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Chapter 8

The rare letters of the Phrygian alphabet revisited[1]

Rostislav Oreshko

From all the non-Greek alphabets found in Anatolia in the first millennium BC, the Old Phrygian (OPhr.) is arguably the closest to the Greek. Although stylistically distinct – often featuring more slender letter shapes with shorter side strokes than was usual for Greek letters – the majority of the Old Phrygian inscriptions can be read by those familiar with Greek inscriptions of the Archaic period without any difficulty. Indeed, from the 24 letters recognised in the standard edition of the OPhr. inscriptions, *Corpus des inscriptions paléo-phrygiennes* (Brixhe and Lejeune 1984, 280) and adopted in the recent comprehensive overview of the Phrygian language (Obrador-Cursach 2020a, 31), 17 practically exactly correspond to their familiar counterparts in the Archaic Greek alphabets. Together with a special letter for the non-syllabic *i* (*y*, no. 18), which is the only important feature distinguishing the Phrygian alphabet from the Greek alphabet, these letters constitute the bulk of the standard Phrygian letter set used in an ordinary Phrygian inscription.

The remaining six letters listed in the table are found practically only in a handful of the OPhr. inscriptions constituting less than 10% of the Phrygian corpus. Moreover, the relative significance of these rare letters is by no means equal. In fact, only *two* of them (nos. 19 and 20, see Fig. 8.1) are relatively well represented in the corpus and can be properly classified as independent letters that make up part of an 'average' Phrygian letter repertoire.

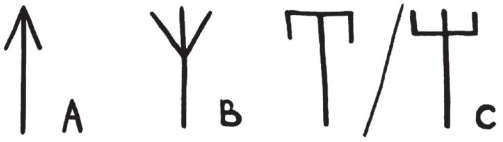

Fig. 8.1. Rare letters of the Old Phrygian alphabet: nos. 19 (A), 20 (B) and 23 (C).

[1] Abbreviations:
OPhr. = Old Phrygian
NPhr. = New Phrygian
Skr = Sanskrit

No. 23 is found very rarely (only in four graffiti on pottery sherds), and its status – a separate letter or a special local variant of another letter – remains not quite evident (see below). No. 22 is claimed to be found (Brixhe and Lejeune 1984, 282) only in two graffiti from Gordion (G-106 and G-244, both being meaningless three-sign sequences) and there is every reason to suspect that in both cases we are dealing with a corrupt text. Similarly, no. 21, found in only one inscription (W-08) on a natural rock, probably is a variant of a usual letter (in all likelihood, *r*). Lastly, no. 24 is very probably simply a graphic variant of *b* (cf. discussion in Obrador-Cursach 2020a, 50–51), more typical, as it seems, for the easternmost part of the Phrygian epigraphic zone, given that it is found in 2 out of 12 known inscriptions coming from this region (P-101 and P-106).

On the other hand, the standard table does not list all letters attested in the Phrygian alphabet. One additional rare Phrygian letter appears to have hitherto escaped identification. It is found in only two very early (c. 740 BC) inscriptions and, as will be argued below, probably represents a further variant of no. 19.

The topic of the present contribution is thus the three rare letters of the Phrygian alphabet (nos. 19, 20 and 23). The discussion will focus primarily on the definition of the exact phonetic value of the letters that hitherto remained controversial (albeit not quite to the same degree), using linguistic, philological and epigraphical evidence. In the final part of the paper, there will be discussed the question of possible 'relatives' of these letters within Anatolia – a question on which the establishment of the exact phonetic values sheds some new light.

Letter ᛉ (no. 20)

One may count about 10 possible attestations of the crow's-foot-shaped letter corresponding in essence to the most common variant of Ψ in the Archaic Greek 'Blue alphabets' and X in the 'Red alphabets'.[2] Four of these possible attestations are found, however, as graffiti on pottery sherds consisting of only one letter (G-278, G-294, G-298, G-306) and may represent a sort of 'mark'. The claim of Obrador-Cursach (2020a, 38) that the Ψ-shaped character found on 10 other sherds[3] is a variant of ᛉ is unfounded. In none of the cases the 'letter' appears in what can be properly classified as a sensible letter sequence, and there is a strong suspicion that it represents a sort of 'owner's mark'; for G-249, which is a special case, see in detail below. There are thus only *six* real cases in which ᛉ appears in a more or less sensible epigraphical context, W-01b, B-07, G-115, G-145, G-224c and G-339, although even from these the last two are much less informative, as both represent three-letter sequences. These are the following:

[2] It is not clear to me on what count is based Obrador-Cursach's statement (2020a, 38) that the letter no. 20 'occurs twenty-three times in twenty-one different inscriptions'. Somewhat further in the text he mentions only 17 inscriptions (erroneously citing NW-121 twice), including those featuring Ψ.

[3] G-225, G-249, G-322, G-324, NW-101, NW-105, NW-112, NW-119, NW-121, NW-126. In fact, it is even dubious that in all these cases we are dealing with the same character: in a number of cases (NW-112, NW-119 or NW-121) the strokes may be a part of bigger and more intricate drawing.

Fig. 8.2. Graffito G-145, Penn Museum Gordion Archive: image G-4620.

1. Graffito G-145 on a jar handle from Gordion: a *scriptio continua* sequence *voineio*ϒ*uriienoisku[* (Brixhe and Lejeune 1984, 131–132; Obrador-Cursach 2020a, 458). Although the word boundaries are by no means obvious and the sequence is broken at the end, the attestation is important from an epigraphical point of view. The part of the graffiti with the letter ϒ bears clear traces of correction from one letter to another, although it is not quite clear whether ϒ is the former or the final variant of the letter. Due to the importance of the technical side, it seems appropriate to reproduce the graffito here (Fig. 8.2).
2. Graffito G-115 on the bottom of a small vessel from Gordion, which can be read as ϒ*uva*ϒ*aros* (Brixhe and Lejeune 1984, 107; Obrador-Cursach 2020a, 450). The parallels of other graffiti from Gordion suggest that the sequence probably represents a personal name.
3. Graffito G-224c (one of three) on a large cooking pot from Gordion, which can be read as ϒ*uv* (Brixhe and Lejeune 1984, 181; Obrador-Cursach 2020a, 475). Given that the other two graffiti on the pot represent personal names (*Ata* and *Garṭes*), and the only other personal name beginning with ϒ*uv* is found in G-115, it is quite possible that ϒ*uv* is an abbreviation for ϒ*uva*ϒ*aros* (as already thought by Lejeune 1978, 784).
4. Inscription associated with the so-called '*Areyastis* Monument' (W-01b). The letter is found in the word *da*ϒ*et* in the second clause of the inscription which reads as follows (Brixhe and Lejeune 1984, 39-41; Obrador-Cursach 2020a, 433):

   *yos esai-t materey: eveteksetiʲy: ove vin: onoman: da*ϒ*et:*
   lakedo-key: venavtun: avtay: materey

5. A Middle-Phrygian funerary epigram B-07 (Brixhe 2004, 73–85; Obrador-Cursach 2020a, 441; 2021). The letter is found in the word *aniva*ϒ*eti* in the final clause of the inscription:

   *Tiv[(.)]n-ke devụṇ-ke umnotan ordoineten me kos aniva*ϒ*eti smaniṇ*

6. A graffito G-339 found on the bottom of a bowl from Gordion consisting of only three letters ϒ*ir* (Brixhe 2002, 93). The sequence may be interpreted as an abbreviated personal name, comparable with ϒ*uv* in G-224c.

