“THORN” AND "MINUS" IN HIEROGLYPHIC LUVIAN ORTHOGRAPHY*

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1. “THORN” (sign 383)

It has long been known that HLuvian sign 383, an oblique stroke (†), when added to another sign, indicates the presence of a postvocalic r; see the references cited by Larochë, HHL 205. The “thorn”, as it is often called, may indicate r[i] alone, or a sequence r[a]- or r[i]. The now standard transliteration r[i] is thus a cover symbol for all three possibilities. The actual reading in any particular case may be determined only on comparative grounds, internal or external. As examples of r[i], /rai/, and /ra/ I may cite respectively dat.-loc. pl. (“pons”) i + rai-ha-za = (iranian/ “boundaries”) (cf. Hitt. irha- “idem”), pret. 3rd sg. i + rai/i = /ira/ “went”, and pres. 3rd sg. i + rai/i = /ir/i “goes”.

Hawkins, Morpurgo-Davies and Neumann, HHL 771 f, have argued that in internal and final position the combination 209 + 383 (†), in addition to r[i]-, may also indicate r[i]+i = /iri/. That i, in combination with a vowel sign V, the “thorn” may indicate the sequence r[i]V instead of /r[ai]/. Note that the HLuvian syllabary has no CV sign for /ri/; while sign 412 (and less often sign 103) spells /r[a]/. Evidence for the reading r[i]+i comes also from alternations such as št[i]/inst. deus-na-r[i]+i beside deus-na-t(i) “by/through the god(3)” or tu-pi-r[i]+i beside tu-pi-t(i) “strikes”.

Hawkins and Morpurgo-Davies, AnSt 28 (1978) 104 f, have also suggested that sign 178, la + thorn + double stroke (‡), should be read as /la[r]/, i.e. as la + r[i]+i, where the double stroke at the bottom of the sign indicates a, vocalism, as in sign 210 ya (§) and 377 za (‡). They also argue, following an idea of Gelb, that the double stroke in such cases marks a-vocalism because it is in origin a certain form of sign 40, a (§).

It wish to propose that in similar fashion the combination 450 + 383 (††) is internal and final position may indicate instead of r[i]-a/r[i]- rather ra-i-3 = /ra[i]/. Note that the HLuvian syllabary also has no CV sign for /ra/. The proposed reading of (††) as ra-3 is exactly parallel to that of (†) as ri+i.

The crucial case supporting ra-i-3 has already been cited by Hawkins, KZ 94 (1980) 117, although he makes no comment on this aspect of the orthography. In Assur i.1 we find the phrase (*476, *311) hi-i-[u]-a-3 + i-[i] (AHRA wa/i-is-ta-ta) “they (have) died through/from a curse”. The sense “die” for (AHRA) was assured by the other evidence presented by Hawkins. Although its origin is obscure, a pert. 3rd pl. ending -anta is well attested in CLuvian. The equation of hi-i-[u]-a-3 + i-[i] with CLuv. biri-ni-“curse” (abl.-inst. hi-i-[u]-ta-ta) with thotacism of the stem-final

* Bibliographical abbreviations are those of The Hittite Dictionary of the Oriental Institute of the University of Chicago, Chicago, 1980 ff, (hereafter C.H.D.). In the numbering of HLuvian signs I follow the system of Larochë, Les hieroglyphes hittites, Paris, 1960. I transliterate HLuvian signs according to the revised system of Hawkins, Morpurgo-Davies, and Neumann, HHL (1974). See also the summary by Hawkins, AnSt 23 (1975) 153 ff, and further additions AnSt 31 (1981) 148. I am grateful to D. Hawkins for having read a draft of this paper and offered many useful suggestions and criticisms. Responsibility for the views expressed here remains mine, of course.

† On the appearance of r for expected dental stop in these and other HLuvian forms see Morpurgo-Davies, KZ 96 (1982) 245 ff.
dental stop also seems certain. Note, however, that the current transliteration ḏ + ṝ/r̄ is here produces an anomalous reading /ḥirū(w)arāt/. The putative stem /ḥirū(w)ar-/: ṭ has little chance of being real. A sequence ṭ-ruwār:- would by the rules of HLuvian orthography be spelled ṭ-ruw-a’-r̄/r̄. A sequence ṭ-ru-s:- with ṭ-ru-s is hardly credible. The answer to this problem is that the stem /ḥirū(w)ar-/: ṭ is a fiction, a mere creation of our transliteration, which is false. The real HLuv. stem is /ḥirū-/: ṭ, rhotacized from /ḥirūt-/: ṭ attested in CLuvian. We should read /ḥirūta-ra + ṭ-ː ːi = /ḥirūtari/, where the d-ṣign marks the vowel following the ṭ-ː ːi unambiguously as ːi/, just as the ṭ-ː ːi indicates i-vocalism in nevs-ːna-ti-ː = /nius-nari/.

I call the above case crucial because in this example we have independent evidence from CLuvian to tell us what the phonological shape of the stem is. However, the proposed reading ṭa-ass = ṭ-ː ːa can also resolve difficulties in the reading of the HLuvian noun for “writing; letter”, traditionally read as /ḥatura(ː)/. The accusative of this word is spelled consistently ḏa-ṭa + ṭ-/a’-/n̄a, which implies a stem /ḥaturu-/: /ḥatur-/. The apparent dative-locative3 is spelled once /ḥatur-ː/ as ḏa-ṭa + ṭ-ː ːa, again pointing to /ḥatur-ː/ or /ḥatur-ː/. However, the same form is usually spelled ḏa-tu-ː ṭa + ṭ-ː ːa and the nominative is attested as ḏa-tu-ː ṭa + ṭ-ː ːa. The current transliteration implies that these spellings reflect an allomorph /ḥaturwara/ː in /ḥatur-ː/. The reality of the form /ḥaturwara/ː is very dubious, for the same reasons cited for /ḥirū(w)ar-ː/ above. Once again I suggest that the allomorph does not exist. We should read du-ː ːi. ḏa-tu-ː + ṭ-ː ːa = /ḥatur-ː/ and nom. sg. ḏa-tu-ː + ṭ-ː ːa = /ḥatur-ː/. The spelling ṭa-ṭa + ṭ-ː ːa may of course also be read as /ḥatur-ː/. We thus have a perfectly regular animate ːa-stem /ḥatur-.

Since the closest comparandum for this noun is the Hittite verb ḏaṭa’ː/-: “write, I cannot show independent evidence for the reading /ḥatur-ː/ as I could for /ḥirū-ː/. However, the regular animate stem /ḥatur-ː/ is at least amenable to morphological analysis, unlike the bizarre /ḥaturwara/ː. The animate noun /ḥatur-ː/ may be taken as a hypostatized genitive of a verbal noun /ḥatur-ː/-: “writing”, of the type of Hitt. ḏaṭanu/-: “offering, present” < ḏanu/-: “offer, present”. For the derivation compare Hitt. ḏaṭa’ː - “writing” /ḥatur-ː/-: “writing” /ḥatur-ː/-: “writing” /ḥatur-ː/-: “writing”. For the base ḏaṭa’ː (< *haṭe-t) as “write, inscribe” (< “strike”) compare Hit. ḏaṭa’ː - “writing” /ḥatur-ː/-: “writing” /ḥatur-ː/-: “writing” /ḥatur-ː/-: “writing”. For the base ḏaṭa’ː (< *haṭe-t) as “write, inscribe” (< “strike”) compare Hit. ḏaṭa’ː - “writing” /ḥatur-ː/-: “writing” /ḥatur-ː/-: “writing” /ḥatur-ː/-: “writing”.

