LYDIAN:

SEPARATED FROM LUWIAN BY THREE SIGNS*

Fred C. Woudhuizen

As early as in the thirties of our present era Piero Meriggi, working from Luwian Hieroglyphic and Lycian, at once recognized the first person singular amu in Lydian. Unfortunately this promising line of research was much hampered at the time by three problematic signs, viz.: $\int_{-\infty}^{\infty} 1$ and $\int_{-\infty}^{\infty} 1$ of which the ascribed values $\int_{-\infty}^{\infty} 1$ and $\int_{-\infty}^{\infty} 1$ caused grammatical and etymological difficulties.

However, new epigraphic evidence resulting from the more recent excavations at the Lydian capital Sardis, published in full by R. Gusmani⁴, enabled Meriggi again, to prove the Anatolian origin

^{*} My thanks are due to dr. J.J.S. Weitenberg for linguistic criticism, Sonja Hespe for drawing the figures and Mr. J. Woudhuizen for correcting the English version of the manuscript.

^{1.} P. Meriggi, "Die erste Person Singularis im Lydischen", Revue Hettite et Asianique XIX, 1935, p.72.

A. Heubeck, "Überlegungen zur Entstehung der lydischen Schrift", Kadmos XVII, 1978, pp.60-2, figs.2-3.

^{3.} Hence the problem of the position of Lydian within the Anatolian language group, see R. Gusmani, Lydisches Wörterbuch, Heidelberg 1964 (= L. W.), p.25f; cf. O. Carruba, "Lydisch und Lyder", Mitteilungen des Instituts für Orientforschung VIII, 1963, p.385, in which article many other important connections with Luwian have already been put forward.

^{4.} R. Gusmani, Neue Epichorische Schriftzeugnisse aus Sardis 1958-1971, Cambridge-Massachusetts 1975: inscriptions numbered with A, B and C at the start.

of the so-called "Para-Lydian" script, which, on account of its date (VIIIth to VIth century B.C.) and its gradual development into classical Lydian script (Vth to IVth century B.C.), appears to be nothing more than an earlier stage in the development of the Lydian alphabet, thus providing us with a fresh starting-point for investigating these three signs.

1. The Phoenician yod

The first sign exactly parallels the Phoenician yod $(1)^7$. It occurred already during the archaïc period, not only in the same position as its Phoenician counterpart, but also, like other signs of Phoenician origin, turned 90 degrees (7/9) — which is a typical Anatolian feature that can be observed in "Cappadocian" writing as well at the time* —, and continued to be used during the classical period in this way and in a slightly varying form (4/4), closely resembling the 4 in Sidetic inscriptions from roughly the same time $(4/4)^9$.

 P. Meriggi, "Zur Neuen "Para-Karischen" Schrift", Kadmos V, 1967, p. 92-3, table V, esp.:

\(\): Sidetic writing-variant of the Phoenician tsade, see C. Brixhe, "L'Alphabet épichorique de Sidé", Kadmos VIII, 1969, p.6.
\(\)

X: Pamphylian writing-variant of the Phoenician samekh, see C. Brixhe, Le Dialecte Grec de Pamphylia, Paris 1976, p.5.

To these can be added:

Δ: Carian /m/ (Lyd. CI,6: 600-550 B.C.).

D: Carian /e/ (Lyd. CI,4: 650-600 B.C.).

O: like in Carian inscriptions at the end of a word (Lyd. AII,4: c. 600 B.C.).

⊖: (Lyd. B1,5: 700-650 B.C.). ★: (Lyd. CI,5: 650-600 B.C.).

See also note 6 below.

 F.C. Woudhuizen, "Etruscan Origins: The Epigraphic Evidence", TALANTA XIV-XV, 1982-3, pp.108-11; see also discussion below.

7. E. Littmann, "Lydian Inscriptions", Sardis, Vol. VI, part 1, Leyden 1916, p.17.

- 8. Lyd. CI,3 (600-550 B.C.), Lyd. no. 30 (600-550 B.C.); cf. Woudhuizen, loc.cit. In Tartessian and Iberian script this particular writing-variant is used for /i/ and occurs in combination with, apart from other Anatolian signs, the Lydian /f/ and /e/ signs, see A. Arribas, The Iberians, London 196?, pp.89, 93, 95, and U. Schmoll, Die Südlusitanischen Inschriften, Wiesbaden 1961, p.56, nr.23.
- 9. Lyd. no. 41, line 2: day, and Littmann, Lydian Inscriptions, p.16; cf. G. Neumann, "Zur Entzifferung der sidetischen Inschriften", Kadmos VII, 1968, p.90.

A simplification of the sign (\$\sqrt{}\$), appearing once in an archaïc Lydian inscription¹°, can be compared to Phrygian /j/, used from the VIth century B.C. onwards ¹¹, and to Eteo-Cretan /i/, coëxisting in the early VIIth century B.C. with the Phoenician yod in a 180 degrees turned position¹²— attested in Lydian, too, during the classical period (\$\gamma\$, cursive \$\gmma\$)!—, and clearly constitutes an intermediary form in the development from Phoenician yod to straight iota¹³.

Phoen.	value	Lydia			value
		7	1		
7	yod }	9			111
		Y	re	4	
Î	Itl	ĵ	{	3	181

Fig. 1
Origin A: the Phoenician Alphabet

10. Lyd. CI,1 (600-550 B.C.).

11. M. Lejeune, "Discussions sur l'Alphabet Phrygien", Studi Micenei ed Egeo Anatolici, fasc. X, 1969, p.41.

12. Y. Duhoux, L'Etéocretois, Les Textes — La Langue, Amsterdam 1982, p.167, 176 and Pl. 11; for the dating of DRE 1, see pp.29-32. In the light of the epigraphic relation the Eteo-cretan word turon may very well be compared to the title of the Lydian priest-king turannos (first attributed to Gyges by the Greek poet Archilochos) and the Etruscan appellativum of Artemis Turan (T.L.E. 45), which according to E. Laroche, "Reflections sur des problèmes de linguistique Étrusque", Revue Études Latines, Band 38, 1960, p.72, is derived from Anatolian taruna "chef, gouverneur" (= Luwian Hieroglyphic tarwana-, see E. Laroche, Les Hiéroglyphes Hittites, première partie: L'écriture, Paris 1960, s.v. no. 371, sub 2). For /o/ in archaïc Lydian, see Gusmani, Neue Epichorische Schriftzeugnisse, p.90.

