The universal quantifiers *ḫūmant-* and *dapi(ant)-* ‘all; whole, entire’ (less often ‘each, every’) regularly follow their head noun. Against GrHL<sup>1</sup> §17.7, the use with body parts is not exceptional (Rieken 2014: 165 [#109]). In ordinary contexts we find expected [N]Í.TE=ŠU *ḫūman* GIM-*an* ‘like his entire person’, *ANA* LUGAL MUNUS.LUGAL NÍTE-*aš=šaš* *ḫūmantaš* ‘all the body parts of the king and queen’. Rieken (loc. cit.) notes that exceptional preposed examples are concentrated in therapeutic rituals and other religious contexts and attributes the usage to Luvo-Hurrian influence, but concedes that the word order in the plausible source languages is also

Noun+Quantifier. Melchert (2023: 162–5 [#86]) argues that the force of the preposed is intensifying and its preponderant occurrence in *dialogic* contexts of rituals and prayers is a genre effect, citing the near-minimal pair of NUMUN.ĤI.A ‘every (kind of) seed’ in ritual descriptions with the *nu hūman* NUMUN *dā* ‘take absolutely every (kind of) seed!’ (leave nothing behind) in a plea to the Sun-god to take an offering in exchange for the ritual client. This contrast likewise applies to body parts: ‘Let my god open his insides and soul to me with his *entire* heart (*hūmantet kardit*)!’ (hold nothing back).

#### IV. Clausal Syntax

1. Against GrHL<sup>1</sup> §27.6 following others, Goedegebuure (2009 [#33]) and Huggard (2011 [#46]) independently show that Hittite does *not* have “overt *wh*-movement,” but is rather an “in situ” language, where a functionally “unmarked” interrogative word stands in the structural position expected for its syntactic role in the sentence (see correctly Hoffner 1995: 101 [#40] and GrHL<sup>1</sup> §27.1!). This finding also forces a reanalysis of the ordering in relative clauses (see below).

2. As described in detail by Luraghi (2010 [#68]) and Dardano (2017 [#26]), in clauses with “experiencer” subjects the latter often appear in the dative or accusative case. As elsewhere, from OH to NH use of the nominative tends to replace the “non-canonical” construction. The latter should not be described as “impersonal”: *nu=war=an irmaliattat* ‘he became ill’ vs. EGIR-*an=ma=aš irmaliyattat=pat* ‘but afterwards he likewise became ill’ (both in Muršili II’s annals).

3. Melchert (2022b [#85] and forthcoming b [#88]) shows that true topicalization in Hittite consists of a constituent appearing in TopicP (provable for those from the predicate standing left of a full nominal or pronominal subject). These are **not** marked by the particle *-ma*. Proof that they are topics, not focused, lies in examples that are discourse-initial: [*anni*]š<sup>m</sup>*an* <sup>m</sup>*Mašhūluwan* ŠEŠ.MEŠ=ŠU *anda hatkišš[a]nuer* ‘Formerly his brothers besieged Mashuuluwa.’ More frequent is anaphoric topicalization, promoting to topichood something introduced in normal “pattern position” in a preceding clause (so-called “tail-head-linking”): *parā=ma* KUR <sup>URU</sup>*Hutpa ħarninkun nu=mu INA* <sup>URU</sup>*Hutpa LÚ.KÚR zahhiya tiyēr* ‘Furthermore I destroyed the land of H., and in the land of H. the enemies entered into battle against me.’ Note that Hittite allows for topicalization of more than one constituent. It also permits topicalization of just the nominal or pronominal object of a postpositional phrase: *nu=mu ANA KARAŠ.HI.A* *IMBARU* *pera[n ki]šat* ‘a mist arose in front of my troops’. Rarely, a demonstrative alone may be topicalized: [*nu=šm*]aš *kē* <sup>d</sup>UTU-ŠI *kue išhiūl išhiškemi du[qqaru...]* ‘these obligations that I, His Majesty, bind on you, let [them be important to you]!’. Quite separate from these are “hanging topics”, for which see GrHL<sup>1</sup> §30.10 following Garrett: <sup>m</sup>*Huidudduwalliš n=an* <sup>URU</sup>*Šallašna ašašer* ‘(As for) Huidudduwalli, they settled him in Šallašna’ (MH/MS). These are more numerous than previously thought.

4. Goedegebuure (2014: 471–2 [#34]) has shown that in addition to the additive focus particle *-(CC)a/-a* ‘also, even’ and contrastive focus particle *-(C)a/-ma* (see next paragraph), Hittite also has respective homophonous clause-linking conjunctions that mark parallel and contrastive **topics** (examples *ibid.* 473–9). These are clearest when both clauses are marked, but both types also occur with only the second showing the conjunction: (1) **parallel** *zikk=a=wa* <sup>GIŠ</sup>TUKUL *apašš=a* <sup>GIŠ</sup>TUKUL ‘both you are a TUKUL-(man) and he is a TUKUL-(man)’ (OH/OS) and

[pa]rtauwaššet=wa amiyanta apašš=a=wa amianza ‘his wings are immature, and he is immature’ KUB 17.10 i 38 (OH/MS); (2) **contrastive** ANA <sup>m</sup>Šunaššura=ma mān āššu...mān=ši ŪL=ma āššu ‘if it pleases Sunassura...if it does not please him’ (MH/MS) and *aliyaš=wa ŪL wāi ŪL=ma=wa wāki ŪL=ma=wa išparrezzi* ‘the deer does not cry out, does not bite, does not kick’ KUB 14.1 rev. 91 (MH/MS). As per Goedegebuure, what makes these parallel and contrastive **topics**, not additive and contrastive focus, is the strictly parallel structure of the respective clauses.

5. In their function as focus particles, additive *-(CC)a/-a* ‘also, even’ and contrastive *-(C)a/-ma* naturally also show respectively parallelism and contrast, but they differ from the conjunctions just described in key respects: (1) they may refer to sequential actions/events; (2) they need not attach to the first accented constituent in the clause. **Additive** *n=an ANA É<sup>d</sup>10 m[ahḫa]n [i]ēr apēdašš=a=an ANA É.[MEŠ.DINGIR.ME]Š [hū]mandasḫ QATAM-MA iya[nzi]* ‘as they performed it (a given festival) for the temple of the Storm-god, shall they perform it likewise also for all those temples?’ and *nu=za ŠA<sup>d</sup>IŠTAR p[(arā ḫan)]dandatar apiya=y[(a)] mekki uḫḫun* ‘I much experienced the providence of Ishtar also then’; **contrastive** EGIR-ŠU <sup>LÚ</sup>meneyaš iētta kētt=a kētt=a G[I-an] ḫuttiannāi tarnāi=ma=an natta ‘behind walks the *m.*-man; he keeps drawing (back) an arrow towards this side and that side, (but) he does not let it go’ (OH/OS) and *mān=ma(n)=šši LÚ.MEŠ<sup>URU</sup>GIDRU-ti innarā=ma uwāi uter* ‘if the men of Ḫattuša had willfully brought him woe, ...’.

