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Notes on the New Corpus of Hieroglyphic Luwian

Review Article of:
Corpus of Hieroglyphic Luwian Inscriptions, Vol. 1: *Inscriptions of the Iron Age. Parts 1, 2, 3* by John David Hawkins. Studies in Indo-European Languages and Cultures, New Series, 8.1 (ed. R. Gusmani, A. Morpurgo-Davies, K. Strunk, C. Watkins). Berlin and New York: Walter de Gruyter, 2000. 639 pp. + 125 plates + 1 map.

Corpus of Hieroglyphic Luwian Inscriptions, Vol. 2: *Karatepe-Aslantas, The Inscriptions: Facsimile Edition* by Halet Çambel, with a contribution by Wolfgang Röllig and tables by John David Hawkins. Studies in Indo-European Languages and Cultures, New Series, 8.2 (ed. R. Gusmani, A. Morpurgo-Davies, K. Strunk, C. Watkins). Berlin and New York: Walter de Gruyter, 1999. xxiii + 99 pp. + 125 plates + 1 plan.

Volume 1: Inscriptions of the Iron Age

The first volume of the present work is the *opus magnum* of a great scholar, who for more than thirty years (since 1967, cf. p. 12) has studied the monuments of the Hieroglyphic Luwian language, both at the places of their original composition in Turkey and Syria and in museums of these countries, Western Europe, and America. The results of this painstakingly accurate survey of all of the excavated documents are meticulously gathered together in the three parts of Volume 1 of the new *Corpus*, which provides a wonderfully prepared collection of all of the original materials. This includes, for one thing, excellent photographs of all the existing documents, mostly taken by Hawkins himself. Since many monuments were damaged, fragmented, or destroyed after their discovery (particularly during the events of 1919–1920 in Turkey, but also earlier and even much later), it was necessary to find or reconstruct their original shape. To achieve this goal, Hawkins was able, for most documents, to use the negatives of photographs made during or after the excavation, as well as squeezes preserved in museums (especially the British Museum). These precious data have made it possible to see pictures of the documents as they looked at the time of their discovery. Though one may deplore the chaotic historical circumstances of the last century, which not only took away human lives, but also erased our memory of the past and deprived us of the historical evidence of the documents, one cannot but be amazed at the tremendous success of this inventive and resourceful scholar. Hawkins has managed to restore the original look of some of these monuments, despite their present deteriorated state. At other times, he describes inscriptions that he has not seen himself.

Another important component of this three-part production consists in the autograph reproductions of each document, which are provided with the photographs. Even small fragments containing only a few signs are accompanied by written versions made by the author, preserving the actual shape and order of the signs. Due to the mixed logographic and syllabic character of the script, this part of the presentation of the documents is by no means trivial. Although some monumental inscriptions are so clear on the photographs that one can read them relatively easily (particularly when the size of the signs is sufficiently large), in other cases it would have been impossible to grasp the character of the signs without the autograph versions Hawkins has supplied.

The principles of transliteration are briefly stated at the beginning of Part 1, together with a short historical sketch of the research. Hawkins gives proper credit to his predecessors, whose portraits begin the illustrations of Part 3 (p. i). These include: Hrozný (whose intuitive insights, contained in his text editions—and despite evident shortcomings in their interpretation—are noted several times in the book, thereby contradicting the widespread undervaluation of his work of the 1930s); Forrer (to whom we owe some of the most striking and brilliant ideas, many now proven by recent studies[1]); Meriggi (whose "Manual," containing grammar and texts, and "Glossary" have remained, together with his other works, the main modern instruments of study until the appearance of the present book by Hawkins); Gelb (whose collection of monuments Hawkins sees as a model for his own *Corpus*, p. 11; Gelb's early remarks on the character of the language seem particularly important[2]); Laroche (whose signary, never continued, is evaluated on pp. 14–15); Bossert (whose work on the Karatepe bilingual is severely criticized by Hawkins, but he stresses that by the last year of his life, Bossert had already come to a conclusion on the reading of the signs for *za* and *zi*, pp. 14–15, fn. 142); and the late giant of modern Hittitology, Güterbock (whose particular contribution consisted in the first use of digraphic seals for the decipherment[3]). The important works of Mittelberger are also given proper attention (p. 15). The next period of the decipherment was largely dependent on a series of brilliant articles by A. Morpurgo Davies, for the most part written in collaboration with Hawkins. They began with a work, published together with Neumann in 1974, in which a definitive proof for the new readings of the signs for *zi, za, i,* and *ya* was put forward. The book under review summarizes the results of the reevaluation of several other important signs. It also gives the entire system of logograms (transliterated by the founders and participants of this new school by capitalized Latin words) and two different sets of syllabic signs, one of which is restricted locally. The other set was used only in the early documents of the Empire period (which, with minor exceptions, fall outside the scope of the book, p. 33). Particularly noteworthy is the final list of signs with their values (pp. 616–620), added at the end of Part 2 together with the indexes.

The book offers solutions to some problems in reading the script that have remained controversial. For Indo-Europeanists, particularly important is an appendix on the sign for *sù*. Since it is used to render the assibilation result of the Indo-European (IE) palatal stop in the words for 'horse' (*asu*[*w*]-*i*-, pp. 137, 516), 'dog' (*suwani*-, p. 153), and 'horn' (*surni*-, p. 552), its exact reading is relevant for comparative IE and Luwian (L) phonology. Hawkins suggests that if a palatal developed into *z* in other positions, it changed to *s* before *u* (p. 36). This idea may also be supported in part by similar changes elsewhere, like **k'* > [*ts*] > *s* in some other dialects of the *satəm* group of languages, among which one should now also include L. For the whole problem of IE palatals in L, especially significant is the discovery of Hieroglyphic (Hier) L *á-su-* = [*asu*-] 'stone', Cuneiform (Cun) L *aššu*-[4] corresponding to Hittite (H) *aku*- (pp. 127, 155), cf. Lat *acu-s* 'needle', Goth *ahs* 'ear of grain' (Mod Engl *ear*), Gk ἄκμων 'anvil' < 'stone' : Skt *aś-man*- 'stone'.[5] As this word is written with a second syllabic sign (*su*), it helps to prove that in the position before *u* the old palatal stop **k'* developed to *s*.

Another interesting suggestion concerns a sign which Melchert and, more tentatively, Hawkins both propose to read as *ma* (pp. 36, 154). Particularly intriguing is the suggestion of a probable reading *ma*$_x$+*ra/i-ia-ní* as an equivalent to Akkadian *mariannu*- (p. 60), in which one should probably see an old Indo-Iranian or Indo-Aryan borrowing (from *marya*-, as a designation of a social group of warriors or young males). Among specific phonological problems that require future study, I would like to draw attention to the *Pleneschreibung* in Hier L writing (see examples below) and its possible explanations, such as vowel length, accent, or tone (all three possibilities have been discussed in connection with cuneiform Hittite and L texts).

The introductory chapter on the writing system is meant mostly for scholars who already have some knowledge of the script. This may explain the absence of any remarks on the actual order of the signs in the documents. As they combine with each other not only horizontally (as is rendered by transliteration), but also vertically (particularly inside small contiguous groups of syllabic signs), some information on this point might have helped explain how the transliteration succeeds in giving a linear order to this complex spatial picture.

The main section of Parts 1 and 2 presents transliteration, translation, and a detailed analysis of all known inscriptions of the post-imperial period, reproduced in photographs and autograph versions in Part 3 (with some earlier texts included in rare cases). There are eleven main groups bound together geographically and historically (pp. 38–555), as well as texts of miscellaneous character (pp. 556–573) and inscriptions on bulls (pp. 574–586). The first chapter, dedicated to documents found in Cilicia, discusses the Hier L-Phoenician bilinguals of Karatepe. This part of the book differs from the rest. Since Bossert's edition has proven to be deficient, it was deemed necessary to provide an edition of the Karatepe monuments as a separate book in the same series, published as Volume 2 and edited by Halet Çambel (on which see below). Thus only for this section, there are no corresponding photographs and autographs found in Part 3 of Volume 1. The interested scholar will need to consult Halet Çambel's book for photographs and drawings in conjunction with the first chapter of Hawkins' *Corpus*, in which transliteration, translation, and commentary for the Karatepe bilingual have been given.

A general survey of all the places where the Hier L inscriptions have been found is presented on a large detailed map, provided as a supplement to Part 3 in a special pocket on the back cover. This map contains much more extensive information than the one given by Goetze in the second edition of his *Kulturgeschichte* (1957). In Parts 1 and 2, each of the eleven groups of L inscriptions is introduced by a detailed historical chapter that sums up relevant archaeological and epigraphic information, and contributes to the understanding of the context in which the inscriptions were created. Evaluating the gaps in most documents requires a combination of profound knowledge, together with the imaginative power that allows one to guess at the contents and the exact phrasing of sections that had disappeared without a trace, or with only partial and ambiguous fragments of the damaged signs being present. Since the monuments are given according to a classification scheme uniting historically coherent groups, it was possible to restore damaged portions based on repetitions of formulae typical of most texts. Each section starts with brief remarks on the location of a document, its date and character, the history of its discovery, and the sources used in the present edition.

