J. D. Hawkins — Anna Morpurgo Davies

RUNNING AND RELATIVES IN LUWIAN

This paper aims at a solution of three different but interconnected problems. The first concerns the writing system of Hieroglyphic Luwian. What is the syllabic value of the sign Laroche HH no. 329, Meriggi no. 160, used to write the relative pronouns and their derivatives, and transliterated REL and QU by Laroche and Meriggi respectively? The second is a problem of Luwian phonology: what is the treatment of the voiceless labiovelar stop in Luwian? In Cuneiform Luwian, spellings like ku-iš, 'who' (nom. sg. MF), kuin-zi, 'who' (nom. pl. MF), ku-wa-ti, 'as, when', which can be compared with Hitt. kuiš, 'who', kuwattan, 'where', speak for a preservation of kw (as a single phoneme or, less probably, as a cluster). However the other Luwian languages differ: Lycian has ti, and for Hieroglyphic Luwian it has been said that we must postulate a change of k^w to k^w warranted by the reading $h\dot{u}$ of the REL sign, which would be paralleled by the supposed instances of k > hin Cun. Luwian.² The third question concerns the relationship of Cuneiform and Hieroglyphic Luwian. We expect the language of the earliest Hieroglyphic texts written in the Second Millennium, i.e. during the Empire period, to be either Cuneiform Luwian or a dialect extremely close to it. Yet is this likely if a basic part of the lexicon such as the relative pronoun had the form [kwis] in Cun. Luwian, but [huis] in Hier. Luwian? The treatment of velars in Luwian has received a great deal of attention in recent years.

² See Laroche, Dictionnaire de la langue louvite [DLL], Paris 1959, p. 135, but cf. H. C. Melchert, in C. Watkins ed., Studies in Memory of Warren Cowgill, Berlin 1987, p. 187.

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A version of this paper was first read at the Tenth East Coast Indo-European Conference (ECIEC) held in Oxford in July 1991; we are grateful to the members of that conference for their comments and observations. In what follows the transliteration of Hier. Luwian follows the principles first indicated in J. D. Hawkins, A. Morpurgo Davies, G. Neumann, Hittite Hieroglyphs and Luwian: New Evidence for the Connection, Nachrichten der Akademie der Wiss., Göttingen, Phil.-hist. Klasse, Nr. 6, 1973 [HHL], and in Hawkins, An. St. 25 (1975), 119 ff. For a useful summary and discussion cf. M. Marazzi, Il Geroglifico Anatolico. Problemi di analisi e prospettive di ricerca, Roma 1990, passim and 83 ff.; for an up-to-date account see Hawkins, Corpus of Hieroglyphic Luwian Inscriptions (forthcoming). Constant reference is made to P. Meriggi, Hieroglyphisch-hethitisches Glossar, Wiesbaden 1962 [Meriggi] and to E. Laroche, Les hiéroglyphes hittites, Paris 1960 [HH].

The question calls for a discussion of Indo-European reconstruction (two or three velar series?) as well as of the Anatolian data in general; it may be advisable to settle some of the small problems (such as that of the form of the relative) before turning back to the major issue.

For all our three problems much hinges on the writing of the relative in Hier. Luwian. To this we should now turn: new evidence may shed some light on the old questions.

The sign used in late Hier. Luwian to indicate the relative pronoun and its derivatives was recognized by Forrer as early as 1932³ and the identification was confirmed by the KARATEPE bilingual.⁴ The phonetic reading remained uncertain; ki was favoured for a while,⁵ but in a series of articles publishing the results of KARATEPE Bossert proposed a hwa value.⁶ Laroche writing in 1960 tentatively suggested that his sign *329 = REL was used with a phonetic value hw².⁷ In favour of this view he quoted the name sa-*329-sa of the father of the author of \$IRZI (§ 1), which Bossert had already identified with \$ahu, father of Hilaruada, king of Melid, named by Sarduri II of Urartu in c. 760 B.C. (see n. 31). Opinions have diverged ever since: in 1980 Meriggi expressed his view that the correct reading of the relative was kw- while acknowledging that direct proof was missing but also arguing that there was no real evidence for a reading hu.⁸ More recently the tendency has prevailed to leave the problem open and read the REL signs as k/hwa/i.⁹