6. Goedegebuure (2014: Chapter 7) has established that Hittite has a preverbal focus position, marking “exclusive focus”, either “replacing” or “selecting”: (1) <sup>m</sup>Šapallinn=a=šmaš āppa ŪL *peḫḫi kuwapit ku[wapit’...] uwatettani n=an=š(a)maš āppa apiyakku peḫḫi* ‘I also do not give S. back to you; when[ever?] you bring [...], I will give him to you then’ (treaty, MH/MS); (2) *nu 8 DUMU.MEŠ-uš uwadanzi MUNUS-ni=ššan kuiēš nāwi pānzi* ‘They bring eight boys who have not yet gone to a woman, (and they clothe one boy in the hide of a billy-goat,) nu peran apāš iyatta ‘and he walks in front’ (no one else). She treats only forms of accented *apā-*, but there good reasons to think that other nominals may also stand in preverbal focus. Further research is needed.

7. No feature of Hittite syntax has undergone so much revision as relative clauses. Much work remains to be done, and the following cites only selected new findings.

(1) Contrary to previous claims, RCs may appear not only before and after another clause, but within a clause, in more than one configuration (see Melchert 2016 [#80]). First, they may be embedded as a determiner phrase (DP) as a subject or direct object, with only the limitation that they may not be preceded by any other full constituent (type identified by Probert 2006 [#101], but no “fronting” is necessary, and these occur in NH, mostly in oracular inquiries): **subject** *tapaššaš kuiš ANA<sup>d</sup>UTU-ŠI SIxSÁ-at peran parā kuitman=za=aš=kan LUGAL-eznanni nāwi ešari* ‘will the t.-illness that was determined for His Majesty be beforehand, before he sits down in kingship? **Object** INIM<sup>f</sup> *Danuḫepa kuiš SIxSÁ-at GAM ariyawen* ‘we continued to inquire about the matter of T. that was determined’. Second, they may be embedded as a DP conjoined with an ordinary DP: *kēdani=wa=ššan URU-ri naššu ŠA<sup>d</sup>10 kuit Ékarimmi našma tamēdaš (sic!) DINGIR-LÌ-aš kuitki Ékarimmi* ‘in this city there is either a sanctuary that is of the Storm-god or some sanctuary of another deity. Third, externally headed RCs may actually split an independent clause: *namma=ma=za damain BELA kui«e»š=aš kuiš [UN-aš] ANA<sup>d</sup>UTU-ŠI EGIR-an arḫa lē kuinki šākti*

‘furthermore, do not recognize any other lord, whatsoever [person] he is, behind the back of His Majesty!’.

(2) By far the most common type of Hittite RC is that of preposed correlatives, which in the standard form contain the relative word that is then resumed a coreferential word in a following clause: *nu DUMU-an kuin hukkiškemi n=an=kan ŠUM=ŠU tēmi* ‘Which child I am saying spells over, him I say his name’. For the most recent analysis of these see Motter 2023ab [#89-90] with refs. to works of Held, Hale, Garrett, and Lyutikova-Sideltsev. Only some of the many issues raised can be addressed here. First, with Motter (2023a: 28–31, 84–98 et passim) many preposed correlative RCs are “frame” RCs, whose relationship to their resumptive “correlate” clause is far from explicit: *lienganut=wa=mu kuiš nu=wa karū ḥalliya wēhtat nu=war=at ŪL namma kuitki* ‘as to the one who swore me to an oath, the days have already passed, and it is no longer anything’ (NH). There is no actual resumption here, and one must infer that the passage of time has led to the death of the person who imposed the oath, so that it no longer has any validity. Second, the famous contrast between “indefinite” and “definite” preposed RCs must be seriously revised in multiple respects. As seen by Held, but overlooked by others, not every indefinite RC is hypothetical and may be felicitously equated with a conditional clause: *kuiš DINGIR=YA inan paiš nu=mu genzu [(namma) daddu]* ‘whatever god of mine gave me the illness, let him again [take] pity on me!’. Indefinite RCs **are** in “informational” focus, and their relative word **usually** stands at the front of the clause (ignoring clause conjunctions and any enclitics). However, other constituents can also be in focus and occasionally precede *kui-* in what can only reasonably be read as an indefinite RC: *kinuna=wa kuiš ape[n]iššuwān uttar iē[zzi n]=an [kē NIŠ DIN]GIR.MEŠ appandu* ‘whoever does such a thing *now*, let these oaths seize him!’. As already emphasized by Huggard (2011: 99–102 [#46]), “definite” RCs do not form a natural class. If the relative word is not in informational focus, its position in the RC is determined by the overall discourse structure of the clause and the prosodic weakness of the non-focused *kui-*. Full illustration of the range of factors is impossible here. For an undeniable example of the role of phonology see: <sup>LÚ</sup>*šankunnišš=a kuiēš* <sup>MUNUS</sup>*katrišš=a ANA EN SÍSKUR anda weriyanteš ešer nu=za apē=ya INA É.MEŠ=ŠUNU arḥa pānzi* ‘And both the priest and the *k.* woman who were summoned for the ritual client, they too go home (lit. go away to their houses)’. But examples where the *kui-* follows a topicalized constituent are also frequent: *nu=kan ŪL āššiyanteš kuiēš nu 1-aš 1-edani ŠEŠ-tar ḥatreškezzi* ‘Those who are not on favorable terms, do they write of brotherhood to one another?’ (lit. ‘does one write to the other...’).

## HITTITE TEXT SAMPLES

### 1. KBo 5.9 iii 23-27 (Treaty of Muršili II with Tuppi-Teššup of Amurru, NH)

*na-aš-ma ma-a-an KUR-TUM ku-it-ki za-aḫ-ḫi-ya LUGAL KUR URU Ha-at-ti an-da ḫa-at-ki-iš-nu-uz-zi a-pu-u-us-ma pé-ra-an ar-ḫa tar-na-a-i n=a-at=kán ŠÀ KUR=KA ú-ez-zi nu ma-a-an tu-uk da-a-u-wa-an-zi ku-it-ki Z[I-an-za] n=a-at A-NA LUGAL URU KÙ.BABBAR-ti ú-e-ek*

‘Or if the King of Hatti surrounds some land in battle, and they give way before (him), and they come into your land, if you have the desire to take something, ask the King of Hatti for it!’