[1] News about a previously unknown manuscript of Forrer on Luwian (currently at the disposal of Professor M. Poetto), transmitted through Laroche's former student Galina Kellerman (p. 14, fn. 134), is quite interesting.

[2] While studying Gelb's Hittitological (and Luwiological) library, now preserved as part of the UCLA Department of Near Eastern Languages and Cultures library, I have found some marginal notes and remarks made by him in several Hittitological editions from the 1960s, such as the book by Laroche on Luwian ("Hittite") hieroglyphs. It seems that Gelb was still continuing to think about this writing system while being immersed in completely different studies—a point which suggests that some details might be added to what has been known about Gelb's work after 1950 (p. 14, fn. 142).

[3] Among other significant works of his later years, I would also single out Güterbock's polemical booklet of 1982 (to which Hawkins contributed substantially), although it primarily discusses the Hurrian names of gods.

[4] The identity of the Hier L and Cun L forms has been suggested by Melchert 1993a:38 (with a slightly different translation).

[5] The abbreviations for languages cited in this article are as follows: Alb = Albanian, Arm = Armenian, Av = Avestan, Bal-Sl = Balto-Slavic, Cun L = Cuneiform Luwian, Germ = German, Gk = Greek, Goth = Gothic, Hier L = Hieroglyphic Luwian, H = Hittite, Hur = Hurrian, IE = Indo-European, L = Luwian, Lat = Latin, Lith = Lithuanian, Lyc = Lycian, Mil = Milyan, Mod Engl = Modern English, Myc = Mycenaean, OCS = Old Church Slavic, OH = Old Hittite, ON = Old Norse, Phoen = Phoenician, Pol = Polish, Skt = Sanskrit, Sl = Slavic, Toch = Tocharian.

A transliteration of each understandable text is accompanied by a paragraph-for-paragraph translation, followed by a commentary. This describes the present-day understanding of all the important forms, and also offers many new suggestions concerning words that are still unclear or disputed. In this part of the book, Hawkins not only sums up his own and Morpurgo Davies' numerous important contributions, but also discusses suggestions on L vocabulary made recently by such scholars as F. Starke and H. C. Melchert. The commentary contains a rich collection of lexical and semantic observations. For each word, all contexts in the various inscriptions are enumerated. To see the evidence as a whole, it is necessary to read the comments to different inscriptions, since they usually do not repeat each other. The discussion is quite cautious, as is usual with Hawkins. He does not insist on his new insights, but gives all the arguments *pro et contra* for each of his new suggestions.

An important feature of the lexical commentary is the grouping of different words that were used with the same determinative. As a result, several semantic fields are established on the basis of this objective criterion (pp. 258, 260, 455, etc.). This should also be of interest for general semantic studies.

A glossary is planned to follow the *Corpus* (pp. 23, 625). In the meantime, there is an index of the main words discussed in the commentary (pp. 625–631) and a list of logograms with their probable phonetic readings at the end of Part 2 (pp. 631–636).

Without repeating the rich information collected in this part of the book, I have selected for the purpose of this review article some words that are of special interest for comparative studies. In the following discussion, their forms and meanings as cited by Hawkins are provided, with reference to the various places where he discusses them. (Remarks on possible Indo-European connections outside Anatolian belong to the reviewer, unless stated otherwise.)

• *a(ya)-* 'make, do; celebrate (a god)', 1 pers. sg. pres. *á-wa/i* = [*awi*], past *á-ha*, 3 pers. sg. pres. *á-ia-ti-i* (with *Pleneschreibung* of a final syllable), past *á-tà* with a rhotacized variant *á-ra/i* = [*ara*], also with *Pleneschreibung á-ra-a* (274, 469–471, 486, 492, 625). The identity of these forms with Cun L *a(ya)-* has been established on the basis of new readings (Morpurgo Davies and Hawkins 1987:276–279). The L forms [*a-ha*] and [*a-da*] (with the later change *-d-* > *-r-* in dialectal forms with rhotacism) are continued in Lyc *a-χa* and *a-de*. The correspondence with H *iya-*, OH *iē-*, and the cognate Toch A *ya-* in this exclusive Anatolian-Toch isogloss can be explained by a protoform with an initial (laryngeal) + vowel,[6] as in other forms where L *a-* corresponds regularly to H *i-* and to a zero initial vowel in the other IE dialects.

• *á-na-i-ta* (REGIO)*-wa-na* is an ethnic adjective in *-wani-* derived from the name of the country *Anait* (with a H-L suffix *-it-*, according to Starke[7]). Hawkins (229) compares the form to Semitic *-t* in *Ana(t)*. It is possible to think of Arm *Anahit* and Gk Ανα(ϵ)ῖτις, (as the name of a goddess) as deriving from Middle Iranian *Anahit* < ancient Iranian (Avestan and Old Persian) *An-āhita-* ('Stain-less, Pure'). The cult of this goddess is found in the second half of the first millennium B.C. in Armenia, Cappadocia, Pontus, Phrygia, and Lydia.[8] The Iranian adjective was often used with the name of the mythological river and goddess *Arədvī*. It is supposed that her cult goes back to the time before Artaxerxes II, whose inscriptions record the worship of this deity.[9] In Armenia several place-names are derived from this name.[10] Although Iranian influence is not excluded during the tenth–ninth centuries B.C. in the region of Tell Ahmar on the east bank of the Euphrates (whence originates the only inscription with this form), such a date might be too early. One would need to find reasons for the disappearance of the Iranian *-h-* if the name had been borrowed from Iranian, and not from such an intermediary source where this phoneme had already been lost.

• *á-na-tara/i-sa* = [*ana(n)taris*] 'lower' has been found on a lead strip (from Kululu) which reflects an everyday transaction. The document has enormous value in characterizing the L conversational language of the middle or late eighth century B.C. This word has been derived from the stem of Cun L *annan* 'under' (512), cf. Lyc *ēnē*. The Hier L word helps to confirm the proto-IE age of the form **n̥dh-er(o)-* (> Skt *ádhara-*, Av *aδarō*, Lat *inferus*, Goth *undar-o*, Mod Engl *under*, Germ *unter* [cf. Arm *ənd*, Toch A *anč*]). The form is absent in H, where a synonymous derivation from *kattan* (Gk κατά) is formed with the same suffix: *katt-er(r)a-* 'lower'. Although the latter word was not spread in L-Lyc, it had been borrowed into Hier L *kata(n)ta* (458, 477).

• Hawkins has acknowledged (111, 471, 554) the identity of Hier L *á-pa+ra/i-ta* 'hereafter' and the half-logographic POST+*ra/i-ta*, as already guessed by Meriggi. Comparing the form to Hier L *apar-a(n)ta*, Cun L *apar-anti-* 'future', and Hier L **apara-wasati* 'afterwards', Hawkins comes to the conclusion that, although the word has a clear meaning, the form **apara/i* is "of uncertain morphology" (111, cf. on POST+*ra/i-* 'younger' 129). This may be clarified by an IE comparison: an exact morphological correspondence is present in Skt *apara-m* 'later', Av *apara-* 'posterior', Goth *afar* < **(H_1)e/op-ero-*.[11] A supposed H parallel has turned out to be incorrect.

• Following a suggestion by Terumasa Oshiro, Hawkins investigated all the contexts in which *á-pi(-i)* was used in the Assur letters, which were all written on strips of lead, and these are collected in a special Appendix (554–555). It appears that the word means 'back, behind, after, again'. Hawkins accepts Laroche's and Morpurgo Davies' derivation from IE **H_1e/op-i* (> Gk ἐπι/ὀπι-). H *app-a(n)* with a similar meaning presents another form of the same IE relational word (in Fillmore's sense).

• A demonstrative *apa-*, common to all the Anatolian languages, has a variant *api-* in Hier L (371–372, 406). The fragmented context makes it difficult to decide on the possible link of *-i-* to grammatical *Motion* (the use of a different suffix for a gender agreement[12]). However, it seems that all the forms in question belong to the animate (MF) gender.

• In his innovative study of the Assur lead letters, Hawkins has found two forms of the verb *a+ra/i-* 'to come (?)' that can be compared to H *ar-* 'to arrive' (542, 551, 625). But both the forms are grammatically different from H: Hier L 1 pers. sg. pres. (= fut.) (PES_2) *a+ra/i-wa/i* = [*arwi*] 'I shall come'; 3 pers. sg. past *a+ra/i-ta(-)*, cf. H *arḫi, araš*.[13] Hawkins proposes to derive from this Hier L verbal stem a noun *a+ra/i-tà* 'resources, income' = *ara(n)ta*, with a suffix similar to Lyc *ahñta* 'property' (406).