It is no accident that the two examples cited above for the reading ṭa-ass = /ṭa-ː/ both involve the sequence ṭa-ː-ːi. We might in principle also expect spellings of the sort ḏaṭa’ː-ːi to spell unambiguously ḏa-tu-ː + ṭ-ː ːa = /ḥatur-ː/. I am not aware of any, but note that those in Cu-tu-ː + ṭ and Cu-tu-ː + ṭ are hardly numerous (both in the Assur letters). While mere addition of the “thorn” to a CI or Cu sign is ambiguous (ːːi/Ci-ːi/ and /Cu-i/), it is a quite adequate spelling of /Cia-ː/ and /Cu-ː/ respectively. The lack of any spellings in <Ci-ːa-ː-ː is thus hardly disturbing.

As a sequence -ːi/Ca-ː, it is in principle impossible to prove a reading -ːa/Ca-ː for these cases, since the transliteration -ːa + ṭ-ː ːi - also implies -ːa/Ca-ː as one reading. However, it is striking that in all cases of the spelling -ːa/Ca-ː is unknown to me, one either must or can read the second vowel as ːa/. I know of no examples of such a spelling where one must read the second vowel as ː. This fact suggests

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3For the difficult syntax of this form see Morpurgo-Davies, KZ 94 (1980) 91, and compare the Appendix below.

The final i of this word is a mere space-filler, as elsewhere in the Assur letters, and tells us nothing about the vocalism of the final syllable.
strongly that we should indeed interpret these spellings too as -Ca-ra + å, where the å-sign is marking the a-vocalism of the syllable following the /t/, not functioning as "scripto pleno" of the preceding /a/ syllable.

As examples where we must read "Ca-ra + å = /ara/ "did" (MAJAJ 2.2), wa-ri-ar + å = /waraji/, i.e. wa- (quotative particle) + -ara for -atu (3rd pl. enclitic pronoun "they, them" or 3rd sg. nt. "it"). This sequence is attested in CARCHEMISH A 24a 2.4, KARHURUM 1, ASUR 1.2, and ASUR 4.3 and 4.1 (in the last two instances followed by å as a space filler). Compare also twice attested wa-li-la-ra + å = /walamari/, i.e. wa- + å as "ku-ar" (ASUR 2.2 and 4.3). In ASUR 1, we find tuu-di-ma-ra + å = /tumantara/ "may you (pl.) hear"; for the ending -rau see Morpurgo-Davies, KZ 94 (1980) 92. The noun ("PANIS 402")tu-ni-kara + å-na (ASUR 4.1) is confirmed as an a-stem by the alternate spelling ("PANIS 402")tu-ni-ka-la-su (CARCHEMISH 3.2).

The dative-locative plural of i-stems regularly has a-vocalism: e.g. REX-
-"king", dat.-loc. pl. REX-ta-zu/RAEX-ta-zu.

We should therefore also read in CARKA 5 ta-ra + å in /tarazza/ "fathers" and in ASUR 4.4 "198,"(ki + -ra) /:ria-za = /kira/.Bus had, beside nom.,acc. pl. "198,"(ki + -ra) /:ria-zi = /kira/i-tuza/.

Since the ending is overwhelmingly (though not exclusively) -atii, we should also probably read a-la-wa-i-ra + å-ti-(URBS) = /Alawa/ta/ti/ "from Alawa/ira" in ASUR 4.1.

In a few examples there is no basis for deciding the vocalism of the syllable following the /t/, but a-vocalism is quite possible: "LOQU" /:ma-ra + å-ti-na (ASUR b.1), "317,"(WAI)I /:ma-ra + å-ma (ASUR b.2 and similarly c.3 beside ambiguous wai/-ra/-ma elsewhere), ka-pa-rä /:ma-å-na (ASUR 4.3) beside ka-pa-rä /:ma-å-li (ibid.) with an unexplained loss of a syllable.

I know of only one instance where a reading ("Cari") has been proposed for a spelling -Ca-a-rä-i in ASUR 1, I find the following:

(i) /:pa-mo/i-å-rä/ 11 ("78") /:pa-ti-sä
(ii) /:pa-pu-wai/-ra/ [NEGR] /:wa-i-ti/LITUUS-ti
(iii) /:wa-i/-LITUUS+n-å-sa /:re-la-å 10 ("78") /:mu-ti-na
(iv) /:wa-i-muo-a [NEGR]-a

Morpurgo-Davies, KZ 94.105, interprets the above as: "To you (there) are eleven aRIU's. Or do you not find them? Wherever you see ten aRUI's, send them to me". The sequence -wa/i-a-rä/i in the first sentence is taken as /wai-å/ with -å/i being the rhetoricalized form of enclitic -å, here functioning as 2nd person dative singular instead of -tu.

This interpretation is contextually possible, but by no means necessary. In the sentences immediately preceding this passage (on which see Morpurgo-Davies, KZ 94.98), the writer asks the addressee to collect and send some kind of supplies which the writer lacks. Sentence (i) above can therefore equally well be interpreted as: "They (the missing supplies) are eleven aRUI's (in quantity). Or should you not find them..." The term aRUI- appears to be a measure of some sort. We may thus read /wa-i/a-å = /:waraji/ with -å for -atu as elsewhere. An additional argument against -ti = /:ti/ here is that there is no other good evidence for such a form: see Appendix below.

In summary, then, the forms for "curse" and "letter" in HLuvian (hirur- and /hatur-/) argue that we should read the combination 450 + 383 (l) as pa-å = /:ra/ in internal and final position. This reading also makes fine sense for all known

Since the "thorn" may indicate r alone, we should perhaps read ka-pa-rä/a-å-na as /kaparani/ (as written here), permitting direct equation with ka-pa-rä/a-å (kaparani). If this interpretation is correct, it would be an additional argument for reading ra-å instead of å-a-å.
examples of -Ca- ʃ, which should likewise be taken as -Ca-ra-a-du- = /-Cara-i/. The proposed reading of ʃ as ra-a in this position is entirely parallel to the well-established value ri-i for ʃ in the same position.

2. "MINUS" (sign 381)

Sign 245 consists of sign 244 ᾿ядыційм "building" plus a vertical stroke δ. 

Purely on the strength of the component "building", the nominal and verbal stem determined by sign 245, ῾тана-, has been interpreted as either "wall; enclose by walls" (Meriggi, ῾ΗΗΓΙ 118) or "edifice; build" (Laroche, ῾ΗΗ 130). This interpretation has persisted despite the fact that it is patently unsuitable for the contexts in which the word appears.