### 2. KBo 5.8 ii 1-5 (Annals of Muršili II, NH)

*n=a-aš ú-et n=a-aš-mu GÌR.MEŠ-aš kat-ta-an ḫa-li-ya-at-[ta-at] n=a-aš-za*  
came me feetD-LPl below bowed for (my)self

*ARAD-an-ni da-aḫ-ḫu-un n=a-aš šu-ul-la-a-nu-un nam-ma-aš-ma-aš-kán*  
in servitude I took I made hostages next on them

*ÉRIN.ME.EŠ iš-ḫi-aḫ-ḫu-un nu-mu ÉRIN.ME.EŠ pí-iš-ke-u-an da-a-ir*  
troops I imposed and=me troops to give they began

*n=a-at-mu la-aḫ-ḫi kat-ta-an pa-iš-ga-u-wa-an ti-i-e-er*  
me on campaign with to go they began

## PALAIIC TEXT SAMPLES

(texts after Carruba, 1970 [#124], but often with different morphological analysis!)

### 1.A (KUB 32.18) i

6 ... *ānt=ienta mā[rḫaš]*  
into=walkPres3Pl guestNPl

7 *[a]tānti ni=ppa=ši mušānti aḫuwanti ni=ppa=aš ḫašanti*  
eatPres3Pl not=conj=refl be satedPres3Pl drinkPres3Pl not=conj=they be satedPres3Pl

‘The guests enter. They eat, but are not satisfied. They drink, but they are not satiated.’

### 2.A (KUB 35.165) Vo 6-8 (interpretation after Sasseville and Yakubovich 2018[2021] [#128])

6 *[k]uwāiš=a[tt]a ḫalpūta ta[kk]uwānteš ašandu ānta kuwaniš*  
cattleNPIC=locprt stallLocSg displaytcNPIC beImv3pl in addition dogNPIC

7 *tašūra takkuwanteš ašandu ānta warlaḫiš kuwalima*  
kennelLocSg displaytcNPIC beImv3Pl in addition sheepNPIC enclosureLSg

8 *takkuwanteš a[š]andu*  
displaytcNPIC beImv3Pl

‘Let the cattle be displayed in the stall! In addition/furthermore let the dogs be displayed in the kennel! In addition let the sheep/lambs be displayed in the enclosure!’

## LUVIAN TEXT SAMPLES

Lower Land Luvian (text after Yakubovich-Mouton 2023: 1.8 [#162])

KUB 35.54 iii

12 *nu=ššan ANA GAL GIR<sub>4</sub> [k]uit wātar*

13 *lāḥōwān MUN=ya=kan anda išḥowān*

14 *n=at=kan É-ri anda [p]apparašzi*

15 *ANA BEL SÍSKUR=ya=šš[a]n šarā*

16 *papparašzi nu kiššan memai*

(Hittite) ‘The water which was poured into the glazed vessel—salt also is sprinkled into it—she sprinkles it in the house, and she also sprinkles it on the client and speaks as follows:’

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17 [(w)]ār=ša=tta            ÍD-ti            [nan]amman  
waterN-ASg=prt=locprt riverAb-I turnedN-ASgNt

18 [M]UN=ša=pa            ālāti (u)wā[(niya)ti]            upamman  
saltN-ASg=prt=conj distant rock-faceAb-I broughtN-ASgNt

19 [w]ār=ša=tta            zīl[a            ÍD-i]            anda  
waterN-ASg=prt=locprt henceforth riverD-LSg into

20 [(n)]āwa iti            MUN=ša=pa=[tta            z]ila  
not goPres3Sg saltN-ASg=prt=conj=locprt henceforth

21 [(ā)]lī            (u)wāniya            nā[wa it]i  
distant rock-faceD-LSg not goPres3Sg

---

22 [a]dduwal=za=pa=tta            u[tar=ša            ḥa]lliš=ša  
evilN-ASgNt=prt=conj=locprt wordN-ASg=prt defilementN-ASg=prt

23 [par]attan=za            āppa zā[tī] parni  
impurityN-ASg=prt back this houseD-LSg

24 [zil]a            niš            awit[i]  
henceforth let not comePres3Sg

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25 [w]ār=ša            kuwatīn ḥa[l]āl  
waterN-ASg=prt as pureN-ASgNt

26 [a]=(a)ta            ḥalāl            āšdu            zā            [p]arnan=za  
conj=itN-ASgNt pureN-ASgNt beImv3Sg thisN-ASgNt houseN-ASg=prt

27 [DI]NGIR.MEŠ-ninzi ḥōḥḥurša[nt]inzi  
divineNPI h.NPI

28 [d]āru<š>=ša            tiyammiš            ḥ[ō]mmatiš  
frameworkN-ASg=prt groundNSg niche<sup>?</sup>NSg

29 [GU]NNI-tiš<sup>GIŠ</sup>kattaluz[zi]=ša

hearthNSg thresholdN-ASg=prt

30 *a=(a)ta ḫalāl āšdu*  
 conj=itN-ASg pureN-ASgNt Imv3Sg

‘Water is led from the river, while salt is brought from the distant rock-face. The water will not henceforth go into the river, while the salt henceforth will not go to the distant rock-face. May the evil word, the sickness, (and) the defilement henceforth not come back to this house. As the water is pure, let them be pure—this house, the divine *h.*, the framework, the ground, the niche<sup>2</sup>, the hearth, the threshold—let them be pure.’

Songs of Istanuwa

KBo 4.11 (Vo) 39-41 (readings and interpretation after Goedegebuure 2010: 311 [#138])

39 [EG]IR-ŠÚ<sup>d</sup>UTU<sup>URU</sup>Iš-ta-nu-wa e-ku-zi=pát  
 (Hittite) ‘Afterwards he drinks (to) the Sun-goddess of Istanuwa the same.’

40 *šuwatra wāšu ala waddati=[t]ta*  
 pithoiN-APInt very deepN-APInt mountain(s)Ab-In=locprt

41 *zanta ḫuwalpanati ār*  
 down humpbackedAb-In arriveImv2Sg

‘The pithoi are very deep. Come down from the humpbacked mountain(s)!’