• Alternative logographic and phonetic writing in the Karatepe bilingual helps to identify "LONGUS"-ta_5-*ya* = ("LONGUS") *a+ra/i-ya* 'long' (days) = Phoen *'rk* = Cun L *array(a)-*, which is confirmed by phonetic writing in other inscriptions; a spelling with *-t-* might be explained by a suffix *-nt-* (65, 451, 518). Cun L *ārray(a)-* 'long', Hier L *a-ra/i-* 'long' is cognate with Toch A *aryu* 'long'. This is one of the exclusive L-Toch isoglosses. It does not extend to H: H *daluki-* 'long' is cognate with Skt *dīrgha-*, Gk δολιχός, Sl **dŭlgŭ* (Pol *długość* = H *dalugašti-*[14]), Lith *ilga-s*, Lat *longu-s*, Goth *lagg-* (Mod Engl *long*). But a derivative deverbal *-nu-* factitive verb, L *ara-n-u-*,[15] is identical in its structure

[6] Oettinger 1979:349. An alternative view, which assumes an original **yeH_1-* (Melchert 1994:75), makes it very difficult to explain the identical *-y-* in the H and L forms.

[7] Cf. the semantically different Cun L *ana-ḫit-* 'sample, taste', a stem connected to sacrificial terminology (Starke 1990:157–158; Melchert 1993a:12–13). It should not be excluded that some of the explanations of the Hier L form cited above are due to a chance resemblance and that a true solution should be sought elsewhere.

[8] For instance, on places like Komana that are important for their Hier L monuments, see Nilsson 1961:622–623; on Lydia, cf. Heubeck 1959:22.

[9] Wikander 1946; Weller 1938; Kramers 1954:353–358; Bartholomae 1979:125, 194–195; Lommel 1954.

[10] Hübschmann 1962:18 No. 5 (the cult was mentioned in Strabo); 1969:398.

[11] Cf. Melchert 1994:335 on L **apparai-* 'younger'.

[12] Melchert 2000.

[13] On the H paradigm, see Oettinger 1979:40, 104, fn. 35, 112, 403–404; Puhvel 1984:108–111.

[14] Ivanov 1957;1987 (with references to the extensive literature dedicated to this exceptional H-Sl parallel). As the origin of the H *-u-* is not clear (it may correspond to a laryngeal located between resonant and stop in the middle of this word), it is also possible to think of a syllabic **n̥* > *un*, with a later loss of the non-syllabic nasal before the velar stop (in which case the laryngeal simply disappeared in this position).

[15] The suffix *-n-u-*, if it is not explained as a later productive morph, may point to an original *-u-* stem of the adjective from which the verb is derived.

to the deverbal *-nu-* factitive verb H *dalug-n-u-* (used in an archaic mythological context).

• Hawkins derives *ara/i-ti-wa-li-i-na* = logographic EDERE(?)-*ta*$_5$*-ti-wa/i-li-na-*, an epithet of sacrificial sheep, from a rhotacized **ad(>r)-a-(n)ti-wali-* and combines it with the stem *ad-a-* 'to eat'; the meaning of the adjective might be 'fat' (268, 270). A typologically similar but much earlier derivation from **ed-* (without the following *-nt-* suffix) has been suggested for Cun L *adduwali-*, Hier L *atuwari-* 'bad', which have the suffix **-wol-i-* (see on this adjective = logogram MALUS = Phoen *r'*: 61), cf. H *idalu-* 'bad'.[16] A partial analogy might be found in Lat *ed-ūli-s* 'eatable'.

• Among the verbal derivatives from L *ad-* 'to eat' discussed by Hawkins are archaic forms, such as an iterative *aza-* (394); one may suppose that this is a formation different from the root athematic verb, as it has a 3 pers. sg. of the H *ḫi*-conjugation type: *á-za-i* 'eats' (392), cf. H *e-iz-za-i*.[17] A derivative *azali-* from this iterative verb (used in describing a feast or a meal) can be compared to Balto-Slavic **ed-s-li-s*.[18] IE age may be ascribed also to Hier L *ARHA* EDERE-*tà-ri+i-tu* 'let them feed', Cun L *adari-*, H *etriya-*, with parallels in Baltic and other IE dialects.[19] The translation of the mediopassive participle EDERE-*tà-mi-i-sa* = [*adamis*] (coupled with [*uwamis*] from *uw(a)-* 'drink') seems problematic: because Panunis, the author of the Tabal inscription, says that the God Santas gave him food and drink when he was dying (488–489), a probable translation should render this with a passive—not 'eating', but 'fed'. In H two meanings were possible for *adant-* ('eating' and 'eaten') and *akuwant-* ('drunk' and 'drinking'), since the language had lost the old mediopassive participle (there are only traces like *lalukk-ima-* 'brilliant'). L could distinguish these two shades by different participial suffixes.

[16] Oettinger 1979:540, fn. 23a; Puhvel 1984:493. A suffix **-u-n-*, as suggested by derivatives from this root in other IE languages, is probably seen in the Hier L infinitive *aruna* < *aduna* 'to eat' (459).
[17] Cf. Ivanov 1965:160.
[18] Ibid.:161.
[19] Ivanov 1981:25.

• In the Karatepe bilingual *ara/i-zi(i)* = OMNIS-*MI-zi* = Phoen *l-l'm* 'for all ages, to eternity' (67). Hier L *ara/i-* 'time' = Cun L *ari-* 'time' is also found in several other inscriptions (181, 406). An adverb *ara/i-la* '(at?) times' (127, 406) and an adjective *ara/i-si-* translated (as an epithet of bread) as 'perpetual' (98) are connected to *ari-* ' time'. L *ari* 'time' is cognate with the root of Gk ὥρα 'a definite period of time, season', Goth *jēr* (Mod Engl *year,* Germ *Jahr*), Sl **jarŭ* 'spring, beginning of the year' (as seen by Morpurgo Davies and Starke:181). H has another term: H *meḫu-r/-n-* 'time' is cognate to IE **meH-* 'to measure' and to dialectal IE names of 'moon', 'month', 'year' (Lith *metas*, Alb *mot* 'time'), which are derived from the IE root.

Since the H word for 'time' shows a link to an IE word for 'measure' and to a name for 'moon', it seems tempting to suggest a similar semantic chain uniting L *ari-* 'time', Toch B *yarm* 'measure' (Gk ἁρμονίη), H *Arma-* 'Moon God', *arma-* 'moon', Cun L *Arma-*, *arma-*, Hier L *arma-* (= log. LUNA) 'moon, month', OVIS *a+ra/i-ma-sa-ti+i-i* 'sheep of a month, monthling' (467), Mil *armpa* (?), Lyc *armma*, *rmmazata* 'monthly tribute, offering' (cf. also an ON kenning *ár-tali-* 'year-counter' = 'moon'). The source of this cultural innovation that has ousted the IE term for 'moon' from all the Anatolian languages seems to be Luwian.

• Hier L *arawani* 'free (person)' occurs in a Kululu business transaction (512) and corresponds also to Lyc *arawa* = Gk ἀπελεύθεροι 'freedmen', *arawã* = ἀτέλειαν 'tax exemption' (in the Xanthos trilingual). In these later southern Anatolian languages, the terms could have belonged to the official terminology that had been borrowed earlier from imperial H: cf. H *arawa-(nni)* 'free (opposed to unfree), exempt from taxes' (in the H Code). But as the stem *arawa-(n)-* occurs already in the Anatolian names from Old Assyrian documents (dating to the very end of the third millennium B.C., according to dendrochronology) and has a safe IE etymology (cf. Balto-Slavic words for 'free, equal'[20]), it is very difficult to separate the old inherited vocabulary from cross-Anatolian interborrowing.

[20] Toporov 1975:112; another etymology: Puhvel 1984:119–121 (with references).

• Hier L *aruti* is supposed to be equivalent to Cun L *aruta/i-* 'wing'; following a suggestion of Melchert, Hawkins accepts the double meaning 'wing; basket' for this word, as well as for H *pattar*. It seems that the L term may be an old Semitic borrowing, cf. Akkadian *abru*. But in that case the cause of the loss of *-b-* remains to be explained, as well as the meaning of the suffix. Hawkins suggests that Hier L *irwa-* 'gazelle' was a Semitic loanword (Akkadian *arwium,* 484). To the (NW) Semitic borrowings in the Hier L basic vocabulary probably also belongs *ha-li* 'day' (= Phoen *ym;* Cun L *ḫalli)*, acc. pl. *ha-li-i* < *haliya* (185, 521).