Hawkins and Morpurgo-Davies, in ῾ΗΗΗΠΠ, a Tribute to H. G. Güterbock (1986) 34ff., have argued for readoption of an earlier proposal of Laroche, ῾ΡΗ 11 (1950) 5: HLuvian (*245)тана- means "devastate, ravage" and is cognate with ῾ΗΗ, ῾δανατάδή- or ῾δανατάδη()- in the same meaning. The HLuvian stem could be тана-, matching ῾δανατάδη-, with the same loss of stem-final *h2 seen in ῾Παipsoid: see my discussion in ῾ΚΖ 97 (1984) 38, note 28, and that of Oettinger, ῾Στάμβολιση 559, 152ff., and 547–8. However, the HLuvian stem could also be тана(k)- matching exactly ῾ΗΗ, ῾δανατάδη()-.

The Hittite verb ῾δανατάδή(พวกเรา)- is derivative from the adjectival ῾δαινατά "empty, desolate". We would expect to find the same base in HLuvian, perhaps in the form of an *i-stem таниа- (cf. twice attested ῾δαινατή- in Hittite). The base adjectival ῾τаниа- does appear in HLuvian, again marked by sign 245 as a determinative, which I now propose to read as ῾ΥΑΣΤΩΣ. For the nom.-acc. plural (ΥΑΣΤΩΣ)таниа see ῾ΜΑΡΑΓ 1.4 and CARCHEMISH A 3:32,6 cited by Hawkins and Morpurgo-Davies. The neuter nom.-acc. plural τανατύς is ambiguous as to stem-class, but an *i-stem таниа- is assured by other occurrences.

CARCHEMISH A 11b,2 has the following sentence:

ωάνα-τά: ΥΑΣΤΡΟΣ-το-θα ΑΡΗΑ (= "ΛΟΓΟΥ") τανατύς-το-θα-τα

"It (my paternal, ancestral city) stretched out empty; desolate."

At first glance, such a characterization of one's own city may seem unlikely. However, what we have here is merely another example of the self-serving device by which the authors of royal inscriptions built up their own exploits by contrasting their success with the failures of their predecessors. This technique is well known from Hittite sources (such as the "historical" introduction to the Edict of Telipinu). For other examples in HLuvian inscriptions see the passages discussed by Hawkins, ῾ΑΣΤΣ 25.122 and 136ff., especially citation 32a which occurs...

1The hostile sense of the HLuvian verb is undeniable. D. Hawkins (personal communication) has kindly provided me with an additional example of (*245)тана- parallel to ῾ΑΡΗΑ *348-μω- "destroy" (on the latter verb see below). In ῾ΜΟΡΩΝΚΙ 1.83–4 he reads: pa-ya-ra-μω-ta (LARONCI-ΚΑΛ-Α-ΖΑ / Δ-ΜΗ-Α-ΣΑ) / ʃ, ... (245)τανατύς-το-θα-τα-θο (LARONCI-ΚΑΛ-Α-ΖΑ / Δ-ΜΗ-Α-ΣΑ) / "ΜΑΛΛΙΣΤΙσκος-θεος-του-με-ΑΡΗΑ *348-μω-μω-με-με-με-με. Despite the badly broken context, the god θα is clearly "May my... (the god Χ) devastate his place and destroy his..."

2Oettinger ῾Στάμβολιση 240, claims that the hapax ῾δαινατάνανας is an error, not evidence for a stem ῾δαινατάδη(-), but this is unlikely in view of such pairs as ῾κυρωσβιθ (κυρωσβιθ-), "call to witness" and ῾αραμβά "armah-h; armah-", "be pregnant."

3For the verb (LONGUS)παρασύν- "stretch out, extend" (transitive and intransitive) compare SULTANIANE 6: τανατύς-το-θα-μω-πα-τα / τανατύς-το-θα-μω-τα / "It (a grapevine) will extend put forth shoots". HLuvian танατύς is cognate with ῾ΗΗ, ῾αραμβά "shoots" at KU 8 XII 38 IV I. I cannot follow the reading and interpretation of CARCHEMISH A 11b,2 offered by Hawkins and Morpurgo-Davies in ῾ΗΗΠΠ 75.
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in the same text, CARCHEMISH A 11b. The description is undoubtedly calculated hyperbole and should not be taken at face value.

The adjective tanati- also occurs without the determinative vástus in KARAHÖYÜK 3:

\[ \text{o-wa/j urus + mi-ni ta-na-ti wa/j-mi-oculus + ra/ji} \]
"He found the city (area) desolate."

For the reading and interpretation of the entire sentence see Nowicki, KZ 95 (1981) 255 f., who correctly takes tanati as "desolate", following already Laroché. Also important is Nowicki's interpretation of the following sentence as referring to the settlement of the empty area. It is clear that here we have the same sequence of events expressed in two sentences which we found in a single sentence in MARI 1.4-5 cited above. Although Nowicki surprisingly keeps tanati- separate from (*245)tanati-, the parallel contexts show that they are the same word. 4

Thus the usage of the adjective (vástus)tanati- also points to a meaning "empty, desolate", agreeing with the meaning "desolate" arrived at independently for the verb (vástus)tanati-. My interpretation of sign 243 as a logogram vástus "desolate, empty" is based on the meaning of the words which it determines and no further justification. However, the proposed meaning inevitably raises the question of how the shape of the sign expresses such a sense. My pursuit of this question has led me to some surprising and far-reaching results.

As stated earlier, sign 245 appears to consist of sign 244 plus a vertical stroke. Since the sense of sign 244 AERIFICUM "building" is beyond doubt, the explanation for the unexpected meaning vástus "empty, desolate" of sign 245 must lie in the other component, the appended vertical stroke. Laroché, HH 131, tentatively identifies this element as "t'epine", i.e. the "thorn" which marks the presence of r (sign 383 discussed in section 1 above). However, the quotation marks betray some uncertainty, and Laroché states explicitly that the function of the "thorn" in this case is unknown. Meriggi, HSGI 118, is even more cautious, directly representing the vertical stroke in sign 245 (as elsewhere) by a vertical line in his transcriptions. 2

Hawkins, ANET 31.155 and elsewhere, transliterates AERIFICUM + RA/I, implying that the vertical stroke is "thorn".

A reexamination of the usage of this vertical stroke shows that Meriggi's caution is justified and that the identification with the "thorn" is false. As defined above, the "thorn", sign 383, is properly an oblique stroke, slanting from upper left to lower right. In signs read left to right and in the opposite direction in signs read right to left, it is true that occasionally the "thorn" occurs as a vertical or even horizontal line: see the shape of crus + RA/I in CARCHEMISH A 11a.2 (middle of line) and the third and fourth variants of super + RA/I listed by Laroché, HH 43 (sign 70). However, if one surveys the overall use of "thorn", it is clear that these examples are mere variants of what is essentially an oblique stroke (for CRUS + RA/I with an oblique stroke see TOPADA 6). I know of no combination involving "thorn" which does not show some variants with the expected oblique form.

On the contrary, sign 245 shows a vertical stroke in all cases. Six examples may not seem enough to be significant, but sign 248, which will be discussed immedi-

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1D. Hawkins has furnished a further example of the t-stem adjective in a similar context (MARI 8, §1): a-l-pa-na/ji || ku + ra/ji ku-ma-na(u) URUS) PILUMEN-BEGI-RI-na (*243)ta-na-ti wa/j-mi-occulus "And ... I found the river valley (of) Gurgum desolate." The reading URUS + mu-ni in the above quotation results from a recent collation of KARAHÖYÜK by Mr. Hawkins.

