Hittite-Luvian bilingualism and the development of Anatolian hieroglyphs

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КЛЮЧЕВЫЕ СЛОВА

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АННОТАЦИЯ

научной статьи по языкознанию, автор научной работы — Yakubovich I.S.

В статье рассматривается проблема развития анатолийского иероглифического письма в Хеттском царстве.

ВОЗМОЖНЫЕ ТЕМЫ

научных работ по языкознанию , автор научной работы — Yakubovich I.S.,

ГЛАГОЛЬНЫЕ ОСНОВЫ HI-СПРЯЖЕНИЯ НА "С" В КЛИНОПИСНОМ И ИЕРОГЛИФИЧЕСКОМ ЛУВИЙСКОМ

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К происхождению рефлексивных клитик в анатолийских языках

2014 / Якубович Илья Сергеевич

Кто погубил Хаттусу?

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Хеттские «Писцы» в свете новых исследований

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HITTITE-LUVIAN BILINGUALISM AND THE DEVELOPMENT OF ANATOLIAN HIEROGLYPHS

1. The Anatolian hieroglyphic script represents a mixed syllabic and logographic system, which received a detailed synchronic treatment in Hawkins 2003:1. It was used for monumental inscriptions in the Hittite Empire of the Late Bronze Age and the Neo-Hittite states of the Early Iron Age, and also for letters and administrative records in the latter period. Accordingly, the term "Hittite hieroglyphs" was widely used in the late nineteenth /early twentieth century and still enjoys limited currency in the modern scholarly literature. But as the understanding of the script improved, it gradually became clear that it was mostly used not for writing Hittite / Nesite, the main language of the cuneiform archives of the Hittite capital Hattusa, but for writing Luvian, a related Anatolian language that is otherwise attested through magic incantations and isolated words embedded in Hittite cuneiform texts. For those scholars who regarded Luvian as a provincial vernacular spoken in certain peripheral areas of the Hittite state, the hieroglyphic script must likewise have been imported to Hattusa from elsewhere. Thus, Gutterbock (1956a: 518) answered the question "von wem und für welche Spache wurde die Bilderschrift entwickelt" with "von den Luwiern, für das Luwische, in Luwischen Landen".

2. The development of the Anatolian hieroglyphic script represented a long process. Stage I of this development featured pictographic representations on the Anatolian cylinder seals of the Colony period (twentieth through eighteenth centuries BC), some of which formally resemble the later Anatolian signs. Thus Mouton 2002 has cogently argued for the association of the stag and the thunderbolt with the Protective God and the Storm-god, as depicted on the "Cappadocian" glyptics. Later, both signs evolved to become the logographic representations of the respective deities. In other cases, one can posit a formal link between certain elements of the glyptic iconography, which have uncertain associations, and the later hieroglyphic signs. For example, the same author discussed the connection between the "rod with balls" appearing as an attribute of gods and humans on the early second millennium cylinder seals in both Anatolia and Mesopotamia and the hieroglyphic sign L 153 <nu>, even though the iconographic significance of this motif remains a matter of conjecture. Yet it does not seem possible to treat the pictographic inventory of the "Cappadocian" glyptics as a semiotic system because no direct connection between the function of seals and their elaborate iconography can be perceived.

Stage II characterizes the new situation of the Old Kingdom period (seventeenth through fifteenth centuries BC), when the now dominant stamp seals came to feature the little group of well-recognized auspicious signs in their
The phonetic indicator MAx hinting at the last syllable of the royal name (cf. Güterbock 1998: 203). It appears that the Suppiluliuma contains the logographic rendering of the toponym Suppiluli (lit. "pure spring"), enhanced by the rebus writings that hint at their phonetic shape as opposed to conveying them according to a standard convention.

Thus the spelling MONS. TU of the name Tuthaliya consists of the image of the homonymous sacred mountain and the additional signs TONITRUS and REX, presumably indicating that Isputahsu viewed himself as a king ruling by the authority of the Storm-god8. Since the Isputahsu sealing is frequently found in a secondary context, within the wall of the Phrygian fortifications in Hattusa. Pending further discoveries of similar kind, caution dictates to regard this object as a possible import and not as a native production.

Stage III of the Anatolian hieroglyphic script does not yet give the impression of an elaborate system capable of rendering complex messages. The renditions of royal names or the names of high officials can be fairly described as "pure" (semi-) phonetically written personal names and logographic titles and therefore likewise can be read in any appropriate language (cf. Hawkins 2003: 140). To this one must add a group of sealings belonging to high officials, which appear to predate the Empire period on stylistic grounds (see their representative selection in Boehmer and Guterbock 1987: 43-46). Unlike the royal seals, the specimens of this group show the hieroglyphic signs without one hand, the cuneiform rendering the same name10. Thus the name of Sata(n)duhepa, wife of Tuthaliya II, was rendered as sa(-)ta-tu-ha-pa and placed next to her title MAGNUS.DOMINA on the two sealings of a royal seal found in Ma§at-Hoyuk (Mora 1987, #8.4.1 a-b). The short texts such as this do not yield direct evidence as to whether the relevant seals should be considered bilingual as well as digraphic. On the other hand, the cuneiform legends consisting entirely of personal names and Sumerographic titles can be read in either Hittite or Akkadian, or even in Luvian. On the other hand, the hieroglyphic legends were likewise limited to phonetically written personal names and logographic titles and therefore likewise can be read in any appropriate language (cf. Hawkins 2003: 140). To this one must add a group of sealings belonging to high officials, which appear to predate the Empire period on stylistic grounds (see their representative selection in Boehmer and Guterbock 1987: 43-46). Unlike the royal seals, the specimens of this group show the hieroglyphic signs without cuneiform equivalents11.

absence of the determinative REGIO and the lack of attestations of Tarhuntassa in written sources before the reign of Muwattalli II.

