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THE LUWIAN HIEROGLYPHIC CONTRIBUTION TO THE ALPHABET

Abstract: In the present contribution it is argued that the supplementary sign for /phi/ in the Greek alphabet originates from the Lydian and Phrygian “figure-of-eight” (8) sign for /f/ and that this in turn originates from the Luwian hieroglyphic sign *280 for the syllabic value /wa/. Furthermore, the radiation of the so-called Lydian /f/ to Etruria and southwest Iberia in the western Mediterranean region is discussed.

In my contribution on the transmission of the Phoenician alphabet in the Mediterranean region of 2006 I presented the following figure on the development of the supplementary signs (see Fig. 1).¹

In 4 of the 5 cases, it is absolutely clear that the supplementary sign consists of a sign variant from the Phoenician alphabet used for the expression of a related value. Thus value /u/ is rendered by a variant of the Phoenician *wāw*, the value /chi/ by an old variant of the Phoenician *kap*,² the value /xi/ by a developed form of the Phoenician *sāmek*,³ and the value /ō/ by a variant of the Phoenician *‘ayin* with for contradistinction open-worked lower side.⁴ The only exception is formed by /phi/, the sign which in my view represents the upper side of the earliest form of the Lydian sign for /f/ as attested for the early 6th century BC (Lyd. no. 30).⁵

¹ Woudhuizen 2006: 182, Fig. 7.

² Ullman 1934: 364, Table I; Woudhuizen 1982-3: 95, Fig. 4.

³ Woudhuizen 1984-5: 101, Fig. 3.

⁴ The attempt by Haarmann (2015: 132, Fig. 13) to explain the supplementary signs /phi/, /chi/, and /psi/ of the most advanced form of the Greek alphabet as originating from formal counterparts in the Bronze Age Cretan Linear A, which in turn are traced back all the way to the Old European Danube script of the 6th to 3rd millennium BC (p. 119, Fig. 9), fails to acknowledge that for a viable connection not only the form of the sign is of relevance but also the value it renders. Nonetheless, it is true, though, that the Anatolian alphabets used signs from the Cretan Linear or the Cypro-Minoan script with the value reduced from syllable to letter according to the acrophonic principle, see Woudhuizen 2006: 180, Fig. 5.

⁵ Cf. Gusmani 1964: 17.

𐤀	v	𐤁	u
𐤂	k	𐤃	chi
𐤄	š	𐤅	xi
𐤆	f	𐤇	phi
𐤈	o	𐤉	ō

Fig. 1. Development of supplementary signs from sign variants for related values.

Now, the early variant of the Lydian sign for /f/ has been traced back by Helmut Bossert to the south Phoenician sign for /t/ which is also rendered by a vertical stroke with a small circle at either end.⁶ This suggestion, however, is defective in two respects. In the first place, the similarity in form is not matched by a similarity in the value rendered: there is no relationship between /t/ and /f/. It is true that signs may certainly be used to express a secondary value unrelated to the primary one in the course of transmission or as a later development. But in the present case also the relationship in form cannot be upheld, as in its earliest attestations the sign for /f/ occurs in form of the “figure-of-eight” (8), i.e. the more developed form of the sign in the Lydian alphabet attested for the 5th and 4th century BC.⁷

It so happens, namely, that the “figure-of-eight” for the expression of the value /f/ is already attested for three Phrygian inscriptions dating from the 7th to 6th century BC. The first one concerns a rock inscription from the region of Midas City, catalogued by Claude Brixhe & Michel Lejeune as W-08 and assigned by them to the 7th or 6th century BC.⁸ In this inscription the “figure-of-eight” sign for /f/ occurs as much as 3 times in the 4th and lowest line. The second inscription, P-101, is written on the base of a vase from Pazarlı dating from the 7th.⁹ It is noteworthy that the sign here occurs in angular variant (see Fig. 2). The third and last inscription, P-106, is attested for a fragment of a vase and assigned to the 7th or 6th century BC.¹⁰

⁶ Bossert 1959: 284, note 1; Woudhuizen 1984-5: 93-94, Fig. 1.

⁷ Cf. Gusmani 1964: 18.

⁸ Brixhe & Lejeune 1984: 52-53.

⁹ Brixhe & Lejeune 1984: 244.

¹⁰ Brixhe & Lejeune 1984: 149-150.