Unfortunately, however, Meriggi lists together under tanata- occurrences of AERIFICUM alone and of AERIFICUM plus vertical stroke. Only the latter properly belong here.
ately below, is attested at least eleven times, always with a vertical stroke. If these signs contained a form of "thorn", it is simply not credible that there would be no attested example of the normal oblique stroke.

Epigraphically, then, we are justified in separating the vertical stroke of sign 245 and other combinations from the oblique stroke or "thorn" which marks the presence of r. In fact, present evidence argues that we should do so. The vertical stroke may be conveniently identified with Larocque's sign 381 (|).

Since sign 381 is a distinct element, we are free to attribute to it whatever value seems demanded by the usage of the combinations in which it occurs. If we return to sign 245, now analysable as 244 + 381, the meaning which we must assign to sign 381 is evident. The only reasonable way to derive VASTUS "empty, desolate" from AEDIFICiUM + X is to assign a private meaning to X (= sign 381): "lack/absence of buildings" = "empty, desolate". The vertical stroke, sign 381, has in effect the same sense as the modern minus sign: VASTUS = - AEDIFICiUM.

The privative value (minus) which we have been led to attribute to sign 381 due to its use in sign 245 is supported by several other examples. While some of these must be regarded as tentative for various reasons, at least two are tolerably certain.

The first of these is sign 248 (El), already referred to above. This sign obviously consists of sign 247 DOMUS "house" plus sign 381, the vertical stroke. Larocque, IHJ 133, views the vertical stroke here as the "thorn". Since the H-Luvian word for "house" is parn(a), he further proposes that *248- (nu) be read as *par(nu)- and compares the phrase ARKA *par(mu)-, which he interprets as "chase away, banish", with Hitt. arka par(mu)- "chase, drive away". Mövöig, IFG 95, while still representing the vertical stroke as such, cites Larocque's analysis with apparent approval. Hawkins consistently transliterates DOMUS + RA/K(nu)-, implying that the vertical stroke is "thorn" functioning as a phonetic indicator, and in his most recent discussion of the subject, ASJ 33 (1984) 135, n.15, he explicitly suggests a reading *par(mu)-, citing the apparent occurrence DOMUS + RA/K(\(\ddot{\alpha}\) pa + rai/mu-gi/... etc.) in CARCHESIUM A 28g.2 (cf. Hawkins, ASJ 20 (1970) 105).

Neither the interpretation of the vertical stroke as "thorn", the equation with Hittite arka par(mu)-, nor the meaning "chase, banish" can be upheld.

As already indicated, in eleven occurrences of sign 248 the appended stroke is always a vertical, never oblique. In addition to the examples which will be cited below, note also the following examples in broken contexts: CARCHESIUM A 4b.6; A 16c.1; and A 28g.2 (in the last instance contrast the vertical stroke of sign 248 with the oblique thorn of the immediately following pa + rai). Epigraphically there is simply no basis for the identification of the vertical stroke of sign 248 with the oblique stroke which marks r.

As for the comparison with Hitt. arka par(mu)-, the latter does mean "chase, drive away", as given by Friederich, IH 159: "fortjagen, vertreiben, verbravnen". The stem par(mu)- is rare, being used only with "horse" and "goat". The stem par- is also used principally with "horse" as object but occasionally of persons. An intransitive use of par- as "attack, charge" is obviously derived from the sense "drive (horses)". On a handful of occasions, arka par- is used to refer to driving away ill from the body: KBo X 37 II 19 ("evil congeal"), KUB XXIV 14 123 ("dog excrecence"), i.e. sweat or urine), FHG 2 III 22 ("rage, anger, sin, resentment").

This is also the usage of the only contextually clear example of the Clavian cognate par(a)-/pap(a)-, at KUB XXXV 43 II 12 (see now Stark, SIPT 20 143 ff.). The overall context of this Luvian example also shows how the use with bodily ill arose. The subject of the verb here is the sacrificial sheep, which, having been
ritually burdened with the ills of the patient, is then driven away (pará penna). The expression to "chase, drive away" ills is thus based on the fact that in Hittite ritual practice removing ills from the body was often accomplished by driving away a sacrificial sheep or goat. Aside from this special use, which is clearly derivative, arba parthu(nu) is used only of animate beings, people and animals, which are capable of self-locomotion and may therefore reasonably be said to be "driven, chased away".

If we look at the usage of the HLuvian verb arha *248-(nu) - we find the following objects: a city (Carchemish A 1a, 2), a person's head (Carchemish A 4a, 3), a stele (Emirgaizi B, 2–4), a person's name (Aleppo 2, 5 & Adiyaman 1, 4), and a person (Beli-Haram 5). The objects in Babylon stele 7 and Meharde C, 2 are unclear. It is evident that one cannot in any real sense "chase, drive away" a stele or a person's head. For that matter, "chasing, driving away" a name or a city requires a figurative use "banish" for which Hittite offers no evidence. In view of this disagreement, the single occurrence with "person" is hardly significant. The usage of Hitt. arba parthu(nu) - and HLuvian arha *248-(nu) - simply has nothing in common, and there is no more basis for their equation than for the reading of sign 248 as domus + ka/ı with thorn.

The unsuitability of the proposed meaning "chase, drive away" is reflected in the variety of translations offered by Hawkins for the individual occurrences of the verb: "eliminate" (Hortegium Anatolicum 150), "make to vanish" (AnSti 20.104), "drive away" (AnSti 22.89), "dispose of" (AnSti 25.142), "displace" (AnSti 25.129), "get rid of" (AnSti 30.152), "remove" (AnSti 31.162), and "exterminate" (AnSti 31.169). His discomfiture with the assigned meaning "chase away" is shown by the fact that many of these translations are marked by italics as uncertain. The common denominator here is not "chase away", but "destroy, obliterate", a sense appropriate for all examples. The preverb arha here does not mean "away", but has the perfectivizing sense "utterly (destroy)", as elsewhere: cf. arha ad-uze-devor. I therefore propose to read sign 248 as a logogram delere "destroy, obliterate".

The identity of the HLuvian stem (or stems) represented by 248 = delere is an independent question to which we can give only a tentative answer. The stem is normally written delere-fl(munu), pointing to a causative in -mu. In Emirgaizi 2, 3 we find a pres. 3rd sg. delere-t/ı, which seems to argue for a hi-verb. Hawkins, AnSti 30 (1984) 154, suggests that "delere" -tu in Aleppo 2.3 represents the same stem, which he takes to be the base verb of the well-attested nu-causative. However, neither the interpretation of "simple" delere as a hi-verb nor the assumption that it is the base of delere-mu is by any means assured.