Stage III, achieved in the Early New Kingdom period (early fourteenth century BC), can be as a rudimentary writing system, which included phonetic (syllabic) signs in addition to the logograms. The kings of Hattusa, from Tuthaliya I onwards, used the digraphic seals containing their names and titles recorded in the Anatolian hieroglyphs in the middle surrounded by one or more rings of the cuneiform rendering the same name10. Thus the name of Sata(n)duhepa, wife of Tuthaliya II, was rendered as sa(-)ta-tu-ha-pa and placed next to her title MAGNUS.DOMINA on the two sealings of a royal seal found in Ma§at-Hoyuk (Mora 1987, #8.4.1 a-b). The short texts such as this do not yield direct evidence as to whether the relevant seals should be considered bilingual as well as digraphic. On the other hand, the cuneiform legends consisting entirely of personal names and Sumerographic titles can be read in either Hittite or Akkadian, or even in Luvian. On the other hand, the hieroglyphic legends were likewise limited to phonetically written personal names and logographic titles and therefore likewise can be read in any appropriate language (cf. Hawkins 2003: 140). To this one must add a group of sealings belonging to high officials, which appear to predate the Empire period on stylistic grounds (see their representative selection in Boehmer and Guterbock 1987: 43-46). Unlike the royal seals, the specimens of this group show the hieroglyphic signs without cuneiform equivalents11.

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9 The likely pronunciation of the name Isputahsu was /spudahsu/. The morpheme -hsu was a very common formative element in Hittite names of the early second millennium BC. The reconstruction of the initial consonant cluster in this name, precluding its Luvian origin, is assured through the variant Su-pu-da-ah-su attested in an Akkadian text from Kanes/Nesa of the Colony period (Kt o/k 53.3). On the simplification of clusters sC- in Luvian, see Melchert 1994: 271.

10 The hieroglyphic renderings of the names of the New Kingdom rulers are collected in Boehmer and Guterbock 1987: 80. For the digraphic seal impression mentioning Tuthaliya I, see Otten 2000.

11 Boehmer and Guterbock (1987: 39, figure 35c) published the seal containing the hieroglyphic combination HATT(h)I (= Hattusili), which they assigned to the Old Kingdom period on stylistic grounds (ibid: 36). This seal was found in a secondary context, within the wall of the Phrygian fortifications in Hattusa. Pending further discoveries of the similar kind, caution dictates to regard this seal.

Stage III of the Anatolian hieroglyphic script does not yet give the impression of an elaborate system capable of rendering complex messages. The renditions of royal names or the names of high officials can be fairly described as rebus writings that hint at their phonetic shape as opposed to conveying them according to a standard convention. Thus the spelling MONS. TU of the name Tuthaliya consists of the image of the homonymous sacred mountain and the phonetic indicator hinting at its first syllable. By contrast, the spelling PURUS.FONS.MAX of the name Suppiluliuma contains the logographic rendering of the toponym Suppiluliuma (lit. "pure spring"), enhanced by the phonetic indicator MAX hinting at the last syllable of the royal name (cf. Güterbock 1998: 203). It appears that the
The inscription is the hieroglyphic title LABARNA (L 277) written next to the name of Tuthaliya. Although the Hittite documentation originating in Carchemish (Hawkins 2005: 196). A more specific indication of the Late Empire date of 2005: 14014. A related argument is the use of the kar sign (L 315) in our inscription, which is restricted to the period when Carchemish remained firmly within the fold of the Mitanni Kingdom. Pace Hawkins (2005: 200), the god Karhuha was worshipped mainly in Carchemish, it is difficult to envisage such a name of a Hittite vassal king in its chronological attribution because the bowl could be bought as an antique object. What clearly tips the scales in favor of dating the inscription to the Hittite Empire or the later period is the mention of king Maza-Karhuha. Since the ANKARA bowl, published in Hawkins 1997 and again in Hawkins 2005, refers to the victorious expedition of a certain Labarna Tuthaliya against the city of Tarwiza. Since the annals of Tuthaliya I (CTH 142) tell us that this Hittite king fought against the Assuwa coalition, which included Wilusya and Tarwisa, and since the later Hittite texts do not mention the western Anatolian toponym Tarwisa, Hawkins (1997, 2005) hypothetically suggested that Tuthaliya Labarna of the ANKARA bowl is to be identified with Tuthaliya I and that the artifact under discussion can be dated back to the early fourteenth century BC. This dating, as he justly observed, "would make it an extraordinary document of high significance for the development of the Hieroglyphic script". Indeed, the ANKARA bowl inscription represents a cohesive text with a large number of phonetically written Luvian forms, which stand in stark contrast with the formulaic seal inscriptions of the Early New Kingdom period. If it were indeed made in the early fourteenth century BC, and if its western Anatolian internal reference were relevant for establishing its provenance, this would represents an argument for the hypothesis that the phonetization of the Anatolian Hieroglyphic script was first accomplished in the Aegean area.

For further discussion, it appears to represent a drastic innovation that would require us to assume a wholesale adaptation of foreign practices. The development of hieroglyphic writing in the Hittite milieu, where most of its early known specimens have been created, represents a prima facie hypothesis.

3. There is but one assuredly Luvian hieroglyphic text, whose possible Early New Kingdom date has been seriously debated. The ANKARA bowl, published in Hawkins 1997 and again in Hawkins 2005, refers to the victorious expedition of a certain Labarna Tuthaliya against the city of Tarwiza. Since the annals of Tuthaliya I (CTH 142) tell us that this Hittite king fought against the Assuwa coalition, which included Wilusya and Tarwisa, and since the later Hittite texts do not mention the western Anatolian toponym Tarwisa, Hawkins (1997, 2005) hypothetically suggested that Tuthaliya Labarna of the ANKARA bowl is to be identified with Tuthaliya I and that the artifact under discussion can be dated back to the early fourteenth century BC. This dating, as he justly observed, "would make it an extraordinary document of high significance for the development of the Hieroglyphic script". Indeed, the ANKARA bowl inscription represents a cohesive text with a large number of phonetically written Luvian forms, which stand in stark contrast with the formulaic seal inscriptions of the Early New Kingdom period. If it were indeed made in the early fourteenth century BC, and if its western Anatolian internal reference were relevant for establishing its provenance, this would represents an argument for the hypothesis that the phonetization of the Anatolian Hieroglyphic script was first accomplished in the Aegean area.

For further discussion, it appears to be appropriate to cite the relevant text in full. Note that my translation of this inscription is substantially different from one given in its previous editions.