The earliest interpretations of the letter proceeded from its similarity with the Greek letter of the same general shape, which had two different values in its two main alphabetic varieties: /k^{h}/ in the 'Red alphabets' and /ps/ in the 'Blue alphabets'. Young (1969, 254 with n. 12 and 291) hesitated between the two values, but thought that the correction of ϒ to *s* in the graffito G-145 supports its interpretation rather as /ps/ containing a sibilant. Haas (1976, 79–82), on the other hand, tried to defend the value /k^{h}/ by etymological speculations around the idea of the 'Phrygian Lautverschiebung' (now obsolete).[4] Both interpretations were, however, made obsolete by the special discussion Lejeune (1978) in which he proposed to define its value as /ks/. This suggestion was commonly adopted in the more recent literature (*e.g.* Ligorio and Lubotsky 2018, 1817). Lejeune proceeded in his interpretation of the letter from G-145 (no. 1 above), arguing that the scribe initially wrote *s* and subsequently corrected it to ϒ, which should imply that 'ϒ doit noter une articulation consonantique complexe à composante sifflante (ss? ts? ks? ps? vel sim.)'[5] (1978, 786). Lejeune preferred /ks/, assuming that the case may be typologically comparable with the variation seen in Greek σύν/ξύν. In the interpretation of the name ϒ*uva*ϒ*aros* in G-115, Lejeune followed Haas, who suggested that it should be a Phrygian form of the royal Median name known from Greek sources as Κυαξάρης and from the Old Persian Behistun inscription as ^{h}*Uvaxštra-*, and argued that the value /ks/ fits even better. Lejeune interpreted the form *da*ϒ*et* in the Areyastis monument as a suffixal form based on the root *dak-*, adducing as a parallel Latin *faxō* vs. *faciō/fēcī*. As B-07 was discovered only in 1997, Lejeune was not able to use its evidence. It is noteworthy that Lejeune himself was fully aware that the letter value suggested by him is no more than a *possibility* (1978, 788).

Lastly, a new interpretation of the letter was recently proposed by Obrador-Cursach (2020a, 38–49). Obrador-Cursach rejected the evidence of G-145, following a suggestion by Adiego that the scribe had in fact written not ϒ but *ou*, and subsequently

[4] For the recent views on the development of the Phrygian consonants see in general Ligorio and Lubotsky 2018, 1823–1824). One may note, however, that given the size of the Phrygian linguistic area and the likely existence of several dialects already in the early period, it is not excluded that the reflection of the IE consonants was not quite the same in different parts of Phrygia.

[5] 'ϒ ought to denote a complex consonantal articulation with a sibilant component (ss? ts? ks? ps? or similar).'

inserted *s* between the two letters. He also doubted Lejeune's interpretation of the form *daϒet* as /dakset/ on linguistic grounds (consonantal stems seem to insert *-e-* before the suffix *-s(e)-*), suggesting instead that the form may be a 'spelling variant' of *daket*. Obrador-Cursach found the key piece of evidence confirming this interpretation in G-249, which he read, following Brixhe and Lejeune (1984, 196), as *seϒelt|ias* (omitting, however, three question marks present in the original edition). He further claimed that *seϒel* represents a Semitic borrowing in Phrygian corresponding to *šql* 'shekel, weight' (which gave also Greek σίκλος/σίγλος). Next, using the comparative evidence of an Aramaic inscriptions form Daskyleion, Obrador-Cursach analysed the last clause of B-07, *me kos anivaϒeti smaniṇ*, as imprecation with the general meaning 'let nobody harm Manes', and proposed to connect the root of the verb *anivaϒeti* with PIE root **u̯eh₂g-/*u̯eh₂ǵ-* 'break'. Lastly, he assumed that a tectal value (*k* or the like) would be equally suitable for the case *ϒuvaϒaros* as reflecting Median *ʰUvaxštra-*. From three possible interpretations of ϒ, which the evidence may imply – a palatalised allophone of /k/, a fricative allophone of *k* (/x/) or simply a graphic variant of *k* – Obrador-Cursach gave preference to the latter.

Neither the 'classical' interpretation of ϒ as /ks/ nor its re-interpretation as a /k/ by Obrador-Cursach are quite satisfactory. Only the very first step of Lejeune's analysis – the assumption that the letter is somehow connected with sibilant *s* – appears to be correct. His further argumentation is contradicted by several pieces of evidence. As for the attempt of Obrador-Cursach (following Adiego) to cast the epigraphical evidence of G-145 into doubt, it fails to convince. All photos that I was able to study in the Gordion Archive (*e.g.* Fig. 8.2) have only confirmed the previous interpretation of the picture as a case of correction of ϒ to *s*. In fact, the story of the correction is even somewhat more complex, which puts even more value on this evidence (see in detail below).

However, the idea to interpret the letter as /ks/ contradicts the evidence present in one of the inscriptions featuring ϒ, W-01a. Here, the verb *evetekseti'y*, found in just a couple of words before *daϒet*, contains a cluster *-ks-* spelled with two letters. The attempt by Lejeune (1978, 788–789) to explain the obvious contradiction by the general reference to the 'redundancy in the orthographic possibilities' and by an assumption that in *evetekseti'y* there was a morphological border between *evetek-* and *-seti'y* fails to convince. It is difficult to believe in the existence of such 'redundancy' in general as none of the other known alphabets of Anatolia or the Mediterranean shows any apparent signs of it, and all the more difficult to believe that two alleged 'orthographic variants' are found in the same inscription. As for the second point, Lejeune was right that there is a morphological boundary between *evetek-* and *-seti'y*, as the latter part contains the prospective/future suffix *-se-* and the ending *-ti(y).* However, precisely the same applies to the form *daϒet* which should have the same prospective/feature semantics, as it makes a part of the same protasis of an imprecation formula, the two verbs being divided only by the disjunctive *ove* 'or'. If the root were *dak-* 'to do', its *se*-form would be probably spelled as **dakset*. This argument is now even further

strengthened by the recent appearance of a second instance of the spelling *ks* for the phonetic cluster /*ks*/. It is found in the name *Muksos* discovered together with several other names on the beam of the Tumulus MM in 2007 (see Liebhardt and Brixhe 2009, 147–148). There is also a further contextual argument against the interpretation of the form *da*ϒ*et* as **dak-set*: the verb *dak-* 'do, make' is in fact inappropriate in the context of the clause; this point will be addressed in more detail below.

The personal name ϒ*uva*ϒ*aros* does not lend any firm support to the reading /ks/ either, as its time-honoured comparison with *Median* name ^{h}*Uvaxštra-* represents, if taken unbiasedly, a sheer absurdity both from historical and linguistic points of view. To avoid any misunderstandings: the name ϒ*uva*ϒ*aros* is found as a graffito (G-115) on the bottom of a grey-ware black-polished drinking bowl excavated on the City Mound of Gordion, the capital of the Phrygians. Similar pottery is in general very well represented in the Middle Phrygian Gordion (c. 800–540 BC). The dating of the object is unclear: like the majority of the pottery material on the City Mound, it was found in rubble fill, and the objects associated with it essentially lack any precise dating. Even if the dating of the fill by Young (1969, 271) to the late sixth century is correct, it gives only a *terminus ante quem* for the object and the graffito, which is useless, since this dating is anyway obvious from the letter shapes. In fact, the shape of the slim six-bar[6] *s* clearly points in the direction of a relatively early date, possibly first half of the seventh century BC. In any case, nothing in the graffito suggests that the name ϒ*uva*ϒ*aros* is anything other than an ordinary *Phrygian* name, as is the case with dozens of other names incised in the pottery sherds from Gordion. It is noteworthy that, besides ϒ*uva*ϒ*aros*, only one further Iranian name, *Asakas*, was tentatively assumed to be attested in Gordion (G-150, Avram 2019, 328–329); however, even in this case, the Iranian character is highly dubious.[7] The attestation of ϒ*uv* in G-224c, probably representing an abbreviation of ϒ*uva*ϒ*aros*, even further confirms that we are dealing with a local Phrygian name.

On the other hand, the name ^{h}*Uvaxštra-* is not even a Persian name, which one might theoretically expect to find in Gordion after the Achaemenid conquest of Anatolia c. 540 BC. It is a Median name. Moreover, as far as one can see it is a name associated exclusively with Median nobility. Besides the Old Persian form ^{h}*Uvaxštra-* (*u-v-x-š-t-r*), the name is attested in Assyrian sources as ^{m}*Ú-ak-sa-tar* or ^{m}*Uk-sa-tar*

[6] The sixth bar of the letter is found close to the ring and is incised only slightly.