Hieroglyphic Luvian

KARATEPE (HLuvian text Hu)

§1 <sup>1</sup>[EGO-*wa/i-m*]i <sup>2</sup>(LITUUS+)*Á-za-ti-i-wa/i-tà-sá* <sup>3</sup>(DEUS)SOL-*mi-sá*  
 /amu=wa=mi/ /At<sup>s</sup>atiwadas/ /tiwadamis/

<sup>4</sup>CAPUT-*ti-i-sá* <sup>5</sup>(DEUS)TONITRUS-*hu-ta-sa* <sup>6</sup>SERVUS-*la/i-sá*  
 /t<sup>s</sup>idis/ /Tarḫuntas/ /xodarlis/

§2 <sup>7</sup>*Á-wa/i+ra/i-ku-sa-wa/i* <sup>8</sup>REL-*i-na* <sup>9</sup>MAGNUS+RA/I-*nu-wa/i-ta*  
 /Awar(a)kus=wa/ /k<sup>w</sup>in/ /oranuwata/

<sup>10</sup>*Á-tana-wa/i-ní-i-s[a*(URBS) <sup>11</sup>REX-*t]i-sá*  
 /Adanawannis/ /xantawadis/

<sup>12</sup>*wa/i-mu-u* <sup>13</sup>(DE[US]) TONIT[RUS-*h[u-za]-sa* <sup>14</sup>[*Á-tana*]-*wa/i-ya*(URBS)  
 /a=wa=mu/ /Tarxunt<sup>s</sup>as/ /Adanaway(a)/

<sup>15</sup>”FEMINA”-*na-tí-na* <sup>16</sup>*tá-ti-ha* <sup>17</sup>*i-zi-i-tà* “17”  
 /annatin/ /tadin=xa/ /it<sup>s</sup>ida/

‘I am Atsatiwada, a person of the Sun-god (Tiwad), a servant of the Storm-god (Tarhunt), whom Awar(a)ku, King of Adana, made great. Tarhunt(sa) made me mother and father to Adana.’

§74 <sup>399</sup>POST-*na-wa/i* <sup>400</sup>ARHA <sup>401</sup>(“CRUS”) *ta-za-tu* <sup>402</sup>*ara/i-zi* <sup>403</sup>OMNIS+MI-*zi*  
 /appan=wa/ /arxa/ /tat<sup>s</sup>atu/ /arint<sup>s</sup>i/ /tanimint<sup>s</sup>i/

<sup>404</sup>[LITUUS+] *Á-za-ti-wa/i-tà-sa* <sup>405</sup>*á-lá/i-ma-za*  
 /At<sup>s</sup>atiwadas/ /a|aman=t<sup>s</sup>a/

§75 <sup>406</sup>(DEUS)LUNA-*sa-wa/i* <sup>407</sup>(DEUS)SOL-*ha* <sup>408</sup>REL-*ri+i* <sup>409</sup>*á-lá/i-ma-za*  
 /Armas=wa/ /Tiwadas=xa/ /k<sup>w</sup>ari/ /a|aman=t<sup>s</sup>a/

<sup>410</sup>”CRUS”-*i*  
 /ta(:)i/

‘Afterward henceforth let stand for all ages the name of Atsatiwada, just as the name of the Moon and the Sun stands.’

### LYCIAN TEXT SAMPLES

(texts after Friedrich, 1932 [#167]; Laroche, 1979 [#170])

TL 88 (Myra)

1 *ebēññē prñnawā m=ene prñnawatē Ddaqasa Sttuleh:*  
 thisASgC tombASgC conj=itASgC buildPret3Sg D.(NSg) S.(GSg)

2 *tideimi hrp<p>i ladi ehbi se tideime se ēke lati Ddaqasa*  
 sonNSgC for wifeD-LSg his and childD-LPl and when diePres3Sg D.

3 *m=ene ñtepi tāti ñtipa tezi se ladā ehbi kbi tike me=i*  
 conj=him into putPres3Pl ?D-LSg and wifeAccSgC his other someAccSgC conj.=prt  
*nipe ñtepi tātu*  
 let not inside putImv3Pl

4 *tibe=i nipe hlñmi tuwetu hlñmi me=i tuweti tike tibe=i*  
 or=prt let not ?AccSg placeImv3Pl ?AccSg conj=prt placePres3Pl anyoneAccSg or=prt

5 *ñtepi tadi tike m=ene itlehi tubeiti trñmili huwedri*  
 inside putPres3Sg someoneAccSg conj=him ?NPl strikePres3Pl Lycian allNPl

6 *se trqqas: se mähāi huwedri*  
 and Storm-godNSg and godsNPl allNPl

‘Ddaqasa, son of Sttule, built this tomb for his wife and children. And when D. dies, they shall put him into the ñ. t., and his wife. Let them not put anyone else inside it, nor let them place an addition<sup>7</sup> on it. If they impose some addition<sup>7</sup> on it, or one puts anyone inside it, all the Lycian *itlehi* shall strike them, and the Storm-god and all the gods.’

N320 Létôon Trilingual

18 *se=i=pibiti:*  
 and=himDSg=givePres3Pl

19 *uhazata: ada |^| 00: ēti: tllaxñta*  
 yearly-tributeN-API 120 ada’s prep ?



- 20 *Arñna:*            *se=sñmati*        *xddazas:*    *epi*  
 XanthosD-LSg and=bindPres3Pl slavesAPI preverb
- 21 *=de arawa:*        *hãti*            *kñmētis:*        *me=i=pibiti*  
 locprt freedomLSg releasePres3Pl how-manyAccPl conj=him=givePres3Pl
- 22 *sixlas:*            *se=wa(j)=aitē:*        *kumaha:*        *ēti*  
 shekelsAccPl and=prt=makePret3Pl sacredN-API on/down
- 23 *sttali:*            *ppuweti:*        *kñmē:*            *ebehi:*        *Xñtawataha*  
 steleD-LSg writePres3Pl how-muchN-ASg thisD-LSg of-kingN-API
- 24 *Xbidāñnaha:* *se=Rκkazumaha*  
 of Kaunos and=of-Arkesima

‘And they shall give to him (the deity) as a yearly tribute 120 *ada*’s for Xanthos, according to the payment standard. And they shall oblige the slaves, as many as they set free, (that) they shall give to him shekels (i.e. each respectively one). And they have made sacred as belonging to the King of Kaunos and to Arkesima as much as they write on this stele.

Greek Version: 16-23:

καὶ δίδονται κατ’ ἕκαστον ἐνιαυτὸν τρία ἡμιμναῖα παρὰ τῆς πόλεως, καὶ ὅσοι ἄν ἀπελεύθεροι γένωνται ἀποτίνειν τῷ θεῷ δύο δραχμάς, καὶ ὅσα ἐν τῇ στήλῃ

#### LYDIAN TEXT SAMPLES

(texts after Gusmani1964 [#179], but with new transliteration conventions)

LW 4a

1 *es*            *asinas maneliš*    *aluliš*            *ak=mλ=t*            *qiš*            *fěnslipid*  
 thisNSgC a.NSgC of M.NSgC of A.NSgC conj=itDSg=locprt whoNSg ?Pres3

2 *puk esvav*            *anolav puk*  
 or theseD-LPl a.D-LPl or

3 *esλ*            *karolλ*            *f=ak=mλ*            *sāntas*  
 thisD-LSg k.D-LSg prt=conj=himDSg SandaNSg

4 *kufaw=k*            *mariwda=k*  
 KubabaNSg=and darkNPIC=and

5 *ěnslipp[i]d*  
 Pres3

‘This *a*. belongs to Mane, (son) of Alu. And he who *undermines* it, or these *a*. or this *k*., let Sanda and Kubaba and the dark deities *undermine* him.’