(1) ANKARA BOWL, cf. Hawkins 2005: 19413
za/i-wa/i-ti CAELUM-pi 'a-sa-ma-i(a) REGIO.HATTI VIR2 (*273)i(a)-sas-za-ta REX ma-za/i-kar-hu-ha REX PRAE-na tara/i- wa/i-zi/i-wa/i(REGIO) REL+ra/i MONS.[TU] LABARNA.LA hu-la-/i(a)-ta *a-wa/i-na *a-pa-ti-i(a) ANNUS-i(a) (i(a)-zi/a-ta
'This bowl Asamaia, man of Hattusa, bought from (lit. "in the presence of") the king Maza-Karhuha. When Labarna Tuthalia smote Tarwiza, in that year he (Tuthalia) had it made'.

13 For the autograph of the inscription, see Hawkins 2003: 144.

Hawkins 2005 notes the formal possibility of connecting (*273)i(a)-sa5-za- with the Luvian stem iasa- 'to buy', but rejects this connection on semantic grounds. In my opinion, the problematic character of this comparison is exaggerated. It is true that iasa- normally appears with the preposition CUM, lit. 'with', governing the counter-agent, but the royal dignity of the salesman may have dictated a more polite turn of phrase with PRAE-na = /parra/, lit. 'before' in this case. On the other hand, the assumption that we are dealing with an ownership inscription, and not a dedicatory inscription as thought by Hawkins, helps to explain why it consists of two separate sentences. The first part of the inscription records the act of transfer, while the second one establishes the pedigree of the transferred object.

If my interpretation is correct, then the mention of Tuthaliya I in the text of the inscription does not have bearing on its chronological attribution because the bowl could be bought as an antique object. What clearly tips the scales in favor of dating the inscription to the Hittite Empire or the later period is the mention of king Maza-Karhuha. Since the god Karhuha was worshipped mainly in Carchemish, it is difficult to envisage such a name of a Hittite vassal king in the period when Carchemish remained firmly within the fold of the Mitanni Kingdom. Pace Hawkins (2005: 200), the military campaigns of Tuthaliya I against Mitanni, which are retrospectively mentioned in a thirteenth-century treaty, cannot alone justify the hypothesis that this king controlled Carchemish for an extended period of time (cf. Bryce 2005: 14014). A related argument is the use of the kar sign (L 315) in our inscription, which is restricted to the documentation originating in Carchemish (Hawkins 2005: 196). A more specific indication of the Late Empire date of the inscription is the hieroglyphic title LABARNA (L 277) written next to the name of Tuthaliya. Although the Hittite
A different type of argumentation for the Aegean origin of the Anatolian hieroglyphic script is advanced in Hawkins 1986. Hawkins bases his conclusion on the observed structural similarities between the Anatolian hieroglyphic writing and the Aegean scripts, such as Linear A and B. In particular, Hawkins acknowledged the dominance of the syllabic signs of the CV type in the Aegeo-Anatolian area, as against the Cuneiform CV+VC/CVC type. Hawkins 2003: 166-169 essentially advocates the same view, although this discussion makes clear that the Aegean syllabaries can be viewed only as triggers for the development of the "Luvian" script, not as its direct prototypes. Since the kingdom of Arzawa was closer than Hatti to the Minoan and Mycenaean cultural sphere, this is where, according to Hawkins claims, the Anatolian hieroglyphic writing probably originated.

In my opinion, the similarities discussed by Hawkins can all be accounted for in the stadial and typological terms, without invoking either direct borrowing or cultural influence. "The pictographic-Hieroglyphic character common to the Aegean and Anatolian script" reflects a stage passed by every original (non-borrowed) script. 

Part of the problem with the hypothesis that the Aegean syllabaries triggered the development of the hieroglyphic writing without providing a direct model for its development is that such a claim cannot in principle be falsified. We simply know too little about Anatolian intellectual history to rule out the hypothesis that a Hittite man of letters writing without providing a direct model for its development is that such a claim cannot in principle be falsified. We simply know too little about Anatolian intellectual history too rule out the hypothesis that a Hittite man of letters

The attribution of the ANKARA bowl to the times of Tuthaliya I becomes even less likely once we take into consideration the sociolinguistic situation of the Early New Kingdom. The use of the Luvian language in official written discourse was systematically discouraged in the early fourteenth century Hattusa15. Hittite was the standard language for writing on clay tablets (for most textual genres), while Akkadian remained an acceptable alternative for inscriptions on durable materials, such as the sword dedicated by Tuthaliya I to the Storm-god after a victory over Assuwa (Unal et al. 1991). Incising a Luvian inscription on a silver bowl, which was clearly made for the use of the elites, would represent an obvious faux pas under such conditions.

I am aware of four monumental Luvian inscriptions that come from the Aegean area. The name ku-pa-ia appearing on the LATMOS inscription and accompanied by the title MAGNUS.REX-INFANS may represent an abbreviation of Kupantakrumiya, the early thirteenth century king of Mira (Peschlow-Bindokat 2002). Targasnawa, king of Mira, who ruled in the late thirteenth century BC, commissioned the KARABEL inscription (Hawkins 1998). SIPYLOS 1 mentions a certain Kuwalanamuwa, tentatively identified with a Hittite prince at the time of Mursili II and the commissioner of the HANYERI and IMAMKULU inscriptions (cf. Bossert 1954: 144-47). SIPYLOS 2 contains the name of a palace attendant ("eunuch") Zuwalla, who is otherwise unknown (Güterbock and Alexander 1983). To this can be added four inscribed seals found in Western Anatolia or connected with it through internal references. The famous "Tarkondemos" digraphic seal, as we now know, belonged to the above-mentioned Targasnawa, king of Mira (Hawkins and Morpurgo-Davies 1998). The imitation(?) of an Anatolian hieroglyphic seal was found in Metropolis (Schachner and Merig 2000), while a genuine hieroglyphic sealing found...
None of the hieroglyphic inscriptions discussed above can be shown to predate the conquest of Arzawa by Mursili II in the late fourteenth century BC, while several of them likely or assuredly postdate it. Therefore, the choice of a writing system must reflect, first and foremost, the political dominion of Hatti over the vassal kingdom of Mira, comprising the central part of the former kingdom of Arzawa. If the rulers of Mira tried to imitate the traditions of the Hittite court, it was only natural for them to follow the pattern of epigraphic code alternation that was familiar to Hattusa scribes. Cuneiform script was mostly used for writing on clay tablets, while hieroglyphs were carved in stone. If the commissioner of SIPYLOS 1 has been correctly identified, we have the ready example of a Hittite official whose inscription could provide a model for the local rulers. At the same time, the small number of inscriptive finds coming from western Anatolia suggests that this imitation was practiced on a moderate scale.