13. Lyd. no. 2, line 2: day, Lyd. no. 24, line 2: katosy; cursive: Lyd. no. 2,

line 5: ml, venday, Littmann, Lydian Inscriptions, p.16.

14. Lyd. no. 30 (600-550 B.C.); for its origin, see H.Th. Bossert, "Reisebericht aus Anatolien", *Orientalia* XVIII, 1959, p.284, note 1. This sign is strikingly paralleled in North Etruria on a stèle from Vetulonia already during the preceding period (T.L.E. 363: 650-600 B.C.).

Of course, if all this is correct, a direct derivation from Phoenician is implied and may be confirmed by the south Phoenician origin of the Lydian /f/ sign (\frac{1}{2}: archaïc period)¹⁴, characterized by an equally independent handling during the course of time (8: from the VIth century B.C. onwards)¹⁵.

Having arrived at the value /i/ (transcription i₁) on account of the epigraphic parallels, it now remains to look whether this conclusion can be reinforced by linguistic evidence.

In two highly corresponding texts (Lyd. nos. 23-4), found at the temple of Artemis and dedicated to the same person, probably a priest, the nominative of the first person singular amu is followed by verbs in -u/v and $-vi_1$:

- 237-8 fak-ud amu ovi, ak-it + ed fasfenu's
- "I declare the following:"
 "what I possess"
- 24₁₇₋₈ nak amu (...) katosi, faov ak-it amu nā+id fasfenu
- "I, (...), declare the ... :"
 "whatever I possess"

These two verbal endings bear a striking resemblance to the Lycian first person singular of the present/future -u and its Luwian predecessor -wi respectively¹⁷ — Lydian, in using both old and new form, testifying an intermediary stage in the development. Several of the grave-inscriptions, especially the longer ones, are headed by a dating formula, which is characterized by the verbal form $d\bar{a}i_1$, derived from the Indo-European root *do-,də- "to give":

1₁ borll₁X Artakśassal₁ + al₁ml₁ul₁ dāi₁ "It gives in the year 10"

"of the kingship of Artaxerxes"

In this case the verbal ending -i can be identified with that of the third person singular of the present/future in Palaïc and

^{15.} Lyd. AII,3 (VIth century B.C.). The same development can be traced simultaneously in Etruria, e.g. on the gold tablets from Pyrgi, dated to c. 500 B.C. (T.L.E. 874-5).

^{16.} For $/\bar{e}/=/e/$, see figure 4 below.

^{17.} Ph.H.J. Houwink ten Cate, The Luwian Population Groups of Lycia and Cilicia Aspera during the Hellenistic Period, Leiden 1961, p.83.

^{18.} Gusmani, L. W., s.v.

cuneiform Luwian — where it is used along with -ti, represented in Lydian by $-d^{19}$, for the same ending²⁰ —, and can conveniently be translated here by the neuter "it".

In a semi-bilingual inscription from the temple of Athena at Pergamon the epichoric equivalent of Greek Athènaièi is Asi, il²¹:

40₁₋₂ esi, taśei, Asi,il Bartaraś †atit "This stèle for Asia,"
"Bartaras has erected
(it)"

Apparently this is the dative of the epichoric Lydian GN Asia — after whom the Sardian genos of the Asiones/Esiones was named²² —, recalling the Luwian GN dAssiya-, derived from the verb assiya- "to (be) love(d)" and hence "the beloved Goddess". The same root reappears as an onomastic element in the well known Luwian Hieroglyphic MN A+si-i-ti-wa-ta-sa according to the reading of Meriggi and Laroche²⁴, which is surprisingly close to Lydian, not only in this case, but also with respect to ta-sa-i and wa-na-i, both nom./acc. singular of the neuter "stèle" being exactly paralleled in Lydian by tasei, and vanai respectively²⁶.

19. Meriggi, Die erste Person Singularis, p.69-70. As in Lycian, where the ending -d/ti is interchangeable with that of the third person plural -ñti, derived from Luwian -anti, cf. E. Laroche, "Comparaison du Louvite et du Lycien IV", Bulletin de la Société de Linguistique LXII, 1967 (= Comparaison IV), p.55, this ending is used for the third person plural, too, and vice versa:

2412-3 Artimus (...) katsarlokid

2310 + lidan(s)-k Artimu(s)-k katsarlokid

but also: 55 Artimus (...) vlba + ent

44-5 + I dans Artimu(s)-k v1ba + ent

20. J. Friedrich, Hethitisches Elementarbuch, Heidelberg 1960, p.191; cf. J.D. Hawkins, A. Morpurgo-Davies, G. Neumann, "Hittite Hieroglyphs and Luwian: New evidence for the connection", Nachrichten der Akademie der Wissenschaften in Göttingen, Philologisch-Historische Klasse, Nr.6, Göttingen 1973 (= H.H.L.), p.38.

21. The same name is written on an altar-stone from Volsinii in Central Etruria (T.L.E. 205: Ašil).

22. Strab. XIII, 627.

23. E. Laroche, Dictionnaire de la langue Louvite, Paris 1959, p.126.

24. P. Meriggi, Hieroglyphisch-Hethitisches Glossar, Wiesbaden 1962, s.v.; E. Laroche, Hiéroglyphes Hittites, p.14. For a discussion of the reading of Luwian Hieroglyphic, see appendix.

