

## On the place of Phrygian among the Indo-European languages

The aim of this paper is to gather together certain relevant features of Phrygian based on our current knowledge of the language in order to determine its dialectal position inside the Indo-European family. The relatively large number of features shared with Greek is consistent with prior views about the close relation between the two languages, which may have formed a common proto-language. The relations proposed with certain other languages, such as Armenian, are not so strong despite sharing some features.

*Keywords:* Phrygian language; Indo-European dialectology; linguistic subgrouping; isoglosses; Proto-Greek language.

### 1. Introduction<sup>1</sup>

Over the last three decades our knowledge of the Phrygian language has increased immensely, especially in regard to historical linguistics. In the light of this new information, it is worth reconsidering previous theories about its genetical position within the Indo-European family. Because of the fragmentary nature of the vestiges of the language<sup>2</sup> the data available are very limited, and it must be added that many inscriptions (interestingly, some of the largest)<sup>3</sup> remain mainly undeciphered. Therefore, any conclusions presented in this paper must be considered provisional and, of course, subject to new findings and interpretations.

From a methodological point of view, direct sources (inscriptions) are the base of this work,<sup>4</sup> although indirect sources (glosses and toponyms) are occasionally considered. I exclude isoglosses that are extended throughout the Indo-European family, because here I will focus on the most restrictive isoglosses, highlighting the shared innovations. Needless to say, I operate with the clearest forms. As is the case with fragmentary languages, most of the current interpretations of the texts are mere possibilities that need to be confirmed by future findings.

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<sup>1</sup> This is an extended version of a chapter devoted to the position of the Phrygian language within the Indo-European by Obrador-Cursach (2020: 121–127). A first draft of this paper was presented to the 6<sup>th</sup> “‘Luwic’ Dialects: Inheritance and diffusion” Workshop, held in Barcelona (March 28, 2019). I must thank the workshop participants for their useful comments. I am also grateful to Hrach K. Martirosyan for his remarks mainly on Armenian. Needless to say, any errors are my own responsibility.

<sup>2</sup> Direct sources for Phrygian are inscriptions found in central Anatolia. These inscriptions are gathered in two main corpora. Old Phrygian (OPhr., also known as Paleo-Phrygian) is the label for the inscriptions dated to between 800 and 330 BC and written in an epichoric alphabet closely related to the Greek one. The inscriptions here are quoted according to *CIPPh* and its supplements, i.e., an initial letter derived from the name of the area where the inscription was found with a number, and transcribed in Latin characters. The corpus called New Phrygian (NPhr., also Neo-Phrygian) comprises 118 inscriptions dated to the Imperial Roman period, which are written in the Greek alphabet and mainly contain cursing formulas against desecrators. They are quoted with the enumeration given by Obrador-Cursach 2020 followed by the traditional *numerus currens*. From Hellenistic times there is an important inscription, W-11 (also written in the Greek script), which scholars often consider a third stage of the language, called Middle Phrygian (MPhr.).

<sup>3</sup> Old Phrygian B-01, B-04 and B-08, Middle Phrygian W-11 New Phrygian 11.2 (18), 16.1 (116) and 43.1 (69).

<sup>4</sup> The treatment of each form is detailed in Obrador-Cursach 2020.

Consequently, arbitrary speculations are left aside. In addition, I should stress that I operate with the devoicing and deaspiration defended by Lubotsky (2004), known as Phrygian “Lautverschiebung”.<sup>5</sup> Although some scholars have tried to nuance it by considering contextual shifts (e.g., Woodhouse 2006 and de Lamberterie 2013), it has the advantage of being the simplest explanation and, even more significantly, many Phrygian words have been identified and explained since the publication of Lubotsky’s analysis. Finally, despite the difference with regard to the amount of data available, Martirosyan’s paper on the place of Armenian (2013) was an excellent model for my purposes.

## 2. Compilation of isoglosses

### 2.1. Phonological isoglosses

**2.1.1.** In the attested positions, Phrygian shows the same reflexes as the old PIE laryngeals found in Greek, including the so-called “prothetic vowel”: OPhr. *ev-* ‘well’ < PIE *\*h<sub>1</sub>su-* (cf. Gk. εὖ-); NPhr. *αναρ* ‘husband’ < PIE *\*h<sub>2</sub>nēr* (cf. ἀνήρ); OPhr. *onoman* ‘name’ < PIE *\*h<sub>3</sub>nh<sub>3</sub>-mn* (Ligorio and Lubotsky 2018: 1823). This feature is also shared with Armenian (Martirosyan 2010: 714–716, also 2013: 89).

**2.1.2.** Phrygian γλουρεος ‘golden’ (MPhr-01 = W-11) shows that the Greek *\*CRh<sub>2</sub>C* > *\*CRōC* (cf. χλωρός ‘id.’) affected Phrygian as well.

**2.1.3.** Phrygian, as well as Greek, Armenian and Albanian (in some positions, see Demiraj 1997: 56), has lost the sibilant /s/ at the beginning of the word and in intervocalic position: OPhr. *egeseti*, NPhr. *εγεσιτ, εγεδου* ‘hold, experience’ < PIE *\*seǵh-*; NPhr. *δεως* ‘god’ < PIE *\*d<sup>h</sup>h<sub>1</sub>so-*. Note, however, that this feature is also shared, e.g., with Lycian (Melchert 1994: 288), Brythonic Celtic and Old Persian (Clackson 1994: 53–54), so this phenomenon is too common to be significant for our purposes.<sup>6</sup>

**2.1.4.** Phrygian belongs to the *centum* group of IE languages (Ligorio and Lubotsky 2018: 1824). Together with Greek, Celtic, Italic, Germanic, Hittite and Tocharian, Phrygian merged the old palatovelars with plain velars in a first step: NPhr. (τιτ-)τετικμενος ‘condemned’ < PIE *\*deik-*; NPhr. *γεγαριτμενος* ‘devoted, at the mercy of’ < PIE *\*ǵ<sup>hr</sup>Hit-*; NPhr. *γλουρεος* ‘golden’ < PIE *\*ǵ<sup>h</sup>h<sub>3</sub>-ro-*. However, two shifts affected this language. Phrygian merged the old labiovelar with the plain velar (the etymological and the resulting ones): OPhr. *ke(y)*, NPhr. *κε* (passim) ‘and’ < PIE *\*k<sup>u</sup>e*; OPhr. *knais* (B-07), NPhr. *κναικαν* ‘wife’ (16.1 = 116) < *\*g<sup>u</sup>neh<sub>2</sub>i-*. Secondly, in contact with palatal vowels (/e/ and /i/, see de Lamberterie 2013: 25–26), and especially in initial position, some consonants became palatalised: PIE *\*ǵ<sup>h</sup>es-r-* ‘hand’ > OPhr. *↑iray* (B-05),<sup>7</sup> NPhr. *ζειρα* (40.1 = 12) ‘id.’ (Hämmig 2013: 150–151). It also occurs in glosses: *\*ǵ<sup>h</sup>eu-m<sub>h</sub>* > *ζευμαν* ‘fount, source’ (Hesychius ζ 128). These two secondary processes, as happened in Tocharian and the Romance languages, lend Phrygian the guise of a *satəm* language.