The content of all the inscriptions mentioned above is limited to personal names and logographic expressions, and none of them contains phonetically spelled forms that force their attribution to a particular language. Thus, although the hieroglyphic texts found in the Aegean chronologically belong to Stage IV, from the point of view of their structure, they did not go beyond the level of Stage III. In other words, the development of hieroglyphic writing in this region trailed behind the level that it had achieved in the Hittite core area. This is only natural given its provincial status in the eyes of the Hittite kings, whose ambitions were normally turned in the southeastward direction. The hypothesis that the Anatolian Hieroglyphic Script was invented in the western part of Asia Minor lacks empirical confirmation. In the following, I will assume that the true first specimens of the Anatolian hieroglyphic writing (understood here as a semiotic system containing a phonetic component) are the Hattusa seals of the Early New Kingdom period.

16 This can be contrasted with the presence of the cuneiform "Arzawa Lettres" in the archive of El-Amarna, which contain the correspondence between Tarhuntaradu, king of Arzawa, and the Egyptian pharaoh Amenhotep IV. The cuneiform literacy may have not been widespread in the independent kingdom of Arzawa, but it definitely arrived there before the Hittite rule.

4. It is a well-known fact that many early phonetic writing systems established the values of their signs via the principle of acrophonic derivation. Thus, in the early Canaanite alphabet, the letter <b> depicts a house, reflecting the fact that the Canaanite word for house, *bayt, begins with [b], <k> is a pictogram depicting a hand, since *kapp (‘palm of hand) begins with [k], and so on (Hackett 2000: 367). If the same principle underlies the phonetization of Anatolian hieroglyphic signs on Stages III-IV, it is reasonable to presume that syllabograms were likewise assigned values based on the language(s) that the inventors of the new script perceived as their own. If both Hittite and Luvian played a role in this process, then both languages were at home in the community where the script was created. Discussing the characteristic empirical data that can lend support to this claim constitutes the task of the present section.

The starting point for the present discussion is the often-cited paper by Günter Neumann, who made the first attempt to study the acrophonic derivation of Anatolian hieroglyphic signs in order to establish the origin of the script. Although Neumann (1992: 26, fn. 3; 27, fn 5) rejects Aegean influence on the system of Anatolian hieroglyphs and regards Kizzuwatna, and not Arzawa, as the most likely area where it could be created, he concurs with Güterbock’s view that this writing system must have been of Luvian origin. On the one hand, he acrophonically derives the arrow-shaped sign L 376, which had the value <za/i> in the Empire period, from the Luvian proximal demonstrative pronoun za-, whose Hittite counterpart was ka-. On the other hand, he follows Hawkins 1986 in deriving the phonetic value <u> of the sign L 105 = BOS, graphically the head of a bovine, from the Luvian form that he reconstructed as ’uwau-’cow< IE. *gwou- ‘id.’ (Neumann 1992: 25-26, fn. 21).

Out of these two examples cited by Neumann, only the first one holds water. The archaic inscriptions BOGAZKÖY 1 and 2 lack any unambiguously phonetic signs, but contain L 376 functioning as a demonstrative. For these inscriptions, one can perhaps entertain the logographic value L 376 = HIC, on the assumption that the cross-cultural metaphorical use of an arrow as a pointing device was also known in Bronze Age Anatolia. If one takes this step, there is no way around accepting Neumann’s claim that L 376 acquired its syllabic value in the Luvian-speaking milieu.

17 Cf. the pessimistic assessment by Hawkins (2003: 168): "[R]ecognizable derivations of syllabic values indicate a Hittite-Luvian origin, but provide no diagnostic distinction between the two languages except in one sole case: the derivation of the syllabogram u from Luvian ‘uwau-’ox’, as against the postulated Hittite ‘gwauau-’ (Neumann 1992: 251, cf. 39)."

The situation with the BOS sign is more complicated. The earliest attested phonetic value of the variant of BOS that represents the body of a bull and is now transcribed BOS2 (L 106) is <nu/ wa> 18. Although the developed hieroglyphic script distinguishes between L 105/106 <u> and L 107 <mu>, this must be a secondary differentiation because L 107 is derived from L 105 with the diacritic L 391 = <mi>19. On the other hand, the expected reflex of *gw- in Luvian is w-, as in wana/i- ‘woman’ < gwon° (Melchert 1994: 239)20. Therefore, (BOS.ANIMAL)wa/i-wa/i-must represent the full phonetic rendering of Luv. wawal/i< ‘cow’, and this lexeme could hardly serve as a basis for the phonemic rendering of the bellowing of the bulls and the mooing of the cows.21

In order to place Neumann’s arguments in a proper perspective, one must contrast them with those cases where the phonetic values of Anatolian hieroglyphs appear to be acrophonically derived from Hittite lexemes. Neither Hawkins 1986, nor Neumann 1992 explicitly addressed this issue, perhaps because both scholars had been
One conspicuous case is L 41, traditionally transcribed as <ta>. Rieken 2007 has shown that this sign is normally used for marking the
18 See, for example, the archaic sealings Boehmer and Guterbock 1987, #117 and Herbordt 2005, #259. Although Herbordt 2005: 4 dates these sealings by the 15th century BC, I do not see obvious reasons why they need to predate Early New Kingdom. For the frequent use of the BOS sign with the value <mu> in Anatolian glyptics, see Hawkins apud Herbordt 2005: 428b.
19 Differently Hawkins apud Herbordt 2005: 429a: "[S]ince mu properly consists of u+mi, if mi is omitted, as frequently, mu becomes indistinguishable from u". The chronological distribution of the readings <u> and <mu> of L 105-106 speaks against this scenario.
20 One cannot exclude the possibility of an optional contraction "wawa->uwa- in the Luvian dialect of Hattusa. This contraction, however, was unlikely to become a norm because the Iron Age dialect of Luvian consistently shows (BOS,ANIMAL) wa/-wa-/ - bull, cow'.
1 Compare the similar case of L 110= <ma>, graphically a ram's head, which cannot be derived either from Luv. hawi- 'sheep' or from Hitt. GUD-u- 'id.' (on the assumption that the latter represents a cognate of IE. pek’u- 'small cattle'). Can this syllable transcribe the bleating sound? Cf. e.g. Gk. 'bleat' and
Arm. mak i 'sheep' of onomatopoeic origin.
22 Compare, however, the remarks of Neumann 1992: 38, where a number of hieroglyphic signs are provided with acrophonic derivations based on Hittite lexemes, but the sociolinguistic implications of these derivations are not discussed.