[7] Schmitt 1982, 34. The Iranian origin of *Asaka* is claimed on the basis of its possible Iranian etymology (a diminutive of *asa-* 'horse') and the attestations of *Áš-šá-ka*$_4$ in two Elamite tablets (Tavernier 2007, 118). Neither of the arguments is compelling, as the chance correspondence is not excluded in such a short name. In fact, a very similar name is possibly attested also in another Phrygian graffiti from Seyitömer (W-101, see Bilgen *et al.* 2011) in which one read *asakas* after the broken edge of the sherd. The traces before the word would be compatible with *p* or *m*, but there is no guarantee that this is the first letter of the name and not a part of the preceding word. Even if it is not the same name, it has a very similar morphological structure, and, in the absence of clear indications otherwise, both names can be defined as Phrygian. Lastly, one may point out the name Αἴσακος belonging, according to Apollodorus (3.12.5) and Ovid (Met. 11.749–759), to the son of Priam and Arisbe. It is not impossible that the two names are related.

for a Median prince of the eighth century BC, and as Babylonian ^{m}*Ú-ma-ku-iš-tar* or ^{m}*Ú-ma-kiš-tar* and Elamite *Ma-ki-iš-tur-ri* or *Ma-ak-iš-tar-ra* for the sixth century king known from Herodotus (1.73, 1.103–107) as Κυαξάρης (for an overview of the evidence see Diakonoff 1993). In addition, the latter name was recently identified also in a late Assyrian document in the form ^{m}*Ú-ba-ki-is-te-ri* (Roaf 2021). It is obviously a fantastic idea that a Median king of the sixth century BC or a Median prince of the eighth century BC would show up in Gordion, grab a drinking bowl and write his name on it, without any attempt to identify himself as a Median.

No more credible is the linguistic side of the equation, which presupposes that the initial *h*- of the Iranian form would be reflected in the Phrygian alphabet as /ks/ (Lejeune) or /k/ (Haas and Obrador-Cursach). All the cuneiform forms, including the Old Persian, clearly show that already in the eighth century the initial *h*- was a very weak sound, which could be simply ignored in writing. The initial *k*- of the Herodotean form represents an oddity, the source of which is quite unclear; it may well result from a Greek folk-etymological reinterpretation of the name. At any rate, there is absolutely no reason to think that the strange Greek form was known in Gordion. The expected Phrygian spelling would simply ignore the initial weak *h*-, which is supported, *inter alia*, by a piece of onomastic evidence: while the name of the central Anatolian river *Halys* appears with a rough breathing in Greek (Ἅλυς), the personal name *Alus*, well attested both in Phrygia and Lydia, which is likely based on it, appears with the initial *a* (Oreshko 2020, 88, n. 18). In sum, the name Ψ*uva*Ψ*aros* cannot be connected with ^{h}*Uvaxštra*-Κυαξάρης and should be interpreted in Phrygian terms.

These observations already undermine in part Obrador-Cursach's argument for the re-interpretation of the letter as *k*. From the remaining two pieces of evidence, the heuristic value of the graffito G-249, regarded by Obrador-Cursach as the key piece of evidence, is in fact close to zero. There is every reason to think that the graffito does not encode any verbal message at all, but only *imitates* writing. Indeed, the 'letters' of the graffito (for a drawing and the photo see Brixhe and Lejeune 1984, 195 and pl. CVI) not only have 'un dispositif bizarre' (Brixhe and Lejeune 1984, 195) unimaginable for a normal text – in fact *not a single one* of the characters corresponds to a normal Phrygian letter. The reading *se*$^{?}$Ψ$^{?}$*e*$^{?}$*lt*|*ias* proposed by Brixhe and Lejeune (1984, 196) is as arbitrary as, for instance, 'κύριε βοήθεσε' would be. No better-founded is the definition of the object as an 'alabaster weight' given by Brixhe and Lejeune (1984, 195), which they probably took from the title of the object card preserved in the Gordion archive. However, the text of the card makes it clear that the compiler had in mind not a 'weight for scales', but a 'loom-weight' (which has obviously quite a different function), since the general form of the object to a degree resembles one and there is an unfinished hole in it. More probably, however, the object was conceived to become a sort of magic amulet to be worn around the neck: comparable things with the characters imitating writing and thus making it more powerful for the practitioner are well known both in Antiquity and in the medieval period

(see Boyes, this volume). Obrador-Cursach's analysis of the last piece of evidence – the verb *aniva*ϒ*eti* in B-07 – again fails to convince, as both the identification of the root as **va*ϒ- and its connection with PIE root **u̯eh$_2$g-/*u̯eh$_2$ǵ-* are quite speculative (for an alternative analysis see below).

As already in part adumbrated above, G-145 and W-01c remain two crucial pieces of evidence for establishing the value of ϒ. Both texts in fact contain more clues than was assumed earlier. As for the former, a close observation of the corrected letter reveals that we are probably dealing with *two* stages of correction: first ϒ to *s* and then back to ϒ. Indeed, the distance of the letter from the preceding *o* clearly implies that ϒ was the letter that was intended initially. However, *s* is seen well only in the lower part, and its long tail and the irregular shape – as contrasted with the neat multi-bar shape of the second *s* of the graffito – seems to suggest that the scribe 'freaked out' because of his own mistake. On the other hand, ϒ is incised very deeply, obviously with several additional scratches for every element, a process that caused the loss of black varnish around the incised lines. This indicates that the scribe has returned to the initial variant of the letter, making significant efforts to obliterate *s*. This painful hesitation of the scribe implies that the writing of ϒ instead of *s* was not just a mistake caused by negligence – apparently, it was indeed not that easy to choose between the two letters. This means that the phonetic values of ϒ and *s* were indeed connected closely.[8]

As for the form *da*ϒ*et*, its analysis both by Brixhe and by Obrador-Cursach was quite imprecise, being arrived at by an inveterate misconception concerning roots, *da-* and *dak-*. These roots, although etymologically related, have *different* meanings in Phrygian and the latter is in fact irrelevant for W-01c. The root *dak-* is abundantly attested in the Phrygian corpus, first of all in the NPhr. inscriptions (cf. Obrador-Cursach 2020a, 157–158). Although not all attestations are equally clear, the semantics of the verb αδ-δακ-ετ (which features the prefix *ad-* ~ Latin *ad-*) used in the standard protasis of an imprecation formula ιος νι ... κακον αδδακετ 'whoever does/inflicts evil to...' leaves little doubt that the precise meaning of the root *dak-* was 'do, make, inflict'. The verb thus corresponds to the Latin root seen in *faciō*, which can be traced back to PIE **d^{h}eh$_1$-k-*, an old extension of PIE root **d^{h}eh$_1$-* with the suffix *-k-*. In contrast, the Phrygian verb *da-* in all probability preserves the original semantics of the PIE

[8] As for the meaning of the text, one may tentatively analyse the sequence as *Voineio* ϒ*uriieno(i) sku[*. The first word apparently represents an adjective (poss. nom. neutr.) based on the personal name *Voines* attested elsewhere in Gordion (G-129, G-228 and G-286). Given the observations put forward below, it would be tempting to recognise in ϒ*uriieno(i)* an ethnic adjective derived with the suffix *-en-* (= Greek -ην-, as in Σιπυλήνη etc.) from a toponym **Suri-*. The word finds a nearly exact correspondence in the epithet of Zeus Συρεανος found in an inscription from Söğütyaylası in the Phrygian Highlands (some 30 km to the east of Kütahya, see Haspels 1971, 340 no. 109). The epithet of Zeus likely continues the name of the Mount *Šuwara* (> *Συρα) attested in the Hittite sources (cf. Forlanini 1996, 8). This is not excluded for ϒ*uriieno(i)*, but this is not the only possibility. Another option would be to connect it with the people called Σύροι or Λευκοσύροι in the Greek sources and *Sura* in hieroglyphic Luwian, who inhabited the northern parts of Anatolia (for which cf. Simon 2012). A third, less likely possibility, would be to connect it with Syria.

root *$d^h eh_1$- 'put, place, set' and thus corresponds to Greek τί-θη-μι. This is especially clearly seen in the use of the aorist form *e-da-es* regularly used in the dedicatory context (cf. M-01a, M-01b, M-02, B-01 or W-08 and discussions in Gorbachov 2005 or Ligorio and Lubotsky 2018, 1827). There is no evidence suggesting that the verbs *da-* and *dak-* belong, on the synchronic level, to the same paradigm, and their treatment by Obrador-Cursach (2020a, 157–159) under one lemma is confusing and erroneous.