• Hier L *aruwa/ir-a(n)tu* '(they) may bow down (?)' may be identical to Cun L *aruwar-*,[21] H *aruwai-* 'bow down', cognate with Lat *ruō* 'fall down, collapse', Gk (Homeric) ὄρουσα (aorist).[22]

• In the Karatepe bilingual, a logogram SOLIUM+*MI* represents a verb *asa-* 'to sit' (61, 112). In one of the Karkamiš inscriptions (A 1a, 16) this sign serves as a determinative for a causative *isanu-* (< **ēs(o)-nu-*) of the same verb (89) corresponding to H reduplicated *ašeš(a)nu-* from *aše/aš-* (reduplicated causative for *eš-* 'sit', with correspondences in Balto-Slavic **ses-* : IE **ēs-*). The same logogram in the combination MENSA. SOLIUM is used with a derived noun *asa-* 'seat' (126, 292), cf. (THRONUS) *istarata-* 'throne' (336, see on possible phonetic variants with *-ta-/-la-*: 470): H *aš-atar* 'sitting', which may have a similar meaning.

• If Hier L *asati* really means 'hunger' as Melchert has proposed (372, 547, 625, 635), it is a perfect match to H *kašt-*, Toch A *kaṣt*, B *kest* (an exclusive Anatolian-Toch isogloss[23]) and confirms the voiced (aspirated?) character of the initial stop lost in Hier L.

[21] Melchert 1993a:33 supposes an opposite meaning, 'to lift', for the Cun L.
[22] Puhvel 1984:185.
[23] The inclusion here of Skt has been assumed, based on the Skt verb *ghas-ati* (Delamarre 1984:84), but a better phonetic explanation for Hier L is given by the reconstruction **gos-(t)-*.

• An interesting feature of Hier L verbs of speaking is presented in *asaza-* 'say, pronounce', derived from L *as-* (Cun L *a-a-aš-ša*, where the spelling may point either to a pronunciation of a laryngeal not expressed as such in the cuneiform writing, or to vowel length, or a hiatus caused by the laryngeal's disappearance), which is structurally similar to Lat *ōs*, Skt *ās* 'mouth' < **oHs*. A more archaic shape has probably been preserved in H *aiš*, oblique *iššš-* 'mouth'.[24] The form 2 pers. sg. imper. *á-sa*$_5$*-za* 'say' opens each of the Assur lead letters, which corresponds to the use of Akkadian *qibī* in the same genre (538). The use of this verb of speaking in the sense 'to proclaim' with direct speech is one of the peculiar stylistic features of the Hier L parts of the Karatepe bilinguals: their corresponding phrases differ from the Phoen ones, making an exact match impossible (66). The form of the 3 pers. sg. pres. (=future) is *á-sa*$_5$*-za-i* (469, 471; a type corresponding to the H *ḫi*-conjugation). The mediopassive participle of this verb is *á-sa*$_5$*-za-mi-i-sá* 'proclaimed' (129).

• Among derivatives of the L heteroclitic word for 'blood' (Cun L *ašḫa-r-/-n-*: H *ašḫa-r-/-n-*, with Toch, Skt, and other cognates going back to IE **esH-ṛ/-ṇ-*) is the particularly complicated grammatical form *á-sa-ha-na-ti-sa-za*, analyzed as [*ashan-a(n)t-i*], corresponding to H *ešḫan-ant-* (an animatized "quasi-ergative" form based on an old neut. gender noun[25]) + *-asi-* (L poss. gen. suffix) +

[24] The H word has been considered as a crux (Melchert 1994:115–116). Hittite has preserved an archaic word structure, for though the intervocalic *-H-* has been lost, it has retained the archaic IE quantitative ablaut, no trace of which is seen either in Luwian or in the other IE dialects. A supposed Palaic cognate is unclear. In some IE areas an *-u-* has developed after the loss of the laryngeal.
[25] Since the Hurrian-H bilingual confirms that such an *-ant-* form was a translational equivalent of the Hur ergative (cf. Hur *ta-a-re-eš* 'the fire' rendered by the H quasi-ergative form *pa-aḫ-ḫu-e-na-an-za* from *paḫḫur*, Neu 1996:104–105, fn. 18), it is possible to see in the form *zu-ur-ki-ya-an-za* (Bo 2349/c + KUB XXIX 7 Rs. 22; Haas and Wilhelm 1974:65) a hybrid Hur-L derivation (cf. Laroche 1980:309) in which this suffix was added to the stem of Hur *zurki* 'blood'. This suggests the hypothesis that such H-L forms were due to the intensive Hur-L bilingual contact in southern Anatolia and northern Syria.

the nom.-acc. sg. neut. ending + a case/"particle" *-ša* of an "animatized neuter" (174). The result might mean 'an active thing belonging to active blood-deeds'. As a designation of a blood-sacrifice it serves as an object to the verb 'to give'. It is interesting that the same case/particle *-ša* is added to the word for blood in Cun L *ašḫa-r-ša*.[26] In Hier L a blood-sacrifice can also be designated by the mediopassive participle of the denominative verb *ashari-mi-* (106, 114).

• The causative verb *asu-nu-* that occurs in one of the Assur letters (536, 549, cf. 136), if it is related to H *ašš-anu-* 'favor, make good', is very interesting, as it—alongside Hier L LITUUS *á-za-* 'love' and mediopass. participle *á-za-mi-na* 'beloved' (cf. 445 and H *ašš-iya-*)—shows an initial syllable different from Cun L: IE *$_o$*s-u-* 'good' > H *ašš-u-* (Skt. *su-*), Cun L *wāššu-*. But a stem identical to Cun L also is present in a number of derivatives: Hier L *wa/i-su*, *wa/i-sa* ('dear', 293), the verb *was(iya)a-* (453, 476, 477, participle *wasa-mi-*, 147), iterative *wasa-za-* (522). A causative verb (BONUS) *us-anu-* seems to be parallel to *asu-nu-*. The presence of both variants of the initial in Hier L is otherwise paralleled only in Skt, where *vasu-* coexists with *su* (the origin of Gk *ϵὐ-* is controversial).

• Besides its importance for the IE problem in general[27] and for the *satəm* question in particular, the Hier L word for 'horse', *asu-*, presents an interesting grammatical problem. The word (like Cun L ANŠE.KUR.RA-*uš*) is a *-u-* stem (acc. sg. *asu-n*), but a collective form with nom.-acc. neut. in *-nza* also exists: (EQUUS) *á-sù-wa/i-za* = [*asuwinza*] < **asuw-iy-anza* (515). The exact function of the collective suffix *-i(y)-* and its relation to IE **-iH-* remains to be explored. A new interpretation of Hier L "ANIMAL. EQUUS" *sù-sà-ta-la-u-na* 'to ride on horses' (479) seems quite stimulating for the whole question of horse-riding among early Indo-Europeans. But the character of the *nomina agentis* suffix *-tal(l)a-*, as well as the correspondence to the stem of H *aššu-šša-nni*, makes it plausible that here (as in many other cases) Hier L continued the H imperial tradition, preserving old H terminology. In that case, the correspondence with H *aššu-šša-talla-* would not be accidental (although the exact function of this H official is unfortunately not clear).

• The adjective *a-tá-ti-li-i-sa* = [*anta-tili-s*] 'internal' (opposed to *irhitili-* 'external') is probably related to *a(n)ta* = Cun L *anda* (H *anda* 'into') and *a(n)tati* (dat. sg.) 'interior', Lyc *ñtata-* 'chamber (?)' (394, 474, 552). The parallel to IE formations like Lat *in-ter(-us)* is evident, but in L (and Anatolian in general) an interchange *-l-/-r-* is taking place (cf. the suffix *-til-* in Cun L *puwa-til* 'future').

• Hier L *atala(i)-* 'brother (?)' (logographic FRATER-*la*[*i*]-, 127, 132, 237, 278) can be compared to Gk ἀταλός 'childish', Toch A *atäl* 'man', German *Adel* 'nobility', and a group of Lat terms like *prōlēs* 'progeny' that go back to **al-*, as shown by Szemerényi and Benveniste. Almost the entire paradigm is attested: sg. nom. FRATER-*la(i)s*, acc. *-lan*, gen. *-las*, dat. *-lai/-laia*, dat. sg. of poss. adj. *-lasana*, pl. nom./acc. *-la(in)zi* , dat. *-la(n)za* (237). The enigmatic final *-i-* element of the stem might perhaps be explained as a trace of a collective suffix used to designate 'brotherhood, fraternity', as is common in IE derivatives of 'brother'.

• Hier L *atala-* 'brother' differs from Cun L *nana-* 'brother' (from **neg'h-no-* > H *negna-*, a derivative of an archaic term, cf. H *nega-* for a young woman in the generation of *ego*). Still, both L languages use a derivative of *nana-* as a word for 'sister': Cun L *nanašriya-* 'of a sister', Hier L *na-na-sa$_5$+ra/i-za*, acc. pl., a Maraş fragment at the Hermitage Museum, St. Petersburg (278). These L forms reflect a compound from the stem of L *ašr(a/i)-* < **e/os(o)r-* 'female, woman', a noun deduced from Cun L *ašra-hit-aššiin* 'belonging to womanhood' (a loan translation of a Hur expression *ašt-ašḫi* 'womanhood' with a L abstract suffix *-hit-*), *ašr-uli-* 'female' (a rendering of a Hur expression *ašt-uhhi* 'female'), *ašr-ula-hit-* 'femininity', Hier L FEMINA-*la-* (367). It seems that only L and Homeric Gk ὄαρ have preserved this IE stem as such with an initial vowel, which is lost in the rest of the IE dialects (Indo-Iranian *str-ī-* < **sr-iH-* shows later changes of the stem after the addition of a suffix **-iH-* > *-ī-*). The morph has been preserved only as a suffix in H, Skt, and Celtic.