<sup>5</sup> I avoid this term because Phrygian does not show a complete consonantal shift; PIE voiceless stops appears as such in Phrygian. On the history of the Phrygian studies I strongly recommend Morante Mediavilla’s PhD dissertation (2007).

<sup>6</sup> Gusmani (1959: 13–14) considered that Phrygian and Lycian were in contact when this sound disappeared. However, this loss takes place in many unrelated languages.

<sup>7</sup> On the possible representation of “a voiced affricate or /z/” by the OPhr. arrow-letter, see Ligorio and Lubotsky 2018: 1820.

**2.1.5.** The ancient *\*k<sub>i</sub>-* became *s-* in Phrygian, as shown by the demonstrative pronoun (Ligorio and Lubotsky 2018: 1824, 1826): *sin* (B-05, masc. acc. sing.), *si* (B-01, M-01b, neuter nom.-acc. sg.), *σεμουv* (masc. and neuter dat. sg.), *σαι* (feminine sg. dat. 43.1 = 69), etc. The same treatment is found in Greek: *σά* < *\*k<sub>i</sub>-h<sub>2</sub>* (Megarian, Ar.Ach. 757, 784, pl. nom.-acc. neut.).

**2.1.6.** The PIE suffix *\*-ih<sub>2</sub>* yields *-iya* in OPhr. *niptiya* (B-05), a development also found in some conditions in Greek (Myc. *-iya*; alphabetic Greek *-ια*), also in Tocharian (PIE *\*<sub>h</sub>1-ǵneh<sub>3</sub>-tih<sub>2</sub>* ‘ignorant’ > *\*<sub>h</sub>1-ǵnō-tyH<sub>2</sub>* > PTo. *\*āknātsā* > ToB *aknātsa*). In other languages, such as Armenian, Albanian (Demiraj 1997: 61) and Indo-Iranian it appears as *-ī*: compare *πότνια* ‘mistress’ (Myc. *po-ti-ni-ja*) < *\*potnih<sub>2</sub>* with Ved. *pātnī* ‘mistress, goddess’, Y.Av. *paθnī-* and Old Lith. *vieš-patni* ‘housewife’.

**2.1.7.** The shift *\*-m* > *-n* occurs in Phrygian (*\*dh<sub>1</sub>-tō-m* > *δετο(υ)v*); it is shared with Greek and Armenian (Kim 2018, 256) but it also occurs in Anatolian (“parallel but independent in Luvian, Palaic and Hittite”, Melchert 1994, 181), Insular Celtic, Germanic, Balto-Slavic and Tocharian. Like the loss of sibilant /s/, the frequency of this shift makes it few relevant.

**2.1.8.** At some point in Phrygian pre-history, the inherited voiced stops became devoiced: NPhr. *Τιαν* (acc. sg.), *Τιος* (gen. sg.), *Τι(ε)* (dat.sg.) ‘Zeus’ < PIE *\*diēm*, *\*diūos*, *\*diuei*; OPhr. *torv-* (B-05) ‘wood’ < PIE *\*doru-*/*\*dru-* (see Ligorio and Lubotsky 2018: 1823). Phrygian devoicing is the strongest difference with regard to Greek; according to Kortlandt (2016: 249–250) it happened together with Thracian and Armenian.<sup>8</sup>

## 2.2. Morphological isoglosses

**2.2.1.** The prohibitive particle *\*meh<sub>1</sub>* is found in Phrygian as *me/με* (Obrador-Cursach 2020: 296–297, with references), as well as in Armenian *mi*, Skt. *mā*, Avestan *mā*, Greek *μή*, Albanian *mo* and Tocharian A and B *mā* (also used for simple negation ‘no’ in To.).

**2.2.2.** Phrygian particle *ni(y)/vι* is also found in Pamph. *καί vι* + imperv. (Pamph. 3, see Brixhe 1976: 131–132), although its use is different in the two languages.

**2.2.3.** The use of the Phrygian conditional conjunction *ai*, *ay/αι* (PIE *\*éh<sub>2</sub>i*, *\*áHi* according to *LIPP* II 348) is shared with Dorian and Aeolian Greek (*αι* instead of the most common *ει*, in Homer also *αιθε* for *ειθε*) and Messapian *ai*.

**2.2.4.** In the light of *υποδαν* ‘above, on the top’ (Lubotsky 1993), Phrygian also has a local particle *\*-d<sup>h</sup><sub>1</sub>ǵ* attested in some Greek dialects as *-θα* (e.g. Aeol. *πρόσ-θα* ‘before’).

**2.2.5.** The demonstrative particle *e-* (considered the same of the verbal augment in *LIPP* II, 179) occurs attached to demonstratives: *e-sai*† (W-01b) and, possibly, *ε-σ<sup>2</sup>αν* (40.3 = 31; suggested by Neumann 1986a). This particle can be equated to the one found in Greek *εκεῖνος* and *εχθές* (as in Tzitzilis 2013).

**2.2.6.** The compound pron. *\*h<sub>2</sub>eu-to-* is only found in Greek *αὐτός* and Phr. *αυτος*. Albanian has an adverb derived from the zero-grade of this formation: *\*h<sub>2</sub>u-tō-* > *hut* ‘in vain’ (compare with Greek *αὐτῶς* ‘in this very manner, even so, in vain’, Demiraj 1997: 59). A similar formation is Alb. *aj* ‘this, he’ < *\*h<sub>2</sub>eu-so-* (Demiraj 1997: 70 and Matzinger 2005: 384 num. 9).

<sup>8</sup> After the devoicing and before the first Phrygian texts, a deaspiration affected Phrygian inherited aspirated stops: NPhr. *δεως* ‘god’ < PIE *\*d<sup>h</sup><sub>1</sub>so-*; NPhr. *γεγορεμεναν* ‘written’ < PIE *\*ǵ<sup>h</sup>reiH-*; NPhr. *βρατερε* ‘brother’ < PIE *\*b<sup>h</sup>reh<sub>2</sub>ter-* (Ligorio and Lubotsky 2018: 1823).