As to the first point, in Karatepe LXXI,355 there is attested a pres. 3rd sg. -tu aspifacare + -mi followed shortly in LXXI,373 and LXXII,379 by a-tu aspifacare + -mi -ri -i -li. The latter can hardly be anything but a rhootized form of a pres. 3rd sg. -ri. While an alternation of hi- and mi- endings in a single verb is hardly unheard of in Anatolian, it would be striking to find such an alternation within five lines of a single text. It also seems possible to suppose that logogram + i is on occasion a spelling variant of logogram + -ti -ri -i -ri with scriptio plena. 16 This means that as isolated spelling logogram + i is not by itself compelling evidence for a hi-verb.

Furthermore, HLuvian, like Hittite, uses a single logogram to represent more

16Morpurgo-Davies, Fs Szemerényi (1979) 590, also interprets aspifacare -mi beside aspifacare -mi -ri -i -li as standing for "tamari or "tamati."
than one lexical item: cf. among many examples INFANS-nc (and INFANS)minnowiza—both "child, son". There is thus no way to exclude the possibility that DELIRE-ia (and perhaps DELIRE-ia) stand for an entirely different verb from DELIRE-me. Finally, however, there is also no rule which requires that a causative in -me be spelled with -me as a phonetic complement (cf. SOLIUM-wa/-i-ja = [isanuwaha], "I set it in" in MSQUON 5-6). Thus DELIRE-ia and "DELIRE"-ia could also represent forms of DELIRE-me. In sum, there is no compelling reason to assume with Hawkins a base verb "destroy" and a corresponding na-verb built on the same stem. We are also free to assume a na-causative "destroy" alone or a na-causative beside an unrelated verb "destroy" (the latter perhaps indeed a hi-verb). In the latter case we have no clue as to the phonetic shape of the simple verb DELIRE-[ja].

As for the na-verb, the fragment CARCHARHEH A 282.2 has DETERE(-)A*45*2-raj-i-na-[as]. Larocche, HH 238, very tentatively reads sign 452 as pai, but as Hawkins stresses, ANSY 33.135, n15, the only evidence on which this reading was based (two city names) has been shown to be false. Hawkins indeed cites DETERE(-)A pai + raji-na-wa[ji] itself as one of two remaining pieces of evidence for the value pai. We have seen, however, that sign 248 does not contain "thorn" as a phonetic indicator, but a vertical stroke as part of a logogram. Furthermore, the comparison with Hitt. pariya is without foundation. Therefore the reading of the verb as "pampa-" and phonetic connection with parma[ja]—"house"—have no firm basis.

Hawkins' other evidence for the reading 462 = pai, the equation of HLuvian (LOQUITA)+r+ti-ta and CLuvian paratta "curse" is also very dubious. The CLuv. word appears in stereotyped lists of evils which give little clue as to its precise meaning. However, KUB VII 14 I 1 ff. (SIG.B T 30.60), where the Storm-god parattas/ili is invoked when "impurity" occurs (Hitt. papratu), support Larocche's interpretation, DLL 78, that paratta—means "impurity". There is no positive evidence that CLuv. paratta means "curse". The phonetic value of HLuvian sign 462 (usually with "thorn" as A*45*2-raj-i) thus remains undetermined.

Irrefutable evidence, i.e. alternation of sign 462 with a known syllabic sign in assuredly the same sense, is lacking. However, I believe that there is more evidence for a reading ma than for pai. First of all, we may indeed have an alternation of sign 462 with ma in the same word. It is quite possible to equate the frequent (LOQUITA)A*45*2+ra+t+ti+ta (in the expression "whoever erases these A*45*2+raj+i-ta") and the hapax (LOQUITA)ma+t+ti+ta of Assur b1 (for the reading ma+raj-i see

11It is possible, however, that we do have a hi-verb meaning roughly "destroy" attested in TUPADA 4.1 [BAZ.ARE AYA ha + raj-i-ta + i ... wa-taÅ-pa-nam HA:AR.AAT-isa-ia mÅ-pa-nam-[ha] TERRA.REL.<-raj-i-ja] (DUMBUTYTOUR[A]HUT.AA) (DUMBUTYTOUR[A]HUT.AA). ARAK ha + raj-i-ta + i "As [someone] smashes [this inscription/these words], ... let the Storm-god and Sarumusm smash his form and his land." The word should probably restore BOLKAR[ADEN 5] za-pa-wa-ni-ja | CAFERES-NAJTA ni-XA-AR[WA] (ha + raj-i-ta + i) ("Whoever smashes this document?", ...). Due to the lack of anari and particle-ta, it is hard to say whether we have the same verb later in the same line (DUMBUTYTOURALIA-MAN-PAPA-AKA ha + raj-i-ta + i "Let the Moon-god smash(?) him.") HLuvian ARAK harr[AT]—could equate directly to Hitt. harr- -"crush, smash", which significantly is the term commonly applied to damaged cuneiform tablets: KUB XII 7 IV 3 5 TUPADA: ORHA HARRAN eth[A] ("This tablet was broken/smashed." As noted by Oettinger, Stemmblüden 505 f., the earliest attestations of Hitt. harr- are middles with a tensive or passive sense. The later attested active h-verb harr- could thus be old. One difficulty with the equation is that the only way to read HLuvian ha + raj-i-ta + i as a hi-verb is to read harr[AT]. To my knowledge there are no other certain examples of a pres. 3rd sg. ending -i in Luvian (instead of usual oh), and it would be an unexpected archaism.

12On the form of the Hittite word (redundicated pa-pr) and a possible etymology see Melchert, Studies in Hittite Historical Phonology (SHHP) (1984) 33, 168.
section 1 of this article). Morpurgo-Davies, KZ 94.98, translates maratin from context as "bidding". The peremptory tone of the Assur letters, which consist largely of commands, supports the meaning "bidding" or something even stronger: "injunction, order". This sense also fits the use of (LOQI)462 + rai-i-ta, which typically occurs between various proscribed acts and the curse which is to apply if those acts are committed. In view of the shift in English "enjoin" from "command" to "forbid, proscribe", the phrase of KULULU 1.5 ß-pa-i-su-na kA-so-mi-na 462 + rai-ta-mi-na may just as well mean "his proscribed/forbidden clan" as "his accused clan". For the supposed collective plural marata beside animate acc. sg. maratin compare H.L.UV. acc. pl. so-wa11 "eyes" (KARABURUN 283) beside acc. sg. "(ILITUS)ko-wa11-inu" "eye" (KAYSERI 2). The readings sawa and tawin are assured by the CLUV cognates dawu and dawil. Compare further CLUV. coll. pl. pinaata beside anim. acc. pl. pinaata and nom. sg. punati (DLL 82). I therefore tentatively read (LOQI)ma, + rai-ta beside (LOQI)marata + ß-i-su, both "injunction, order"."

Second, we have the divine name (DAHA)ANUNA-kAkA 462 + rai-i-ma-sa, in TELL AHMAR 1,2. As discussed by Hawkins, ANSt 31.166, it is tardy not to identify this first-millennium name of a grain-god in Hurrian context with that of Kumbari, who fulfills a similar function in documents of the later second millennium. It is quite true that one must assume some alteration in the name no matter how one reads the second syllable, and a metathesis of Kumbari to Kuparma cannot be excluded. Nevertheless, a reading of the H.L.UV as Ku-ma, + rai-i-ma-sa, = /Kumbaras/ clearly brings the name closer to the Kumbari of the cuneiform texts and supports the value ma, for sign 462 suggested by maratin = marata.