Fig. 2. Phrygian “figure-of-eight” sign for /f/
in (a) round and (b) angular variant.

Clearly, therefore, the “figure-of-eight” (8) form should be used as a starting point in our search for the origin of this sign for /f/. If we do so, it so happens that a striking comparison is afforded by the Luwian hieroglyphic sign *280 *WALA*, *wa*₅. This consists of a “figure-of-eight” with a vertical handle at the lower side. The same sign occurs in a writing variant consisting of one circle only on a vertical handle, catalogued separately by Emmanuel Laroche as *329, (2), 2 and by Procida as *515 and attested for Karahöyük-Elbistan § 11.¹¹ Finally, it also occurs without the handle as a straightforward “figure-of-eight” as attested for Assur letter e § 26, which latter form in angular variant is catalogued separately as *424.¹² In regard to dating, the last mentioned angular variant occurs on Late Bronze Age seals or sealings, whereas the remaining variants are from Early Iron Age texts dating from the 12th to 8th century BC (see Fig. 3).

Fig. 3. Luwian hieroglyphic (a) *280, (b) *515, and (c) *424.

In order to bolster our view that the Phrygian “figure-of-eight” sign originates from the given Luwian hieroglyphic parallels we have to assume that the value /wa/ is used in Luwian hieroglyphic for the expression of the value /pha/ or /fa/ as well. Now, this is exactly the case with the writing variants of the root of the ethnic *watašatinā-* in Sheizar § 1, *watīšatināzā-* in Meharde § 2, and *walasatināza-* in a join from a fragmentarily preserved inscription from Tell Tayinat, which phonetically represents /Phalestin-/ or /Falestin-/; the “Philistine” in these inscriptions from the early phase of the Early Iron Age (early 10th to early 9th century BC).¹³

¹¹ Laroche 1960: 170; Marazzi 1989: 69.

¹² Laroche 1960: 222.

¹³ Weeden 2015; Woudhuizen 2015: 369-370.

Alongside the given evidence for the “figure-of-eight” (8) sign in Phrygian, its Greek variant consisting of a circle with a vertical hasta starting at its inner top side is also attested in Phrygian. This latter form, namely, occurs in an inscription from the late 8th century BC from Midas City, M-01b, reading *kḗiyanaveyos*. However, in view of the form *ktḗiyanaveyos* in M-02 of the same date and location, it is obviously used by mistake for the “arrow”-sign *t*₁ in writing the ethnic of the town name Tyana where a Phrygian governor was stationed at the time.¹⁴ If rightly analyzed as a writing error, this would indicate the unfamiliarity of the scribe with this particular form of the supplementary sign under discussion.

In the above, we have seen not only that in form the supplementary sign in form of a “figure-of-eight” (8) for /f/ is most closely related to the Luwian hieroglyphic sign variants for the syllabic value *wa*₅, but also that Luwian hieroglyphic /w/ may be used for the expression of the value /f/—a consonant otherwise unrepresented in the syllabary. What remains to be shown is that the Phrygians were in contact with the Luwians of Cilicia and North Syria where Luwian hieroglyphic up to the end of the 8th century BC was the most current form of writing.

Such contacts of the Phrygians with the Luwians are easily demonstrable. In the first place, as already mentioned, a Phrygian governor was stationed in Tyana during the late 8th century BC, the capital of the realm of the Luwian king Warpalawas. Against this backdrop, no doubt, the memorial of the so-called Tyana black stone (T-02), inscribed with a Phrygian alphabetic text, was set up.¹⁵ Furthermore, Phrygian alphabetic inscriptions dated to the late 8th century BC are attested for Karkamis¹⁶ and Hama in North Syria.¹⁷ To this comes that the Phrygian king Midas, ruling before the destruction of his capital Gordion by the Kimmerians in 696 BC, dedicated stone bowls, one of which is inscribed with a legend in Luwian hieroglyphic, to a sanctuary presumably located in Aleppo;¹⁸ the inscribed bowl had been taken already in Antiquity as booty to Babylon and hence is known to us as Babylon 2. Finally, it deserves our attention in this connection that some of the Luwian hieroglyphic inscriptions from the 9th or 8th century BC have been found in Phrygian territory, like the ones from Alişar and Çalapverdi.¹⁹

In short: the Phrygians were in contact with the Luwians during the late 8th century BC and had some knowledge of the Luwian hieroglyphic script. Therefore, it is not unreasonable to assume, as I do, that

¹⁴ Brixhe & Lejeune 1984: 9-10; 18-19; cf. Woudhuizen 2008-9: 192-195. Note that the “arrow”-sign for *t*₁ belongs to the category of signs originating from Cretan Linear or Cypro-Minoan referred to in note 4 above, in this particular case ultimately from Cretan Linear AB 37 *ti*.