25. Meriggi, Glossar, s.v.; cf. J.D. Hawkins, "The Negatives in Hieroglyphic

Luwian", Anatolian Studies XXV, 1975, p.145.

26. Lyd. no. 40, line 1; Lyd. no. 18, line 1: normally vanas, comparable to the Luwian neuters in -sa/-za.

In this light it seems opportune to compare the case ending $-ai_1$, which is levelled in the first section of the damnation formula of the grave-inscriptions with the dative singular in $-l_1$ by the word buk "or":

24-7 ak-t-in nā + is fensl₁ibid "whoever inflicts any damage" esi₁ai₁ ml₁vendai₁²⁷ (...) "upon these thank-offerings (...)" "or this grave or monument"

to the dative plural $-a\bar{l}$ in Luwian Hieroglyphic²⁸. That the same ending is used for the genitive plural, too²⁹, for which comparative data are coming from Lycian³⁰, is seemingly in accordance with the advanced assimilation between the genitive and dative attested in Lydian with respect to the singular, being both expressed by l/l_1^{31} .

In the same way, if one is willing to accept the correspondence between the case ending $-i_1$, which in the second section of the damnation formula of Lyd. no. 2 is attached to the GM Artimu—who must be subject of the closing verb on the basis of the

27. The word *ml*₁*vendai*₁, apparantly a participium formation on *-nd*-analogue Lycian *-ñt*- in *ahñtai* "of the possessions" (Xanthos' Trilingue, line 17), can be compared to Sidetic *malvam*₁a, which, on account of its correspondence to Greek *charistèria*, means "thank-offerings", see F.C. Woudhuizen, "Origins of the Sidetic Script", p.122 below.

28. P. Meriggi, Manuale di Efeo Geroglifico, Parte 1: Grammatica, Roma

1966, p.26, 31. 29. See below.

30. E. Laroche, "La stèle trilingue du Létôon: version lycienne", Fouilles de Xanthos VI, 1979, p.85-6.

31. The genitive singular in -l: 49, Aluš Mretlizul "Alys, son of Myrtilos" is derived from the Luwian adjective-suffix -ali-, cf. Laroche, Comparaison I, p.187 — still traceable in Lydian in its original form (see Gusmani, L.W., p.44) —, in the same way as the Lycian genitive in -ahi/-ah(e) is derived from Cuneiform Luwian -ašši- and Hieroglyphic -asa-/-as respectively (see Laroche, Comparaison II, pp.155-63).

The dative in -l: 40₁ Asi₁il ≈ Gr. Athènaièi and -l₁: 20 Artimul₁ = Gr. Artemidi

on the other hand, can, in the light of Lycian evidence (ebehi, dat. sing. of the dem. pronoun ebe-, Trilingue, line 24), possibly be explained as an original dative of the adjective-suffix.

For the combined use of both these adjective-suffixes in Etruscan, see Laroche, Reflexions, p.72 and Woudhuizen, Etruscan Origins, p.113-4.

analogies³² —, and the nominative plural in -i in Lycian³³ and Luwian Hieroglyphic³⁴, the mode of expression used here appears to be almost identical to that of the corresponding section of Lyd. no. 1, where the same goddess is twice invoked in both her capacities!:

29-13 $ak-m-l_1$ $Artimui_1$ $Ib\acute{s}imi_1ai_1$ $Kulumi_1a(i_1)-k$ (...) $v^{\dagger}bu+id^{35}$

"the Artemisses of the Ephesians" "and the Koloans (...) will strike him"

16-8 fak-m-l₁ Artimuś Ibśimsis Artimu(ś)-k Kulumsis (...) v†ba+ent "the Ephesian Artemis and the Koloan Artemis (...) will strike him"

The apparent conclusion is that the value /i/ for the sign in question can be sustained by linguistic evidence and that even for those scholars who feel compelled to adhere to the present communis opinio on the reading of Luwian Hieroglyphic, irrespective of new arguments put forward or old ones neglected, it can still be sufficiently based upon grammatical implications from Lydian itself and unchallanged correpondences with Lycian and Cuneiform Luwian.

2. The Cypro-Minoan ti-sign

The second sign is identical to that for /ti/ in the Cypriote Syllabary (†)³⁶. Its adoption into alphabetic script is first attested for the earliest Phrygian inscriptions from the VIIIth century B.C., in which it is used exclusively before the vowel /i/³⁷.

32. See sub 2 below.

33. T.L. 933 me-ne Trqqas tubidi se muhāi huwedri

"Tarhunt and all the Gods"
"will strike him"

Cf. Laroche, Trilingue, p.86.

34. Meriggi, Manuale I, p.26,31.

35. Comments: the ethnicon suffix -mi₁- may perhaps be compared to the latest phase in the development of Hittite -umana-, viz. -ma-, cf. Laroche, Comparaison II, p.171; for the confusion of the third person singular and plural in the present/future, see note 19 above; for the meaning of the verb, see sub 2 below.

36. O. Masson, Les Inscriptions Chypriotes Syllabiques, Paris 1961, figs. 1-6.

37. Phryg. no. 25: silidosakor; no. 3: klianavezos; no. 9: alioni/alios.

Thereupon it appears in the earliest Lycian inscription found on Rhodes, dating from the VIIth century B.C., in which it most plausibly represents the value /t/, and, in doing so, would give further substance to the impression of a regular value-reduction according to the acrophonic principle under influence of alphabetic writing³⁸.

In this light it is interesting to note that in Lydian, where this sign can be traced during the classical period only, it occurs in more than 40% of the cases before the vowel i/i_1 and it is interchangeable with the common Phoenician $/t/^{39}$.

In addition to this other signs originating from the Cypro-Minoan syllabary were incorporated into the classical Lydian alphabet, and because these can be shown to be remnants from the archaïc period, the same may indeed apply to the *ti*-sign as well⁴⁰.