## SIDETIC

(text based on edition of Nollé 2001: 625–46 [#201], but with corrected readings and values of certain letters as per S. Pérez Orozco 2003 [#202])

S2 (Dedication of Apollonios)

1 *polonij pordorís polonijas masara tue* [ ]

P.NSg P.GSg P.GSg godsD-LPl ?

‘Apollonios (son) of Apollodoros, (grandson) of Apollonios for/to the gods [ ]

2 Ἀπολλώνιος Ἀπολλοδώρου

3 τοῦ Ἀπολλωνίου ἀνέθηκεν

4 [εἰ]κόνα τήνδ’ ἑαυτοῦ θεοῖς πᾶσι

5 [Μ]νασέας Ἀρτέμωνος Σιδήτης ἐπο[ί]ησε

Forms in -*ś* may instead be NSgC of possessive adjectives.

## Changes from Old to New Hittite

### I. Orthographic

1. Many plene spellings CV<sub>1</sub>-V<sub>1</sub>-V<sub>1</sub>C disappear totally: *še-e-r* ‘above’, *ma-a-aḥ-ḥa-an* ‘when, as’, etc. Many of the shape CV<sub>1</sub>-V<sub>1</sub>-(CV) become rare: *pé-e-da-/di-* ‘place’. Against Kloekhorst (2014: passim, [#64]), these mean **nothing** phonologically. See reviews by Kimball (2015[#57]) and Melchert (2018[#81]).
2. Post-vocalic allomorphs *-ma* and *-ya* generalized after logograms (no matter what the real reading was). Thus nom. sg. MUNUS.LUGAL-š-*a* replaced by MUNUS.LUGAL=*ya* ‘also the queen’.
3. As per Hittite Writing 11, by NH CV<sub>m</sub> signs used for corresponding CV, and even CV-V<sub>m</sub>-mV spellings are not reliable evidence for geminate /mm/.

### II. Phonological

1. From Mursili II onward, many words of the shape *iC(C)a* → *eC(C)a*: *išša-* → *ēšša-* (impf. of *iya-* ‘do, make’), *mimma-* → *memma-* ‘refuse’, etc. But cannot be regular sound change (contra Melchert 1984: 153–4, [#71]), since there are many counterexamples: *kiššan* and *eniššan* remain. Despite caution of Yakubovich (2010: 309ff., [#159]), surely hypercorrections of Luvian native speakers without /i/ vs. /e/ trying to speak Hittite. Thus only affects some words.
2. Other confusion of /i/ and /e/ (despite general maintenance of contrast, as per Melchert 1984) probably also due to hesitation of Luvian speakers: e.g. anim. acc. sg. of *i*-stems spelled *-Ci-en*, use of *TE* for *TI*.
3. Probably neutralization of /i/ and /e/ by NH before /s/: see Melchert 1984: 134–5 & 147–50 for gradual development.

### III. Morphological

#### A. Nominal

1. Anim. Nom. and Acc. Pl. merge, in favor of Acc. Pl. *-uš* with only three exceptions: (1) relative-interrogative *kuiēš*, (2) *u*-stem *-aweš* (replacing *-amuš*), (3) *-anteš* beside *-antuš*. Only incipient in late MH (Mašat Letters).
2. Allative in *-a* and Instrumental *-it* become moribund.
3. Genitive Plural in *-an* disappears by MH (NB: OH already has *-aš* beside *-an!*).
4. Collective plural in *-a* to animate stems is lost. Collective plural to neuters becomes regular plural (no positive evidence for replacement by animate endings or use of modifiers in *-ant-*). Also new coll. pl. to neuters in *-i* (see Rieken 2012).
5. Evidence for “*i*-mutation” due to Luvian influence (i.e. secondary *i*-inflection just in anim. nom. and acc.) **and** “reverse *i*-mutation”, i.e. deletion of *-i-* outside anim. nom.-acc. (see Rieken 1994[#102]).

## B. Pronominal

1. Enclitic anim. nom. pl. *-e* is replaced by *-at*.
2. Enclitic neut. nom.-acc. pl. *-e* is replaced by *-at*. (NB both match HLuvian *-ata*!)
3. Enclitic dat. sg. *-šše* is replaced by *-šši*.  
(all of these are already completed by late MH)
4. Enclitic anim. acc. pl. *-uš* is replaced by *-aš* (stepwise in MH; survives longest in *nuzuš*).
5. Genitive plural *-enzan* is replaced by *-ēl* (late MH).
6. Nom.-acc. plural *kē* is replaced by *kī*.
7. Anim. nom. pl. *kē* and *apē* are replaced by *kūš* and *apūš*.
8. Inst. *kēdand(a)* and *kēt* and *apēdand(a)* and *apēt* are replaced by *kēz* and *apēz* (probably already late MH).
9. Subject forms *ūk*, *wēš* and *šumēš* are replaced by *ammuk*, *anzāš* and *šumāš* (some hypercorrect forms of the subject pronouns also occur as non-subjects).

## C. Verbal

1. OH endings *-hhe* and *-e* are lost (NB *-hhi* and *-i* are already OH).
2. The *hi*-conjugation pres. 2nd sg. *-ti* replaces *-ši* in *mi*-verbs ending in consonant (late MH shows alternation).
3. The *hi*-conjugation pret. 2nd sg. *-tta* replaces *-š* in *mi*-verbs ending in a consonant (*-t* replaces *-š* in those ending in a vowel; begins already in late MH).
4. The *hi*-conjugation pres. 1st sg. ending *-hi* is replaced by *-mi* in stems ending in a consonant (*akmi*, *nahmi*), but not ending in a vowel!
5. The first and second plural present endings *-wani* and *-tani* are lost (late MH still shows alternation).
6. The *hi*-conjugation pret. 3rd sg. ending *-š* partially gives way to *-šta*.
7. The *-š-* of 2nd pl. *-išten(i)* in *hi*-verbs in *-i-* spreads to 2nd sg. *-šti*.
8. Medio-passive *-(tt)a* is replaced by *-(tt)ari* (already complete by late MH).
9. Medio-passive *-(tt)ati* is replaced by *-(tt)at* (ditto).
10. The allomorph *-ya-* spreads at the expense of *-ye-* (but gradually through early NH; see Melchert 1977: 32–34 [#70] with refs.).
11. The ablaut *a/e* in *hi*-verbs spreads (*aker* → *eker*; *šaktēni* → *šekteni*, etc.).
12. Verbal stems in *-ye/a-* proliferate at expense of other classes.
13. Verbal stems in *-e/-a-* are replaced by stems in *-ā(i)-* (but often then replaced in turn by *-ye/a-*).
14. Transitive medio-passive stems in *-a(ri)* **and** *-tta(ri)* are mostly replaced by active *hi*-verbs (*hannai* for *hannari*, *iškallai* for *iškallari*, *šarrai* for *šarratta*), but *huittiya(ri)* replaced by *huittiyazzi* and *paršiya* by *paršiyazzi*.