¹⁵ Brixhe & Lejeune 1984: 260-267.

¹⁶ Börker-Klähn 1994: 198; Meriggi 1975: Nr. 266.

¹⁷ Börker-Klähn 1998: 279; Ingholt 1934: Pl. XXXIX, 6-7.

¹⁸ Hawkins 2000: 391.

¹⁹ Hawkins 2000: 568; 497-498.

they derived their supplementary sign for /f/ from a Luwian hieroglyphic model.

With the spread of literacy to the west, the supplementary sign for the value /f/, of which the origin is traced back here to Luwian hieroglyphic *280 and related forms for the syllabic value *wa*s, also disseminated to regions in the central and western Mediterranean. It so happens, namely, that this supplementary sign is attested for the region of central Italy, in particular Etruria, and southwest Iberia.

The “figure-of-eight” for the /f/ is a marked feature of the Etruscan alphabet, and since the times of Ferdinand Sommer has been fairly generally ascribed to Lydian influence.²⁰ At first glance, the formal development of this supplementary sign reflects the situation in Lydian, where the “figure-of-eight” (8), which also occurs in angular variant,²¹ is likewise preceded by the variant consisting of a vertical hasta with small circles at either end (see Fig. 4; for the early form as attested for the inscription on a stele from Vetulonia, see Bonfante 2002: 140, Fig. 18).

		period				
symbol		700-650 BC	650-600 BC	600-550 BC	550-500 BC	500-450 BC
digraph	𐌦𐌠	CAERE	CAERE	VEII ORVIETO	VULCI CAERE	ROME
	𐌠𐌦					
	𐌦					
figure of eight		VETULONIA TARQUINIA RUSSELLAE CAERE				

Fig. 4. Formal development and regional diffusion of the Etruscan symbols for /f/.

However, the “figure-of-eight” (8) form, which, as we have seen in the above, is the original one in the Phrygian alphabet closest to the Luwian hieroglyphic model, already appears alongside the for Lydian earliest variant consisting of a vertical hasta with small circles at either end in the final decades of the 7th century BC—being attested for an inscription from Bolsena dated to this early period.²² To this comes that also already in this early period the “figure-of-eight” (8) sign for the value /f/ radiated to the Umbrians, to which fact the paleo-Umbrian inscription on a pilgrims flask from Poggio Sommavilla, dated to the late 7th century BC, bears testimony (see Fig. 5).²³

²⁰ Sommer 1930; Gusmani 1964: 26; Brixhe & Lejeune 1984: 53. As opposed to this, Bonfante 2002: 78 considers its origin obscure.

²¹ Bonfante 2002: 76, Fig. 6.

²² Briquel 1972: 793; note that this inscription is not included in our overview of Fig. 4.

²³ Briquel 1972: 792; cf. Morandi 1982: 63-64 and Rix 1995.

Fig. 5. Pilgrim's flask from Poggio Sommavilla.

It should be noted, though, that the “figure-of-eight” (8) is not the only device for the expression of the value /f/ in Etruria. Especially in the region of Caere the so-called digraph, consisting of a combination of *wau* and *ēta*, is current from c. 700 BC onwards (see Fig. 4). This particular device for writing of the value /f/ is generally assumed to be of Greek origin and paralleled for 5th and 4th century BC inscriptions from Corinth, Argos, Tanagra in Boiotia, and Sillyon in Pamphylia.²⁴ Furthermore, the Etruscans were also already during the 7th century BC acquainted with the Greek φ /phi/ as traceable, amongst others, in the Euboian type of abecedarium on the ivory tablet from Marsiliana d'Albegna, dated c. 675-650 BC.²⁵ As a consequence, the Lydian or more in general Anatolian influence on the local scripts of central Italy in the form of the supplementary “figure-of-eight” and its early Lydian writing variant was, though conspicuous, restricted in nature and may therefore be variously judged as resulting from merely superficial trade contacts or more intimate contacts in the form of actual settlement by individuals or groups (note that such distinctions cannot be made on the basis of epigraphic data alone but call for an interdisciplinary approach which is beyond the scope of the present contribution).