[26] A connection with the Toch A perlative case *ysar-sa* is possible.

[27] Ivanov 1999b (with references).

Probably at the time of Hur-L bilingualism in southern Asia Minor, Hur influence had helped to preserve the word as an equivalent of a Hur term for the principle of 'womanhood'.[28]

• A new problem for IE phonology is presented in Hier L *atr/l/ni-* 'form/figure/image/soul', already identified with Lyc (and Mil) *atr/l-* 'person, self' by Gelb. It has now been found that this L-Lyc stem corresponds to H *ešri-* 'form/figure/essence' (101, 136, 445–446, 460), as in a H myth, where the essence of the God of Thunder is stolen from him by a dragon. From a (heteroclitic) stem *atn-* is derived Hier L *atana-sama-* 'wisdom' (61); in the Karatepe bilingual it corresponds to Phoen *hkmt*.[29] The correspondence L *t-* : H *š-* recurs in Hier L *tawi-* 'eye' (acc. sg. *tawi-n*, 474, instr. *tawi-ri*, 272, poss. adj. *tawi-+ asi-nt-ati*, 547), Cun L *tawa/ī* 'eye' (Lyc *tawa*, collective pl.[30]) < **takwa* : H *šakuwa* 'eye' (OIr *ro-sc*), H *šakuwai-* : Goth *saihvan* 'to see' (Mod Engl *see*), H (in mythological epics) *šakuwai-šk-* (iterative): Alb *shoh.* (In the rest of the IE dialects there is no initial consonant in **okʷ-* 'eye'.) Such correspondences[31] might shed light on some of the difficulties surrounding forms like Hier L *hwitniya-nza* 'of the wild beasts' (324), *hwitar-* where *-t-* (also in Cun L, as well as in H forms probably borrowed from L) interchanges with *-s-* of *hwisar* (237, commenting on Starke's complicated explanations; 265[32]). Is it possible that all forms with *-t-* initially belonged to L, while the ones with *-š-* were H (cf. H *hwe/iš-* 'to live'), and that later on there was intensive cross-borrowing in these Anatolian dialects? It seems significant that Cun L has only forms in *-t-*. The specific development that makes this phoneme in L different from the reflex of **s* > *š* may be connected to the *satəm*-type change of voiceless palatal stops. As the latter developed into affricates and spirants, the former spirants had to change. Such a "chain reaction" in the phonemic system may be compared to a similar one that led to the contextually motivated development *s* > *š* in some *satəm* dialects (i.e., Indo-Iranian, with a special development in Nuristani, Balto-Slavic, Albanian).

• Hier L *hamsukala-* 'great-grandson' (with unexplained semi-logographic variants[33]: 153, 258; Cun L *ḫamšukkalla-*) seems to be derived by means of a suffix *-kala-* (diminutive, cf. German *Enkel* < Late Old High German *eni-klīn* 'grandson'[34]) from the stem *hamsu-*. The latter is present in another vowel grade (zero grade) in Hier L (NEPOS) *ha-su* '(for the) family' (dat. sg. = Phoen *šrš* 'roots', 60; cf. mediopass. participle *has-ami* 'begotten, born', 444). Comparison with H *hašša hanzašša* (with a similar iconic use of different vowel grades in kinship terms) helps confirm the correspondence L *-ms-* : H *-nz-*, which is important for historical morphology (particularly for the origin of cases: Hier L pl. *-[n]z-* < IE acc. pl. **-m-s*).

• Hier L REX-*ti-* = **hanta-wati-* 'king' = Cun L *ḫanta-wati-* 'king', Lyc *χnta-wat(i)-* 'ruler, king' (61–62, 67, 455, 521, 626) can be traced back to an IE compound **Hn̥t-o-wodh-* 'front- + lead'. Its first part is identical to Hier L *hant-* = FRONT 'forehead, face', Cun L and H *ḫant-* 'forehead' (110); Hier L *hantili-* 'former, first' (61); H *ḫantezziya-*, with

[28] The phonetic resemblance to Hur *ašte* 'woman' might have contributed to the preservation of this stem, particularly in abstract derivatives. Meriggi, who was the first to suggest the existence of the L word, even thought of a Hurrian borrowing, although this does not seem plausible.

[29] The Phoen form is identical to the other W Semitic forms (Ugaritic, Hebrew). In a H-Hur bilingual, Hur *mati* (of supposed Indo-Aryan origin, but cf. also Ancient Egyptian *m(a)ti* as a designation of the balance of opposing binary forces in the universe) is translated by H *ḫatt-atar* 'wisdom' (Neu 1996:140; etymologically linked to Skt *āt-man* 'breath, soul, self', Germ *Atem* 'breath').

[30] Melchert 1993b:71. OH *šakuwa* seems to preserve traces of a collective dual form (of the nom.-acc.-dat.) as, for instance, in a construction with a postpositional enclitic pronoun *ša-ku-wa-aš-ma* (2 BoTU 12 A = KBo III 34 I 18). The L distributive pl. in *-nt-*, probably reflected in the poss. adj. form cited above, has a correspondence in Toch.

[31] Also found in cases like Cun L *tammuga* 'nails' : H *šankui-*. On H *šeḫur* 'urine' corresponding to L *dūr* 'urine', cf. Melchert 1994:118, 274; Gamkrelidze and Ivanov 1995:104.

[32] The "wild life" as a concern of the gods (265) corresponds to an IE concept.

[33] Melchert's suggestion of a metathesis (Melchert 1993a:50; 1994:275) is not supported by the attested phonetic spellings.

[34] Müller 1979:71–119; Ruiperez 1984:35–41, 106, 119–121.

another IE suffix. The second part, meaning 'leader', is comparable to Bal-Sl words for 'leader': Lith *vadas* 'leader', *pra-vadas* 'leader' (cf. OPr *pra-weedd-uns* = *durchgeführt*), *vedėjas*, OCS *voždь*, *predŭ-voditelĭ*, *voje-voda* 'general' (cf. the semantic type Myc *ra-wa-ke-ta* = λαϝαγέτας). These terms exhibit a remarkable coincidence in the use of the verb **wedh-* 'to lead' in a specific meaning associated not with the widely represented general IE (and also Bal-Sl) violent marriage custom,[35] but rather with the role of the leader. H *ḫaššu-* 'king', attested already in Ebla archives of the third millennium B.C. in the name of the city *Ḫazzuwa* (cf. OH *Šall-a-ḫšuwa* 'Of the Great King' as a city name), is usually identified with Skt *asu-ra-* 'lord, god' (Av *ahura-*) and an ON word for gods. In L, as also in Balto-Slavic, such an archaic term might have been replaced with a descriptive compound.[36]

• Hier L *hapat(a)i-*, rhotacized *hapari* 'river-land' (= Phoen [*kl*] *h-mskt*, 64, 414; Cun L *hapati*[37]) is derived from the stem of FLUMEN = *hapi-*, Cun L *hap-i-*, cf. the Baltic hydronym *Apytà*.[38]

• Hier L (CAPUT) *harmah-asi-*, poss. adj. 'of a head = person' (449, 451), is identical to Cun L *ḫarmaḫ-aššī-*. H *ḫaršar* 'head' continues an old IE term[39] while L has changed the meaning of the inherited noun.[40]

• Hier L *harwa(n)(-t)* 'road', Cun L *ḫar(u)wa-* 'road' (62, 373; on its derived nouns and verbs: 373, 353) is probably a Hur borrowing, cf. Hur (and Urartean) *ḫari-* 'road'. In H *palša-* 'road' is used with the same meaning (Hier L *pal*[*a*]*sa-*/*par*[*a*]*si*? 112, 127; probably a borrowed H ritual term with phonetic variations); cf. also H *itar* 'going' (from the lost *i-* 'to go'): Toch A *ytar*, Lat *iter* 'road'.

• Hier L *has-ati* 'by force' < 'bone' (107) is similar to Cun L *ḫa-(a-)aš-ša* 'bone', Lat *oss* > *os* where no suffix *-t(H)* is to be reconstructed, which is different from H *haštai-* 'bone': Skt *ásthi-*, Sl **kostĭ* < IE **Hos-t(h)-i*.[41]

• Hier L (PUGNUS. PUGNUS) *hi-sa-ha-mi-na* 'we bind' (Cun L *ḫišḫiya-*, H *išḫiya-*, 149) shows that for a long time (initial) laryngeals were preserved in L in positions where they had already disappeared in H in the pre-literate period.