**2.2.7.** The IE noun *\*d<sup>h</sup>eh<sub>1</sub>s-/\*d<sup>h</sup>h<sub>1</sub>s-* is found elsewhere in the Indo-European languages (see NIL 102), but only in Greek, Phrygian and Armenian does it take the new meaning ‘god’. Note, however, that, unlike Armenian *dik* ‘god’ (*plurale tantum*), Phrygian *devos* (B-07; NPhr. dat. pl  $\delta\epsilon\omega\varsigma$ ) and Greek  $\theta\epsilon\acute{o}\varsigma$  (Mycenaean *te-o*) go back to the thematised form *\*d<sup>h</sup>h<sub>1</sub>s-ó-*.<sup>9</sup>

**2.2.8.** The singular nominative of the ancient masculine nouns and adjectives in *\*-eh<sub>2</sub>* takes an *-s* in Phrygian, as shown in the ethnics *Tias*, Πουντας and *\*Gordiyas* (see Obrador-Cursach 2019). The same innovation is found in Greek: compare νεανίας, μαθητής with Latin *agricola*. This also happened to the adjective for ‘big’. To the nominative singular of the PIE *\*még<sup>h</sup>h<sub>2</sub>* ‘big’, Greek and Phrygian added the ending *-s*: compare OPhr. *mekas* (M-05, G-111, P-03, etc.; Obrador-Cursach 2016) and Greek μέγας with Sanskrit *máhi* and Armenian *mec*. A common reformulation of the *a*-stems in Phrygian and Greek was considered by Brixhe (2006: 42–43).

**2.2.9.** Phrygian seems to share with Greek the existence of a suffix *\*-e<sub>u</sub>-/-ē<sub>u</sub>-*: Gr. -εύς/-έως (Epic -ῆος), Phr. *-avos* (thematised). As happens in Greek, the Phrygian forms with this suffix are titles whose origin is not always clear: *akenan-ogavos* (‘the holder of the *akenan*’ (M-01a, W-01a); *akinanogavanē* (M-04, sg.acc.fem.?); cf. Greek ὀχεύς, -έως, Epic -ῆος) and *proitavos* (M-01b, M-02).

**2.2.10.** In the inflection of *knais*, *knays* ‘woman’ (B-07, HP-114), forms other than the sg.nom. takes the suffix *-ik-*, just as in Greek and (slightly differently) in Armenian.<sup>10</sup> Compare sg.acc. κναικαν (16.1 = 116) with Gr. γυναικα and sg.gen. κναικος with Gr. γυναικός.

**2.2.11.** The e-grade in the root of the adjective *\*g<sup>u</sup>her-mo-* seems to be found in some toponyms: Γέρμα (KON § 204–2 from Galatia), Γέρμη (KON § 204–2 from Mysia), *Germe* (KON § 204–3 from Mysia). Traditionally, they have been linked to the Phrygian language<sup>11</sup> and, indeed, this is the best option to explain them. The e-grade of this ancient adjective (secondary substantive) is shared with Greek θερμός ‘warm’ (also θερμη ‘heat and, in plural, ‘hot springs’), Albanian *zjarm*, *zjarr* ‘heat’ and Armenian *ǰerm* ‘warm(th)’, an appellative also found in place names (e.g. *Jerm*, gen. *-ay*, see Martirosyan 2010: 681–682). Other languages show an o-grade in the root: *\*g<sup>u</sup>or-mo-*. See, e.g., Latin *formus* ‘warm’ and Sanskrit *gharmá-* ‘heat’.

**2.2.12.** The Phrygian word for ‘name’, *onoman* (W-01b), derives from a form *\*h<sub>3</sub>nh<sub>3</sub>-mn*, as well as Greek ὄνομα and Armenian *anun* ‘id.’ (Martirosyan 2013: 96–97). This proto-form differs from the other languages, which “have generalised one of the two ablaut grades” (EDG 1085).

**2.2.13.** Three words show that some *i*-stem anthroponyms and theonyms added a *t*-enlargement to their genitive forms (Brixhe 2006: 40): *artimitos* (B-05, the Greek goddess Ἄρτεμις, genitive Ἀρτέμιδος Ἀρτέμιτος Alcμ.54, Ἀρτάμιτος CID 1.10.8, 12), *manitos* (B-07, genitive of *manes*), *urgitos* (K-01, perhaps borrowed from Hurrian *Urhi-*, as in *Urhi-Tešub*, heteronym of Muršili III). This feature also occurs in some Greek words (see, e.g., Greek ὄρνις, -ῖθος ‘bird’).

**2.2.14.** Phrygian shares the *e*-augment with Greek, Armenian and Indo-Iranian: compare 3sg.aor. PIE *\*(h<sub>1</sub>)é-d<sup>h</sup>eh<sub>1</sub>-t* ‘(s)he put’, OPhr. *e-da-es*, Greek ἔ-θη-κα, Armenian *e-d* and Skt. *á-dhā-t*. This is considered a very significant morphological isogloss by Martirosyan (2013: 90).

**2.2.15.** Phrygian perfect middle participles are built through the PIE suffix *\*-mh<sub>1</sub>no-* (NPhr. γεγαριτμενος ‘cursed, devoted’, γεγριμενον ‘written’, τιττετικμενος ‘accursed’, etc.), as well

<sup>9</sup> A parallel formation, *\*d<sup>h</sup>h<sub>1</sub>s-ó-*, is found in some Anatolian languages: Hieroglyphic Luwian *tasa-* ‘stele’, Lycian *θθε-* ‘sanctuary’ and Lydian *tasēv* ‘statue (?)’ (see Payne and Sasseville 2016: 76).

<sup>10</sup> On the PIE root of this noun and derivatives, see the recent work by Opfermann (2017).

<sup>11</sup> See, e.g., Matzinger 2005: 384, num. 8 and, more cautiously, de Lamberterie 2013: 20.

as Greek (-μενος-, see de Lamberterie 2013: 43–44). The exact form is also found in ToA *-mān*, ToB *-mane* and Prakrit *-mina-* (slightly different Skt. *-a-māna-*, Av. *-a-mna-*) and frozen in some Lat. words such as *alumnus* (\**h<sub>2</sub>al-o-mh<sub>1</sub>no-*) or *fēmina* (< \**d<sup>h</sup>eh<sub>1</sub>-mh<sub>1</sub>neh<sub>2</sub>-*).

**2.2.16.** Phrygian has a 3sg. middle ending *-tor*: αββερετορ 14.1 = 73, 52.1 = 75, 59.3 = 79 and αδδακετορ 20.1 = 63, 24.1 = 40. According to Kortlandt (2016: 252), the forms with *-tor* (considered imperfect by him) “must be compared with the Armenian imperfect *berēr* < \**-etor*, *beriw* < \**-etro*” (but see below § 3.2.) and are shared with Latin *-tur* and Old Irish *-thar*. This ending was lost in Greek after the generalisation of the ending *-τοι*, also found in Phrygian: OPhr. *edatoy* (B-05), *tedatoy* (W-01a), *odeketoy* (B-07), NPhr. αββερετοι (10.2 = 113, 17.5 = 91, 19.2 = 129).<sup>12</sup> The presence of both *-tor* and *-toi* in Phrygian has been used to show the language’s associations with Armenian (Kortlandt 2016: 252) and with Greek (Ligorio and Lubotsky 2013: 1816–1817) respectively. However, the presence of *-tor* in Phrygian is inherited from the proto-language and, as a residual feature, it is of little value for elucidating any dialectal position. Similarly, the sole presence of *-toi* does not show a special relation between two branches or languages, since it is “a simple case of analogical extension” also attested in Indo-Iranian and Germanic (Jasanoff 2003: 46).