The clause *yos esai-t materey: evetekseti'y: ove vin: onoman: daϒet:* very probably represents a protasis of a *negative* imprecation formula, although the meaning of the verb *evetekseti'y* and the verb *lakedo* in the apodosis are not quite clear.[9] At any rate, the fact that the second part of the clause uses the noun *onoman* 'name' suggests that we are dealing with a usual topos of replacing the name – *i.e.* appropriating a monument by obliterating the original name and writing instead his own – frequently found in Luwian inscriptions. The formulations in Phrygian and in Luwian were different: in the Luwian inscriptions one usually used in the respective imprecation formulas the verb 'delete, obliterate'.[10] However, the collocation 'name' + 'put' is often found in other cases, cf., *e.g.*, *wa/i-tu-ta* (LITUUS)*Á-za-ti-wa/i-tà-ia-na*(URBS) |*á-la/i-ma-za* PONERE-*ḫa* 'And to it (scil. the 'fortress') I gave (lit. 'put') the name « Azatiwadaya »' (KARATEPE §39) or *wa/i-ta* (DEUS)*Pa-ḫa-la-ti-i-sà á-ma-za-ḫa-´ á-lá/í-ma-za* PONERE-*ḫa* (HAMA 4, §7) 'I put the name of the goddess *Ba'alat* and my (own) name (on it)'. These parallels and general logic requires for *daϒet* a meaning 'would/will put' and not 'would/will make' (thus contra Ligorio and Lubotsky 2018, 1823). In other words, the expected root is not *dak-*, but *da-*.

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[9] The context suggests for the verb *evetekseti'y* a general meaning 'harm, make wrong' directed against the deity (*esai-t materey* 'this Mother') [I find quite unconvincing the analysis of the clause and the form as an adjective by Obrador-Cursach 2020a, 223]. The part of the word preceding the suffix *-se-* looks too complex to represent a simple root, and there are good reasons to analyse it as *eve-tek-*, with **tek-* being to the root, as was assumed already by Lubostky (1988, 20) and now also by Obrador-Cursach (2020a, 223). However, the probable negative semantics of the verb excludes its connection with PIE *$h_1$su- (in any case problematic, as the 'prefix' features additional *-e-*). An alternative interpretation would be to compare the prefix with Skr. suffix *ava* 'away, off'. Given its separative/privative semantics, it would not look inappropriate. As for the root **tek-*, one may compare it with the Phrygian root **tik-* seen in the NPhr. form τε-τικ-μενος usually interpreted as 'accursed' (see Obrador-Cursach 2020a, 363–363 with further refs.). The alternation *i/e* does not represent a problem, as it is found in Phrygian on the synchronic level (*e.g.*, *kubileya/kubeleya,* δεως/διως, for further examples see Obrador-Cursach 2020a, 62–63), and the use of the root in a negative context supports the equation. The root in question probably go back to PIE **deiḱ-* 'to point, indicate' and corresponds to the root of Greek δικάζω. It would be very tempting to see in the verb *eve-tek-* a Phrygian correspondence of Greek ἀ-δικέω 'injure, do wrong', which is the most frequent term in Greek imprecations. Alternatively, *eve-tek-* may mean simply 'neglect' or the like. However, one may also indicate an alternative possibility: the element *eve* could be not a suffix, but the first part of a complex disjunctive *eve … ove*, which can be typologically compared with English *whether … or*, or German *weder … oder*; etymologically, the disjunctive can be compared with Skr. *vā*, on the one hand, and with Tochatian B *epe … epe*, on the other. This interpretation would be, however, difficult to agree with the possible semantics of the root **tek-*.

[10] Usually *ARḪA* 'MALLEUS'-*la/i/u-* (as, *e.g.*, in KARKAMIŠ A11a, §25), but cf. also *ARḪA* *69"(-)*i-ti-* in KARATEPE §§63.

It is not difficult to see that the evidence of W-01c points in exactly the same direction as that of G-145: the expected *se*-form of the verb *da*- should be something like **daSet*. These observations suggest a very simple solution, which was in fact mentioned as a theoretical possibility already by Lejeune (see above), but for some reason finally disregarded: the letter ϒ should render a sort of sibilant.

This interpretation can be supported by several strands of evidence, which concern both the early Mediterranean alphabets and the language in general. To begin with the Phrygian evidence, one may point out that several words in the NPhr. inscriptions feature geminate σσ. The form in which this spelling appears to be employed consequently is just the *se*-forms of two verbs, τοτοσσειτι and δεδασσιννι, based on **to*- 'give' (< PIE **deh*$_3$-) and on the already discussed *da*- respectively (Obrador-Cursach 2020a, 367 and 158).[11] The correspondence with the use of ϒ in *da*ϒ*et* is striking, and strongly suggests that ϒ, at least in this form, conceals precisely the geminate *ss* (for further discussion see below).

Next comes the evidence of the Phrygian alphabet found in the north-western part of the Phrygian cultural zone, which is slightly different from the central Phrygian variety. This variety appears to have two letters for sibilants, although due to the low number of inscriptions found there, the picture is not as clear as one would wish. A letter for a second sibilant was for the first time identified by Cox and Cameron (1932) who published the Phrygian inscription from Üyücek (B-04). They transliterated two letters, which (at least in their drawing) almost exactly correspond to Lydian Ϟ and Ŧ as *ś* and *s* respectively (cf. Table 8.1), picking up the then-usual transliteration of the two Lydian letters for sibilants (now *s* and *š* respectively).[12] However, the photo in the original publication is of a rather mediocre quality, and the inscription has since been missing, so that it is impossible to verify the correctness of identification of the letter Ŧ in the inscription; the context does not give any reliable clues either (for different readings of the inscription see Brixhe 2004, 39 and Obrador-Cursach 2020a, 439). The second inscription from the region in which a second letter for sibilant could be suspected is the inscription from Vezirhan (B-05). The first publisher of the inscription, Neumann (1997, 18) transliterated with *ś* a letter resembling (especially in his drawing) an *s* with a diacritic mark (cf. Table 8.1), which he identified in the words *eśtat* (l. 4), *enpṣatuṣ* (l. 5), *śiray* (l. 11), *yosikeṣos* and *śemeney* (l. 13). In the new edition of the text, Brixhe (2004, 47–48, 50) corrected Neumann's transliteration *ś* to *s* in three words (*eśtat, enpraṣtuṣ* and *yosikeṣos*), which was accepted in subsequent discussions (Obrador-Cursach 2020a, 439–440 with further refs). Again, due to the poor quality of the published photos, a purely epigraphical verification of the picture is impossible, and one can rely only on circumstantial considerations (see below). Lastly, Gusmani-Polat (1999) published a short but clear graffito on a pottery sherd (B-108), which

[11] One may note, however, the form *dedạsitiy* found in B-05 (l. 8), which is clearly based on the root *da*- as well. If the fifth letter is indeed *s* (and not *ś*, cf. below), we are dealing apparently with a simplified spelling.
[12] A third sign that the publishers transliterated as *š* in fact renders the glide *y*.

Table 8.1. Sibilants/affricates in the north-west Phrygian alphabet (after Brixhe 2004, 28).

		s	*ts*(?)
B-04	5th – 4th C		
B-05	End 5th C		
B-06	6th C		↑
B-07	1st quarter 5th C		
B-108	6th – 5th C		

features a personal name *Saragiś*, in which the first *s* corresponds to usual central Phrygian *s* and the final *s*, which they rendered with *ś*, to the northwest Phrygian *s* (cf. Table 8.1).

In his new edition of the inscriptions from the northwestern zone, Brixhe (2004, 26–29) dedicated a special section to the problem of the double representation of the sibilants, which, however, introduced even more confusion in the already rather incoherent picture with 'western sibilants'. Observing that yet another inscription from the region, B-06, features the arrow-like letter ↑ (in the word ↑*egmatin*), while B-04 and B-05 lack it, Brixhe suggested that the letters earlier transliterated as *ś* represent in fact a variant of ↑, which he takes for an affricate resulting from the palatalisation of *k* before *i/e*. As for B-108, Brixhe simply identified both letters as different graphic variants of *s* (cf. Table 8.1).