The sign must be looked at in its context. If we start with Laroche's sign list, a number of points must be clarified. First, Laroche lists under the number *329 = REL two signs which Meriggi separates as *160 = QU and *161 = QW (Fig. $3b_{1-2}$ and e_{1-2}). In previous work, while adopting Meriggi's distinction, we have transcribed the signs with REL (Meriggi 160) and REL₂ (Meriggi 161).¹⁰ In its turn this transcription may be confusing because Laroche had also used REL₂, but for his sign 332. Yet this has been shown to

³ E. Forrer, Die hethitische Bilderschrift, Chicago 1932, p. 41 f.

⁴ REL = Phoen. 's, 'who', e.g. in Hu. 8, Hu./Ho. 61, 103, 135, 139, Hu. 173 etc.

⁵ Forrer, loc. cit. (in note 3); I. J. Gelb, Hittite Hieroglyphs III, Chicago 1942, p. 59f.; P. Meriggi, Athenaeum 29 (1951), p. 32.

⁶ Oriens 1 (1948), p. 178; Belleten 16 (1953), p. 511; AfO 17 (1955), p. 68; Muséon 68 (1955), p. 84.

⁷ HH, p. 173.

⁸ P. Meriggi, Schizzo grammaticale dell'anatolico (Memorie dell'Accademia dei Lincei XXIV/ 3, Rome 1980), p. 267.

⁹ See HHL, p. 234; Hawkins, An. St. 25 (1975), p. 119; Melchert, op. cit. (in note 2), p. 187, note 15; Oshiro, Orient 19 (1983), p. 551ff.; Marazzi, op. cit. (in note 1), p. 217.

¹⁰ Hawkins, An. St. 30 (1980), p. 139, note 1; 31 (1981), 148, Table 1.

be quite unconnected with REL and to represent the various forms of the factual and prohibitive negative;¹¹ it is transcribed NEG and may also have a syllabic value of the *ni/na* type.

Two reasons appeared to favour the linking of our REL and REL₂: the two signs are similar in shape and, as acknowledged by Meriggi, they may alternate in the same or similar words. Yet a closer look at the evidence reveals that real alternations occur in one inscription only. In SULTANHAN REL and REL, seem to be used indifferently to indicate the relative or derived forms; more specifically REL is used for this purpose nine times and REL2 six times. In three parallel clauses we find twice REL2-sa-ha, 'whoever' (§§ 38, 39), and once REL-sa-ha, 'whoever' (§ 40). REL is also used in two verbs, REL-sà-i, 'fears' (§ 17), and pa-sà-REL-i, 'neglects' (§ 20), and in the adjective (TERRA)ta-sà-REL+ra/i-si-zi, 'of the earth' (§ 33), all words to which we shall have to return. Two other inscriptions have a surprising use of REL, which contrasts with that of the rest of the corpus: in BULGAR-MADEN the sign REL does not appear; the relative (which occurs only twice) is written on both occasions with REL₂ (§§ 10, 13) instead of the 'normal' REL, while REL₂ is also used in the sequence (BESTIA) REL₂-sa₅+ ra/i-', similarly written elsewhere (see below). In KARATEPE, on the other hand, REL is used for the relative pronoun and derivatives (some 20 times), and REL₂ appears only twice, writing the verb REL₂-sà-, 'to fear' (Hu. 174, 179). This last writing contrasts with the REL-sà-i of SULTANHAN, § 17, and more importantly, as we shall see, with the related form REL-i(a)-mi-sa of KARAHÖYÜK, § 12, a text of the twelfth century B.C.

In all other texts of our corpus the spellings are entirely consistent; the relative is written with REL and not with REL₂, and words in which REL or REL₂ are used as syllabograms are constantly written with one or the other sign, but there is no alternation. The clearest example is the verb for 'run, march', (PES₂) (REL₂)-REL₂-(ia-)(sà-), which is always written with REL₂. Standard examples are found in KARKAMIŠ A11b, § 11:

["the gods loved me because of my justice"] wa/i-ma-tà-' PRAE-na PES₂(-)REL₂-ia-ta "and they marched/ran before me"

or ibid., § 8 (cf. A12, § 2):

¹¹ Hawkins, An. St. 25 (1975), pp. 119-152; cf. Marazzi, op. cit. (in note 1), pp. 219-221.

pa-tá-za-pa-wa/i-ta-' (TERRA.LA.LA)wa/i-li-li-tà-za mi-i-zi-' tá-ti-i-zi AVUS-ha-ti-zi-ha *348(-)lá/í-tà-li-zi-ha NEG₂-' (PES₂)REL₂-REL₂-sà-tá-si "to those fields my fathers and grandfathers and ancestors used not to run/march".