etymological dental stops in the position of lenition. The most salient exception to this generalization is the Luvian verb 'to take', which is commonly transliterated as **ta- but transcribed as **/ta-/ on the assumption that it represents a direct cognate of Hitt. da- 'take'. Since Luvian, unlike Hittite, consistently implemented the fortition of word initial dental stops, there is no obvious reason why the initial consonant of this root could undergo lenition in any dialect of Luvian23. Therefore one may wonder whether the above-mentioned phonetic reconstruction of the Luvian verb 'to take' is warranted.
As it turns out, it is not. On the one hand, different dialects of Luvian support the existence of the Luvian verbal root la- 'take'24. The competing verbal stems la- and lala- 'to take' are well attested in the Kizzuwatna dialect (Melchert 1993: 120, 121), while the derived noun lalama/i- 'receipt' occurs as a Glossenseil word in texts emanating from Hattusa (Melchert 1993: 122). On the other hand, when the Anatolian logogram CAPERE 'to take' (L 41) appears with a phonetic complement indicating (part of) the stem in Iron Age Luvian, it is invariably la(-la-), never **ta- 5. In a similar fashion, when the verb 'to take' is phonetically written in the hieroglyphic orthography, its stem appears as la-. The table below, containing all the inflected forms of CAPERE in Iron Age Luvian, ostensibly indicates these facts.
23 For the inconsistent rendering of the etymological *d- in prehistoric borrowings from Luvian into Hittite, see Melchert 2003: 181.
24 With Tischler 1990: 1, I believe that this root is etymologically unrelated to Hitt. da- 'take', but rather represents a cognate of Hitt. la(i)- 'loose, take off' (differently Kloekhorst 2007: 804). For Hitt. *la- as the original ^¿-conjugation verb, see Oettinger 1979: 67. The semantic reanalysis of Luv. la- as 'to take' possibly originated in the construction arha la- 'to take off, remove'. A factor that likely contributed to this reanalysis was the undesirable homonymy between Luv. ta- 'to stand' and 'ta- 'to take', which led to the gradual disappearance of the second verb. Using the phonological jargon, one can characterize this case as a "pull shift".
25 One cannot say with certainty whether the sequence CAPERE(-)la contains a logogram extended by the phonetic complement or a determinative followed by the full phonetic spelling in each particular case because of the ambiguity between variant stems la- and lala-. Only in the case of (*CAPERE")la-la-ta is the full phonetic spelling of the reduplicated stem assured.
Tab e 1.

Pres 2sg. la-si ISKENDERUN § 6
3sg. la-i KORKUN § 11 (+ARHA)
CAPERE-i KARKAMIS Alia § 22, A2+3 § 20 (+ARHA), A6 § 26, A15b § 12, KORKÜN § 8 (+ARHA) BOROWSKI 3 § 9 (+ARHA) ALEPPO 2 § 13, 18 (+ARHA) KOTÜKALE § 5 (+ARHA) BOYBEYPINARI 2 § 19 (+CU-M-ARAH) ANCOZ 7 § 4 (+ARHA), 9 (+PRAE)
CAPERE?-i KELEKLI §2
CAPERE-ia KARKAMIS A6 § 27, 28, 30 (+CU-M-ARAH), A3+ § 12 HAMA 4 § 8, 5 § 1 (+ARHA)
CAPERE KARKAMIS A11b+c § 22
CAPERE KARKAMIS 4 § 4,12 (+INFRA-ta)
The alternation between the phonetic spelling la- and the logographic spelling CAPERE in two parallel passages of the KORKUN inscription is particularly revealing. It appears that Luv. la- ‘to take’ can be spelled as a logogram CAPERE, both with and without a phonetic complement.

(2) KORKUN, § 8, Hawkins 2000: 173 na-na-si-pa-wa/i-ta INFANS.N/ || |REL-sa |ARHA CAPERE-i ‘(He) who takes it away from Nanassi (or) the child ...’.

(3) KORKUN, § 11, Hawkins 2000: 173
|za-pa-wa/i-tu-ta (VITIS)wa/i-ni-na |REL-sa |ARHA la-i |na-na-si |INFANS.N/-na (NEPOS)ha-ma-si (NEPOS)ha-ma-su-ka-
|la ‘(He) who takes this vine away from Nanassi, (or) the child, (or) the grandchild, (or) the great-grandchild..’.

The next obvious step is to wonder what the obstacles are to accepting la(la)-as the phonetic reading of CAPERE (L 41) in all the cases where it stands for the verb ‘to take’. This issue, to my knowledge, was last addressed in Morpurgo Davies 1987: 211-212, fn. 17, who writes: ‘Hawkins and I ... have already pointed out that it would be possible to read all ta- forms as logographic on the assumption that the sign no.*41 must be read as CAPERE and not as <ta>. If so, the normal reading of the root would be la- (as in Cun. Luwian). The objection is that for *41, the taking hand, a <ta> syllabic value is certain - and it would be difficult to understand the origin of this value if the verb was not ta-, but la-. It is of course conceivable that an earlier ta- verb in existence at the time when the syllabary was created was replaced by a la- verb due to phonetic change or lexical replacement.”