**2.2.17.** In the Phr. corpus two denominative verbs are found: *kakoioi* (G-02c, also *kakuioi* P-04b; see Lejeune 1969: 299) and *kuryaneyon* (W-01c). The first is a verb in *-o-yo-* derived from an *o*-stem noun, *kako-*, while the second is in *-e-yo-*, derived from another *o*-stem noun, although only attested in Greek κοίρανος, *-ov*. In both cases one cannot rule out an early Greek borrowing dated to Myc. times. However, there is no phonetic reason for ruling them out as Phrygian cognates of the Greek forms.

### 2.3. Lexical isoglosses

**2.3.1.** A derived noun \**b<sup>h</sup>oh<sub>2</sub>-t-/\*b<sup>h</sup>eh<sub>2</sub>-t-* from the PIE verbal root \**b<sup>h</sup>eh<sub>2</sub>-* ‘to shine’ (LIV<sup>2</sup> 68–69) has been widely considered to yield Greek φῶς, φωτός ‘man, mortal, hero’ (Peters 1993: 101–108 and Vijūnas 2009: 72–76, following a previous suggestion by Brugmann & Delbrück 1906: 536; NIL 7). Recently, a formation of this kind has been claimed for the Phrygian DN βας (acc. βαταν, see Obrador-Cursach 2017).

**2.3.2.** The formation \*(*h<sub>1</sub>*)*en-mén-* (LIPP II, 234) derived from \**men* ‘stand fast, remain’ (LIV<sup>2</sup> 437) appears in the Greek adverb ἐμμενές ‘unceasing’ and Phrygian *iman* (sg.dat. *inmeney*, B-05) according to Vine (2010). It is also found in OIr. *ainmne* ‘patience’.

**2.3.3.** Although the root \**ǵ<sup>h</sup>h<sub>3</sub>-* ‘green, yellow’ is found in Greek χλωρός ‘greenish-yellow, pale green’, in Lat. *helus*, (*h*)*olus* ‘green plants, vegetables, cabbage’, in Skt. *hari-* ‘fallow, greenish’ (used in compounds), etc., the formation \**ǵ<sup>h</sup>h<sub>3</sub>-ró-* is only found in Greek χλωρός and Phrygian γλουρεος ‘golden’ (MPhr-01 l. 2 identified by Brixhe 2004a, 17 through the Hesychius gloss γλούρεα, γ 659).

**2.3.4.** The stem *kako-* ‘bad’ is found both in Greek κακός ‘bad, worthless’ and, nominalised, in Phrygian *κακουν* ‘harm’ (*passim*). Thought of a Greek loan since Solmsen (1897: 52 fn. 4), there

<sup>12</sup> There are some other marginal forms. On the divergence in the endings, Kortlandt (2016: 252, reconsidering Lubotsky 1997: 127) considers that the Phrygian forms in *-tor* “were middle forms of the imperfect”. However, things are not this simple: The forms on *-tor* occur in the same imprecative apodosis where a present is needed and the forms αδδακετ and αββερετ mainly occur.

is no reason not to consider it as a Phrygian inherited word shared with Greek. So, its status remains unclear. If a Greek borrowing, it is one of the oldest, since the stem is found in the verb *kakoiōi* in G-02, an OPhr. inscription dated earlier than the 6<sup>th</sup> century BC.

**2.3.5.** Obrador-Cursach (2020: 269–270) suggests that OPhr. *keneman* ‘cavity, niche’ (M-01b) derives from *\*ken-elo-* ‘empty’, a form found in Proto-Greek *\*ken(e)-uó-* ‘empty, idle’ (Att. κενός, Ion. κεινός but Epic and Dor. κενεός) and Armenian *sin, sn-oy* ‘empty’.<sup>13</sup> Previously, *keneman* was considered to derive from *\*kenh<sub>1</sub>-*, attested in Sanskrit *khánati* ‘to dig’ (Lubotsky 1988: 15), but this root is not found outside Indo-Iranian.

**2.3.6.** The stem *koru-* (perhaps derived from *\*kerh<sub>3</sub>-* ‘grow’ *LIV*<sup>2</sup> 329) is a Greek peculiarity attested in κόρη ‘young girl, daughter’, κοῦρος, κόρος ‘boy’ (*EDG* 752–753) but recently it has also been identified in MPhr. κορο- (MPhr-01, Lubotsky 2017), which follows the original *u*-stem inferred for the Proto-Greek forms (see Obrador-Cursach 2020: 177–178 and 277 and fthc.).

**2.3.7.** The adjective *\*mōro-* ‘stupid’ is found only in Greek μωρός and, nominalised, in Phrygian μουρου[v] (61.1 = 100; plural μμουρα [sic] 35.1 = 5). As in the case of *κακουν*, it can be considered a Greek borrowing, although the word does not show any feature that rule it out as an inherited word (its etymology is still lacking).

**2.3.8.** The PIE verb *\*sleh<sub>2</sub>g<sup>u</sup>-* ‘take hold of, grasp’ (*LIV*<sup>2</sup> 566) was only attested in Greek λαβεῖν ‘id.’ until Lubotsky (2004: 234–235) equated to Phrygian *lakedo* (W-01b).

### 3. Evaluation of the data

#### 3.1. Phrygian as the closest language to Greek

To the best of our current knowledge, Phrygian was closely related to Greek. This affirmation is consistent with the vision offered by Neumann (1988: 23), Brixhe (2006) and Ligorio and Lubotsky (2018: 1816) and with many observations given by ancient authors.<sup>14</sup> Both languages share 34 of the 36 features considered in this paper, some of them of great significance: the “triple representation” of the vocalisation of the PIE laryngeals, the *\*-eu-/\*-ēu-* suffix or the addition or the ending *-s* to the nominatives of the ancient *h<sub>2</sub>-*masculines. Other features are of little value if taken one by one, because they are shared with other unrelated Indo-European branches: the treatment *\*-ih<sub>2</sub> > -iya*, for example, is also found in Tocharian. The importance of features of this kind is their accumulation. The available data suggest that Phrygian and Greek coexisted broadly from pre-historic to historic times, and both belong to a common linguistic area (Brixhe 2006: 39–44). One of the features that emerged as a result is the shift *\*-ans > -ais* and *\*-ons > -ois* found in Phrygian and Aeolic, a common characteristic in the shared linguistic area (Brixhe 1990, 65–67 and 2004, 41–42). However, in such close languages, it is not always easy to differentiate the genetic and the areal features.