Other:

Non-geminating contrastive conjunction *-a* after consonant replaced by post-vocalic allomorph *-ma* (stepwise through MH).

Syntactic:

1. Focus particles *-ma* and *-ya* take entire clauses as focus (placed after first accented word, including conjunctions).
2. OH rule of collective plural subject + collective plural predicate adjective (+/- singular finite form of 'be') is replaced by collective plural subject + neuter singular predicate adjective (+/- singular finite form of 'be').
3. True periphrastic perfect with *hark-*+ neut. nom.-acc. participle or *ēš-* plus participle agreeing with subject is developed (not yet compelling exx. in OH).
4. "Local" particles *-an* and *-apa* are lost (first by MH). Particles *-š(š)an* and *-(a)šta* are very limited in NH. Functions taken over by *-kkan*.
5. From late MH all clauses with first and second person and verb 'to be' (expressed or in nominal sentences) must include reflexive *-z(a)* (or in plural the respective enclitic pronoun). Clearly under influence of HLuvian, where each person and number has distinct enclitic reflexive.
6. Gradual expansion of "telic" (or "change of state") *-z(a)*: NB OH active *ēšzi* 'sits' vs. medio-passive *eša* 'sits down' → *eša* 'sits' vs. *-z(a) eša* 'sits down'. Similar for *kiš-* 'become' (but not as regular).
7. Double accusative ("scheme of the whole and part") replaces possessive genitive and accusative head noun (and "accusative of respect" is developed).

Hittite Laws

§9 (KBo 6.2 i 13-15, OS)

*ták-ku LÚ.U<sub>19</sub>.LU-aš* SAG.DU-SÚ *ku-iš-ki hu-u-ni-ik-zi ka-ru-ú* 6 GÍN KÙ.BABBAR *pí-iš-ker hu-u-ni-in-kán-za* 3 GÍN KÙ.BABBAR *da-a-i A-NA É.GAL* 3 GÍN KÙ.BABBAR *da-<aš>-ke-e-er ki-nu-na LUGAL-uš ŠA É.GAL-LIM pé-eš-ši-et nu=za hu-u-ni-kán-za-pát* 3 GÍN KÙ.BABBAR *da-[a-i]*

(KBo 6.3 i 21-24, NS)

*ták-ku LÚ.U<sub>19</sub>.LU* SAG.DU-SÚ *ku-iš-ki hu-u-ni-ik-zi ka-ru-ú* 6 GÍN KÙ.BABBAR *pé-eš-ker hu-u-ni-in-kán-za* 3 GÍN KÙ.BABBAR *da-a-i A-NA É.GAL* 3 GÍN KÙ.BABBAR *da-aš-ke-er ki-nu-na LUGAL-uš ŠA É.GAL-LIM pé-eš-ši-et nu=za hu-u-ni-kán-za-pát* 3 <GÍN> KÙ.BABBAR *da-a-i*

§10 (KBo 6.2 i 16-19, OS)

*ták-ku* LÚ.U<sub>19</sub>.LU-*an ku-iš-ki hu-ú-ni-ik-zi ta-an iš-tar-ni-ik-zi nu a-pu-u-un ša-a-ak-ta-a-iz-zi pé-e-di-iš-ši-ma* LÚ.U<sub>19</sub>.LU-*an pa-a-i nu É-ri-iš-ši an-ni-iš-ke-ez-zi ku-it-ma-a-na-as la-a-az-zi-at-ta ma-a-na-aš la-az-zi-at-ta-ma nu-uš-še* 6 GÍN KÙ.BABBAR *pa-a-i*  
<sup>LU</sup>A.ZU-*ya ku-uš-ša-an a-pa-a-aš-pát pa-a-i*

(KBo 6.3 i 25-28, NS)

*ták-ku* LÚ.U<sub>19</sub>.LU-*an ku-iš-ki hu-u-ni-ik-zi ta-an iš-tar-ni-ik-zi nu a-[pu-u-u]n ša-a-ak-ta-a-iz-zi pé-e-di-iš-ši=ma an-tu-uh-ša-an pa-a-i nu É-[ri-iš-ši] an-ne-eš-ke-ez-zi ku-it-ma-na-as SIG<sub>5</sub>-at-ta-ri ma-a-na-aš SIG<sub>5</sub>-at-[ta-ri-ma] nu-uš-ši* 6 GÍN KÙ.BABBAR *pa-a-i*  
<sup>LU</sup>A.ZU-*ya ku-uš-ša-an a-pa-a-aš-pát [pa-a]-i*

## ANATOLIAN HISTORICAL GRAMMAR

### I. Historical Phonology

See globally Melchert 2020[#82], updating Melchert 1994[#8].

#### A. Vocalism

1. As per Melchert (1984[#71]), /e(:)/ and /i(:)/ contrast through NH, but distribution undergoes many changes. Likely contrastive in Palaic (Wallace 1982/83[#129] and 1983[#130]). \*/e:/ and \*/i:/ probably merge as /i:/ in rest of languages.
2. As per Melchert (1994) with refs., PA \*/ĕ/ and \*/ō/ > Lyc. /e/ vs. at least Luvo-Hittite \*/ō/ and \*/ā/ > /a/. Lydian and Carian unclear.
3. As per Melchert (1994), PIE \**eh*<sub>1</sub> > PA \*/ǣ/, which gives Hitt./Pal. /e:/, but elsewhere /a:/.
4. Against Kloekhorst (2006a: 76-81[#4]) and Simon (2010[#156]) and (2013[#157]) #V<sub>1</sub>-V<sub>1</sub>C in both Hitt. and CLuv. **is** a “plene” spelling marking a long vowel (**partially** reflecting lengthening of short vowels under the accent), **not** evidence for word-initial [ʔV-] < \**h*<sub>1</sub>V-.
5. With Eichner (1986a: 13, note 12[#175]), **original** unaccented PIE long vowels were shortened in PA.
- 6. Against Melchert (1994), no PA or Hitt. \*/ĕ:/ (alleged Hittite evidence not compelling). Whether PIE \**ei* and \**eu* had monophthongized to \*/e:/ and \*/u:/ in PA is unclear.
- 7. Against GrHL<sup>1</sup> [#37] and Melchert (1994), cuneiform <u> = /o(:)/ vs. <ú> = /u(:)/, thus Hitt., Pal., and Luv. (including necessarily HLuv.) have **new** /o/ mostly < \**h*<sub>2/3</sub>u & \**uh*<sub>2/3</sub> (/χ(:)o/ and /oχ(:)/ and /o:/ also < \**au* and \**ou*. But first change also where \**h*<sub>2/3</sub> are lost: Hitt. *āššō* (*a-aš-šu-u*) ‘goods’ < \**uh*<sub>2</sub> (N-APINt) and *šō* (*šu-u*) ‘full’ (N-AsgNt) < \**suh*<sub>3</sub>u-.