Once we reinterpret the last alternative in sociolinguistic terms, it is easy to arrive at a satisfactory scenario for the evolution of the sign in question. L 41, iconographically a taking hand, was originally used as a logogram CAPERE for the predicate ‘to take’. At some early point in the history of the hieroglyphic script, the Hittite verb da- ‘to take’ provided a basis for the acrophonic derivation of the phonetic value <da> (vel sim.), which is conventionally transliterated as <ta>.26 We can already see this

26 One need not necessarily use this derivation as an argument for the preservation of the distinctive feature [±voice] in word-initial position in fourteenth-century Hittite. Note that L 100=<ta> is acrophonically derived from Hitt./Luv. targasna- ‘donkey’, which was likely to begin with an etymological voiced stop (Melchert 2003b: 195-96 with ref.). It is possible that <ta> and <ta> underwent a secondary differentiation already within the system of the hieroglyphic script.

phonetic value on the sealings of the Early New Kingdom ruler Arnuwanda I. The logogram CAPERE was used in this period without phonetic complements indicating its root. After the convention of reading the hieroglyphic texts in Luvian came about, the sign CAPERE became secondarily associated with Luv. la(la)- ‘to take’ and this led to the rise of the (semi-)phonetic spellings CAPERE(-)la. But the phonetic values of the Anatolian hieroglyphs had been already fixed by this time, and so the reading <ta> of L 41 remained unaffected.

Thus the analysis of a small group of well-attested signs appears to confirm the hypothesis that the phonetic component of the Anatolian hieroglyphic script was originally developed in the mixed Hittite and Luvian-speaking environment.

5. In what follows I will attempt to provide a systematic survey of hieroglyphic syllabograms with assured or likely “etymologies”. In addition to the signs discussed in the previous section, the input of my analysis includes the lists of the acrophonically derived phonetic values collected in Neumann 1992: 39 and Hawkins 2003: 162.27

Table 2 contains six phonetic signs attested from the second millennium BC onward, for which the acrophonic derivation based on the sound shapes of the Hittite but not Luvian lexemes can be suggested. Only the first four examples, which have already been addressed above, must be regarded as probative, whereas the “grey area” contains the signs that theoretically may have been derived based on the unknown Luvian lexemes (the Luvian cognates of Hitt. pattar ‘basket’ and karzan- ‘basket of wool’ have not been identified thus far).

27 I have, however, excluded from my analysis two signs mentioned Neumann 1992 because the suggested path to their phonetization strikes me as too speculative. The sign L 55 = <ni>, graphically a hand with crossed fingers, has been explained with reference to Luv. niya- ‘to turn’, but this derivation is neither obvious, nor supported through the
known logographic reading of L 55. L 186 = <lu>, graphically a four-pointed star, was explained with reference to Hitt. lukk- ‘to dawn’, but the recognition of Hawkins (2005: 410) that L 186 was a mere graphic variant of L 445 in the Bronze Age undermines this derivation. The development of the sign L 108 = <su>, graphically a horn, advocated by Hawkins, is also problematic. Hawkins (2000: 36) hypothesized that the value <su> was acrophonically collected from Luv. *surni- ‘horn’, but the word for horn is written with the sign L 448 = *<su>, for which Melchert (1987: 202) suggested the new value <zu> on etymological grounds. If Melchert’s suggestion is correct (and I believe it is), one has to consider a different acrophony, for example deriving <su> from Luv. suwa- ‘fill’ via the concept of comucopia (Craig Melchert, pers. comm.).

Table 2

| L 41 | CAPERE <tà> (/da/) Hitt. da- vs. Luv. la(la)-‘take’ |
| L 391 4 | <mi> Hitt. miwa vs. Luv. mawa ‘four’ |
| L 90 | T PES <t> Hitt. tiya- ‘walk, step’ |
| L 56 | INFRA <ka> Hitt. katta vs. Luv. zanta ‘down’ |
| L 334 S | <pa> Hitt. pattar ‘basket’ |
| L 315 Cf. *314=<hax> <ka> Hitt. karzan- ‘basket of wool’ |

In seven cases, the values of Bronze Age syllabograms can be acrophonically derived from Luvian, but not from Hittite lexemes. The probative value of examples cited in Table 3 below is, again, not uniform. Only the first three cases can be seen as assured, whereas the signs in the shaded part of the tablet can be explained from Luvian only under certain assumptions. The derivation of L 376, discussed above in this section, depends on the existence of its logographic value HIC, which is likely but not absolutely certain. In the case of L 319, the suggested explanation is based on the graphic shape of this sign, which resembles an upward-pointing arrow, and on its vague resemblance to L 270 = SUPER. In the case of L 389, the contrast between Hitt. teri- and 32 Note, however, that the same sign could be used in the second millennium BC as a phonetic indicator MAx accompanying a logogram (cf. Guterbock 1998: 203).

Table 3

| L 13 | PRAE (also cf. *14) <pari> Hitt. peran vs. Luv. parri ‘before’ |
| L 165 1 BONUS <wa/i> Hitt. assu vs. Luv. wasu-‘good’ |
| L 327 fi SIGILLUM <sa5> Hitt. siyatar vs. Luv. sasanza ‘seal’ |
| L 376 I HIC(?!) <za> Hitt. ka- vs. Luv. za- ‘this’ |
| L 319 \ -SUPER <ari> Hitt. parku- vs. Luv. ala/i-‘high’ |
| L 389 Ilk 3 (<ra/i) <tar<ari> Hitt. teri- vs. Luv. tarri- ‘three’ |
| L 395 III III III 9 <nu> Luv. nuwinza ‘nine/ninth’ |

But the largest group of examples, summarized in Table 4, comprises those cases where a given sign can be equally well derived from via Hittite and via Luvian. For example, both Hitt. pai-/piya- ‘give’ and Luv. piya- ‘id.’ could motivate the value <pi> of L 66, graphically a giving hand.33 In fact, one need not choose between these two options because the person responsible for introducing the new syllabogram could be bilingual in Hittite and Luvian.

32 To this example one should probably compare L 270 = SUPER used with the value <sari> in the hieroglyphic transliteration of Sarri-Tesub, the Human name of Muwattalli II. Note, however, that the seals of the Empire Period Hittite officials appear to use SUPER+ra/i as the equivalent of sar(r)i- (Herbordt 2005: 175-177), pleading for a different phonetic value L 270 = <sar> (vel sim.). More syllabographic occurrences of L 270 appear to be necessary to settle the issue.

33 One should, of course, distinguish between the etymology of a given lexeme and its presence in a particular
language. For example, although the name of the Hittite capital Hattusa is non-Indo-European in origin, it was intimately familiar to both Hittites and Luvians living in this city.