The formulae speak for themselves and as early as 1958 Laroche compared the verb with the Luwian (hui)huiya- 'run', caus. huinu- (attested in Luwian texts and in a number of Glossenkeil words) and with the Hittite huiya-/huwai-. ¹² A perfect Hittite parallel to the text just quoted is provided by formulae such as that of Hatt. ii 38:

nu-mu a-pí-ia-ia [(dIŠTA)]R GAŠAN-IA pí-ra-an hu-u-w[(a-a-iš)] "There too Ištar, my lady, ran before me".

or ibid. iv 10 (spoken by Ištar):

^{lú}*MU.DI.KA-wa am-mu-uk pí-ra-an ঽ ḫu-u-i-ia-mi* "I shall run before your husband".

Clearly in Hier. Luwian the standard sign REL is normally reserved for the relative, i.e. for the equivalent of Cun. Luwian (and Hittite) kui-, while the sign REL₂ is reserved for the running verb which matches Hitt. huiya-/huwai- and Luwian huiya-. The suspicion arises that Laroche's REL may indicate (or may have originally indicated) two different syllabograms, i.e. that REL points to a k- consonant, while REL₂ points to h-.

There is new evidence in favour of this suggestion. The Empire antecedent of the late Hieroglyphic Luwian REL, used for the relative, is well known. It is found in EMIRGAZI and in KÖYLÜTOLU YAYLA with a clearly recognizable form as in Fig. 3a. Photographs of the recently published YALBURT inscription¹³ show a number of examples of the same form, as does the recently discovered SÜDBURG inscription from Boğazköy.¹⁴ However, YALBURT also attests the verb 'run' in the usual formulae seen above.

YALBURT block 4, § 2 (Özgüç, op. cit., pl. 90.1); here Fig. 1: zi/a-tá-zi/a-pa-wa/i REGIO-ní-zi/a MAGNUS.REX-zi/a HATTI(RE-GIO) a-mi-zi/a | TÁ.AVUS-zi/a NEG-a REL-i(a)-sa-ha REL₂-i(a)-tá

E. Laroche, BSL 53 (1958), p. 195, note 15. The connection with Lycian χuwati proposed by Laroche (Fouilles de Xanthos VI, 1979, 66) is of course uncertain and was rejected e.g. by Melchert, Lycian Lexicon, Chapel Hill 1989, 87.

T. Özgüç, Inandiktepe, Ankara 1988, pls. 88-95, especially pls. 88.1, 90.2, 91.1, 92.1.
 See J. D. Hawkins, The Hieroglyphic Inscription of the Sacred Pool Complex (StBoT, Beiheft 3, Wiesbaden, forthcoming).

"and to these countries the great kings of Hatti, my fathers (and) grand-fathers, no one had run/marched".

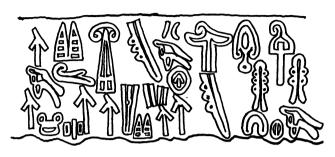


Fig. 1

YALBURT block 4, § 2.

The last three signs on the upper right are NEG, REL, and CURRERE, the late forms of which have all been mistakenly equated.

YALBURT block 10, § 3 (see Özgüç, op. cit., pl. 88.1; also blocks 12 § 4; 11 § 1); here Fig. 2: (DEUS)TONITRUS DOMINUS-na REL+ra/i PRAE-na REL₂-i(a)-tá "when the Storm-God, the Lord, ran/marched before (me)"

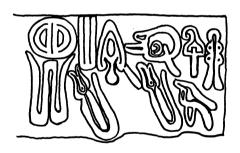


Fig. 2

YALBURT block 10, § 3.