#### B. Consonantism

- 1. With Adiego (2001[#1]), the two PA “lenition” rules of Eichner (1973: 79ff. and 100, note 86, [#28]) represent a single sound change of voiceless stops to voiced stops and \**h*<sub>2</sub> (\*[χ]) to \*[ʁ] between unaccented **morae**, with [V:] = [V̇V]: \**dhéh*<sub>1</sub>-*ti* ‘puts’ > \*[dǣæti] > \*[dǣædi] > Lyc. *tadi* just as abl.-inst. \**-oti* > \*[-ódi] > CLuv. *-ati*, HLuv. /-adi, -ari/, Lyc. *-edi*. Against Melchert (1994: 69), this change **includes** voiceless stops following \**-á* < \**h*<sub>2</sub>, thus \**mnéh*<sub>2</sub>-*ti* > \*[mnáati] > \*[mnádi] > CLuv. *m(a)nāti* ‘sees’ (Starke 1980: 147[#158], against Melchert 1994: 236) and \**-éh*<sub>2</sub>-*tj* > \*[-áat̪] > \*[-áad̪] > Hitt. suffix *-ātar* (against Melchert 1994: 86).
- 2. Against Kloekhorst (2016[#5]), **synchronic** contrast /T:/ vs. /T/ (and /χ:/ vs. /χ/) is **not** inherited from PA, but due to conditioned sound change (“Sturtevant’s Law”), with Yates (2019[#118]).
3. With Melchert (1994: passim), geminate continuants /ss/, /rr/, /ll/, /mm/, /nn/ in Hittite and Luvian reflect various assimilations and gemination /C\_ / & /\_ C/ at syllable boundary and are **not** conditioned by accent, against all others. For exception in Luvic and Lydian see 5. below.
- 4. Against Melchert (1994 with refs.), three-way contrast of dorsal stops in Luvo-Lycian is due to **conditioned** split of palatovelars before merger with velars, **not** unconditioned split (see revisions in Melchert 2012c[#144]). Thus Anatolian is clearly centum, as per Hrozný.
- 5. No “limited Čop’s Law” in PA of form \*#ĕ.C<sub>1</sub> > \*#áC<sub>1</sub>.C<sub>1</sub> exists (against Melchert 1994: 74–5). Result of real Čop’s Law is [T:] and [s:]/[RR], which applies to Lydian as well as Luvic (refs. under Hittite phonology). Against Kloekhorst (2006b[#141]), Čop’s Law does **not** occur



after PA accented \**ó* (NB Hitt. *dākki* < \**dókei* ‘matches’, etc.). Against Melchert (1994: 61), **no** ad hoc “weakening” of PIE \**k<sup>w</sup>* in PA: all alleged exx. may be explained otherwise.

- 6. With Kloekhorst (2006a: 97–101[#4] and 2008a: 836–9[#61]), PIE \**h<sub>2</sub>w* > unitary \*/*χ<sup>w</sup>*/ in PA, and with Melchert (2011a[#76]) likewise \**h<sub>3</sub>w* > unitary \*/*ʁ<sup>w</sup>*/ (exx. under Hittite phonology).
- 7. Against Melchert (2020: 262) et al., Hitt. *walḫ-* ‘to strike’ cannot reflect \**welḫ<sub>3</sub>-*. Cognacy with Grk. ἀλωῶναι ‘to be captured’ (sic!) semantically impossible, and spellings *wa-al-aḫ-hV-* demand \**h<sub>2</sub>*. Real cognate is TochAB *wälā-* ‘to smash’ < \**welḫ<sub>2</sub>-* (also Lat. *uolnus* ‘wound’).

## II. Nominal Morphology

1. Almost all derivational suffixes of PIE attested in Anatolian, but productivity often differs dramatically. Status of suffix \**-ih<sub>2</sub>*, \**-yéh<sub>2</sub>*- unfortunately indeterminate.
- 2. No compelling trace of feminine grammatical gender in Anatolian, against earlier claims. On “*i*-mutation” outside Hittite see Rieken 2005b[#17], but also serious revision by Norbruus (2018[2021], [#15]). As per latter, most synchronic reflexes are best analyzed as *i*-stems, reflecting large-scale merger of ablauting *i*-stems, consonant stems, and thematic stems. Typologically comparable to similar in Greek and Latin, but almost total loss of matching ablauting *u*-stems led to more massive merger and restructuring in Luvic (and likely Lydian). For widespread reflexes of PIE “individuating” suffix \**-eh<sub>2</sub>* **distinct** from homophonous abstract suffix see Melchert 2014[#11] following Hajnal (1994[#168]), also Sasseville (2014–15[#153] and 2018[#154]). For reflex of “*vṛkī-*” suffix \**-iH* in Hitt. *nakkī-* ‘heavy’ see Widmer 2005[#115], comparing Skt. *rathī-* ‘charioteer’ to *rathá-* ‘chariot’ (but further analysis arguable!).
3. Hitt. ending *-an--ān* marks **only** Gen.Pl.: see Hittite nominal morphology I.C. (5), matching Lyd. (Gen.)/D-LPl. *-av* and probably Lyc. *-ē*. Since unaccented PA \**-ōm* would shorten (see I.A.5 above), but would remain long in Hittite under accent, Anatolian gives no crucial evidence for debate about shape of PIE gen. pl. ending: \**-oHom* or \**-ōm* (or even \**-om*).
4. NB Anatolian reflexes D-LPl \**-os* **without** \**-bh(y)-* or \**-m-*, though both elements present: NB Hitt. *kuwapi* ‘where; when’ < \**k<sup>w</sup>o-bhi*, while Luvian abl.-inst. \**-im* (Goedegebuure 2007[#137]) increases chances that at least some adverbs in \**-oām* reflect just \**-m* (Dunkel 1997, [#26]).
5. Against some claims, evidence for full PA thematic inflection: now add Hitt. *-aš* to Pal. *-aš* as reflex of NPIC \**-os* < PIE \**-ōs*; see Hittite nominal morphology I.C (3). As per Melchert (2012b[#9]), also reflexes of Gen.Sg. \**-o-s* (sic!) in Hitt., Pal., CLuv., and Lyc. (PNN); \**-osyo* directly in HLuv. /-asi/ and Carian *-ś*, indirectly in Hitt. and CLuv. *-ašša-*; and \**-e/oso* directly in Lyc. (PNN), Carian *-s*, indirectly in Pal. *-aša-*.