Table 4
L 362 < DARE <pi> Hitt. pai-/piya- vs. Luv. piya- 'give'
L 175 L LINGUA <la> Hitt. lala- vs. Luv. lala/i-'tongue'
L 100 < ASINUS <ta> Hitt./Luv. targasna-'donkey'
L 160 Y VITIS <wi> Hitt. wiyan(a)- vs. Luv. wiyan/i-'wine'
L 329 Q REL <kwa/i> Hitt. kui- vs. Luv. kui-/kua- 'which'
L 329 k CURRERERE <hwa/i> Hitt. huwai-/hu(i)ya-vs. Luv. hui(ya)- 'run'
L 105 BOS <u>/ <mu> Onomatopoeic origin (sound of mooing)?
L 196 h HATTI <há> Hitt./Luv. Hattusa

It is instructive to contrast the data collected in Tables 2-4 with a group of signs that acquired syllabographic values only in the first millennium BC. In this late period, when the Hittite language was probably extinct and almost certainly not spoken in the epigraphic community responsible for the production of Luvian hieroglyphic texts, we do not expect the Hittite-based acrophony to play any derivation of new syllabograms. And indeed, all of the sound values listed in Table 5 can be accounted for through the analysis of Luvian lexemes. The only potentially problematic case is that of L 347 = <hu>, for which Neumann 1992 suggests an acrophonic derivation based on Hitt. huppar 'pot, bowl, keg'. Yet if Luv. huppart(i)- 'pelvis' is indeed derived from the same root, as per Melchert 2003: 196, it is quite likely that the base noun with the meaning 'bowl' also existed in Luvian, but is simply not attested in the available texts.

Table 5
L 103 + CERVUS <rú> Luv. Runtiya- 'Stag-god'
L 313 5 VIR <zi> Luv. zida/i- 'man'
L 82 § CRUS <ta^> Luv. ta- 'stand, step'
L 362 "DEUS <má> Luv. massana/i- 'god'
L 332 Ä NEG <ná> Luv. na 'not'
L 326 T SCRIBA <tu> Luv. SCRIBA-la- = *tupala 'scribe'
L 347 § <hú> Luv. 'huppara/i- 'pot' (cf. huppart(i)- 'pelvis')

It emerges from the analysis undertaken above that although the development of the Anatolian hieroglyphic script was closely connected with the history of the Luvian language, its very initial phase also bears an impact of Hittite. The term "Luvian hieroglyphs" may be relatively more accurate that the earlier misnomer "Hittite hieroglyphs", but both of them ultimately impose an association with one language upon the writing system that was historically the joint venture of the Hittite and the Luvian speakers. This is why I believe that both designations must be abandoned in favor of the language-neutral term "Anatolian hieroglyphs".

The sociolinguistic setting of Hattusa in about 1400 BC, where the majority of the population was already Luvian, while Hittite enjoyed political and cultural prestige, makes the Hittite capital the most likely venue for the phonetization of the Anatolian hieroglyphic script. Thus there is no more reason to speculate about Arzawa or Kizzuwatna as a place where the first Anatolian syllabograms came into being.

6. We have seen in the previous sections that the combination of the external and the internal evidence refutes Guterbock's claim that the Anatolian hieroglyphic script was created by the Luvians, in the Luvian lands, and for writing Luvian. My answers to the questions posed in Guterbock 1956b are very different from his: the Anatolian hieroglyphic script was developed in Hattusa, in the mixed Hittite and Luvian environment, for writing Anatolian names and titles on durable objects, such as seals. This happened at the time when the cuneiform script of Mesopotamian origin had been already in use in the Hittite capital for more than two hundred years. But what prompted the Hittite rulers and high officials to introduce the new script in addition to the cuneiform for rendering their official signatures?

I believe that this decision was primarily dictated by nationalistic concerns. The Hittite royal seals of the Old Kingdom period, the so-called "tabarna-seals", were inscribed in Akkadian. Even in the later period, the cuneiform periphery of the royal seals could in principle be read in Akkadian as well as in Hittite or...
Luvian, and there was no easy way to resolve this ambiguity within the cuneiform script, as long as the inscription consisted entirely of personal names and Sumerographic expressions. One could, of course, phonetically render the common nouns making part of the royal title, such as "son" or "king", but this would make the legends much longer and, in addition, would run afoul of the common practice of writing these words as Sumerograms in Hittite texts. The radical alternative was the invention of an entirely new writing system, which was not in use in Mesopotamia. The choice of this solution could be triggered by the pre-existence of auspicious symbols decorating the central part of Old Kingdom seals.

This change may be compared with a different process, namely the transition from Akkadian to Hittite as the main language of written expression in Hattusa, which was implemented step by step. Certain genres of texts, such as the ritualistic literature pertaining to the official state cult, had been routinely recorded in Hittite at least since the reign of Tellibinu. Certain other types of documents, such as royal land grants (Landschenkungsurkunden), were always compiled in Akkadian in the Old Kingdom period, but came to be executed in Hittite in the Early New Kingdom (van den Hout, forthcoming). Finally, the bulk of the translation of Mesopotamian epic literature from Akkadian and Human into Hittite appears to have been undertaken in the thirteenth century BC.36 The nationalistic reforms within the sphere of seal production fit well within the general pattern described above. Their only formal peculiarity was that in this case we are dealing not with the shift to the national language, which would have been difficult to implement in a short formulaic text, but with the shift to the national script.