It is clear that REL₂ is completely different in shape from REL as shown by Fig. 3 d in contrast to 3a. In other words, on the one hand in the Empire period the functions of REL and REL₂ are similar to the 'regular' distribu-

tion of the Late Period, thus warranting similar conclusions about their phonetic value; on the other hand the two signs are much more different from each other in shape and are obviously intended as separate signs. If so, we ought to abandon our own deceptive REL, REL₂ transliteration (just as previously we had abandoned the REL/REL₂ contrast of Laroche in favour of REL and NEG) in favour of two different symbols: we propose here REL (= MERIGGI *160 = QU) and CURRERE (= Meriggi *161 = QW).

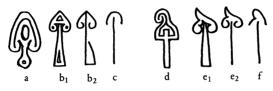


Fig. 3

Forms of REL (a-c) and CURRERE (d-f).

Obviously these are conventional transliterations and do not speak for a logographic rather than syllabic value of the two signs. A decision about this particular point will have to be taken separately for each word and each text. As we shall see, there is sufficient evidence in the late texts to warrant a syllabic reading of the signs. As for the Empire period it may well be that EMIRGAZI (altars A 1.3/C 1.1) can provide us with some evidence for a phonetic reading of CURRERE if the word written CURRERE-sa-ti-sa may be identified with Cun. Luwian hu-u-i-iš-ti-iš, 15 which may indicate a substance (= Hitt. hušti-?) and has nothing to do with 'running'. 16 A phonological use of REL is attested in YALBURT where the sign appears in the verb (*85) REL-zi/a-tá, 'knelt'(?) (block 15, § 1; Özgüç, op. cit., pl. 92.1), and in the geographic name REL-la-tara/i-na(REGIO) (block 17, § 2; Özgüç, op. cit., pl. 95.1), presumably to be read Kuwalatarna. 17

Before we turn to a new analysis of the first millennium evidence on the basis of these suggestions, we ought to try to establish both the consonan-

¹⁵ For the attested forms of Cun. Luwian huišti-, see Laroche, DLL, s.v.; Starke, StBoT 30, pp. 245 no. IV.1, 1.6'; 222 III 8; 239 IV 4'; 224 III 6'; 232 II 6'; 229 II 8'; 230 II 1', 14'. For the EMIRGAZI attestation of CURRERE-sa-ti-sa, see Hawkins, StBoT, Beiheft 3 (forthcoming), Appendix 2, EMIRGAZI, §§ 11,12 and commentary.

A new example of the sign CURRERE used as a syllabogram is found among the bullae excavated at Boğazköy in 1991, where there are impressions of several different seals of an official with a name written ma-CURRERE-zi/a. It is likely that this name is to be identified with Cun. Mahhuzzi (ma-ah-hu-(uz-)zi; Laroche, Noms des Hittites, no. 714).

¹⁷ Cf. the attested Cun. toponym Kuwaliya, and other similar.

tism and the vocalism to be attributed to the signs in syllabic function. The texts (early or late) do not show alternations of REL and CURRERE with ku or hu.¹⁸ Even more significantly the relative conjunction kuman, 'when', is always written ku-ma-na and never REL-ma-na, while for 'where' the writing is always REL-i-ta-na, i.e. presumably k(u)wittan. On the other hand the writing REL-sa is very frequent. The easiest assumption is that REL and CURRERE, if used syllabically, had the values kwa/i (or kua/i) and hwa/i (or hua/i) respectively, i.e. that they included a final vowel which may be either a or i (just as in wa/i).¹⁹

We are now in a position to reconsider the data of the First Millennium: in addition to the relative what is indicated by REL? And what is indicated by CURRERE in addition to the verb for running?

REL is used in four verbs and a noun which merit discussion.