<sup>13</sup> *EDG* 672; Clackson 1994: 138–139 and Martirosyan 2010: 575 and 2013: 116.

<sup>14</sup> See, especially, Plato, *Cratylus*. 410a (Socrates is speaking): Ὅρα τοῖνυν καὶ τοῦτο τὸ ὄνομα τὸ “πῦρ” μὴ τι βαρβαρικὸν ἦ. Τοῦτο γὰρ οὔτε ῥάδιον προσάψαι ἐστὶν Ἑλληνικῆ φωνῆ, φανεροί τ’ εἰσὶν οὕτως αὐτὸ καλοῦντες Φρύγες σμικρὸν τι παρακλίνοντες· καὶ τό γε “ὔδωρ” καὶ τὰς “κύνας” καὶ ἄλλα πολλά. “Well, this word πῦρ is probably foreign; for it is difficult to connect it with the Greek language, and besides, the Phrygians have the same word, only slightly altered. The same is the case with ὔδωρ (water), κύων (dog), and many other words” (translation by Harold N. Fowler).

Table 1. Comparison of Phrygian features with Greek, Armenian, Albanian and Indo-Iranian (grey files indicate that borrowing cannot be totally ruled out)

	Phrygian feature		Greek	Armenian	Albanian	Indo-Iranian
Phonetic	2.1.1.	“prothetic vowels”	+	+	+	-
	2.1.2.	*CRh <sub>3</sub> C > *CRōC	+	-	-	-
	2.1.3.	Loss of /s/	+	+	+	-
	2.1.4.	Centum treatment	+	-	-	-
	2.1.5.	*-ih <sub>2</sub> > -iya	+	-	+	-
	2.1.6.	*k <sub>i</sub> - > s-	+	-	-	-
	2.1.7.	*-m > -n	+	+	?	-
	2.1.8.	*M > T	-	+	-	-
Morphological	2.2.1.	*meh <sub>1</sub>	+	+	+	+
	2.2.2.	ni(y)/v <sub>1</sub>	+	-	-	-
	2.2.3.	Conditional ai	+	-	-	-
	2.2.4.	*-d <sup>h</sup> η	+	-	-	-
	2.2.5.	e-demonstrative	+	-	-	-
	2.2.6.	*h <sub>2</sub> eū-to-	+	-	+	-
	2.2.7.	*d <sup>h</sup> h <sub>1</sub> s-ó-	+	-	-	-
	2.2.8.	*-eh <sub>2</sub> -s masc.	+	-	-	-
	2.2.8.	*mégh <sub>2</sub> -s	+	-	-	-
	2.2.9.	*-eū-/*-ēū-	+	-	-	-
	2.2.10.	*g <sup>u</sup> neh <sub>2</sub> -ik-	+	+	-	-
	2.2.11.	*g <sup>u</sup> her-mo-	+	+	+	-
	2.2.12.	*h <sub>3</sub> nh <sub>3</sub> -mn-	+	+	-	-
	2.2.13.	t-enlargement	+	-	-	-
	2.2.14.	e-augment	+	+	+	+
	2.2.15.	*-mh <sub>1</sub> no-	+	-	-	-
	2.2.16.	-toy/-τοι	+	-	-	+
2.2.16.	*-(t)or	-	?	-	-	
2.2.17.	verbs in -o-yo-	+	-	-	-	
2.2.17.	verbs in -e-yo-	+	-	-	-	
Lexical	2.3.1.	*b <sup>h</sup> oh <sub>2</sub> -t-/*b <sup>h</sup> eh <sub>2</sub> -t-	+	-	-	-
	2.3.2.	*(h <sub>1</sub> )en-mén-	+	-	-	-
	2.3.3.	*g <sup>h</sup> h <sub>3</sub> -ró-	+	-	-	-
	2.3.4.	kako-	+	-	-	-
	2.3.5.	ken-	+	+	-	-
	2.3.6.	*korū-	+	-	-	-
	2.3.7.	*mōro-	+	-	-	-
	2.3.8.	*sleh <sub>2</sub> g <sup>u</sup> -	+	-	-	-

Also problematic are the lexical isoglosses. Because of the many similarities between Phrygian and Greek, it is often difficult to discern when words are loans and when they are shared or inherited. When a word lacks the expected inner evolution and can be explained as a mere borrowing, the latter explanation is preferred. Because the devoicing did not work in OPhr. *lavagtaei* (W-01a), it is preferable to consider it a loan from a (pre-alphabetic) Greek dialect (cf. Mycenaean *ra-wa-ke-ta*; Doric *λαγέτας* ‘leader of the people’). For its part, *γλουρεα* (MPhr-01 = W-11) must be a genuine Phrygian word, since it shows the result of the deaspiration in the first stop. Nevertheless, we do not have data of this kind in some lexemes. Both *kako-* (§2.3.6.) and *\*mōro-* (§2.3.7.) can be considered borrowings or inherited words as well, at least until a satisfactory etymology is found. A very specific problem concerns the shared substratum. If a word has no special Phrygian feature, the decision is not easy. The clearest example of this problem is Phrygian *vanakt-* (sg. nom. in M-04 *modro-vanak*, sg. acc. 6.1 = 88 *ουανακταν*, sg. dat. M-01 *vanaktei*) and Greek (Ϝ)άναξ (Mycenaean *wa-na-ka*). Was it borrowed from a substratum language by both Phrygian and Greek, was it borrowed only from that assumed language by Greek, and secondly borrowed from Greek by Phrygian? Honestly, we do not know;<sup>15</sup> for this reason, I exclude this word from this discussion. Because of the fragmentary nature of the Phrygian corpus, a large set of words which might shed light on this point is missing.

The affinity between the two languages cannot be denied. Indeed, they are so close that some scholars have suggested a Proto-Greco-Phrygian language, a common pre-historic stage (Neumann 1988). In the light of the available data, this is a very attractive idea. However, Greek has some features that distance it from Phrygian, and in fact they can be used in order to discern when this suggested common language split. A nice source of information is the treatment of the aspirate in the languages. It now seems clear that Grassmann's law did not affect Phrygian: compare OPhr. *bevδος* ‘statue’ (B-01, identified by Lubotsky 2008) and Greek *πύθομαι* ‘learn’, both derived from the PIE root *\*b<sup>h</sup>euǵh-* (LIV<sup>2</sup> 82–83). It remains unclear, however, when the dissimilation of the aspirate affected Greek, but if the idea of Proto-Greco-Phrygian is accepted, it must have occurred between the split of the two languages and post-Mycenean times (see Risch and Hajnal 2006: 303–304). Also, in relation with the aspirated stops, it would be interesting to know whether their devoicing in Greek also affected Phrygian.