But the difference between these two reforms also had a sociolinguistic dimension. The cuneiform tablets were written and read by the professional scribes, who would have no difficulties discriminating between Akkadian and Hittite. Introducing a new written language must have represented a sufficient way of nationalistic self-expression for this group. The seals, on the other hand, could belong to a variety of officials, not all of which were necessarily literate. Changing a set of obscure foreign signs on their personal signature would do little to boost their sense of national identity. Introducing a set of entirely new symbols whose pictographic shapes would be easily recognizable even to an illiterate person was obviously a better strategy.37

One can easily imagine that the owners of the personal hieroglyphic seals felt the same kind of pride as did Darius I when he intimated at the end of the Bisitun inscription: "By the favor of Aoramazda this (is) the form of writing, which I have made besides, in Aryan ... Besides, I also made the signature; besides, I made the lineage. And it was written down and was read aloud before me" (DB IV 89-91, Schmitt 1991: 73-74). The Bisitun inscription was likely the first written text ever recorded in Old Persian, but this was the new writing system, not the language, that captured the imagination of the Achaemenid king.38

This leaves us with the question about the underlying language of the first hieroglyphic texts. I suggest that it could be both Hittite and Luvian depending on the individual preferences of the reader. The are no reasons to think that the Hittite and Luvian native speakers viewed themselves as two distinct ethnic groups in Hattusa in the last two centuries of its existence (in fact, the designation “man of Luvia” is never used in written sources after the end of the Old Kingdom period). In a largely bilingual society, in the absence of an open conflict between the two languages, the linguistic associations of the hieroglyphic script may have originally been vague. As Hawkins (2003: 140) aptly observes, even though the names and titles inscribed on seals are attributable to a language, these texts are not in a language. There is no linguistic way to show that their language is either Hittite or Luvian. In practice, this means that certain population groups may have given them a different linguistic attribution from one that had been originally intended. While the court literati probably expected that the hieroglyphic titles be read in their language, the public, who were not literate, would have had no difficulty in understanding the seal as a symbol of the king’s power.

The extent to which the new script came into private use in the Hittite kingdom depends on the unsolved problem of wooden waxed boards, which were quite popular in Late Bronze Age Anatolia (Symington 1991). A large group of scholars are of the opinion that they were sometimes used for the writing of the Anatolian hieroglyphic script (see lately Uchitel 2005: 55).40 A different group of scholars (e.g. Marazzi 1994) continue to maintain that wooden boards were always used for writing cuneiform. Although chances of finding a Hittite wooden board with traces of
Hieroglyphic script in the Hittite Empire and thereafter, there is no reason to believe that the Hittites borrowed it and supported by the internal analysis of the script. Thus, whatever one thinks about the evolution of the Hattusa origin of the Anatolian hieroglyphs follows from the available archeological evidence taken at face value relevant text of more than one sentence in length that does not emanate from the royal administration. By contrast, thirteenth century BC finds but a minimal support in the archaeological record. The ANKARA bowl is the only specimens of the latter category of documents from the Empire period, but their appearance need not have been different from that of the Iron Age ASSUR letters (Hawkins 2000: 534-37). Eventually, the Luvian language associated with the hieroglyphic script might have become the preferred vehicle of all-purpose written communication outside the palatial sphere. This would explain why the last Hittite rulers accepted Luvian as the language of their monumental inscriptions. The real choice was in favor of the Anatolian hieroglyphs, deemed suitable means of nationalistic self-expression, whereas the Luvian language probably came along as a part of the package deal. It must have been easier for the hieroglyphic scribes to design the monumental inscriptions if they could use the familiar linguistic conventions, while the rulers had no reasons to insist on using Hittite. The widespread use of the Luvian "Glossenkeil-words" attested in the texts attributed to the thirteenth-century kings of Hatti suggests that these kings, unlike their predecessors, did not shy away from code-switching even in their own public discourse.

The functional extension of hieroglyphic writing in the late Empire period independently allows one to explain why it survived the "Dark Age" that followed the disintegration of the Hittite Empire in the early twelfth century BC. This period witnessed the abandonment of the cuneiform in central Anatolia, reflecting the fact that the writing system used primarily for administrative purposes cannot survive without state sponsorship. The same political upheavals must have decreased the demand for large-scale stonework, as indicated by the small number of monumental hieroglyphic inscriptions datable to the last two centuries of the second millennium BC (cf. Hawkins 2000: 19). The ostensive revival of hieroglyphic writing in the early first millennium BC can be best explained on the assumption that the scribal lore continued to be transmitted in the interim period in response to the mundane needs of private individuals.

One argument for the widespread transmission of the first hieroglyphic inscriptions as Luvian is the tripartite opposition \(<\text{Ca}> / \langle\text{Ci}> / \langle\text{Cu}>\) within the system of hieroglyphic signs correlating with the Luvian three-vowel system, as opposed to the Hittite five-vowel system.

The creation of a full-fledged phonetic script might, in its turn, have given rise to new kinds of hieroglyphic texts, such as ownership inscription similar to the ANKARA bowl, or private letters. Once again, we do not have any of the latter category of documents from the Empire period, but their appearance need not have been different from that of the Iron Age ASSUR letters (Hawkins 2000: 534-37). Eventually, the Luvian language associated with the hieroglyphic script might have become the preferred vehicle of all-purpose written communication outside the palatial sphere. This would explain why the last Hittite rulers accepted Luvian as the language of their monumental inscriptions. The real choice was in favor of the Anatolian hieroglyphs, deemed suitable means of nationalistic self-expression, whereas the Luvian language probably came along as a part of the package deal. It must have been easier for the hieroglyphic scribes to design the monumental inscriptions if they could use the familiar linguistic conventions, while the rulers had no reasons to insist on using Hittite. The widespread use of the Luvian "Glossenkeil-words" attested in the texts attributed to the thirteenth-century kings of Hatti suggests that these kings, unlike their predecessors, did not shy away from code-switching even in their own public discourse.

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This explanation is different from the hypothesis of van den Hout 2006: 235, according to which the choice of Luvian as the language of public monuments directly reflected the "alleged solidarity" of the Hittite kings with the common population of the Empire. Even if the desire to please the common people was one of the factors involved in this decision, the choice of the Hieroglyphic script was a more efficient way to achieve this goal. The illiterate spectators would hardly have been able to figure out the underlying language of the inscriptions, but everyone could see the difference between the hieroglyphs and the cuneiform signs.

I must repeat at the risk of seeming tedious that the private circulation of Luvian hieroglyphic texts in the in the thirteenth century BC finds but a minimal support in the archaeological record. The ANKARA bowl is the only relevant text of more than one sentence in length that does not emanate from the royal administration. By contrast, the Hattusa origin of the Anatolian hieroglyphs follows from the available archeological evidence taken at face value and supported by the internal analysis of the script. Thus, whatever one thinks about the evolution of the Hieroglyphic script in the Hittite Empire and thereafter, there is no reason to believe that the Hittites borrowed it from anyone else in the Early New Kingdom period.

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