• The verb *i-* 'to go', a common IE root athematic verb, has been preserved in L (but not in H). In Hier L its paradigm includes the forms of 1 pers. sg. pres. *i-wa/i* = [*iwi*], past ("PES_2") *i-ha*[42], 3 pers. sg. past ("PES_2") *i-tà* (rhotacized *i+ra/i*), 3 pers. sg./pl. imper. *i-tu-u* (= Skt *e-tu*), infin. *i-u-na* (62). For the study of euphemistic expressions, an important finding is the circumlocution for 'to die' = Hier L *arha i-* (= log. PES_2) 'to go forth' (181, 491). The phrase occurs several times in inscriptions referring to the death of the person who had ordered a monument, and is sometimes found in a fuller form: DEUS-*anza tawa/iyana arha i-* 'go forth in the

[35] Benveniste 1969:240; Gamkrelidze and Ivanov 1995:658–660 (with references).

[36] An opposing opinion, put forward by Starke, is based instead on the Hier L form *hasusari-* 'queen', which seems to be either a H borrowing or the result of a semantic reinterpretation of the L term under H influence (since Hier L continued the H imperial tradition after the break-up of the H kingdom, several terms were borrowed from the vocabulary of OH official documents). In Hier L *hasu-* means 'family', but not 'king' as in H.

[37] Starke 1990:514; Melchert 1993a:55; 1993a (Mil *χbade/i*).

[38] Vanagas 1981:44. On the controversial problem of the character of the stop, see Gamkrelidze and Ivanov 1995:63–64, fn. 83.

[39] In spite of the rare instances where H *ḫ-* corresponds to an IE "guttural" stop in the other IE dialects (in contrast to the large number of cases showing a change *k* > *h* in L), it seems that in *ḫaršar/-n-* the entire structure corresponds to the stem of such words as Lat *cerebrum* < **k'er(e)srom*, and so the word should be cognate to it.

[40] The meaning of a corresponding term in the other IE dialects is reconstructed as 'shoulder, upper part of the arm', cf. Lat *armus*. One may suppose a shift '*shoulder/neck' > 'head'.

[41] Melchert (1994:243, cf. Starke 1990:122–123) ascribes the simplification of the group **-st-* to the Proto-Anatolian period. But in this case one may accept either a parallel (or convergent) development in Proto-Latin or a dialectal IE difference between a form without **-t(H)-* or with it (a solution suggested by Benveniste before the L form was found).

[42] On possible comparisons, see Ivanov 1981:100.

presence of gods'[43] (444). One may compare the partly antonymous *arha lar(<d/t)a-* 'to flourish, burgeon forth' (with reference to vegetation in a theophany, in which the god is present on earth but not in the Netherworld, 468). Two verbs derived from *i-*, Hier L *awi* 'come' (Cun L *awi*, H *uwa-*, 260, 444) and Hier L *pa-* 'go, live', iterative *paza-* (114, 185, 548, H *pai-*, which was substituted for the root verb), are also used in stock phrases (e.g., Hier L *apan awi-* 'to come after = to be available', 98, 260). In Hier L the phrase *wasu awi* 'come well (for)' is often used (444). In one of the ritual poems, the songs of Ištanuwa,[44] the same Cun L noun combines with *paddu*, which may be identified with the Hier L 3 pers. sg. imper. *pa-tu* 'should go, come, live'. The formula *waššu paddu* 'the good (luck) should come (to me)' is similar to the one discovered in Hier L. It shows that some of the repeated formulae in Hier L inscriptions reproduce the older vocabulary of L rituals.

• If, as seems possible, Hier L *i(ya)sa-* 'buy' (147) is cognate with H *waš-*, the absence of *w-* in L (constituting exactly the opposite of the pair H *aššu-*: L *waššu-*) reminds one of comparable difficulties with the absence of initial digamma in related forms in Gk, as pointed out by Chadwick.[45] But a form with an initial *w-* may be reflected in Hier L *waza-* (247), an iterative verb from the same root. One possibility might involve an initial IE morph **w-* prefixed to the root, as probably in Lat *vēscor*, if < **w-* + *ed-*.

• Hawkins has shown that Hier L *irha-li-* 'frontier-post' (455; cf. also *irhalisa-* 'delimit', 298), *irh-a/iti-* > *irha-ri* 'outside, external' (H *arḫ-za* from the same IE root, Lith *óras* 'outside = weather',[46] 150) + *na-* (FINES-*hi-ti-i-na*, H *araḫ-zena-*, 126), *irha-tili-* 'foreign' are derived from *irha-* 'frontier' (= FINES-*hi*[*-zi*] = Phoen *gbl*, 52). A full description of L vowel gradation in such sonant-combinations still needs to be written.

• Hier L *ku(wa)lana* 'army' (= EXERCITUS, 59, 174) may be connected to the stem of Sl **čelędĭ* < **kʷel-endi* 'servants (in a feudal estate)'. Despite the seemingly contrary evidence of Myc *tereta*, one should probably return to the controversial reconstruction of τέλος < **kʷelo-s*.[47]

• Hier L *kuma/i-* 'pure' (Cun L *kummai-* 'pure'), **kuma-za* 'priest' (= Lyc. *kumaza* 'priest': 474, 627, also *kuma-ni-* = PURUS 'consecrate', 139; *kuma-stari* 'sacrament', 357; *kum-iy-ala* 'sacrificial victim', 343) may be related to the stem of Hur *Kumm-ene*, an epithet of the god *Kum-arbi* (whose residence is the city *Kumme*).

• Hier L *kuwaya-* = *HWI-ya-(mi)* (= Phoen *št'* 'fear', 63, 293, 469) is identical to Cun L *kuwaya* in several *Glossenkeil* words. The word goes back to IE **dwei-* with a L change **dw-* > *kw-*. Semantic parallels are known in derivatives of this root in Gk and Arm (and typological parallels of the type of Germ *Zweifel* are known from Coptic and other languages). Cun L *kuway-at-a* 'fear' belongs to the same type of abstract noun as H *naḫšaratt-* 'fear', an abstract noun based on the root of H *naḫḫ-* 'to be afraid', L *naḫḫuwa-*. In a mythological context the expression H *naḫšaratt-eš weritem-eš* '(personifications of) Fear and Terror' (= Gk Δεῖμος τε Φόβος τε) renders Hattic *tauwa*$_a$ *tupi* (with North Caucasian parallels).[48]

• A clear example of a H borrowing in Hier L appears in the verb *laman-isa-* 'proclaim'. The contrast between the development of laryngeals in initial position in L and H (143) is clear: IE **Hnom(e)n* > H *laman* 'name', with a zero reflex of the initial laryngeal, as in most dialects except the Gk-Arm part of the eastern IE region. Hier L *a-ta*$_{4/5}$*-ma-za* 'name' has a prothetic vowel of a type

[43] In the corresponding H imperial euphemistic terminology, the late king did not simply come into the presence of the gods, but actually became (H *kiš-*) one of them.

[44] This song appears to have been particularly popular or important since either its first line or both of its first lines were reproduced with minor variations in three different tables: KUB XXXV 135 Rs. IV 22', KBo XXX 167 Rs. III 8'–10'; KBo IV 11 Vs. 54–55.

[45] Chantraine 1976:193–194.

[46] On suggested etymologies, see Puhvel 1984:134–135.

[47] See the cautious conclusion by Chantraine 1984:1103.

[48] Ivanov 1985:47–48 (with references to works by Friedrich and Puhvel, who discovered the Hattic – H – Gk semantic connections).

similar to the Gk-Arm one. Only a late borrowing can explain the peculiarity of the form *laman-isa-*.

• Hier L *ma-tu-sa* 'wine' (477), Cun L *maddu* have preserved the meaning of IE **medhu-* as 'alcoholic beverage, mead', otherwise attested in cognate words in Iranian, partly in Vedic and some later Indo-Aryan and Nuristani dialects, Mycenaean and Homeric Greek, Germanic, Slavic, and Celtic.[49] H (as in many other IE dialects) substituted for this word a derivative of the old name for 'vine' preserved in Hier L *wiyani* 'vine' (178, 444, 468, 471), Cun L *winiy-ant-*. Thus the whole structure of the semantic field has been changed due to the absence of **medhu* in H.

• The Hier L negative *na* (= NEG_2, 477) coincides with Cun L *na* (> Lyc and Mil *ne*) and differs from the complex H form *natta*. The Hier L prohibitive *ni(s)* (261, 286), Cun L *niš*, and Lyc *ni* differ from the H prohibitive *le*. The continuity of the L and Lyc systems of negation and disjunction is also seen in the recently discovered Hier L *ni... nipa* (= NEG_3 ... NEG_3) 'whether... or' (127, 486) and Lyc prohibitive *nipe*, Mil *nepe*.