C.S.	value	Lyd.	value
1	ldal,ltal	t. k	111
	IRUI	4,4	121
\wedge	Imil	\triangle	m
1	Itil	1	Itl
	c.s. 	- Idal, Ital IRUI / Mil	Idal,Ital Interpretation IRUI Y, Y Imil △△

Fig. 2 Origin B: the Cypro-Minoan Syllabary

38. G. Neumann, Neuefunde Lykischer Inschriften seit 1901, Wien 1979, p.11: N 300 ur[†]u, which is exactly paralleled in Lycian B by urtu-, see J.J.S. Weitenberg, Die Hethitischen U-Stämme, Amsterdam 1984, p.303, and can be compared to Luwian urt(t)a-, see Houwink, Luwian Population Groups, p.152. After the archaïc period, however, the original value of this sign was replaced in Lycian by a secondary value /e/.

39. Compare: fiv- "god" with PN Tivda-, derived from Luwian dTiwata-

"(sun-)god" and fati- "to erect" with ta(a)fi,- /taśei, "stèle".

ΔΔ/m/: Lyd. CI,6 (650-600 B.C.), which in its original form, i.e. before its turning 90 degrees (β) (cf. Woudhuizen, Origins of Sidetic, fig. 10), continues to be used for a secondary value /b/, first attested in Lyd. AII, 17 (VIth century B.C.).

Some confirmation of the value /t/ (transcription t₁) may be provided by linguistic evidence.

It has already been convincingly established that the verb vit, i,:

22₁₁ est mrud (...) "This monument (...),"

Ml₁imnaś vit₁i₁ "Mlimnas has built (it)"

11₁₋₂ est mruvaad (...)

Vantas vit₁i₁ Arel₁

"This monument (...),"

"Vantas has built (it) for Arès"

is related with Hittite and Palaïc weda-/wete- "to build". To this it can be added that the word tat₁i₁ (acc.sing.n.)⁴², which, like taśei₁ "stèle", is seemingly derived from the Indo-European root *dhe- "setzen, stellen, legen"⁴³, is almost identical to Lycian ntata (acc.sing.), rendered by mnèma in a bilingual inscription with Greek⁴⁴, and that the related verb t₁ati- "to erect"⁴⁵ consequently has its Lycian equivalent in ntata-⁴⁶.

Similarly, the root vt,ba- of the central verb of the damnation

41. Gusmani, L.W., s.v.; consequently the verbal form vit.i, is most probably simply the root without proper ending for the past tense (-t/l, cf. Lycian -te) and Luwian -ta, which became difficult to distinguish from the present/future as a result of the loss of the vowel. Moreover, this same root is also present on the Pyrgi gold tablets in Etruscan in a construction very similar to Lyd. no. 11:

T.L.E. 874 ita tmia ica-c heramasva "This temple and this statue" vatieche Unial/Astres (...) "Thefariei Velianas (...) has built" Thefariei Velianas "(it) for the Mother, for Astarte"

comments: for tmia "tempel", cf. Lyd. (e)tami,u-; for enclitic -c "and", cf. Lyd. -k; for Uni- "Mother", cf. Lyc. ēni- from Luwian anni- (Laroche, Comparaison I, p.190); for Thefarie(i) (also Thvarie/Thifarie), cf. the Luwian Hieroglyphic onomastic element ti(a)wata-, rhotacized tiwara-, in the PN Asitiwatas (Karatepe bilingue, c. 710-700 B.C.).

42. Lyd. no. 43, line 3.

43. J. Pokorny, Indogermanisches Etymologisches Wörterbuch, Bern 1959, p.236.

44. Lyc. no. 6, line 1; for $\bar{n}t$ in primary position as a dental in Lycian, cf. $\bar{N}tarijeus$ = Darius, see "Iranische Namen in den Indogermanische Sprachen Kleinasiens", Iranisches Personennamenbuch, Band V, fasc. 4, Wien 1982, p.24. In this light the preposition ti- in Lyd. no. 30 (see Woudhuizen, Etruscan Origins, p.113) may more plausibly be compared to Lycian $\bar{n}te$ - "in", but cf. Laroche, Comparaison I, p.176-7.

45. Lyd. no. 40, see sub 1 above.

46. Laroche, op.cit., p.177,196.

formula⁴⁷, which is interchangeable with for instance ensl₁ibi- "to inflict damage upon" ⁴⁸:

4a₃₋₅ fak-m-l₁ Śantaś Kufad-k

Marduk''

Marivda(k)-k ensl₁ibid

"will bring damage upon him''

4b₄₋₅ fak-m-l₁-t + l₁dānś

Artimu(ś)-k vt₁ba + ent

"Santas and Kubala and Marduk''

"will bring damage upon him''

"Apollo and Artemis''

"will strike him''

and katsarloki-49, a compound of kat(t)a, šar(r)a/i and lukai- "to burn down completely", and clearly constitutes a religious sanction executed by the gods against possible desecration of the grave, strikingly corresponds to Lycian tub(e)i-, derived from Luwian tupai- "to strike, to hit" which in Hieroglyphic is expressively associated with the double-axe⁵¹, one of the foremost Luwian symbols of divine power⁵².

Moreover, the relation between the Lydian and Lycian damnation formula is further emphasized by the affinity of the verb dt_1tdi - in the first section of Lyd. no. 2:

27-8 buk-in al₁ei₁ avlāi₁ "or whoever inflicts any damage (?)"

+ isk dt₁tdid "upon other objects"

ist esl₁ vānal₁ "in this grave"

to Lycian *ttl(e)i*-, mostly found in the final section of the formula⁵³, but sometimes, like-its Lydian counterpart, in the first one, too⁵⁴.

47. See sub 1, page 97 above.

48. ≈ fensl, ib/fi-, without the prefix fa-; for Marivdak, cf. LH Ma-ru-ti-ka-.

49. See note 19 above.

50. Laroche, Comparaison IV, p.53,55.

51. E. Laroche, "Études de Vocabulaire VII", Revue Hittite et Asianique

LXIII, 1958, p.99.