In its early Lydian variant, the supplementary sign for the value /f/ also radiated to southwest Iberia. At any rate, it can clearly be encountered in the southwest Iberian inscription catalogued in *Monumenta Linguarum Hispanicarum* IV as J.9.1 (see Fig. 6).²⁶ As duly acknowledged by Ulrich Schmoll, the sign has only one occurrence,²⁷ and hence it did not make it into the southwest Iberian standard signary. Also because of its paucity, it must be admitted that its value cannot be ascertained. Nevertheless, the single presence of this supplementary sign can only be explained in terms of direct Anatolian influence on the

²⁴ Colonna 1970: 665, esp. note 5; Lejeune 1966: 150, esp. note 44. Note that the Greek examples are late and rare, though.

²⁵ Bonfante 2002: 132-133.

²⁶ Untermann & Wodtko 1997: 256.

²⁷ Schmoll 1961: 12.

development of literacy in the region of southwest Iberia — most likely exerted within the frame of maritime trade contacts sometime during the period from which the South Iberian inscriptions date, i.e. 7th or 6th to 5th or 4th century BC.²⁸

Fig. 6. Southwest Iberian inscription MLH J.9.1 (Schmoll 1961: 56, Nr. 23).

ADDENDA

(1) Just after finishing the manuscript of my contribution on the transmission of the Phoenician alphabet in the Mediterranean to the *Rivista di Studi Fenici* XXXIV, 2 of 2006, I stumbled on the study of John Coleman Darnell e.a. on two early alphabetic inscriptions from the Wadi el-Hôl (Egypt) of 2005. In this contribution it is shown that the alphabetic inscriptions in question are associated with Egyptian hieroglyphic ones, one of which dates from year 26 of Amenemhat III (1853-1808 BC), which means 1827 BC in terms of absolute chronology. This means that the early date for the development of the alphabet, in the 19th century BC, applies. Doubts about this early dating raised by Benjamin Sass (2004-5: 149) and André Lemaire (2008) are in my opinion unfounded.

(2) Also after finishing the aforesaid manuscript I came across Gordon Hamilton's monograph, published in 2006, on the origins of the west Semitic alphabet, in which he systematically traces the origin of every single alphabetic sign back to an Egyptian hieroglyphic or hieratic counterpart. This by far outmatches Goldwasser 2006, table on pp. 154-155, in which such evidence is provided for only 14 of the 22 signs of the Phoenician alphabet.

(3) With respect to Woudhuizen 2006: 178, Fig. 3 it needs to be observed that Āfis is located to the northeast of Hama instead of to the southeast, see Loretz 1990: Karte. It further deserves attention that Hama also produced Aramaic inscriptions dating to the 8th century BC (see Ingholt 1934: 115-117; Pl. XXXIX, 1-5), and that some more Aramaic inscriptions of this early date are attested for Sfire and Brēg near Aleppo in between Āfis and Hasan Beyli (see Loretz 1990: Karte). Finally, it should be added that in the sanctuary of Apollon Daphnephoros

²⁸ Untermann & Wodtko 1997: 136 with note 91.

at Eretria have been found inscriptions from the Middle Geometric II period (800-750 BC), see Kenzelmann e.a. 2005: nos. 25, 26, 36, 64, and 66—the last mentioned of which is not Greek but Semitic.

(4) Claude Brixhe (2004) accepts the recent re-dating on the basis of calibrated C¹⁴ samples of the destruction layer of Gordion from 696 BC to c. 800 BC, and therefore downdates the Phrygian inscriptions from this destruction layer to the 9th century BC. If correct, it follows that the evidence for the Phrygian alphabetic script precedes that for the Greek one. However, this re-dating of the destruction layer of Gordion does not stand the test of criticism, see my review of Sass 2005 (= Woudhuizen 2011) with due reference to Muscarella 2003. A similar unrealistically high calibrated C¹⁴ date is attributed to the inscription from Osteria dell'Osa in Latium, which against all odds is also assigned to the 9th century BC (Woudhuizen 2011: 519).

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