• The combination of *punati-* 'all' with the name of the gods (440) makes it possible to find in Hier L the same phrase that occurs in Cun L mythological texts as *punatinzi maššaninzi* (cf. Lyc *mahai uwedri*, Mil *masaiz uwedriz*), synonymous with H *ḫumant-eš šiun-eš* 'all the gods'.[50]

• Several Hier L ritual texts celebrate the god called 'Tarhunt (Storm God) of the Vineyard', *tu-wa/i+ra/i-sà-sa* (DEUS)TONITRUS-*hu-za-sa-*. The theophany described in these texts correlates with sculptural images of the god, which represent him with bunches of grapes that encircle his body (468, 516, 526).[51] It seems that the same cult connected to the vine is meant in a Cun L mythological fragment in which one of the broken lines following the form *ú-i-ni-ya-du-wa* contains the fragmentary verbal form *tar-ḫu-un-ta-at-ta...*, derived from the name of this god.[52] In the rituals of Ištanuwa, participants "drink the God of the Vineyard (or Wine?)" (^{D}*Ù-i-ni-ya-an-da-an a-ku-wa-an-zi*).[53] These texts were written in Hittite, but they represent the religion of a Luwian-speaking population. They may also show how the meaning 'wine' has developed from that of 'vine'.

[49] Gamkrelidze and Ivanov 1995:517–518. The semantic reconstruction sketched in the book can be corroborated by L data, unknown to the authors at the time of writing.

[50] Cf. on Gk παντ-, cognate to L *punat-* in this mythological context, Ivanov 1998.

[51] Although the Ivriz sculpture of the god with vine-grapes has been reproduced several times, Hawkins has here for the first time found an explicit connection between this representation of the god and his verbal description in the Hier L ritual texts. The suggestion of seeing the probable source of Gk θύρσος 'sacred sign of Dionysos' in Hier L *tuwar(i)sa-* 'vineyard' (254), which goes back to Gelb and Bossert, can now be considered to have been proven by these data. And given Neumann's suggestion concerning an etymological link between the Gk and Hier L words and the Gk term τύβαρις, referring to a sort of salad prepared with vinegar (1961:86–87), it is also possible to include in this group of nouns the late Hier L designation of the Wine God *Tip/wariya-* (66 and 97), which is locally restricted. But the linguistic explanation for the phonetic difference between these two forms remains to be clarified; Neumann considers them to belong to two different dialects. For further discussion of Gk θύρσος, τύβαρις, and Hier L *tuwar(i)sa-*, as well as their possible connection with Linear A material, see recently Vine (1999:571).

[52] KBo XIII 263 2', 7'. Since the river Euphrates (*Mala*) is mentioned in the beginning of the fragment, together with spatial designations like *išaruwaya* 'right', it appears that a description of a particular place is being given. Thus the meaning 'vine' and not 'wine' seems more appropriate, although the latter (as suggested by Melchert 1993a:269) is not absolutely excluded.

[53] Bo 2447 Rs. IV 16. In a similar text the ecstatic cry of the singers (again reminiscent of Dionysiac rites) contains the same name of the god (written without a determinative: KUB XXV 37 + XXXV 131 + 132 II 17, 19) repeated twice. These two names probably constitute a line of eight syllables typical of Luwian metrics, which go back to IE poetry (Watkins 1995): *winiyandan/ winiyandan* – ˘ – ˘ / – ˘ – ˘ //. In a Luwian song in this text (ibid. Vs. II, 33') the form *tarḫuntaššinzati* 'belonging to Tarhunt' is used, while the drinking of 'wine' (Sumerian logogram GEŠTIN) is mentioned several times in the Hittite text.

The latter seems to be exceptional within the entire group of IE, Afro-Asiatic, Kartvelian, North Caucasian (Abkhazian), and Hattic terms related to these words.[54]

• Hier L *u-sa/i-* 'year' (271, 373, 457, 484), like Cun L *ušša-* 'year' and Lyc *uhe/i-*, *uha(-zata-)* 'yearly (tribute)', goes back to IE **w(e)t-so-* > Skt *vat-sa-*.[55] It is derived from the root of the athematic root noun preserved in H *wett-* 'year' < IE **wet-*.

• Hier L *wanati-* 'woman' (338), Cun L *wanatti-* contains a suffix similar to the one found in a cognate form in Slavic.

• Hier L (CURRUS) *wa/i-ra/i-za-ni/nī-* = [*warazani-*] 'chariot' (546) is related to H *hurki-* 'wheel' : Toch A *wärkant-*, Toch B *yerkwantai* 'wheel', a possible *satəm* correspondence. It might have referred to a common type of vehicle used by both Anatolian Indo-Europeans and proto-Tocharians as well as by Hurrians and other tribes speaking North Caucasian dialects.[56] It is connected to H *huluganni-* 'chariot'.

• In Hier L *zalal-* 'chariot, vehicle, cart' (135, 525, 546), there is a probable trace of an older (partial?) reduplication. The Hier L word is derived from the root of L *kuwal-* 'to turn', with later palatalization of the labiovelar before a front vowel.[57] Cun L *zal-war/n-* 'riding in a chariot' comes from the same root without reduplication, as do cognate words in Old Prussian, Slavic, and Celtic.[58] A large zone including L and all the other IE dialects except H is defined by this name of a 'wheeled vehicle, wheel', derived from the root **k^{w}el-* 'to turn'. In "Euphratic" (*gigira* 'chariot, wagon' known through Sumerian[59]), Toch (A *kukäl*, B *kokale* 'carriage'), Eastern IE (Indo-Iranian, cf. Skt *cakra-*; Myc and Homeric Gk; Phrygian), and Germanic, a perfect-type reduplication of this stem is used. Although H retains some traces of derivatives from *ku(e)l-*, the main verb meaning 'to turn' is different from the L one: H *weḫ-* is used particularly in descriptions of horse-training exercises in the hippological treatises.

• Among the very few cases where one could go further in suggesting lexical readings, I might mention a possible **tuliyan* 'assembly' for 455-*li-ia-na* '*assemblage* (of the gods)' in Karkamiš A Ia, 25 (91–92, 631);[60] *tuliya-* occurs several times in Cun L as a poss. adj. in *-aššiš-*, and in H it is often used as an equivalent of Akkadian *puḫrum* 'assembly of gods'. The proposed reading, however, contradicts the value *la_x* recently suggested for the rare sign 455 (620).

It also is possible that Hier L *pu-* in the 3 pers. sg. imper. *pu-tu* (481–483, Karaburun §13), identical to the 3 pers. sg. imper. form Mil *pu-tu*, may have the meaning 'to be' ("he should not be superior..."), cf. Cun L *puwa* 'formerly', *puwa-til* 'past' (IE **bhuH-*).

Summing up the main features that emerge from these data, one may say that, although Hier L is very close to Cun L, the distance between the two versions of L is sociolinguistic, spatial, and temporal. Cun L texts come from the H capital during the fourteenth–thirteenth centuries B.C., at a time when L had been an unofficial language distinct from the official H language. Hier L was written as an official language to the southeast of this area, mostly some centuries later, when H had ceased to exist and Hier L replaced it in the princes' inscriptions. The influence of the official H tradition on later Hier L explains many words and perhaps some grammatical constructions absent in Cun L (such as sentences with gen. sg.). Since the principles underlying the grammatical structure of Hier L stand out more clearly as a result of Hawkins' book, it is now possible to distinguish between them and details that still deserve deeper

[54] Gamkrelidze and Ivanov 1995:557–562.

[55] Čop, who had proposed a similar derivation, later changed his mind. In his last works on Indo-Uralic he considered the possibility of explaining L *š* by a special phonetic law, which nevertheless remains unproven.

[56] Ivanov 1999b:215–216, see there also on the stem *tur-i-* < **dhur*, 103 (Karkamiš A 11 b+c, 3, §7), 113 (Karkamiš A, 2 §4).

[57] Ivanov 1999a.

[58] Ivanov 1999b:216–218.

[59] Gamkrelidze and Ivanov 1995:622; 639; Whittaker 1998:144; Frayne 1992:21.

[60] Meriggi (1962:218) had already read *Götterforum* (Meriggi 1967:115: "288-*li-š* divino").

investigation (such as the reasons for the use of the particle *-sa* with nom.-acc. neut., mentioned several times in the commentary).