- (a) REL-za-, 'incise', may or may not be preceded by the logogram MANUS+SCALPRUM. The suggested connection with Hittite kuen- is very doubtful, because kuen- is from $*g^{m}hen$ -, which ought to yield **wan- in Luwian. Thus, the verb seems to lack a clear etymology. The existence of the Cun. Luwian verb kui- listed by Laroche in DLL is very doubtful.²⁰
- (b) REL+ra/i-, 'cut' (MARAŞ 4, § 13), can be compared with Hittite kuer-, 'cut', which presumably continues an original labiovelar.²¹
- (c) REL-sà-i, 'fears' (SULTANHAN I. 5, § 17), is to be compared with the participle REL-i(a)-mi-sa of KARAHOYÜK I. 8, § 10,²² and with the Luwian/Glossenkeil root kuwaya-, 'fear'.²³ The etymology is not certain, but Laroche has suggested a derivation from *dwey- through a *kwey- stage.²⁴ As we have seen, KARATEPE has an unexpected CURRERE-sà-.

This statement may now have to be qualified following a reading on an unpublished stele IVRIZ 2 kindly shown to us by Professor Massimo Poetto who will be publishing it in collaboration with Professor Ali and Dr Belkis Dinçol. A verb on TUNP 1, § 2 reading arha ("CAPUT+SCALPRUM")ku-sà- seems likely to be the same as one on IVRIZ 2, reading arha ("CAPUT+SCALPRUM") REL-sà-. We suggest that perhaps we have here a verb kwasa-contracting to kusa-, rather than an alternation between ku and REL as such. Both inscriptions belong to the late eighth century B.C.

¹⁹ Cf. Melchert, op. cit. (in note 2), p. 187.

²⁰ Identification as part of the indefinite pronoun cannot be excluded in all its attestations: see Starke, StBoT 30, pp. 143 f. II, 2, 3, 4, 6, 7, 8; 162 I 5', 6'; 399 IV 13'.

²¹ Hawkins, An. St. 25 (1975), p. 143; 30 (1980), p. 143; see Tischler, HEG, s.v. kuer. Cf. Marazzi, op. cit., p. 386.

²² P. Meriggi, Manuale di eteo geroglifico, Rome 1966-1975, II/3, p. 321; Hawkins, Corpus (forthcoming), commentary to KARAHÖYUK, § 12.

²³ Laroche, DLL, s.v. kuwaya-; id., BSL 55 (1960), p. 175 note 2.

²⁴ BSL 62 (1967), p. 50.

- (d) pa-sà-REL-i, 'neglects'(?), may well be compared with Hittite pasku-wai-.25
- (e) Finally the frequent word ta-sà-REL+ra/i-, 'earth', has been compared with Hitt. kwera-, 'field', though this is doubtful.²⁶

All examples, except for one odd spelling of KARATEPE, show that syllabic REL corresponds to a k(u)wa/i sequence of Hittite or Cun. Luwian.²⁷

The position of CURRERE is different. As we have seen, it is not normally used for the relative pronoun, but it appears in a few other words (see above). Of these the most prominent is huitar-/huisar-, 'wild beasts', as in BULGARMADEN, § 7, (BESTIA)CURRERE-sa₅+ra/i-'; ALEPPO 2, § 5, (BESTIA)CURRERE-sà+ra/i-sa; MARAŞ 1, § 11, (BESTIA)CURREREtara/i; BOHCA, § 5, (BESTIA)CURRERE-sa₅+ra/i, 28 with the derivatives SIRZI, § 4, CURRERE-tà-ni-ia-za, 'that of the wild beasts'; and ASSUR letter a, § 10, (BESTIA) CURRERE-sá-na-ma-ia.²⁹ The word is clearly identical to Hittite huitar, which is sometimes taken as a borrowing from Luwian (but see Puhvel, HED 3, s.v. huedar). As for the etymology, a connection with IE * g^wi - is not likely because in Luwian we would expect **wi-; Puhvel (loc. cit.) starts from a root *Hwed- (Cun. Luw. huit-) which ultimately may be brought back through suffix-variation to the same root as *Hwes- (cf. Hitt. hueš-, huiš-, 'be alive, live etc.'). He derives (ibid., s.v. huwai-, huya-) the Hittite word for 'run' from *Hw-éy-. However it seems likely that, whatever the real etymology was, Luwian folk-etymology derived the noun from the verb 'run'. If so, in our evidence the first sign could be taken as a syllabogram HWI or as a logogram CURRERE.

Yet in ASSUR letter f+g, § 13, the sign occurs in a context where a logographic use is unlikely. It is the 2nd sing. imperative verb (SIGILLUM)

²⁵ Hart apud Hawkins, An. St. 25 (1975), p. 119, note 9.