This resulted, *inter alia*, in that the words *śiray* and *śemeney* found in Vezirhan are confusingly rendered in Obrador-Cursach's edition (2020a, 247 and 440) as ↑*iray* and ↑*emeney*. The problem is that Brixhe's suggestion, while not entirely impossible, has a very weak basis. The alleged letters for *ś* identified by Cox and Cameron, Neumann and Gusmani and Polat, are found not in the same words where ↑ is found in B-06, and the latter inscription is in general too short and fragmentary to give a reliable picture of the alphabet used in it. In fact, the absence of ↑ in B-04 and B-05, and the absence of a letter for *ś* in B-06 could be based simply on chance, as both letters, and especially ↑, are rare.[13] On the other hand, it is difficult to agree that two letters in B-108, having clearly distinctive shapes, represent the same sound, all the more that their distribution corresponds to that seen in Lydian: while *s* apparently renders a

[13] The only other argument that can be advanced to support Brixhe's hypothesis is the alleged identity of *śira-* and NPhr. ζειρα suggested already by Neumann (1997, 25) and later picked up by Hämmig (2013, 150–151) and Obrador-Cursach (2020a, 35–36) who saw in the latter word the Phrygian correspondence of Greek χείρ 'hand' (< PIE **ǵʰes-r-*). If the meaning 'hand' is possible – although by no means certain – for NPhr. ζειρα, the meaning of *śira-* is entirely obscure, due to the problematic context. However, in view of the relative dating of the forms, the identity is unlikely. The Vezirhan inscription is dated probably to the late fifth century BC, and thus the form *śira-* is at least 500 years older than NPhr. ζειρα. Despite its late date, the digraph ει probably renders a true diphthong *ei̯*, as *i* is rendered by simple ι. In view of the Greek χείρ and the possible IE etymology of ζείρα, a later diphthongisation of *i* > *ei̯* looks very unlikely.

usual sibilant /s/, *ś* may render its palatal variant found after *i*. In sum, there is a good probability that the northwest Phrygian alphabet had two letters for sibilants and that central Phrygian ϒ might correspond to the second one.

Even more abundant evidence supporting the possibility of identification of a second sibilant in the central Phrygian alphabet is found beyond Phrygia. The evidence of the Lydian alphabet has been already mentioned above. Carian alphabet appears to have even three different letters for sibilants (*s*, *ś* and *š*, see Adiego 2007, 250). At least two letters for sibilants were present in the Sidetic alphabet (cf. Brixhe 2018, 146). In the Pamphylian alphabet, one finds a special letter Ψ, which appears in the words where later inscriptions have the geminate *ss* (cf. Brixhe 1974, 7); it is noteworthy that graphically, the letter is not that far away from ϒ (see below). Moving away from Anatolia, one finds two letters for sibilants at least in three Italic alphabets: Etruscan, Umbrian and South-Picene. Greek alphabets, each of which have only one letter for one basic sibilant of Greek, represent rather an exception; it is noteworthy that technically even the Greek alphabetic zone knew two letters for sibilants, *sigma* and *san*.

The common presence of several letters for sibilants in different alphabets has its roots, of course, in the simple fact of the linguistic reality: the majority of the world's languages have at least two, but often three sibilants. Usually, the contrastive pair is the alveolar sibilant /s/ vs. postalveolar sibilant /ʃ/ (as in English, Italian, Hungarian, Turkish etc.), but the contrast between alveolar vs. palatal /ç/, as in Lydian, is also frequent. In addition, a contrast in strength that can be expressed as fortis vs. lenis or geminate vs. non-geminate is another linguistic universal. In sum, the presence of the second letter for a sibilant in the central Phrygian alphabet looks entirely natural, whatever the exact linguistic nature of the sound concealed behind it could be. Before addressing this question, one has to discuss three other available attestations of the letter to verify how they agree with the re-interpretation of the letter.

The general interpretation of the last clause of B-07 (*me kos anivaϒeti smaniṇ*) as 'let nobody harm Manes' proposed by Obrador-Cursach (2020b, 42–45; cf. further 2021) appears quite convincing. One can readily agree with the interpretation of *me kos* as a combination of a prohibitive particle (found also elsewhere in imprecation formulae) reflecting PIE *meh_1 (= Greek μή) and an indefinite pronoun. However, his morphological analysis of the verb *ani-vaϒeti* and the connection of the root with PIE *$\underset{\wedge}{u}eh_2g$-/*$\underset{\wedge}{u}eh_2ǵ$- 'break' look quite arbitrary. There is no other evidence for a prefix **ani-*, and even the existence of a prefix **an-* (assumed by Brixhe 2004, 84) is highly dubious.[14] Also, there is probably no necessity to analyse the sequence *smanin* and *smanes* in line 1 as a combination of the 'proclitic particle' *s=*, possibly a form of the demonstrative root *s-*, and the name *Manes* (cf. Obrador-Cursach 2020a, 343–344). The

[14] In view of several attestations of the word δετουν or δετον (Obrador-Cursach 2020a, 212) the correct division of the text in W-11, 1. 7 is doubtlessly κοροαν δετουν. NPhr. 40.3 (31), l. 2–3 feature in all probability εσαν μανκαν 'this monument' (acc. sg.).

appearance of a deictic element in combination with a name would look quite odd. Rather, we are dealing with a name *Smanes*, a variant of the name *Manes* 'embellished' by an *s*-mobile, which is comparable with Σμῖκρος/Μῖκρος, Σμικυθίων/Μικυθίων and the like. As for the verb, it can now be read as *anivaSeti.* Read in this way, it can be immediately identified as a future/prospective *se*-form directly comparable with *daSet*, τοτοσσειτι and δεδασσιννι. As for *aniva*-, one may suggest connecting it with the root of Greek ἀνιάζω or ἀνιάω 'grieve, distress, vex', which excellently fits formally (with Phrygian preserving the intervocalic -*v*-) and semantically. The Greek verb is based on the noun ἀνία 'distress, grief', which do not have a good IE etymology and thus may well be of a substrate Balkan origin.[15]

The name ϒ*uva*ϒ*aros* can be read now as *SuvaSaros.* Comparable forms are not attested in the later Greek epigraphical record of Phrygia or Anatolian in general. One may adduce, however, a piece of toponymic evidence: Stephen of Byzantium (301 Συασσός) mentions a settlement called Συασσός, which he defines as κώμη Φρυγίας 'Phrygian village' (for further details see below). The root may be tentatively identified also in the name Σουησις attested in the northern Pisidia (in an inscription from the Burdur museum, cf. Balzat *et al.* 2018, s.v.). This correspondence suggests that **suwas(s)aros* may be a secondary derivative based on the root **suwas(s)*-, most probably an adjective, structurally comparable with Greek adjectives with the suffix -ρ- (ἰσχυρός, λιπαρός etc.). On the other hand, one may compare **suwas(s)aros* with the word σαυσαρός attested in the Lexikon of Hesychius: 285 σαυσαρόν· ψίθυρον 'whispering, twittering'. In other words, **suwas(s)aros* may be an onomatopoeic reduplicated formation imitating whispering or soft melodious sounds. These two explanations do not necessarily exclude each other.

Turning back now to the question of the exact phonetic value of ϒ, one may say that the evidence of B-07 and, to a degree, that of G-145 support the idea that ϒ corresponds first of all to the geminate -σσ-, *i.e.* indicates a sharper articulation of the alveolar spirant. Moreover, even if the evidence is not very numerous, it is still possible to identify the source of this sharper articulation. As the usual form of the future/prospective suffix was -*se*- and, normally, it is found spelled both in OPhr. and NPhr. inscriptions with a single *s*, cf. *evetekseti*ʲ*y* (W-01b), *egeseti* (P- 04a), *dedasitiy* (B-05), *umniṣet* (B-05), ομνισιτ (W-11) and εγεσιτ (56.2 = 58).[16] The forms *daSet*, *anivaSeti,*

[15] The Phrygian evidence clearly disproves the speculative connection with Skr. *iṣ*- 'to desire'. To some degree, it supports the old connection with Skr. *ámīvā* 'disease, pain' (Beekes 2010, s.v. ἀνία), but the alternation *n/m* is difficult to explain.