As a final point of grammatical interest: in his study of the Assur lead letters, Hawkins has explored the late Hier L system of enclitic pronouns, including personal orthotonic and enclitic possessive pronouns. It appears that the pronouns include: sg. 1 pers. *amu* (184–185), orthotonic *mu* 'I, me, to me' and enclitic 'me, to me, to myself', Cun L *mu*, and reflexive *-mi*; 2 pers. orthotonic *ti*, Cun L *ti*, enclitic and reflexive *-ti*[61] and (in several cases) enclitic *-tu* 'to, for you'; 3 pers. enclitic *-tu* 'to him/her', Cun L *-du*, reflexive *-ti*; pl. 1 pers. *à-zu-za* 'to us'; 2 pers. enclitic reflexive *-ma-za* (538–539).[62] The personal possessive pronouns are: sg. 1 pers. *ami-*, 2 pers. *tuwi-* 'thy' (abl. sg. *tu-wa/i-ri +i*), pl. 1 pers. *anzi-* 'our' (nom. sg. anim. gender *a-zi-sa*, abl. sg. *á-zi-ya-ti*, nom. acc. pl. neut. *a-za-ya* = [*anzaya*]), 2 pers. *unzi-* 'your' (458–459, 542, 550).[63]

Since Hawkins worked for several years correcting the proofs, there are, not surprisingly, just a small number of errors and misprints. I have found only a few wrong numbers in the indexes, which is understandable, as the discovery of new inscriptions necessitated various changes in the printed text.

The extremely valuable work Hawkins has performed in this volume extends also to the areas of morphology, syntax, and discourse structure (particularly in the examples of conversational speech, such as the Assur letters, which are difficult). There still remains, however, a need for a new grammar to replace Meriggi's. Perhaps one could begin with a full grammatical index of all the forms; the next step would be to establish all the possible paradigms. In this way, one could contemplate working towards a standard historical grammar for all the Luwian dialects. Hawkins has laid a foundation that will remain the basis of such study for several generations to come.

[61] H differs from the rest of Anatolian in adding a velar suffix to the end of these pronouns, as in Germanic and Venetic. For polar views on the origin of personal pronouns, where H significantly differs from the other Anatolian dialects in having a sort of heteroclitic pronominal declension (with different stems for nominative and oblique cases), see Rosenkranz 1978:66; Melchert 1994:7.

[62] If one does not accept a purely phonetic explanation (Melchert 1994:270), it is possible to find a trace of archaic morphology in this form.

[63] This system of possessive pronouns was already clear to Meriggi (1980:320–321) when he had accepted the new readings (absent from his grammar, Meriggi 1966), but he was not so sure of the forms of the personal pronouns (ibid.).

Volume 2: Karatepe-Aslantas, The Inscriptions

The second volume of the series actually appeared somewhat earlier than the first one, and is a supplement to it. Since the only complete edition of the Karatepe inscriptions (published by Bossert in a series of articles) was deficient in several respects, it seemed necessary to publish a modernized one. According to a decision due mostly to the influence of the great Hittite scholar Hans Gustav Güterbock (to whom the book is dedicated, alongside Bossert and Steinherr, the first excavators), Halet Çambel—an archaeologist who had participated in Bossert's initial expedition and publications—took on the difficult task of arranging all the photographs, drawings, maps, and plans, as well as some additional materials that constitute this volume. The photographs were produced by a number of different participants in the work, starting with Güterbock himself during his visit of 1947, and then by many other investigators, particularly Dursun Cankur, Ahmet Boratav, Reha Günay, Josephine Powell, Heinz Anstock, Füsun Yaraş, Aziz Albek, U. Bahadır Alkım, and Elisabeth Rosenbaum-Alföldi. Plans were drawn by Erhan Bıçakı and the architects Ibrahim Süzen and Turgut Kansever, with older plans having been redrawn by Ilknur Türkoğlu-Arı and Arzu Östürk. This material, then, substitutes for the missing Karatepe section in Part 3 of Hawkins' volume, as already noted above. The main section of this book is modeled on Hawkins' marvelous edition (*op. laud., supra*). Each part of the Karatepe Hieroglyphic Luwian-Phoenician inscription is shown in a photograph, accompanied by a copy produced underneath. At the end of the volume, a large plan is provided as a supplement (in a special pocket in the back cover), showing the location of the inscriptions of the North Gate. The plan was made by the German archaeologist Peter Neve. The drawings on this plan, showing the Phoenician and Hieroglyphic Luwian inscriptions in a small but readable reproduction together with the relief figures, are the work of Eva-Maria Bossert.

After a preface enumerating the various participants of this collective work (pp. ix–x), there follow a list of the 125 plates that form the main section of the book (pp. xi–xiii) and a bibliography of publications on Karatepe (pp. xvii–xxiii). The Introduction (pp. 1–13) provides a short history of the discovery and publication of the inscriptions, as well as a brief overview of the subsequent attempts to restore the monuments (a process in which the author himself participated) and a sketch of the current condition of the inscriptions. The section devoted to the archaeological description of the Bilingual (pp. 15–34) is divided into a survey of all the existing Phoenician parts (pp. 15–23) and a corresponding sketch of the Hieroglyphic Luwian inscriptions (pp. 24–34). This description, together with the plan supplemented by Neve, is very important for understanding the external appearance of the entire complicated composition. As there are two parallel but not identical parts of the Hieroglyphic Luwian text, one of many difficulties in their interpretation arises from the non-continuous character of the inscription, parts of which were written on different objects. Given separately are sections containing an archaeological description of the individual inscriptions (Phoenician, p. 35, and Hieroglyphic Luwian, pp. 35–38) and the fragments (Phoenician, p. 39, and Hieroglyphic Luwian, pp. 40–49).

Particularly valuable is Appendix 1 (pp. 50–81), written by the Phoenician specialist Wolfgang Röllig. This section provides a transliteration, translation, partial commentary, and detailed paleographical analysis (with very informative tables of letter variants) of the two main inscriptions (North Gate, Pho/A, and North Gate, Pho/B), as well as of those on the Statue (PhSt/C) and the separate texts on stone fragments (Pho/S I a,b). Röllig's comments are meant only as a short addition to Bron's important book.[64] Some of these additions are necessitated by developments in our understanding of the Hieroglyphic Luwian portion, due to the recent research of A. Morpurgo Davies and J. D. Hawkins. Thus it becomes necessary, for example, to change the form of the name of the bilingual inscription's author: he should be called *Aza-tiwada*, with the vowel *a* in the second syllable (58) and a voiced *-d-* (> *-r-*) at the end of the name, derived from the Luwian Sun God *Tiwad-* (vol. 1:58).[65] As for the combination of the latter with the Phoenician name of Ba'al,[66] one may refer to the cults of Luwian singers at the city of Ištanuwa. The name of the city—typologically equivalent to "Heliopolis"—derives from the Hittite *Ištanu* 'sun, Sun God', based on a Hattic name of the Sun God *Eštan*. As Jaan Puhvel has remarked, the combination of the solar deity with the Storm God in the texts of Ištanuwa is reminiscent of a similar invocation of Zeus and Helios in Agamemnon's "Trojan oath."[67]

The Phoenician *hapax legomenon 'qrt* is explained (58) as connected to Hieroglyphic Luwian *kar/luna-* 'granary' (vol. 1: 59, 178, 233, 254, 410, 627). This Luwian word might have a suffix *-na-*, and in that case may be a borrowing from Hurrian, where *karubi* has the same meaning and was probably formed with a suffix *-(u)b-*.[68] If, as Röllig suggests (58), the Phoenician word can be traced back to the root *g/qrn*, any link to the Luwian stem seems doubtful.

One of the brilliant results achieved in combining recent research on Luwian with the study of the Phoenician portion of the Karatepe bilinguals may be seen in the explanation of the Phoenician personal name *kl(n)pys* (71). Following a suggestion of F. Starke, Röllig identifies it as a compound based on Luwian *ku(wa)lana-* 'army' + the stem *pi-* 'to give', often used as the second part of south Anatolian names.

Tables of the regular and alternative syllabary and the logograms that occur in the Karatepe inscriptions were compiled by J. D.Hawkins, and constitute a substantial contribution to Hieroglyphic Luwian paleography. Not so clear is the value of the second Appendix (82–89). Here we find a

[64] Bron 1979.

[65] The first to suggest this form of the Luwian god's name was Rosenkranz, who did so in 1948 (cf. Melchert 1994:231, 237).

[66] For parallels of Ba'al's role in the Phoenician world, see Lipinski 1995:84 and fn. 137.

[67] Puhvel 1984:467–468. On the typology of the relationship between the Sun God and the God of Thunder/Storm, cf. Hocart 1970.

[68] Khachikyan 1985:63; Laroche 1980:137.

concordance to the Hieroglyphic Luwian and Phoenician parts, set out mostly according to Bossert's first publications, which now have only historical interest. Only the last part of Appendix 2 corrects Bossert's publication and refers to the new one by Morpurgo Davies and Hawkins. But given all the objections against Bossert's interpretation as expressed by many specialists, interested readers must refer not to this Appendix, but rather to the corresponding portions of the companion first volume by Hawkins, since this second volume does not itself contain an up-to-date commentary on either the Hieroglyphic Luwian part or on the bilingual as a whole.

Despite this important flaw, this volume will constitute one of the most important tools for the future study of the Karatepe bilinguals, particularly for its illustrations and for the Appendix on Phoenician. These two volumes will remain indispensable for all students of Anatolian.

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