²⁶ Neumann and Rasmussen apud Oettinger, KZ 92 (1978), p. 82 note 36.

There is also a problematic and so far unexplained usage of REL in the word for 'great-grandson', which appears as ba-am-šu-kal-la- in Cun. Luwian and is written ba-ma-su-ka-la- in Hier. Luwian (MARAŞ I, § 1d; KÖRKÜN, § 11), but also on occasions as INFANS.NEPOS-REL-la- (see MARAŞ 4, § 10; MARAŞ 14, § 5; KARKAMIŠ A4 a § 12). Under other circumstances we might take this as an example of alternation of REL with ka, but given the uncertainty about the etymology of the second element of the word and about the reading we may have to suspend judgement or at worse consider whether the velar could have been infected by the previous u (bamsukala- > bamsukwala-??).

²⁸ See Morpurgo Davies and Hawkins, Studia Mediterranea P. Meriggi dicata, Pavia 1979, 399–401.

²⁹ For these two forms, see Hawkins, Corpus (forthcoming), commentary ad loc.

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CURRERE-pa-sa-nu, which has been connected with Hitt. huwapp-, 'bad, nasty'. 30

Among the various personal names which contain CURRERE used as a syllabogram, one has already been quoted and is important: sa-CURRERE-sa (gen. sg.), the father of the author of \$IRZI (§ 1). If the connection with the Cuneiform Šaḥu is correct,³¹ the chances are that the Luwian version of the name is Sahuis. If so, the middle syllabogram ought to be read hui/hwi, just as the same sign in CURRERE-pa-sa-nu ought to be read hua/hwa. Another relevant name is that of the author of PORSUK (§ 1), pa+ra/i-CURRE-RE+ra/i-. This may well be a rhotacized form of the Hittite name ¹pár-hu-it-ta.³² Note also the name á-sa-CURRERE-si-, which may be identified with Cun. Ušhitti.³³ In general, these examples of CURRERE as a syllabogram suggest that it was an h-sign (hua/i or hwa/i), in contrast to REL which has been seen as a k-sign (hua/i or kwa/i).

Some problems remain: why the oscillations of SULTANHAN, why the CURRERE spelling of the verb 'fear' in KARATEPE and the CURRERE spelling of the relative pronoun in BULGARMADEN? Things become clearer, however, when we realize that the three inscriptions that present 'aberrant' uses of REL and CURRERE are all extremely late: SULTANHAN belongs to the late eighth century and so does BULGARMADEN; KARATEPE may be even later. In other words in chronological terms the 'oddities' are limited to the last part of our corpus.

To sum up. It is now clear that in the Empire period we are dealing with two separate signs REL and CURRERE. We have shown above that at the time they were used as syllabograms for words other than the relative and the verb 'run', and that the chances are that REL indicated [kwa/i] or [kua/i], while CURRERE indicated [hwa/i] or [hua/i]. Later on the data are more complicated. The graphic difference diminishes, but a clear distinction is made e.g. in the linear incised script of ninth century BABYLON 1 (Fig. 3c, f); there, as in the KARKAMIŠ texts, CURRERE is only used for the verb 'run'. At the end of the eighth century we begin to find signs of confusion, though this is limited to three texts. The simplest

³⁰ Hawkins, KZ 94 (1980), p. 116.

³¹ The name is found in the Urartian inscription IZOGLU for which see Melikišvili, UKN, no. 158 = König, HChI, no. 104. The identification of this name with the Hier. name of the father of the author of ŞIRZI was made by Bossert, AfO 17 (1955), p. 68.

³² KBo XVIII 18, 1; see Laroche, Hethitica 4 (1981), p. 26 no. 779 a, where the name is read ^Imaš-hu-it-ta, but the reading ^Ipár- is equally likely.

³³ Morpurgo Davies and Hawkins, Studia Meriggi, op. cit., p. 389 f.

solution is to assume that the distinction between hua/i (or hwa/i) and kua/i (kwa/i), which originated in Empire usage, survived for a considerable period in the First Millennium. After that two hypotheses are possible. We may indeed witness a phonetic change which led to a merger of [k] and [h] in certain environments, i.e. before [w] (or [u]?). The alternative possibility is of course that we are dealing with purely graphic phenomena: the two signs were confused and could be used indifferently by some scribes. In either case the change is late and tells us nothing about the earlier periods of our evidence.