[16] For further discussion see Obrador-Cursach (2020a, 100–102). The hypothesis of Hämmig mentioned there that the suffix -*sḱi*-' goes back to a 'suffix *-*sḱi*-' (possibly *-*isḱ*-) does not find much support in the Phrygian material, and in any case a direct comparison with Armenian marker -*ic'*- is hardly possible. There is in fact no necessity in this explanation, as there is a much more obvious option: the suffix is probably cognate with the Greek future suffix -σ-, as assumed earlier (Sowa 2007, 84–85). More precisely, the suffix can be directly compared with the suffix -σε-, which builds the so-called Doric future (cf. Delph. ταγευσέω, κλεψέω, Rhod. ἀποδωσεῦντι, σπευσίω, πραψίομεν, βοαθησιοντι in Cretan, with -σε- > -σι-), as I argued earlier (the talk 'Phrygian and the Early History of Greek Dialects' given at the conference

τοτοσσειτι and δεδασσιννι represent thus special cases. The sharper articulation of the sibilant in these forms most probably lies in the prehistory of the roots. The forms *daSet* can be reconstructed as *$d^h eh_1$-se-t* (3.sg.); reduplicated formation δεδασσιννι presupposes *$d^h h_1$-*$d^h eh_1$-se-nti* (3.pl.) and τοτοσσειτι presupposes *dh_3-*deh_3-se-ti.* The exact stem form of *anivaSeti* is not immediately clear: in theory it may correspond to either ἀνιάω (stem *aniu̯a-i̯-ō*) or ἀνιάζω (stem *aniu̯ad-i̯-ō*). The latter possibility appears more probable, as the sharper articulation of the sibilant can be in this case naturally explained as resulting from the assimilation *-ds-* > *-ss-*, *i.e. anivaSeti* can be traced back to *aniu̯ad-se-ti.* As for the former three forms, the gemination is apparently connected with the presence of the laryngeal in the root. What is amazing, however, is that the distinction between the two variants of the future/prospective suffix (*-se-* and *-sse-*) was synchronic, which might imply that the traces of the laryngeal was somehow retained in Phrygian. This appears, however, unlikely, especially given the very late date of the attestation of τοτοσσειτι and δεδασσιννι (beginning the common era). Rather, we are dealing with some secondary effect of the laryngeal. One may tentatively assume that the process went in two stages. First, the disappearance of the laryngeal caused the lengthening of the preceding vowel, just as it was the case in Greek, *i.e.* actual form of the Phrygian roots were **dā-* and **tō-*, which was not expressed in writing. The effect of gemination of the sibilant of the suffix *-se-* might then manifest itself in the second stage, resulting from the transformation of the syllable weight **dāCV-* > **daCCV-* and **tōCV-* > **toCCV-*. Very probably, the accent played a role in the process too.[17]

However, the rendering of the geminate (long/fortis) alveolar sibilant was not the sole function of the letter ϒ. In four cases (G-115, G-224c, G-339 and very probably G-145, cf. above, n. 7) it is attested at the beginning of the word, where the presence of the geminate *s* is unlikely. However scarce the available material is, it suggests that in these cases we may be dealing with a different sort of 'unusual *s*'. At the beginning of the words, ϒ is found either before *u* or before *i*. Under the assumption that the Phrygian *u* has a front close articulation, as υ in Greek, one may explain ϒ as rendering the palatal sibilant /ç/. This is reminiscent of the situation in Lydian and in northwest Phrygian alphabet. Thus, although the evidence is too slim to be sure, the ϒ had a complex function of rendering of 'unusual *s*', usually geminate in the

'Contacts linguistiques en Grèce ancienne: diachronie et synchronie', 7–9 April 2021). Most probably, Phrygian *se*-forms has simply future/prospective meaning, but some sort of semantic development or semantic specialisation of the suffix in Phrygian cannot be ruled out. Also the question of the semantic difference between the forms using primary endings (as *-ti*) and those using secondary endings (as *-t*) remains open.

[17] It is noteworthy that the phenomenon is in a way reminiscent of the Aeolic compensatory lengthening of the resonants (ρ, λ, μ, ν) resulting from the disappearance of old *s* > *h*, as contrasted with the lengthening of the preceding vowel in other Greek dialects, cf., *e.g.* Aeol. ἔμμι vs. Att.-Ion. εἰμί and Dor. ἠμί (< *$h_1$es-mi*) or Aeol. σελάννα vs. Att-Ion. σελήνη and Dor. σελᾶνᾱ (< **selas-nā*). Given that from the geographic point of view Aeolic dialects (esp. Lesbian) and Phrygian were contiguous, it may be considered as a local feature. Both can be connected with a special type of accent.

intervocalic position and palatal at the beginning of the words. Given this phonetic value, one may propose to transliterate the letter ϒ as *ś*.

The 'Lunate letter' ϲ

The lunate-shaped character was discovered for the first time in the Phrygian inscription from Kerkenes discovered in 2003–2005 (Brixhe and Summers 2006). The character is found twice in the sequence]*xpa*ϲ*uva*ϲ*x*[preserved on a fragment no. V possibly belonging to the upper 'beam' of the inscribed monument (see Brixhe and Summers 2006, 121, fig. 23 and 106, fig. 9 for a reconstruction of the frontal part). Brixhe (Brixhe and Summers 2006, 123) identified it as a sort of interpunction sign, which serves to emphasise the text standing between the characters, *i.e. uva*. He proposed to identify in *uva* a personal name, comparing it with *Uwa* attested in Hittite texts and Ὀα(ς) attested in the later epigraphic record from Anatolia. The second attestation of the same character appeared several years later in one of the graffiti discovered on the beams of the Tumulus MM dated to around 740 BC, which reads ϲ*urunis* (cf. Liebhardt and Brixhe 2009, 156, fig. 7). Brixhe made a connection between this sign and that found in Kerkenes and hypothesised that the sign was also here used in a function comparable with cuneiform LÚ in the Hittite texts.[18]

The interpretation proposed by Brixhe fails to convince. The idea of seeing in a character of the alphabetic writing a sign comparable in the function of cuneiform LÚ is simply fantastical. Why then it is not used in the three other graffiti from the Tumulus MM, and is never found in the longer Phrygian texts, where it would be especially appropriate? In the Kerkenes inscription, such an interpretation looks no more convincing. First and foremost, the usual Phrygian interpunction sign is found in the inscription on another fragment (no. III) of the same inscription (Brixhe and Summers 2006, 117, fig. 18), which shows that the idea of interpunction was known to the scribes of the Kerkenes inscription, even if applied not very consequentially. Second, although *uva* may in theory indeed correspond to Ὀα(ς) or Ουα, the appearance of such a short and inconspicuous name, attested in no other Old Phrygian inscription, looks rather odd. The interpretation of the character as some auxiliary sign should be dismissed. The character should render a *letter*. Its extremely rare attestation in the Phrygian corpus can be associated with the early dating. The graffiti from the Tumulus MM dated to around 740 BC belong

[18] The character was also allegedly identified in the newly discovered inscription from Sarhöyük (Dorylaion) published by Baştürk and Avram (2019). The attestation is, however, highly dubious. The photo of the inscription (234, fig. 2) does not show any clear traces of the sign, which is drawn, moreover, in an inverted position, which is more than odd. The identification is further contradicted by the context: the text can be read *iman umniṣ*[, with *iman* being either a personal name or, more probably, the name of the monument and *umniṣ*[is very probably the initial part of *umniset* attested in B-05, l. 7 and corresponding to ομνισιτ in W-11, l 8 (for possible meaning of the word see now Obrador-Cursach 2020b, 46–48).

to the earliest inscriptions written in Phrygian. The same can be said about the Kerkenes inscription. As I have argued previously (Oreshko 2021, 292–294 and 299–302) both the possibility to identify in *Masa Urgitos* mentioned in the Kerkenes inscription with *Masa-Urḫissas* of the HLuw. inscription Porsuk probably dated to the late eighth century BC and a number of unique graphic features of the Phrygian inscription strongly imply that it belongs to this time, and not to the sixth century BC, as thought earlier. One can assume, consequently, that ⲥ represents an early variant of another letter of the Phrygian alphabet.

Although the evidence is extremely scarce, both attestations of ⲥ strongly suggest that it is an early variant of Ⲩ. On the one hand, the sequence ⲥ*uva*ⲥ- finds a striking structural correspondence in the sequence Ⲩ*uva*Ⲩ- at the beginning of the name Ⲩ*uva*Ⲩ*aros*.[19] On the other hand, in the name ⲥ*urunis*, the letter appears at the beginning of the word before *u*-, which corresponds to three attestations of Ⲩ (Ⲩ*uva*Ⲩ*aros,* Ⲩ*uv* and Ⲩ*uriieno(i)*). Due to the fact that in both cases we are dealing with names, it is difficult to prove the reading beyond all doubt. However, in both cases the readings are not entirely senseless. As for the name **Śurunis*, it is not attested in the later epigraphical record. However, it is quite possible that it is in a way connected with the word *śuriieno(i)* (G-145), which, as noted above (n. 7), is possibly based on a toponym/ethnonym *Sura*. *Śurunis* may be an alternative suffixal derivative based on the same root.[20]

The reading *Śuvaś-* in the Kerkenes inscription presents an even more intriguing connection. The peculiar details that Stephen of Byzantium provides about the 'village' Συασσός (see above) prove to be quite relevant for the situation at Kerkenes. Stephen reports that 'they say that in this very village the Cimmerians have found large quantities of wheat, stored in the corn-pits, on which they fed for a long time' (ἐν ταύτῃ τῇ κώμῃ φασὶ Κιμμερίους εὑρεῖν ἐν σιροῖς τεθησαυρισμένας μυριάδας πυρῶν, ἀφ᾽ ὧν αὐτοὺς ἐπὶ πολὺν χρόνον διατρηφῆναι). It is obvious that this description suggests quite a specific type of 'village' quite different from an ordinary unprotected agricultural settlement. The commanding and well-protected position of Kerkenes at a high altitude in the centre of a fertile corn-producing region excellently fits with this description. No less relevant is the connection with the Cimmerians. As noted above, the palaeography of the Phrygian inscription from Kerkenes suggests a dating for the palatial complex – and probably the city itself – to the second half of the eighth century BC. Given the short life span of the city, its possible destruction date can be situated around or slightly after 700 BC. The connection of the destruction with the Cimmerian invasion of Anatolia would be one of the most straightforward possibilities. There are thus good chances that *Śuwaś-* at the beginning of the Phrygian inscription

[19] One may note that a structurally comparable sequence is found also in another name, *Ṭuvatis* attested in G-133. However, identification of ⲥ as a variant of *t* is clearly out of the question.