### 3.2. Phrygian and Armenian, an insistent comparison

From the beginnings of the Indo-European theory to the works by Lejeune, who spoke against this idea (see especially 1979), Phrygian was considered to be extremely close to Armenian. Indeed, researchers such as Paul Anton de Lagarde, Christian Lassen, Andreas D. Mordtmann, Richard Gosche, Friedrich C. A. Fick and Otto Hass considered that Phrygian might even be an earlier stage of Armenian. Working basically on glosses, they inferred from them that Phrygian was a *satəm* language (the first ones *avant la lettre*) just like Armenian and concluded that the stops of the two languages shared their *Lautverschiebung*. These researchers also paid excessive attention to the three ancient passages mentioning the relation between the Armenians and the Phrygians: Herodotus’ description of Xerxes’ army against Greece, in which the Armenians are said to be settlers of the Phrygians,<sup>16</sup> the Stephanus Byzantinus’ re-

<sup>15</sup> If we consider that another aristocratic title, *lavagtaei* (W-01a, dat. sg.), is a Greek borrowing, it is not difficult to assume that *vanakt-*, which shares the same semantic field, was also borrowed.

<sup>16</sup> Hdt. 7.73: Φρύγες δὲ ἀγχοτάτω τῆς Παφλαγονικῆς σκευὴν εἶχον, ὀλίγον παραλλάσσοντες. οἱ δὲ Φρύγες, ὡς Μακεδόνες λέγουσι, ἐκαλέοντο Βρίγες χρόνον ὅσον Εὐρωπῆιοι ἔοντες σύνοικοι ἦσαν Μακεδόσι, μεταβάντες δὲ ἐς τὴν Ἀσίην ἄμα τῇ χώρῃ καὶ τὸ οὐνομα μετέβαλον ἐς Φρύγας. Ἀρμένιοι δὲ κατὰ περὶ Φρύγες



port of Eudoxos' opinion of the similarity between Armenian and Phrygian,<sup>17</sup> and the same observations reported by Eustathius of Thessalonica.<sup>18</sup>

Phrygian has constantly been compared to Armenian, but never with any great success. As we can see in Table 1, Phrygian shares fewer isoglosses with Armenian than with Greek, and only two of them are exclusive. Today, we know that Phrygian is a *centum* language and, despite Lejeune's (1979) attempts to deny it (followed by Brixhe 2008: 74, Matzinger 2005: 378 and de Lamberterie 2013: 27–28), Lubotsky (2004) showed that Phrygian stops were affected by devoicing and deaspiration, an incomplete *Lautverschiebung*. However, the phenomenon is not exactly the same as the one found in Armenian; in fact, the two languages only share the devoicing. Recently, Kortlandt (2016: 250) considered this shift to be an innovation which affected Armenian, Thracian (see below) and Phrygian, and this is one of the clearest differences between Phrygian and Greek. However, more than genetic, it should be considered a real feature of the proto-languages in their pre-historic homeland. Leaving Thracian aside (considered “an early dialect of Proto-Armenian” by Kortlandt 2016: 249), one must wonder if this is the only possible scenario for the Phrygian devoicing. Indeed, we do not know when it occurred, although it must have been after the split between Phrygian and Greek (if we assume so) and before the Phrygian deaspiration. It is possible, then, that the Phrygian deaspiration also occurred in the historical territory of Phrygian in central Anatolia, where the languages spoken lack voicing contrast. Kortlandt (2016: 252) also considered a second isogloss shared by Phrygian and Armenian and not by Greek, the 3sg. middle ending *-tor*. However, since both languages retained a common feature also found in other branches, this is irrelevant to the dialectal position of Phrygian. Even worse for Kortlandt's proposal, the Armenian ending *-ēr* may derive from *\*-ter* rather than from *\*-tor* and, consequently, the ending *-iwr*, considered a mere dialectal variant, is problematic.<sup>19</sup>

Note also that sometimes Greek σῦριγξ, ἰγγος ‘pipe, panpipe’ and Armenian *sring* ‘pipe, fife’ have been considered as Phrygian in origin (if not elusive Mediterranean) and a proof of contact of the latter with the former two languages (see, e.g. Greppin 1990: 35 and Martirosyan 2010: 585 and 2013: 123). However, even if Armenian *sring* is a mere borrowing from Greek, any relation between this noun and Phrygian is ungrounded. Although we ignore the Phrygian equivalent, ancient sources are not explicit in this relation and its morphology excludes this proposal: an initial *\*s-* followed by non-front vowel is unexpected for a Phrygian inherited

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ἔσσεάχατο, ἐόντες Φρυγῶν ἀποικοί. τούτων συναμφοτέρων ἦρχε Ἀρτόχμης, ἔχων Δαρείου θυγατέρα. “The Phrygian equipment was very similar to the Paphlagonian, with only a small difference. As the Macedonians say, these Phrygians were called Briges as long as they dwelt in Europe, where they were neighbors of the Macedonians; but when they changed their home to Asia, they changed their name also and were called Phrygians. The Armenians, who are settlers from Phrygia, were armed like the Phrygians. Both these together had as their commander Artochmes, who had married a daughter of Darius.” (translation by A. D. Godley).

<sup>17</sup> St.Byz., s.v.: Ἀρμενία· χώρα πλησίον τῶν Περσῶν, ἀπὸ Ἀρμένου Ροδίου, ὡς Αντίπατρος ἐν γ Περί Ρόδου. οἱ οἰκήτορες Ἀρμένιοι. ὡς Εὐδοξος α Γῆς περιόδου, Ἀρμένιοι δὲ τὸ μὲν γένος ἐκ Φρυγίας καὶ τῆ φωνῆ πολλὰ φρυγίζουσι. ‘Armenia: a region near the Persians called after Armenus Rhodius according to Antipater's *On Rhodes* book III. The dwellers are called Armenians but, according to Eudoxus' *Chart of the earth* book I, the Armenians are native of Phrygia and their tongue resembles very much the Phrygian one.’

<sup>18</sup> Eust., *ad D. P.* 694: Ἰστέον δὲ ὅτι Ἡρόδοτος τοὺς Ἀρμένιους Φρυγῶν ἀποίκους φησὶ, λέγων καὶ ὅτι πολυπρόβατοί εἰσι. Καὶ Εὐδοξος δὲ ἐν Γῆς Περίοδῳ φησὶν· “Ἀρμένιοι τὸ γένος ἐκ Φρυγίας, καὶ τῆ φωνῆ πολλὰ φρυγίζουσι.” ‘One must know that Herodotus says that the Armenians were settlers of the Phrygians and rich in cattle. Also, Eudoxus in *Chart of the earth* says: “the Armenians are native of Phrygia and their tongue resembles very much the Phrygian one.”’