52. J. Keil, "Die Kulte Lydiens", Anatolian Studies, presented to Sir W. Ramsay, 1923, pp.251, 265-6. Likewise in Etruria, where it appears on the Murlo-frieze in combination with the lituus, held upwards like on Luwian seals and reliefs, and the pomegranate, see T.N. Gantz, "Divine Triads", Studi Etruschi XXXIX, 1971, p.5, fig.1.

53. Laroche, Comparaison IV, p.55; note the Anatolian d/l-change, also present in Kufad/Kubala (see above) and the ending of the third person of the past

tense -t/l (see note 41 above). See also note 59 below.

54. Lyc. no. 102, line 2.

3. The Complementary sign no. 24

The third sign is identical to the complementary sign no. 24 in the archaïc Etruscan alphabets from the VIIth century B.C. $(+/\times)^{55}$. Because it is used for the value $/\dot{s}/$ it appears to be merely a cursive form of the Etruscan writing-variant of the Phoenician samekh (\boxplus) — intermediary stages in the development being provided by the "Cappadocian" (Ξ/H) and Pamphylian (Ξ) writing-variants of this particular sibilant sign⁵⁶, which are both attested in archaïc Lydian⁵⁷.

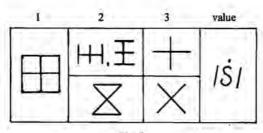


Fig. 3 Development of Sibilant no. 15

In this case, however, the origin of the sign will give us no further clues about its value in classical Lydian, because a sibilant value is incompatible with linguistic evidence and must have been replaced by a secondary one during the course of time — a process that can be witnessed in Lydian for other signs as well⁵⁸. The attractive identification of the Lydian GN $+l_1d\bar{a}ns$ with Apollo induced scholars from the beginning to attach a value /p/ to the sign in question⁵⁹, which was strikingly supported by the correspondence of the Lydian glosse palmus "king" with the

M/ś/: Lyd. Cl,4 (650-600 B.C.).

Y, \/h/: Lyd. CI,5 (650-600 B.C.).

^{55.} L.H. Jeffery, The Local Scripts of Archaic Greece, Oxford 1961, Pl. 48, nos. 18-20.

^{56.} Woudhuizen, Etruscan Origins, p.108-9, and note 58 below.

^{57.} Lyd. BI,5 (700-650 B.C.); CI,5 (650-600 B.C.).

^{58.} H/s/: Lyd. CI,5 (650-600 B.C.).

Cf. Woudhuizen, Etruscan Origins, p.95, note 16.

^{59.} For the d/l-change, see A. Heubeck, Lydiaka, Erlangen, 1959, p.19ff; for the aphaeresis, see Neumann, Zur Entzifferung, p.80.

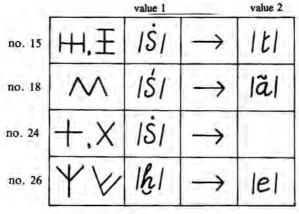


Fig. 4 Value-changes

epichoric designation + al₁ml₁u- "kingship"60.

This last word is, owing to the religious character of the Lydian kingship, most plausibly derived from Hittite kalmuš "lituus", another important Luwian symbol of divine power⁶¹, and, if this is correct, the value of the sign must have a labio-velar origin, as certainly is the case with the relative pronoun pi-/pe- and derived forms, corresponding to Cuneiform Luwian kui- and Hiero-glyphic HWA-a- respectively⁶².

Now, out of uncertainty about a labio-velar development in Lydian and the Anatolian languages in general, the communis opinio turned to a preference for a value /q, but, as Haas correctly pointed out, this is rather superfluous because the original k has — apart from in the enclitic copula -k "and" been preserved in the relative pronouns before u and o^{64} . In addition to this, it can be stated that there is positive evidence for a labio-velar development in Lycian (relative pronoun ti-)65, which is equally incomplete (preservation of the original k in the enclitic

^{60.} See sub 1, p.94 above; cf. the toga palmata of the Lucumones in Etruria, see M. Pallottino, The Etruscans, London 1974, p.129.

^{61.} See note 52 above.

^{62.} Laroche, Comparaison II, p.175.

^{63.} From Luwian -ha(wa), see Laroche, Comparaison I, p.172-4.

^{64.} E.g.: kud, kot, See O. Haas, "Zur lydischen Sprache", Die Sprache VIII, 1962, p. 179; cf. Gusmani, L. W., p. 34.

^{65.} Laroche, Comparaison II, p.175.

copula -ke "and", and, before u, in kmme(n)t, from LH *ku-mant "all that")66.

Conclusion

Determining the values of the three signs discussed above apparently leads us to the conclusion that Lydian is an integral part of a linguistic continuum, covering the western and southern coastal regions of the Anatolian peninsula⁶⁷, which is most adequately to be defined as West-Luwian.

Fig. 5 Distribution of Place Names on -ss- and -nth-/-nd- in the Aegean Region.



- place names on -ss-
- ▲ place names on -nth-/-nd-

De Kloosterhof 79 1852 LD Heiloo The Netherlands

66. Laroche, Comparaison I, p.173-4; Trilingue, p.84. For Etruscan, cf. enclitic copula -c/ch,-ke "and", PN Muchsie (T.L.E. 386, according to the latest drawings in: G. and L. Bonfante, The Etruscan Language, An Introduction, Manchester 1983, p.111) from LH Mu-ka-sa-, but toga palmata.

67. For Carian, cf. F.C. Woudhuizen, "Thracians, Luwians and Greeks in Bronze Age Central Greece", Proceedings of the IVth International Congress of Thracology, Rotterdam 1984 (forthcoming publication), Part 1, esp. note 12.

APPENDIX

ON THE READING OF LUWIAN HIEROGLYPHIC

Introduction

In H.H.L. Hawkins, Morpurgo-Davies and Neumann proposed new values for two pairs of Luwian Hieroglyphic (= LH) signs:

			value	new value
T	1	nos. 376/7	11/,/1/	/zi/,/za/
		nos. 209/10	/a/,/a/	/i/,/ya/

in order to strengthen its relation with Cuneiform Luwian (= CL).