### Pronouns

- 6. The *u*-vocalism of the accented 1PSg pronoun is a defining isogloss of Anatolian. The attempt of Simon (2018[#113]) to claim that it is original vs. rest of IE is unconvincing. As per Melchert (1983[#7]) against all others, vocalism of Hitt. Nom. *ú-uk* /u:k/ (sic!) is analogical to 2PSg \**tū*, the only PIE preform justified by rest of evidence (pace Simon 2018, et al.). But with demise of alleged “limited Čop’s Law” in PA, Hitt. *ammuk* must continue \**h<sub>1</sub>ṛmú* < \**h<sub>1</sub>ṛmē* (“Lindeman variant” of \**h<sub>1</sub>mé*, modifying Simon 2012: 492, note 16, #188]). NB that

Hitt. (before added final stop after Nom.) matches Lyd. *amu*, only derivable < *\*h<sub>1</sub>(m)mu*, and Lyc. *amu* may be older variant (Simon 2012: 492, note 17, after Hajnal). **But**, only source for long *ū* in Hitt. *ūk* is original PIE *\*tū*, before latter > *\*t̥ū* > *\*t̥i* > *tī* (see Melchert 1983: 157–8). Against Melchert (1983: 161–3) and Simon (2018: 357), there **is** evidence for accented D-ASg *\*tū̃*, which is the source of the short *\*ū̃* of *ammug*. One cannot derive long and short accented *u* from the same preform (against Melchert 1983: 156), but the conditioned change may easily affect only the long vowel (ibid. 160).

7. Hitt. 1PlNom *wēš* may easily continue *\*wéis* or *\*wéyes*, and the base *anz-* of Hittite and Luvian expected D-A *\*ṽs-*, but the exact shape of the attested forms remains problematic, as does the entire paradigm of the 2Pl.
8. Proximal (speaker-oriented) demonstrative in PA was *\*ko/e/i-* (Hitt., Pal., Luv., prob. Car.). All else arguable, due to discrepancies in individual languages. With Melchert (2009b[#75]), only assured is **anaphoric** use of inherited *\*é/ó-* and PA innovation *\*o-bhó/i-* for ‘he, she, it, they’. Former also source of enclitic third-person pronoun, except for dat. sg. < *\*soi* and dat. pl. < virtual *\*-sm-os*. Direct case forms of interrogative-relative all clearly < *\*k<sup>w</sup>i-*.
9. Hitt. pronominal GSg *-ēl* reanalyzed from inflected adj. *\*-ēlos/m* via special “law of finals”, as per Rieken (2008: 239–44[#106]). Similar but independent change produces Lyd. GSg in *-Vl* (for which see Yakubovich 2017: 279–80[#189]), including *pil* ‘his’.

### III. Verbal Morphology

1. I retain basic claim of Jasanoff (2003[#49]) of PIE contrast of “*mi*-conjugation” and “*h<sub>2e</sub>*-conjugation”, latter with original *\*ó/é* but mostly modified *\*ó/zero* root ablaut in all classes except suffixed *\*-éh<sub>2</sub>* factitives and “pluractional” *\*-s(e/o)-* and *\*-énh<sub>2i-</sub>*. NB against Jasanoff includes “*i*-presents” like *\*pth<sub>1/2</sub>-óy-ei*, *\*pth<sub>1/2</sub>-éy-ṽti* ‘run’ (see Melchert 2022a: 111–20 [#84] with refs. to others).
2. But “presigmatic” aorist remains unpersuasive, against Jasanoff (2019[#52]). See Melchert 2015[#79] and for Pres2Pl *-šteni* already Kloekhorst 2008b[#62]. Hitt. Pret3Sg *naiš* **not** word equation with Skt. Pret3Sg *nāis*.
- 3. Hitt. *wewakk-* ‘(repeatedly) ask for’ and *mēmi-* ‘speak’ are with Jasanoff (2018: 140[#51]) “intensive-iterative” perfects of type of Skt. *áha*, Av. *ādā* ‘says’, **not** resultative-stative perfects (against Jasanoff 2003: 36–38 and passim). Match for latter in Hittite are *lilakk-* ‘to fell (habitually) and *šipand-* ‘to libate; consecrate’ < reduplicated *h<sub>2e</sub>*-aorist (Jasanoff 2018: 153–4). NB result then is that “classic” perfect is Core IE innovation vs. Anatolian.
4. Absence of optative and subjunctive in Anatolian likely due to loss, but hard to prove.
- 5. As per Sasseville (2020: Chapter 4[#18]), one must in Luvian keep apart verbal stems in *-i-*, with Pres3Sg,Pl *-itti*, *-inti*, from factitive stems in *-iya-*, with Pres3Sg,Pl *-iyatti*, *-iyanti* (and likewise their cognates in Lycian and Lydian).
- 6. With Sasseville (2020: Chapter 14) Luvian verbs in *-nu(wa)-* show *hi*-inflection, but this is unlikely to reflect a PIE archaism (see Melchert 2022a: 110–11, [#84]). Sasseville confirms that the “pluractional” stems in *-zza-* < *\*-ské/o-* also inflect as *hi*-verbs (2020: Chapter 13), surely analogical to those in *-anna-*.
- 7. There is no Luvian class with †/u-/~/a:u/ ablaut (against Sasseville 2020: 190–99; see his own doubts ibid. 205). As per Melchert and Yakubovich (2022[#146]), Luvian */-unta/* is the

**Pret1Pl** ending and /-untu/ **Imv1Pl**. The first < \*'-*wen* renewed after rest of preterite active paradigm.

## Online Resources

Hethitologie Portal: <https://www.hethport.uni-wuerzburg.de/HPM/index.php>

Primary resource for all things Hittite!

Annotated Corpus of Luwian Texts: <http://web-corpora.net/LuwianCorpus/search/>

Lemmatized lexica of CLuwian & HLuwian, grammatical sketch by Ilya Yakubovich.

Warning: for proper citation of grammar see link “Main”. Lexica to be cited as **2015**, only **after** consultation of Luwian portion of eDiAna and Yakubovich-Mouton 2023!

eDiAna Dictionary: <https://www.ediana.gwi.uni-muenchen.de/index.php>

Coverage of all IE Anatolian languages except Hittite.

LAMAN Hittite Name Finder: <https://laman.hittites.org/>

Still under construction, but already has coverage beyond the Onomastica portion of the Hethitologie Portal.

<https://linguistics.ucla.edu/people/Melchert/Index.htm> (not all links are updated!)

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