<sup>19</sup> I am in debt with Hrach Martirosyan for generously sharing with me the corresponding discussion for his unpublished work *Historical phonology and morphology of Classical Armenian* (§ M 504).

word and the suffix  $-\gamma\gamma-$  is never attested in this language. Similarly, Arm. *sayl* ‘wagon; Ursa Major and Minor, Arcturus’, related somehow to Gr.  $\sigma\alpha\tau\acute{\iota}\nu\eta$  ‘chariot’ and the Hesychian gloss  $\sigma\acute{\alpha}\tau\iota\lambda\lambda\alpha$ :  $\pi\lambda\epsilon\iota\acute{\alpha}\varsigma$  τὸ ἄστρον ‘*sátilla*: the cart constellation’ (see Martirosyan 2010: 566–567 and 769, with references), defy any derivation from Phrygian. Precisely, its Phrygian equivalent can be found in another Hesychian gloss:  $\kappa\acute{\iota}\kappa\lambda\eta\nu$ : τὴν ἄρκτον τὸ ἄστρον. Φρύγες ‘*kíklēn*: the constellation Ursa Major’.

Leaving aside the devoicing and, if still accepted, the retention of the ending  $*-tor$ , no other features are exclusively shared by Phrygian and Armenian; all the others are shared with Greek. With the available Phrygian data, the relation between this language and Armenian does not differ greatly from that between Greek and Armenian. It seems that rather than a close genetic affinity, Armenian and Phrygian may have shared the same linguistic area, as suggested recently by Kim (2018) for Greek and Armenian (see also Martirosyan 2013: 126). It is even possible that such an area (including its substrate language(s)) was shared by Proto-Greco-Phrygian and Proto-Armenian. However, if Greco-Armenian is still preferred, there is no strong evidence for a Proto-Phrygio-Armenian split from Proto-Greco-Phrygio-Armenian. In both scenarios, the relation of Phrygian and Armenian seems to be subordinate to the relation between Phrygian and Greek and the relation between Proto-(Phrygio-)Greek and Proto-Armenian.

### 3.3. The relation between Phrygian and Thracian: a minefield

Thracio-Phrygian is a label that has had more success among archaeologists<sup>20</sup> and linguists, despite being a creation of von Bradke (1890: 66). Although some affinities between the Thracians and the Phrygians have been considered in view of the remaining material culture, and since some ancient sources considered that the Phrygians were a tribe of the Thracians (e.g., Str. 7a.1.25), the comparison between the two languages is not easy, since the vestiges of Thracian are even more fragmentary than Phrygian and our knowledge of this language, mainly based on glosses, is very poor.

It remains unclear whether Thracian suffered a complete *Lautverschiebung*, as traditionally considered (see, e.g., Brixhe 2018: 1852), although at least deaspiration occurred in this language: see the toponyms in  $-\delta\iota\zeta\alpha$ ,  $-\delta\iota\zeta\eta$ ,  $-\delta\iota\zeta\omicron\nu$  ‘fortress’ <  $*d^hejǵ^h-$  ‘to knead clay, to build’ (cf. Greek  $\tau\epsilon\acute{\iota}\chi\omicron\varsigma$  ‘wall’). However, since the outcomes of the PIE laryngeals in this language seem to be different from Phrygian and Greek, it remains possible that Thracian was a *satəm* language. Note, however, that Brixhe (2018: 1853) considers that the ancient stops represented by  $\zeta$  “may represent simply a palatalization (at least of  $*d/g$ ) before front vowel”, as considered for some Phrygian results. As can be seen, there are possible affinities in the phonology of Phrygian and Thracian, but they seem to point to ancient contacts rather than to genetic affinity.

### 3.4. The classical comparison between Phrygian and Ancient Macedonian

Since the ancient aspirates  $*b^h$ ,  $*d^h$ ,  $*g^h$  were represented as  $\langle\beta, \delta, \gamma\rangle$  in the available material related to Ancient Macedonian (see, e.g., the famous PN Βερενίκα = Attic Φερενίκη <  $*b^her-$  and the gloss  $\beta\omicron(\omicron)\upsilon\tau\omicron\varsigma$  ‘beer’ < PIE  $*b^hrey-$ ) and ancient sources state that in the original homeland of the Phrygians in the Balkans they were neighbours of the Macedonians (Hdt. 8.138), the two languages were traditionally considered to be closely related. However, inferring from glosses and the few texts possibly written in Ancient Macedonian, there are strong arguments for considering that this language was a Greek dialect (see Méndez Dosuna 2012 for a convincing

<sup>20</sup> See an updated account by Tsetskhladze 2007, with references.

survey of the advantages and disadvantages). Although there is no universal consensus, internal Macedonian data dispel the idea of a special relation with Phrygian. Indeed, the use of ⟨β, δ, γ⟩ for ancient aspirates in Macedonian is better explained as the result of spirantization,  $*b^h, *d^h, *g^h (> *p^h, *t^h, *k^h) > /f \theta x/ \sim [v \delta \gamma]$ , rather than deaspiration (Méndez Dosuna 2012: 134–137). Moreover, there is evidence that Macedonian was affected by the devoicing of the aspirates and Grassmann's law, which is incompatible with Phrygian: see the PN Κεβαλίνοϛ (= Att. Κεφαλίνοϛ) <  $*g^hebh-$ . Therefore, whether or not Ancient Macedonian is accepted as a Greek dialect with “an inner-Greek *Lautverschiebung*”, it does not show any special relation with Phrygian.

### 3.5. The limited relation between Albanian and Phrygian

Although the first testimonies of Albanian are very late, it shares certain features with the ancient Balkan languages. For this reason, it is sometimes considered in the discussion of Phrygian. As in the case of Armenian, the comparison is not easy because of the internal evolution of this language revealed in its different historical stages. However, the comparison between languages does not yield enough isoglosses to be able to conclude that Albanian and Phrygian were more closely related in pre-history than Greek and Albanian and there is no one isogloss that occurs only in these two languages. It is true that the PIE word  $*g^hes-r-$  ‘hand’ (*NIL* 170–172, Hittite *keššar* ‘id.’, Greek χεῖρ, χεῖρός ‘id.’, Armenian *jeṛn* ‘id.’, etc.) becomes an *a*-stem in Phrygian (OPhr.  $\uparrow iray$  B-05 and NPhr. ζειραῖ 59.4 = 106, both sg. dat.) and in Albanian (*dorë*) but this is a general phenomenon in this latter language (Demiraj 1997: 140 with references).

## 4. Conclusion

With the current state of our knowledge, we can affirm that Phrygian is closely related to Greek. This is not a surprising conclusion: ancient sources and modern scholars agree that Phrygians did not live far from Greece in pre-historic times. Moreover, the last half century of scientific study of Phrygian has approached both languages and developed the hypothesis of a Proto-Greco-Phrygian language, to the detriment to other theories like Phrygio-Armenian or Thracio-Phrygian. The result of this study, as fragmentary as our knowledge of Phrygian, is consistent with this view. Future findings and new identifications may provide more information for scholars to work with.