At first sight their case seems justified by recent discoveries of bilingual inscriptions with cuneiform writing found in Urartu (early iron age)² and Meskéné-Emar on the eastern border of North Syria (late bronze age),³ both pointing to a value sibilant + vowel for nos. 376/7.⁴

On the other hand, however, they were forced to reopen the case with respect to other cuneiform correspondences, pointing to a value /a/ for no. 109,5 and therefore the best thing we can do in

- J.D. Hawkins, A. Morpurgo-Davies, G. Neumann, "Hittite Hieroglyphs and Luwian: New evidence for the connection", Nachrichten der Akademie der Wissenschaften in Göttingen, Philologisch-Historische Klasse, Nr.6 (Göttingen 1973).
 - 2. H.H.L. 153-4: Hier. tu-ru-377 / tu+ra/i-377 = cun. $t\acute{e}$ / $t\grave{e}$ -ru-si.
- 3. E. Laroche, "Documents Hittites et Hourrites", Meskéné-Emar, dix ans de traveaux 1972-82 (Paris 1982) 57, no. 10: Hier. Ma-376-hi = cun. Am-za-hi.
 - 4. H.H.L. 154.
- 5. H.H.L. 157; P. Meriggi, "Schizzo Grammaticale dell'Anatolico", Atti della Academia Nazionale dei Lincei, serie VIII, vol. 25, fasc. 39 (1980) 250: "mostruoso trascrivere" I-ma-tu for LH 209-ma-tu-, corresponding to cun. A-mat- / Ha-mat-. Note also with M. Pope, The Story of Decipherment, From Egyptian hieroglyphic to Linear B (London 1975) 144-5, that this particular value was first based upon internal evidence and afterwards confirmed by CL aya- "to make", thus playing a significant role in the decipherment of the script!

the present situation seems to acknowledge that the results from this category of evidence are inconclusive and that a decision in favour of one of the two working-hypotheses (old reading = hypothesis 1, new reading = hypothesis 2) can only be based upon *internal evidence* resulting from a structural analysis of a coherent set of texts, in this way leaving room for the possibility of regional differences or differences during the course of time.⁶

Internal Evidence

1. Epigraphy

All readings of texts are ultimately based upon the sequence of signs as it is determined by the study of the primary sources or, if this is impossible, good photographs of them. Now, in some instances it is necessary to diverge from the sign order established in this way, either on the basis of the parallels or for the sake of meaningful interpretation:

- Kt. 34 TIWA-209-na-u, read: TIWA-209-u-na¹
- Kt. 50 TANAMI-mi-na-209-ma-112, read: TANAMI-na-209-mi-ma-112
- Kt. 59 HWA-HWA+ra/i-sa-há, read: HWA+ri HWA-sa-há

and their explanation as writing errors seems most appropriate. Within hypothesis 2, however, divergences of this kind tend to increase considerably:

- Kl. II,2 377-209-ti, becoming: za-ti-i
- Kl. II,3 á-mi-210-377-209, becoming: á-mi-i-ya-za
- Kl. I,13 á-209-wa-tu, becoming: á-wi-i-tu3

and even extend to those cases where the epigraphic order of the signs can be supported by good CL and Lycian (= Lyc.) parallels within hypothesis 1:

- 6. The texts used here are primarily from Cilicia (Karatepe bilingue = Kt.) and Cappadocia (Kululu I-II = Kl.). Of these, the Karatepe text is dated to the end of the 8th century B.C. (c. 710-700 B.C.), whereas Kululu I is attributed to the reign of Tiglath-pileser III (745-728 B.C.).
 - 7. Luwian infinitive in -una.
 - 8. Cf. Kl. I, 15 209-wa- and CL awi- "to come, go".

Kl. 1,10 ha-pa-377-nu-wa-tu-u, becoming: ha-pa-nu-wa-za-tu-u³ (for the verb ha-pa-ī-, cf. CL hapai- and Lyc. chbai- "to irrigate")¹⁰

Instead of fairly stating that this is a serious argument against hypothesis 2, the authors of H.H.L. claim, when collocation of the text is impossible for them, that their modifications:

- Kt. 23 HARNASha+ra-ná-sà-209, becoming: castrum ha+ra-ni-i-sà
- Kt. 28 274-ha-ta-li-ha-209, becoming: 274-ha-ta-li-i-ha
- Kt. 54 as + mi-209-sa, becoming: solium + mi-sa-i

"will probably appear to be (...) epigraphically acceptable (...)"," in this manner lifting their hypothesis outside the scope of epigraphy as a scientific discipline.

2. Transliteration of an attached sign

A peculiarity of the LH script is that for the sake of brevity a sign can be attached to another, central sign. In so far as it can be deduced from *verifiable* material like the writing-variants in the corresponding versions of the Karatepe text:

- Kt. 22 Hu -ti-wa + ra-sá / Ho -ti-wa-tà-sá
- Kt. 34 Hu as-mi-209 / Ho as + mi-209
- Kt. 28 Hu -pa-wa+ra / Ho -pa-wa-ara

or the writing-variants of words from different passages of this same text:

Kt. 23,38 Ta+mi-ha / Kt. 19,41 Ta-mi-ha

or combinations of logographic and syllabic writing:

- Kt. 6 SURA(+RA)su+ra
- Kt. 58 PARNApa+ra-ná

etc., such an attached sign has to be transliterated after the central sign to which it is attached. As long as positive evidence to

- 9. In Luwian the iterative-suffix -ss- can follow upon factive -nuwa-, but not preceed it.
- 10. E. Laroche, "La stèle trilingue du Létôon: version lycienne", Fouilles de Xanthos VI (1979) s.v. line 14.
- 11. J.D. Hawkins and A. Morpurgo-Davies, "On the Problems of Karatepe: The Hieroglyphic Text", Anatolian Studies 28 (1978) 104,108.