Third, the new reading *(540)sa-á-ta-ra-i-sa-wa11-mi-URU* for CARCHEMISH A 1, 1 & 6 has not yet led to any identification of this place-name. On the other hand, a reading sa-ma, + rai-ka-wa11-ri would permit an interpretation (Smarraka) and equation with the place-name Ismerika of Hitite cuneiform texts. The latter has been identified with modern Turkish Siverek: see now del Monte and Tischler, Die Orits- und Gewässernamen der hethitischen Texte (1978) 149, with references. This identification would place the city a hundred miles northeast of Carchemish, but the references in Hitite texts to the KUR ISmerika "land of Ismerika" indicate that the city's influence, like that of Carchemish, extended at some period for a considerable distance. The equation Smarraka = ISmerika thus does not seem far-fetched.

Finally, D. Hawkins has called my attention to the striking parallel between H.L.UV (DAHA)ANUNA-ta-la-si-zi (or (DAHA)ANU, + rai-i-wa11-ri-si-zi) in KULULU 2, 56 and CLUVIAN SÀ 31 SARI DUGUR-MES marwawini in Bo 1582 II 11 (see CHD 3.2.201). While the meaning of the adjective marwawini remains uncertain, it is very likely that we are dealing with the same epithet: "the marwawini gods of Santa/Iyarti".

Other examples of sign 462 as a phonetic sign are of little use, although it is worth pointing out that a reading "CASTRUM"(?) tara-i-pa-ma-sa (CALAPYERI 1, 2 and 2, 2) instead of tara-i-pa-pa-sa produces a more plausible morphological

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"The interpretation of (LOQI)marat as "injunction, order" is now strongly supported by the existence of Lyc. mar-"order, command", maru-"law" and related forms: see Laroché, Fouilles de Xanthos 6 (1979) 77 f. However, the proposal that (LOQI)ma, + rai-iia is the collective plural of the animate stem (LOQI)marat is brought into question by the existence of (LOQI)-ib-ik (KAYSERI 6), brought to my attention by D. Hawkins. While this example is singular and follows the curse formula, one's first inclination would certainly be to take it as the neuter singular *(m)parataza/ of the attested plural (LOQI)-462+rai-iia."
shape. One may take /arpama(n)za/ as nt. nom.-acc. singular of the participle to the verb tarpi]-tarpi. The meaning, however, remains unclear.14 There is thus some evidence for sign 462 = ma. If we apply this value to our verb "destroy", we obtain in CARCHEMISH A 28g,2 DELELE-MA, + rav-na-wa[-i], i.e. a verb stem marmr-. This result is attractive, since a HLBV. marmr- may be directly equated to Hitt. mermu-marmer- "cause to disappear". This verb is very rare in Hittite, and the references in the two occurrences available to me are unfortunately indeterminate. However, the base verb mer- "disappear; perish" is well-attested, and its usage is suggestive. First of all, it frequently occurs with perfectivizing arpa in the sense "totally, utterly", like HLBV. (DELELE) marmr-. It appears with persons as subject in the meaning "disappear, vanish" (KBo XXII 2 Vs 13, IBO T I 36 i 53). In VBO T 24 III 22.30 falsader mermanda "dead twins" are used in sympathetic magic to eliminate the anger of a god, which is to "perish" (bib. III 45 arpa mermu). Other intangibles, such as an "evil word", are also consigned to oblivion (KUB XLI 23 II 5). While it is true that Hitt. mer- does not occur in curses involving people (perhaps due to competition from har- "perish" and harnink- "destroy"), it remains noteworthy that eight of twenty-one examples I have collected appear in the third person imperative: cf. five imperatives out of eleven instances of HLBV. delele-na. Further evidence for 462 = ma is needed, this reading does yield a plausible stem shape marmr- for delele-na "destroy, obliterate".15 Whether or not marmr- is the correct reading for delele-na, the sense "destroy, obliterate" for the verb stem seems to me assured. This meaning for sign 248, consisting of 247 (DOMUS) plus 381 (MINUS), may be accounted for in the same way as 245 = VASTUS. "Loss of houses" = "destruction": schematically, DOMUS = DELERIE. Once again sign 381, the vertical stroke, has a private value.

A third example of sign 381 as MINUS is found in the logogram MORI "die", which marks the HLBV. verbal vale-]vare-. For the identification of this verb see Hawkins, KZ 94 (1980) 109 ff. He analyses the logogram he transcribes as MORI as sign 386 ("cramp") plus 381 (the vertical stroke).16 The meaning "die" for the verbal vale-]vare- and its accompanying logogram MORI is indisputable, but

14The reading ma, instead of pa for sign 462 might also give a clue to understanding the phrase (ANNUNIBI = ANNUNI) + 462 + rav-11 = KARATEP. XVIII 266-7 (the reading is that of Hø). It is clear from following references to "(the time of) plowing" and "(the time of) harvesting" (see Meriggi, Manuale II/1.i.83) that we are dealing with regularly scheduled sacrifices to a god. The sense of (ANNUNI) "annually" is clear enough, but the function of the further specification (ANNUNI) + 462 + rav-11 = obscure. However, the sequence of time specifications here recalls that of Hittite in KUB XXIV i II 3:5. ESEN, mu meinaal (given is) kumibhundal zemantal "festival of the year", of winter, of spring, of autumn" (likewise XXIV 3 i 16 f.4 with a different sequence of seasons). Whether or not MU meinaal means "new year" (see Friedrich, HtW 139 w.95f.), it is suggestive that in both Hittite and HLBV. we have a specification of the word "year" followed by various seasons. If we read (ANNUNI) 462 + rav-11 = ma, + rav-11 = (marmu), an equation of Hitt. meinaal and HLBV. mar- is possible: for the notion of x compare marmu (KULTANIAN) with marmu elsewhere. Obviously, however, there are too many uncertainties involved to give the equation much weight.

15The reading of the verb stem as marmr- is incompatible with the possible spelling "DELELE-n-MA" in CARCHEMISH A 4a, 3. For which see Hawkins, ANATOLIAN STUDIES 20 (1970) 105, and ANATOLIAN STUDIES 31 (1981) 163. D. Hawkins informs me that he unfortunately has not yet been able to collate this passage, so the question remains unresolved.

16In his table, ANATOLIAN STUDIES 31 148, Hawkins lists MORI as sign 386 + 381-2, but he now informs me that he takes the form of MORI with a vertical bar as merely the relief form of the sign not as a combination with sign 382, which he and I both read as "wood", following an old suggestion of Geb, SOT 3 (1942) 47, note 8. The logogram MORI thus consists only of 386 + 381.
"THORN" AND "MINUS" IN HIEROGLYPHIC LUVIAN

Hawkins makes no comment on how the meaning "die" is expressed by the above combination of elements in Mori.