We may now produce some tentative answers to the questions from which we started. 1) The syllabic value of REL is originally kwa/i or kua/i in contrast to that of CURRERE which must have been hwa/i or hua/i. 2) In prevocalic position, the voiceless labiovelar stop was preserved in Cun. and Hier. Luwian as a complex phoneme or as a cluster, though it is conceivable that in the latest stages of our Hieroglyphic evidence it underwent some phonetic modification. 3) We have no reason to postulate different treatments of the voiceless labiovelar for Cuneiform Luwian and the contemporary Luwian of the Hieroglyphic inscriptions; in other words, we have removed one of the obstacles that prevent us from reading as Luwian the Empire inscriptions written in Hieroglyphic.

Finally, we return again to the alternation between REL and CURRERE of the late texts. A firm choice between graphic and phonetic confusion is impossible, but the first hypothesis does not seem very likely; the two signs were sufficiently differentiated. If we are confronted with a phonetic merger, then we ought to think either of, (i) a change of [k] into a fricative or aspirate, i.e. of a shift of [kw] before vowel to [hw], or of, (ii) a change of [h] into a stop, i.e. of a shift of [hw] before vowel to [kw]. A priori neither possibility can be excluded and certainty could only be reached if we had Hieroglyphic Luwian texts later than KARATEPE, which is not the case. However, it may be possible to make a case for the second of the two possibilities envisaged, if we believe that there are some common phonological tendencies of the Luwian group and if we are willing to use Lycian as evidence for these tendencies. In Lycian the relative pronoun is ti, 'who, which'. If, as is almost certain, this derives from [kwi-], it does not seem likely, purely on phonetic grounds, that we must postulate an intermediate stage [hwi-]. On the other hand, a Cuneiform and Hieroglyphic Luwian [h] (mostly derived from the second laryngeal) corresponds to a phoneme written in Lycian as $\langle \gamma \rangle$ or $\langle k \rangle$ or $\langle q \rangle$ or even $\langle g \rangle$, i.e. (presumably) to a velar fricative or a velar stop. Lycian $\langle h \rangle$ is attested, but it corresponds to a Cuneiform and Hieroglyphic Luwian prevocalic [s]. Thus in contrast with Lyc. hri 'on top' vs. Cun. Luw. šarri, we have Lyc. χawa -, 'sheep', vs. Hier. Luw. hawi-, 'sheep'; Lyc. χuga -, 'grandfather', vs. Hittite and Hier. Luw. huhha-'grandfather'; Lyc. Traqūt- vs. Cun. and Hier. Luwian Tarhunt-, the name of the Storm God, etc. At this stage it is legitimate to suggest that the use of CURRERE for the verb 'fear' in KARATEPE (a very late text) and for the relative pronoun in SULTANHAN and BULGARMADEN (also late texts) does not point, as normally suggested, to a change of prevocalic [kw] into [hw], but rather to a change of [hw] into [kw] (or [χw]??), a development which may be part of a tendency similar to that identified in Lycian.³⁴

A serious phonetic reconstruction is of course impossible given the uncertainty about the exact pronunciation(s) of Hittite, Cun. Luwian and Hier. Luwian $\langle h \rangle$ and indeed of all other relevant consonants. The Lycian evidence might speak for an aspirate pronunciation of $\langle h \rangle$ as [h] (< [s]) and a fricative pronunciation of $\langle \chi \rangle$ as $[\chi] (< [h])$. On the other hand we have no reason to suppose that in Lycian the velar stops turned into fricatives. In other words, a comparison of the development of Hier. Luwian with that of Lycian would not support the suggestion that Hier. Luw. [kwV] or $[k^wV]$ became $[\chi wV]$. If so, there remains the other possibility that in Late Hier. Luwian [hw] turned into $[\chi w]$ with a development of [h] parallel to that of Lycian. Then $[\chi w]$ may have changed into [kw] or a similar sequence thus allowing the use of the original HWI/A sign for a [kwi/a] sequence.