the contrary is failing, it is again a serious disadvantage of the new reading that one is forced to violate this principle of the LH script by transliterating an attached sign either before or after the sign to which it is attached according to whatever suits the hypothesis.¹²

3. Interchange of signs

When the value of a certain sign is unknown or open to doubt, an indication of its value may be provided by its interchange with a sign of which the value is generally accepted.¹³ This category of evidence is especially hopeful for no. 209, which in primary position:

or in plena writing at the end of words or endings in -ha:17

Kt. 28 -ha-209 Kt. 29 -há-à ending of the 1st pers.sing, of the past tense

is interchangeable with no. 19 \dot{a} and no. 450 \dot{a} , whereas it can be

- 12. H.H.L. 171-2: Ca-209+ra/i = Ca-ri-i, but Ca+ra/i = Ca-ri.
 - 13. M. Pope, supra note 5, 144.

14. Cf. E. Laroche, Les Hiéroglyphes Hittites, première partie: l'écriture (Paris 1960) s.v. no. 216, sub II,2.

- 15. E. Laroche, supra note 10, s.v. lines 9 and 22; for the interchangeability of the endings of the 3rd person singular and plural of the present/future, see E. Laroche, "Comparaison du Louvite et du Lycien IV", Bulletin de la Société de Linguistique 62 (1967) 55, and cf. F.C. Woudhuizen, "Lydian: Separated from Luwian by three signs", note 19, for the same phenomenon in Lydian.
 - 16. E. Laroche, supra note 14, s.v. no. 299; cf. also below, sub 4.

 Without reference, see: P. Meriggi, Hieroglyphisch-Hethitisches Glossar (Wiesbaden 1962) s.v. said of no. 210 that it turns in notably in the root of words after the vowel /i/:

or after nos. 376/7:

More scanty and contradictory, on the other hand, is the material for no. 376, which in the relative pronoun:

is apparently lined with no. 209 and no. 450 \hat{a} , but in the ending of the nominative plural:

Kt. 20,26
$$\frac{-376}{-zi}$$
 ending of the nominative plural

appears to alternate with no. 313 /zi/.18
In retrospect, it seems therefore that this particular category of evidence leads us to the conclusion that:

- a) the value of no. 209 is /a/
- b) the value /ya/ for no. 210 is highly probable
- both /i/ and /zi/ are at least possible values for nos. 376/7.

4. Acrophonic principle

Another way of checking the value of signs is offered by the acrophonic principle. 19 However, because the origin of the signs

^{18.} See sub 4 below.

^{19.} M. Pope, supra note 5, 145.

under discussion here is still unclear, it can only be applied indirectly to some of the signs with which they appear to alternate, namely:

no. 299 ASATAR "throne" > 1, /as/ (in: as-mi- "to live, reside", cf. Hit. esmi-20)

2. /a/4 (in:
$$ha-t\ddot{a}+ra-ti-209$$
 / $ha-t\ddot{a}r-a_4+ri^{21}$)

corresponding to no. 209, or, with identical horizontal bars, to no. 210, in for example the verb *piya*- "to give" as indicated above, and:

corresponding, as we have already seen above, to no. 376 in the ending of the nominative plural.

5. Scriptual variations

With its different categories of signs and sign-uses (determinatives, logograms and syllables), the LH writing-system is very rich in scriptual variations, and sometimes the combined use of logographic and syllabic notation can be particularly helpful to determine the value of one of the signs in question, viz.:

confirming once again the value /a/ for no. 209, and:

excluding the possibility of /zi/ for no. 376 on account of the fact that in the phonetic complement only the final syllable(s) are

^{20.} Note in this connection that CL and LH /a/ is frequently rendered by /e/ in Lycian, viz.: a-pa- > ebē-, etc.

^{21.} Kt. 49; for the ending of the ablative, cf. CL -ati and Lyc. -edi.

^{22.} H.H.L. 160-1,168.

^{23.} Kt. 19,31 and Kt. 11, respectively.

^{24.} E. Laroche, supra note 14, s.v. nos 312/3.

repeated with omission of the first,25 in which case the possibility of /i/ as a scripto plena variant of the last syllable remains.26

Interim conclusion

As has been shown above, internal evidence leads us to the conclusion that hypothesis 1 is to be preferred to hypothesis 2, because:

- it more closely fits the epigraphy and principles of the LH script;
- the value /a/ for no. 209, already hinted at by the bilingual information, can be ascertained by its interchange with the signs no. 19, no. 450 and no. 299, and an instance of scriptvariation;
- 3. the evidence with respect to the value of nos. 376/7 is contradictory and inconclusive, but it follows from no. 209 = /a/ that their value must be /i/, otherwise no sign being left to represent this particular value.²⁷

All this, however, with the exception of Neumann's proposal of a value /ya/ for no. 210, which is apparently sustained by its use after the vowel /i/ and nos. 376/7.28

Having arrived at this conclusion, it seems only fair to acknowledge that the benefits of hypothesis 2 were primarily sought in the field of linguistics and that therefore the task remains to revaluate the external evidence.

External Evidence

Ever since Emmanuel Laroche convincingly proved in a series of articles, entitled Comparaison du Louvite et du Lycien I-IV, that Lycian is a Luwian dialect, it is mutatis mutandis of course highly opportune to pay attention to possible Lycian counterparts in a

^{25.} Cf. for the contrary H.H.L. 160 and note that **mons** Tu is not a logogram with phonetic complement, but an abbreviated name of a king preceded by a determinative, which, in case it is used as a syllable, indicates the value /wa/4, see E. Laroche, supra note 14, s.v. no. 207.

^{26.} On the analogy of HWA(-à)-, etc.

^{27.} H.H.L. 155: "a basically improbable assumption".