The privative value I have claimed for the vertical stroke does not at first glance appear to explain the meaning of Mori. The value of the "cramp-on" has been shown to be "male; virility (Vir); see Hawkins, KZ 92.112, following Güterbock. An analysis "lack/loss of virility" hardly seems an appropriate expression for "die". However, the Indo-European concept of "virility, maleness" is ground in the more general idea of "vigor, vital force". Latin ans 'power' is from the same root as air 'male'; see the other reflexes of the root *wesh-, listed by Pokorny, IEW 1.124, and also the discussion of the nearly synonymous root *hner- by Beeke, Development of the PIE Laryngeals in Greek (1969) 75. In fact, the root *hner- appears in Anatolian in the guise of Hit. innara- = CLuv. annari- "vigor; vital force". See my discussion in SHHP 103.1, and for the semantics especially Pulvel, Hittite Etymological Dictionary (1984) 366 ff. We may thus plausibly interpret 386 + 381 = -Vir as "lack/loss of virility" but as "loss of vital force". This seems to me a quite apt expression for "die", a concept for which a pictorial representation would be exceedingly difficult.

In addition to VASTUS = -aAEDFICIAM, DELEBE = -DOMUS, and MORI = -Vir, there are several other plausible cases of a privative value for 381. The vertical stroke. For various reasons, however, the evidence is less than compelling. Sign 62 = LONGUS "long" clearly consists of sign 59 = MANUS "hand" plus a vertical stroke. It is possible to derive the meaning "long" via a privative value for the vertical stroke, though in a less direct way than for the cases above. The idea would be that long objects are "un-hand-able": i.e. too large to be held or measured by the human hand (or arm). Compare the rare but easily analysable German adjective unamfassbar "unencompassable", used as a synonym for unanschlich "immeasurable, immense". Such a privative analysis of 62 = LONGUS is possible, given the other certain examples of sign 381 with this function, but it is hard to assert it with any confidence. One could equally well suppose that the vertical element in LONGUS is not sign 381, but a representation of a measuring rod or stick. A choice between these interpretations might be possible if we could determine the meaning of the combination of sign 39 = PUGUS "fist" plus vertical stroke. This combination occurs as a logogram in SHII 2, where it appears to be an adjective modifying "children". See Hawkins, Florilegium Anatolicae 151 and 154, who transcribes MANUS instead of PUGUS. If one could demonstrate that the vertical stroke in combination with PUGUS did or did not have a privative value, one could probably also decide on its function in 62 = LONGUS. At this point both cases must be regarded as uncertain examples of 381 = MINUS.

Additional examples of sign 381 = MINUS are also questionable. Sign 428 (BR) occurs only three times. It is used to spell the name of the city Taita in IZGIN B 5: 428-na-ur(i-)URUR (acc. sg.). Compare the attive-locative (*428)Tu-i-URUR in OGINB 3. The remaining occurrence is found in CARCHMISH A 246.2,4: *426-IsAHA-ye-X). It is unlikely that this example refers to the city, which appears to be localized in the area of Gürün and Izgin. The context, the phonetic shape of the stem, and the shape of the hieroglyphic sign are all consistent with an interpretation of taya- as a verb stem "steal", identical to Hitt taya- "idem". The top part of the sign would represent a storeroom. The addition of sign 381 = MINUS would indicate loss of the contents of the storeroom, i.e. theft. However, since the putative verb stem is hapax, and incomplete at that, this example of 381 = MINUS is anything but assured.

A final possible example of 381 = MINUS may appear in sign 460 (J), attested in AIZUR 2:24: *VAH-ur(i-)URUR rejoice [rz-cl IJNANS-ri-cl] RELU (K) *460)Jah-ut-ta-
ri -i-ti ("VAS") ha-um-ik-ta-ti-ha [su-ti-ri-i-ti] ha-ra-ti-ti-ha [PRAE-RU] [ARE-NI] [MORI]-wa-la-ri-ti-ti-hi "These NABTU children of mine are nearly (lz. as it were/like) dying of as(a)ta- and tawasa(n)i-tutu and har(a)ltu."

Since the ablatives express the potential cause of death, I have suggested in a paper to appear elsewhere that the stem as(a)ta- may represent the regular Luvian reflex of the noun *go/est- "hunger" attested in Hitt. ka/is- (with regular loss of voiced velar in Luvian). I did so purely from the context and phonetic shape of the word, leaving unidentified the sign which determines as(a)ta- (G.). Meriggi, *Manuale I* 1.137, analyses the sign as his number 126 (= Laroche 462) plus the vertical stroke. Hawkins (personal communication) has suggested to me that the entire combination is rather to be equated to Laroche's number 460, which recurs in *TELL TAVINAT VII frag. 2:1; *460-ii:z1. The latter word could be taken as the accusative plural of the same stem as(a)ti- seen in [*460-ja-as-ta-te-i-i1. However, these two interpretations are not necessarily mutually exclusive. Laroche, *HH* 238, considers the possibility that his number 461 (i.e. sign 460 without the vertical stroke) is identical to sign 462. Thus sign 460 may indeed be sign 462 + 381. Furthermore, since *go/est- is an animate noun, there is no difficulty in supposing that the example *460-ii:z1 is an anim. acc. plural as(a)ta/mi "famines".

The only clear use of sign 462 as a logogram is as the determinative to *muwita- "potency, vigour": see Hawkins, *d.25.143* l., on Carchemish A 11c, 4–5. A representation of "hunger" as "loss of potency, vigour" would not be inappropriate. However, neither the interpretation of [*460]as(a)ti- as "hunger, famine" nor the analysis of sign 460 as 462 + 381 is by any means certain. The last few examples cited for a privative value of the vertical stroke are mere possibilities. I emphasize again, however, the three solid cases of *VASTUS, DELEBE* and *MORTI*. Furthermore, I know of no cases in the HLuvian syllary where a privative value for the vertical stroke can be shown to be inappropriate. 11 Nor do I know of any examples of a consistently vertical stroke which can be demonstrated to be functioning as "thorn". We are therefore justified in distinguishing the vertical stroke 381 as a separate element of the HLuvian syllary with a consistently privative value which we may represent as *MINUS.* I have argued for the privative value of the vertical stroke based solely on the usage of the combinations in which it occurs. One may legitimately speculate,

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11 Compare Hawkins, *KZ* 94.117. For *REZ-* as (it were) "nearly" compare ASUR a.3: *ARU-wa-qa-im-uru* [REZ-ri-i] /MORI-ku-nu "We died as it were/nearly died" (for the verb ending see Marpurg-Davies, *KZ* 94.99).

Hawkins finds the verb ending -iti problematic, but a solution is suggested by the derivational chain in CLuvian kwaw-ka- be afraid > kwawata - "fear" > kwaw-ta- 'be afraid'; this set shows that Luvian formed verbal nouns in -ti- which served as the base for denominative verbs in -adi- whose meaning was nearly identical to that of the original base verbs. We may therefore suppose that beside a reduplicated stem *wuwar(l)i- "die" there existed a virtually synonymous *wuwar(l)i(-). Once such a pattern became productive, it is not even necessary to suppose that the intervening verbal noun actually existed in all cases. Compare the similar situation of Palaic verbs in -adi- which I have discussed in *KZ* 97 (1984) 37 l. Other examples of extended verb stems in -adi- (a.r) attested in HLuvian: cf. pugum-ta-i-ta-wa-ti "I seize" (1?) in Carchemish A 6, 7, beside the usual pugum-ta-wa-ti-. The alternate reading by Hawkins, *d.25.113*, is by his own admission forced. Likewise, it is hard to avoid connecting a-ta-wa-ti-i-ta-wa-ti of Jerz 3 with Hitt. arwa(l)i- "bow down". We may account for the extra syllable in HLuvian by assuming a stem *wuwar(l)i(-), rhotacized from *wuwar(l)i(-), formed as per above.