[20] Structurally, one may compare *Kukkunniš*, a name of an early king of *Wiluša* (Troy) attested in KUB 21.5 I 18.

is a part of the name of the city. Needless to say, more epigraphical evidence is needed to confirm this interpretation.

It is noteworthy that the existence of two different chronological varieties of the same letter, strongly suggests that the 'invention' of the letter was a local Phrygian development, and not an import from abroad. The source of the early variant of *ś* might have been simply the drastic 'truncation' of the form of *s*. However, this shape was probably too inconspicuous and in a way disagreed with the general Phrygian preference for the high and slim letters, and was at some point replaced by a new letter that matched it better. Given that Ψ is found already in the graffito G-145, which hardly dates later than c. 700 BC, the process of replacement had already taken place in the eighth century BC.

Letter no. 23

As already mentioned above, letter no. 23 is found extremely rarely in the Phrygian corpus. The letter represents a sort of T with two additional vertical strokes, which are suspended from the horizontal hasta; a similar letter in which the horizontal hasta is set somewhat lower, so that it has the shape of a 'trident' (Fig. 8.3), is probably a graphic variant of no. 23, although it is impossible to prove. The letter is found in only four graffiti on pottery sherds: G-112 in a sequence *e*Ŧ*tạ*[; P-106 in a sequence :*makiota*Ŧ*bi:*[21]; in NW-120 in a sequence]Ŧ*is* and in G-275 is an isolated two-letter combination *Ti*. The isolated character found on yet another pottery sherd (NW-128) has a different shape (a 'trident') and its connection with either no. 23 or no. 20 is impossible to demonstrate (see above on Ⱳ). Similarly, the reading of the graffito NW-135 is too uncertain to suggest anything about the identity of the fifth letter (Brixhe and Sıvas 2009, 135–136). Although obviously too scarce to suggest anything certain about the phonetic value of the letter, the available evidence is still not quite useless.

Fig. 8.3. Graffito G-112, Penn Museum Gordion Archive: image GR-675-6 [edit].

Given the scarcity of the attestations, there are good reasons to see in the letter a rare variant of a different, more usual letter, be it a purely graphic variant or

[21] Contra Brixhe and Lejeune 1984, 250 (adopted in Obrador-Cursach 2020a, 504–504), it is highly unlikely that the vertical hasta before 8-shaped letter represents an *i* (and the reading is thus: *makiota*Ŧ*ibi:*). In all appearances, we are dealing with a somewhat idiosyncratic mode of writing of *b*.

an attempt to render a specific phonetic phenomenon. The attestation of the letter immediately before *t* in G-112 excludes with high probability the identification of the letter as a graphic variant of no. 19, which likely represents an affricate /dz/ or /ts/ (see in detail below), since the phonetic sequence /t^{s}t/ is strange (if not entirely impossible). On the other hand, the identification of the letter as yet another graphic variant of ϒ would be thinkable. Indeed, in the position before *t*, the alveolar sibilant *s* frequently assumes a post-alveolar articulation (/ʃ/), as is the case, for instance in German (cf. English *stone* vs. German *Stein*) or some Italian dialects (for further examples see Kümmel 2007, 236). Read as *eštą*[(G-112), the sequence may be interpreted as a part of the verbal form *estaes* 'put' (3rd. aor. sg.) or the like found in later inscriptions (cf. Obrador-Cursach 2020a, 232). It is noteworthy that the northwest Phrygian *ś* is possibly found in the form *eśtat* in B-05: 4 (see above), although this reading should be verified on stone. This explanation well agrees with the evidence of P-106 in which the letter is found again before a consonant. The position before a labial consonant is also conductive to the development *s* > ʃ (cf. English *swine* against German *Schwein* or *spare* against *sparen*). Thus, it is quite possible that the letter is connected with ϒ. It remains, however, not quite clear whether it is merely its purely graphic variant (for instance, a local variation), or an attempt to render /ʃ/ as contrasted both with /s/ and with /ss/.

The 'Arrow letter' (no. 19)

In contrast to no. 20, the clues for the phonetic reading of the arrow-shaped letter are more straightforward, and its identification as a sort of affricate (/ts/ or the like) was suggested long ago (Brixhe 1982, 229–238). However, in part etymological speculations on the prehistory of the sound rendered by this letter and in part its confusion with no. 20 and the northwest Phrygian *ś* (see above) have muddled the picture. The recent discussion by Obrador-Cursach (2020a, 33–37), which even more heavily relies on the etymological method, have even further confused the situation, the result being that the letter is rendered throughout the book by a special arrow sign (↑) – although the words beginning with this letter are given in the dictionary section intermixed with those beginning with ζ. As the problem has been already in part disentangled by the above discussion of no. 20, one can here only briefly revisit the key pieces of evidence concerning the reading of no. 19.

The clearest piece of evidence is supplied by the graffito *A↑ses* (HP-109) found on a bronze bowl from Tumulus D in Bayındır (Varinlioğlu 1992, fig.1, no. 7; cf. Brixhe 2004, 114). The word clearly represents a variant of the personal name *Ates* found on the other bowls from the same tumulus. The odd spelling apparently represents an attempt to render the real pronunciation of the name as /At^{s}es/ resulting from the assibilation of the *t* before *e*. In all probability, the scribe was not quite sure about the real phonetic value of the letter ↑ and thought it better to add *s* for clarity, which resulted in the redundant spelling *↑s*. The spelling *A↑ios* and *A↑ion* found in

T-02 represent probably more correct spellings of a derivative of the same name.[22] This evidence clearly implies that the value of ↑ (or at least one of the values) in the early Phrygian inscriptions was the affricate /tˢ/.

The interpretation of the letter as an affricate is supported by a further piece of onomastic evidence. The Phrygian name *Si↑idos* (G-105, G-346, HP-110) or **Si↑etos* (W-08, W-09 and patronymic *Si↑etodas* in W-10) is very probably connected with the name **Sidis* attested in the Pamphylian bilingual S6 as *śdiṯś* (gen.) and Σιδιδος (gen.).[23] The Phrygian *Si↑idos* represents either a direct counterpart of gen. Σιδιδος or, if a nominative, is a quasi-patronymic derivative of **Sidis* with the suffix *-t-/-d-*.[24] The appearance of ↑*i* where Pamphylian and Greek still have *-di-* implies that ↑ renders the voiced affricate /dᶻ/.

This interoperation is further confirmed by later evidence. A number of words attested in the NPhr. inscriptions, which are written in the Greek alphabet, feature the letter ζ, cf. ζεμελως, ζειρα or PN Ζωτικῶ. The exact reading of the Greek ζ in different periods (and different words) is a problem in itself (Allen 1987, 56–59), but in the late period (second to third centuries AD) the common reading of the letter was probably either /dz/ or /z/ (and not /zd/ as earlier). Whatever the case, there is every reason to think that ζ has the same function in the NPhr. inscriptions as ↑ had in the Old Phrygian alphabet, while the letter Ψ rendering sibilants is quite irrelevant here. One has to emphasise that the question of the *origin* of the Phrygian sound rendered by ↑/ζ has as little relevance for its synchronic phonetic realisation, as the etymology of the Greek ζ (which can go back to PIE **i̯, *di̯, *gi̯, *zd* < **sd*) has for its synchronic phonetic realisation.