^{28.} See note 39 below.

discussion of the Luwian character of certain LH forms within the old reading.²⁹

Reasoning from this premises it may certainly be considered as supportive evidence if some of the wrecked LH forms do have parallels in Lycian:

	CL	LH	Lyc.
1. nom.sing. GN	Tarhunza	TARHU-hu-sa	
The state of the s		TARHU-hu-i-sa	Trqqiz30
2. "god"	maššani-		1.7 %
2.0		MASANA-na(-a)-	mahana-31
		MASA-sa-32	mahā- / muhā-
3. nom.pl. ending	-nzi	-zi	
		-1	-133
4. 1st pers.sing. of	-wi		
the present/future	e	-wa(-a)34	-u

or if these parallels even occur side by side with variants more closely resembling the "ideal" CL forms in this particular language, as is often the case in LH, too:

5. ethnicon suffix ³¹	CL -wanni-	LH	Lyc. -evnni / -(e)nni
	34	-wa-na(-a)-	-(a)ñna
6. adjective-suffix	-ašši-	-(.)a-sà-ī³° -(.)a-sá₂(-a)-	-ahi- -ahe-
7. abl.sing./pl. ending	-ati	-(.)a-ti -(.)a-ta	-edi -ede

Furthermore, it is of course important to notice if LH within the

- 29. In: Bulletin de la Société de Linguistique 53 (1958) 159-197, 55 (1960) 155-185, 58 (1963) 58-79 and 62 (1967) 46-64.
- 30. R. Gusmani, "Die Nominalformen auf -z im Milyischen", Die Sprache 10 (1964) 42-3; cf. H.H.L. 181, where this form is omitted.
 - 31. This word is an a-stem on account of its dative plural in -a.
 - 32. Kt. 51a.
 - 33. E.g. in: T.L. 93,3: me-ne Trqqas tubidi "Tarhunt and all/the confedse muhāi huwedri erate Gods will strike him"
- Cf. H.H.L. 161 for the omission of this ending.
- 34. For wa/u, cf. wawa-/uwa-, see E. Laroche, supra note 14, s.v. no. 102, sub II.
- 35. E. Laroche, "Comparaison du Louvite et du Lycien II", Bulletin de la Société de Linguistique 55 (1960) 171-3 and cf. H.H.L. 180 for the omission of the Lycian variant in -a.
- 36. Kl. I,8; cf. H.H.L. 180 for the omission of the variant in -a explicitly noted by Laroche, supra note 35, 155-163.

old reading can be shown to take up an intermediate position between the corresponding forms from CL on the one hand and Lyc. on the other:

or if this relation with both CL and Lyc. can even be reinforced, as G. Neumann was the first to see, 39 by assigning a value /ya/to no. 210:

	CL	LH	Lyc.
9. dat.sing. ending	~i	-a / -i	-a / -i
	-ya	-210	-ya / -ye**
10. nom./acc.pl.	-a	-'à	-a/-e
neuter		-210	-ya / -ye*1

for which additional data are emanating from internal evidence⁴² and other external evidence.⁴³

If in addition to this remaining problematic LH forms within the old reading can be accounted for by equivalents, based upon an independent epigraphic argumentation, from Sidetic:

37. Note in this respect especially the correspondence between CL a-i-ya- and LH a-i-210-, discussed by Neumann, infra note 39.

38. J. Billigmeier, "The Values of Certain Hittite Hieroglyphic Signs", Journal of Near Eastern Studies 35,3 (1976) 190.

39. G. Neumann, "Der Silbenwert ya in den Hethitischen Hieroglyphen", Festschrift Heinrich Otten (Wiesbaden 1973) 243-251.

40. G. Neumann, supra note 39, 251; cf. H.H.L. 170.

41. E. Laroche, supra note 10, s.v. line 33: ebeya, and line 12: ehbiyē; cf. H.H.L. 172.

42. For example GN RUWA-i- / RUWA-ya-, see P. Meriggi, Manuale di Eteo Geroglifico, Parte 1: Grammatica (Roma 1966) 36.

43. For example ta-wi-ya-na corresponding to CL daweyan, see Neumann, supra note 39, 248.

44. F.C. Woudhuizen, "Origins of the Sidetic Script", p. 124 below; cf. H.H.L. 177.

and Lydian:

12. dat.pl. ending*5	CL -nza	LH	Lyd.
		-a-ī	-ai,
13. nom./acc.sing.	-sa / -za	-sa	-Ś
neuter46		-T	-1,
14. rel.pronoun ⁴⁷	kui-	HU-i-	pi-
		HWA(-à)-	pe-

and finally the seemingly inconsistent endings in -ti-a and -(.)a-ti-a⁴⁸ can be explained by the instability and subsequent loss of the closing vowel in the inflexional system of verb and noun within the west-Luwian dialects:

	CL	LH	Lyc.	Lyd.
15. 1st pers.sing	-wi			-vi _t
of present/fut.		-wa(-a)	-u	-v / -u
16. 3rd pers.sing.	-ti (plnti)	-ti	-d/ti (plnti)	
of present/fut.		-ti-a -ta	-d/te?	-d (plent)
17. abl.sing./pl.	-ati	-(.)a-ti	-edi	-idi, / -di, "
		-(.)a-ti-a -(.)a-ta	-ede	-d / -li

there seems to be no reason to doubt that the long established values of the signs discussed here are basically correct.

^{45.} Cf. H.H.L. 168-9.

^{46.} Cf. H.H.L. 173-6; for the presence of the neuter-suffix -za/-sa in Lydian, see F.C. Woudhuizen, supra note 15, sub note 26.

^{47.} Cf. H.H.L. 176.

^{48.} Cf. H.H.L. 164, 179.

^{49.} In Lyd. no. 30, discussed in F.C. Woudhuizen, "Etruscan Origins: The Epigraphic Evidence", *Talanta* 14-5 (1982-3) 112-4, and Lyd. no. 24,6: pedk-m-l, al,ad f-etami,idi, "and whatever else by the temple"