12 Except where the vertical stroke is used to indicate the number "one". This use of the vertical stroke is already properly distinguished by Laroche as sign 380. Like the oblique "thorn" 383, the vertical stroke 381 as a privative marker occurs only in combination with other signs, never by itself.
however, on why or how this element came to have such a value. While no
definitive answer is possible, I believe that its resemblance to our modern minus
sign is more than accidental. According to the most popular explanation, our
minus sign is derived from the Ancient Greek obelos, a horizontal line used in
ancient manuscripts to mark spurious or superfluous passages: see the OED sub
obelisk. The Greek term means "dagger, spit", but we need not accept the analysis
implied by this appellation as the correct explanation for the origin of the sign. This
may well be a folk etymology. The difference in orientation between the vertical
stroke of HLVuvian and the horizontal line in Greek is no obstacle to assuming that
they have a similar origin. We know that in the shift from writing vertically to
writing left to right cuneiform signs were rotated ninety degrees: see Jensen, Sign,
Symbol and Script (1969) 88. In the adoption of the Semitic aleph as Greek alpha
the sign was also turned ninety degrees. It is therefore quite possible that the Greek
obelos originated as a vertical stroke like that of HLVuvian. I emphasize that I am
proposing only a similar origin: to suggest a common origin would be exceedingly
hazardous.

Whatever its origin, if we assign a privative value to the vertical stroke 381 we
are able to give a consistent account of its function in the combinations in which it
occurs. It can, indeed must, be distinguished from the oblique stroke 383 which
marks the presence of .

ADDITIONAL LOGOGRAMS TRANSLITERATED INTO LATIN

| 254 | AEDIFICUM | 381 | MINUS |

APPENDIX

1st & 2nd Person Reflexives -mi/-ti

Morpurgo-Davies, KZ 34 (1980) 89, lists -mi/-ti and -tu/-ti as HLVuvian enclitic
forms of the first and second singular personal pronouns respectively. Her
description implies that the forms with u and i-vocalism are mere variants, although
she does suggest that tu beide ti may reflect earlier case distinctions. In her analysis
Morpurgo-Davies ignores or implicitly rejects the suggestion of Hawkins, AnSt 22
(1969) 105 f., that -mi is a reflexive pronoun of the first person singular, distinct
from dative-accusative -mu.

I will not repeat here Hawkins' arguments for -mi as a reflexive, which are
cogent. He himself sees two problems with his analysis. First, he cannot fully
account for the use of the reflexive in nominal sentences of the common type:
EGO-(w)il-h-mi PN "I am so-and-so". In fact, this construction confirms his analysis,
since the required use of the reflexive in nominal sentences of the first and second
person is exactly parallel to the usage of Neo-Hittite reflexive -sa, as shown by
Hoffner, JNES 28 (1969) 225 ff. Hawkins' second reason for doubt, that -mu also
appears as a reflexive in competition with -mi, is also groundless. The fact that -mu
can occasionally serve as reflexive (e.g. CARCHEMISH A. 1a,2) does not alter the fact
that -mi is used exclusively in this function. As discussed by Hoffner, enclitic
personal pronouns may also be used in place of reflexive -sa in Hittite. The
existence of first-person reflexive -mi in HLVuvian is unquestionable.

Identification of enclitic -ti as "ubi" goes back to Mitteberger, Sprache 9
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(1963) 93 f., who based his interpretation on the parallel of ASSUR c1 sa-pi-su + raj-i-wa/ri-i ti and ASSUR f., 1 sa-pi-su + raj-i-wa/ri-i is-sa-za which he translated respectively as "Hei (auch) dir!" and "Hei (auch) euch!". The parallelism is undeniable, and the proposed interpretation natural, but it is not the only possibility. Having seen the clear evidence for reflexive -mi in nominal sentences, we may equally well interpret the examples above as "Youg(pl.) (shall be) in health". The form supi/su/ri may easily be taken as dat.-loc. singular in either -a or -i. That -ma(a)za functions in the second plural as both reflexive and dative-accusative is not surprising. Hitittic first plural -na/za and second plural -ma/na also fulfill both functions. For use of the present indicative (implied by a nominal sentence) in a wish, compare the sequence in ASSUR d.1: sa-wa/ri-i ti / wu-ma-ma / ha-tu-ru-i ti "You shall stay(y) well, and you (shall) also (be) in health". In this example, we find rhotacized -mi-i for -mi-i.

The interpretation of sentences with -ti-i for nominal sentences marked by a reflexive is confirmed by an example from ASSUR f.2: wu-wa/ri-i / ha-ma-ma / ha-tu-ru-i ti "When you (are) to write". For the interpretation as a nominal sentence with dative of habitas: "writing" see Hawkins, KZ 94,115, and especially Morpurgo-Davies, KZ 94,115 ff., with further examples of this construction. As Hawkins notes, the above sentence is entirely parallel to that of ASSUR c,1, cited by Morpurgo-Davies: wu-ma-za / u-sa-za ha-tu-ru/i ti / wu-sa-sa-mi "You are to write". The overt verb form and orthotonic pronoun are for emphasis, but we still have a nominal sentence with obligatory reflexive -ma(/)a. See also ASSUR c,1-2, cited by Morpurgo-Davies, KZ 94,104 f.

To my knowledge, evidence for a second-person enclitic -ti-i for consists only of the examples cited above, which we have seen are all best taken as reflexive, parallel to first-person -mi. The second-person reflexive -ti-i was probably created after the third-person reflexive -ti-i just like -mi: 3rd sg. dat. -tu. refl.: -ti-i: 2nd sg. dat. -tu x (- -ti-i); 1st sg. dat. -ma / x (- -mi). It is conceivable, however, that the second person reflexive -ti-i is an archaism, reflecting an original wider use of the reflexive particle -ti/i for all persons and numbers. Such a general use of -ti is suggested by the use of the Hitittle cognate -ja(a) for all persons and numbers.

Aside from reflexive -ti, HLuvian shows orthotonic nominative ti, orthotonic dative-accusative tu and enclitic dative-accusative -tu for the second singular personal pronoun. All of these forms are directly comparable to those of other Anatolian languages, and HLuvian shows no more evidence for a confusion of tu and ti than does Hitittle or Palaic: see my discussion in MGS 42 (1983) 151f., especially note 6, which now may be revised as per above. [Addendum: Eichler, Untersuchungen zur hehitischen Deklination (1974) 68, n. 16, independently made the correct comparison of HLuvian -mi in nominal sentences to Neo-Hittite -za. However, his derivation of -mi from an ethical dative *mei fails to account for the strictly reflexive use of -mi in other than nominal sentences.]