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[22] A non-assibilated form of the same name is probably found in the first line of the Germanos inscription (B-01). Although the end of the first line is somewhat weathered, one can still quite clearly discern after *adi-* an *o*, after which there may be an *s* (cf. photos in Brixhe and Lejeune 1984, pl. XXXVIII, 3 and 4, and the drawings on p. 63). Both the position of the word *Adiọṣ* immediately after the object of dedication (*si bevdos*), as the absence of any other clearly identifiable names in the second line, suggests that *Adios* is the name of the dedicator. The name is probably related to *Ates*/Ἄττις, as there are further examples for the alternation of the Phrygian dentals (Oreshko 2020, 88, n. 18 and 108).

[23] Contra Nikolaev (2017, 223), it is hardly possible to see in the Carian name *šδτatś* (E. Me. 13) a counterpart of the Pamphylian and Phrygian names, as its phonetic reading is probably */šəndə-tˢatəs/*. Most probably, it is a composite theophoric name based on the name of the War-and-Pestilence god *Šandas*. It would be seducing to see in the second part the Carian counterpart of the Luwian *zida/i-* 'man', but the *a*-vocalism is odd.

[24] As argued in Oreshko (2020, 88, n. 18), the form *Si↑idos* is a nom. sg. rather than gen. sg. The Pamphylian evidence would, however, better agree with an assumption that *Si↑idos* is gen. = Σιδιδος. Such a re-interpretation would be possible if one takes the form *Si↑idos* on the wooden beam in Tumulus MM in Gordion (G-346) not as an isolated name, but as a patronymic of *Muksos* found immediately above it. In G-105 (*Si↑idos akor*) and in HP-110 (*Si↑idos*) interpretation of the form as gen. sg. is equally possible. This reinterpretation does not significantly affect the interpretation of *Alus* in W-08-10: the form *Sizeto* can be interpreted as an asigmatic genitive (< **Si↑etos*) and *Si↑etodas* would be, now as before, as patronymic based on the stem-form **Si↑et-* (poss. < **Si↑etadas*).

Last but not least, the interpretation of the 'arrow letter' as an affricate agrees well with the presence of letters of (nearly) identical shape and comparable phonetic values in three other Anatolian alphabets: Lydian, Carian and Sidetic. In Lydian, the letter very probably renders an alveolar affricate /tˢ/, as etymologically the sound appears to go back to the palatalised *t/d* (cf. Gérard 2005, 59–60). In Carian, the corresponding letter also stood for a sort of affricate, either /tʃ/ or /ts/, which appears more probable in the local perspective (Adiego 2007, 251; 2019, 25; Oreshko 2013 [2015], 81–82). As for the Sidetic alphabet, the appearance of the arrow-shaped letter in *śdit̲ś* = Σιδιδος (S6) and in *ubat̲-* (poss. < **ubati-*) suggests a sound comparable with that rendered by the Lydian ↑.[25] In sum, the available evidence rather strongly suggests that ↑ rendered an affricate in the Old Phrygian alphabet, very probably both t^s and d^z. It is not impossible that in late Phrygian the sound was simplified to voiced sibilant /z/, as was the case in Greek, but this is irrelevant for the Old Phrygian alphabet. The transliteration of the letter as *z* would thus be a fair option.

The unravelling of the phonetic values of letters nos. 19 and 20 has some interesting implications for two Greek alphabets of Anatolia, which one may briefly explore here. First, the Pamphylian Greek alphabet had a special trident-shaped letter (Ψ), which is found in the words usually spelled with the geminate σ elsewhere in Greek or in the later inscriptions from Pamphylia. For instance, it is found in the word for 'queen, lady', (F)ἄνασσα, attested in the coin legend ИANAΨAΣ ΠΕΡΕΙΙΑΣ, which would correspond to Fάνασσας Περγαίας 'of the Lady of Perge'. In the discussion of different hypothesis about the origin of the letter, Brixhe (1976, 7–9) expressed doubts about the possible connections of the letter with the Cypriot syllabic sign *se*, with Ionian *sampi* and a Carian letter of the same shape suggested earlier, and instead gave preference to the derivation of the letter from the Phoenician *ṣade*. The connection of the letter with the Cypriot sign and the Carian letter (now transliterated as *y*)[26] is indeed quite out of the question. However, a connection with the Ionian *sampi*, which has a similar shape, appears to have exactly the same phonetic value and found in the same general region is entirely thinkable (see below). As for the derivation directly from the Phoenician *ṣade*, it is not impossible per se, but is not especially convincing either. Graphically, such a derivation is possible, but the problem is that in the Greek alphabets of the Aegean, the Phoenician letter produced quite a different shape, ϻ (*san*). It would be rather strange if the Pamphylian Greeks had re-borrowed the Phoenician letter

[25] Cf. Pérez Orozco 2007, 128 and 134. In view of the very probable correspondence of the name to Phrygian *Si↑idos*, one wonders if *śdit̲ś* is not a result of metathesis (or simply an error) for **śt̲idś.* The proposal by Nikolaev (2017) to interpret *t̲ue[* (S4) as 'all' and interpret the phonetic value of the first letter as /ʃ/ does not seem convincing to me. Now as before, the *t̲ue[* is most probably a verb corresponding to Luw. *Tuva-* with assibilation *t* > t^s before *u*, which probably conceals a front close /y/.

[26] The letter is found in the alphabets of Mylasa, Sinuri and Kildara (Adiego 2007, 209–210 and 212–213).

in a shape closer to its Phoenician original, disregarding the possibility of adopting Greek *san* as the second sign for a sibilant.

On the other hand, the shapes of Ψ and the Phrygian ϒ are close indeed, and their core phonetic values correspond, as far as one can see, quite exactly. Given this similarity, one may suggest that the Pamphylian letter has an Anatolian origin. As chronologically the central Phrygian ϒ is very probably much earlier (possibly eighth century BC, see above) than the Pamphylian letter, the direction of borrowing should have been from Phrygia to Pamphylia. In fact, the Phrygians were present very early as far south as *Milyas* (the tumuli of Bayındır), and this circumstance makes it probable that the letter come to Pamphylia via Termessos. The slight difference of the shapes of the Pamphylian letter and the standard central Phrygian crow-foot variety of ϒ can be naturally explained by the wish to differentiate the new letter for the sharp sibilant from the letter for /ps/, which was also present in Pamphylian alphabet.

The second implication concerns the Ionian *sampi*. The letter is usually shaped as a T with additional short strokes suspended from the horizontal hasta, but sometimes also having the shape of an arrow. It is found in the inscriptions of Ephesos, Erythrai, Teos, Halikarnassos, Kyzokos and Pontic Messambria, and thus is essentially confined to the Ionian alphabet, being exported to Messambria possibly via Kalchedon (see Jeffery 1990, 38–39; Willi 2008, 419–422; Hawkins 2013, 7–27). The letter appears in the words that are spelled in Ionian literary texts with the geminate σσ and with geminate ττ in Attic, which etymologically go back to the clusters **t̯i̯*, **k̯i̯* and **t̯u̯*. This picture suggested the idea that the letter renders a sound ancestral to σσ and ττ, a sort of affricate /ts/ or /tʃ/ (cf. Allen 1987, 60–61 or Hawkins 2013, 17). Given that the use of the letter was essentially confined to Ionia, one frequently saw its source in Anatolia, or more specifically in Caria. In the recent discussion of the possible Anatolian sources of the letter, Hawkins (2013, 18–24) tried to specify its origin, analysing all available graphic comparanda from the Anatolian alphabets, but remained inconclusive about its exact source.

The separation of the two Phrygian letters changes the perspective and brings in clarity. On the one hand, one can postulate in the Phrygian alphabet a letter that graphically very closely – or even exactly, if one interprets no. 23 as a graphic variant of no. 20 – corresponds to the Ionian *sampi* and has exactly the same phonetic value. On the other hand, it becomes clear that the Carian and Lydian arrow-shaped letters are connected not with this letter, but with the Phrygian arrow-shaped letter. Neither Lydian nor Carian alphabet has a letter closely matching both graphically and phonetically the Ionian *sampi*. This implies that the source of the Ionian letter, like that of the Pamphylian Ψ, can only be the Phrygian letter no. 20. Moreover, as the letters for affricates become now irrelevant, there is no necessity to assume that the phonetic value of *sampi* was something other than the sharp *ss*, like in Phrygian. The putative affricate transitional between **t̯i̯*, **k̯i̯* and **t̯u̯* and *ss* should be sought on a much earlier stage of the linguistic development of Greek.

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