## Abbreviations

*CID* = Rougemont 1977; *CIPPh* = Brixhe & Lejeune 1984; *EDG* = Beekes 2010; *KON* = Zgusta 1984; *LIPP* = Dunkel 2014; *LIV*<sup>2</sup> = Rix 2001; *NIL* = Wodtko, Irslinger, Schneider 2008.

## References

- Beekes, Robert. 2010. *Etymological Dictionary of Greek*. Leiden/Boston: Brill.
- von Bradke, Peter. 1890. *Über Methode und Ergebnisse der arische (indogermanischen) Alterthumswissenschaft*. Giessen: J. Ricker'sche Buchhandlung.
- Brixhe, Claude. 1976. *Le dialecte grec de Pamphylie. Documents et grammaire*. Paris: Lib. d'Amérique et d'Orient Adrien Maisonneuve.

- Brixhe, Claude. 1990. Comparaison et langues faiblement documentées: l'exemple du phrygien et de ses voyelles longues. In J. Dor, Jean Kellens (eds.). *La reconstruction des laryngales*: 59–99. Liège: Université de Liège.
- Brixhe, Claude. 2004. Corpus des inscriptions paléo-phrygiennes: Supplément II. *Kadmos* 43: 1–130.
- Brixhe, Claude. 2006. Préhistorie et début de l'histoire des dialectes grecs. *Incontri Linguistici* 29: 39–59.
- Brixhe, Claude. 2008. Phrygian. In: R. D. Woodard, R. D. (ed.). *The Ancient Languages of Asia Minor*: 69–80. Cambridge: Cambridge University Press.
- Brixhe, Claude. 2018. Thracian. In: J. Klein, J. Brian, M. Fritz (eds.). *Handbook of Comparative and Historical Indo-European Linguistics*. Vol. 3: 1850–1854. Berlin/Boston: Walter de Gruyter.
- Brixhe, Claude, Michel Lejeune. 1984. *Corpus des inscriptions paléo-phrygiennes*. 2 vols. Paris: Institut français d'études anatoliennes.
- Brugmann, Karl, Berthold Delbrück. 1906. *Grundriss Vergleichenden Grammatik der Indogermanischen Sprachen* 2.1. Berlin: Walter de Gruyter.
- Clackson, James. 1994. *The linguistic relationship between Armenian and Greek*. Oxford/Cambridge: Blackwell.
- Demiraj, Bardhyl. 1997. *Albanische Etymologien. Untersuchungen zum albanischen Erbwortschatz*. Amsterdam, Atlanta: Rodopi.
- Dunkel, George E. 2014. *Lexikon der indogermanischen Partikeln und Pronominalstämme*. Heidelberg: Winter.
- Greppin, John A. C. 1990. The Etymology of Greek σὺριγξ 'Pipe'. *Historische Sprachforschung* 103(1): 35–37.
- Gusmani, Roberto. 1959. Relazioni linguistiche tra Frigia e Licia. *Archivio glottologico italiano* 49: 9–16.
- Haas, Otto. 1966. *Phrygische Sprachdenkmäler*. Sophia: Die Phrygischen Sprachdenkmäler.
- Hämmig, Anna Elisabeth. 2013. *Nevotan niptiyan*, die Fluchformel der Stele von Vezirhan. *Indogermanische Forschungen* 118: 125–54.
- Jasanoff, Jay H. 2003. *Hittite and the Indo-European Verb*. Oxford: Oxford University Press.
- Kim, Ronald I. 2018. Greco-Armenian. The Persistence of a myth. *Indogermanische Forschungen* 123: 427–272.
- Kortlandt, Frederik. 2016. Phrygian between Greek and Armenian. *Linguistique Balkanique* 55: 2–3.
- de Lamberterie, Charles. 2013. Grec, phrygien, arménien: des anciens aux modernes. *Journal des Savants* 2013, 1: 3–69.
- Lejeune, Michel 1969. Notes paléo-phrygiennes. *Revue des études anciennes* 71: 287–300.
- Lejeune, Michel. 1979. Regards sur les sonores I.E. en vieux phrygien. In: *Florilegium Anatolicum: Mélanges offerts à Emmanuel Laroche*: 219–224. Paris: De Boccard.
- Ligorio, Orsat, Alexander Lubotsky. 2018. Phrygian. In: J. Klein, J. Brian, M. Fritz (eds.). *Handbook of Comparative and Historical Indo-European Linguistics*. Volume 3: 1826–1831. Berlin/Boston: de Gruyter.
- Lubotsky, Alexander. 1988. The Old Phrygian Areyastis-Inscription. *Kadmos* 27(1): 9–26.
- Lubotsky, Alexander. 1993. New Phrygian  $\nu\phi\omicron\delta\alpha\nu$ . *Kadmos* 32: 127–34.
- Lubotsky, Alexander. 1997. New Phrygian Inscription No. 48: Paleographic and Linguistic Comments. In: R. Gusmani, M. Salvini, P. Vannicelli (eds.). *Frigi e frigio. Atti del 1° Simposio Internazionale, Roma, 16–17 ottobre 1995*: 115–130. Roma: Consiglio Nazionale delle Ricerche.
- Lubotsky, Alexander. 2004. The Phrygian Zeus and the Problem of the 'Lautverschiebung'. *Historische Sprachforschung* 117(2): 229–37.
- Lubotsky, Alexander. 2008. Old Phrygian *bevδος* 'Statue, Image', Greek  $\beta\epsilon\upsilon\delta\omicron\varsigma$  'Woman's Dress'. *The Journal of Indo-European Studies* 36: 96–97.
- Lubotsky, Alexander. 2017. The Phrygian Inscription from Dokimeion and Its Meter. In: I. Hajnal, D. Kölligan, K. Zipser (eds.). *Miscellanea Indogermanica. Festschrift für José Luis García Ramón zum 65. Geburtstag*: 427–31. Innsbruck: Innsbrucker Beiträge zur Sprachwissenschaft.
- Martirosyan, Hrach. 2010. *Etymological Dictionary of the Armenian Inherited Lexicon*. Leiden: Brill.
- Martirosyan, Hrach. 2013. The place of Armenian in the Indo-European Language family: The Relationship with Greek and Indo-Iranian. *Journal of Language Relationship* 10: 85–137.
- Matzinger, Joachim. 2005. Phrygisch und Armenisch. In: G. Meiser, O. Hackstein (eds.). *Sprachkontakt und Sprachwandel: Akten der XI. Fachtagung der Indogermanischen Gesellschaft, 17.–23. September 2000, Halle an der Saale*: 375–94. Wiesbaden: Dr. Ludwig, Reichert.
- Melchert, H. Craig. 1994. *Anatolian Historical Phonology*. Amsterdam/Atlanta: Rodopi.
- Méndez Dosuna, J. 2012. Ancient Macedonian as a Greek Dialect: A Critical Survey on Recent Work. In: G. Giannakis (ed.). *Ancient Macedonia: Language, History, Culture*: 133–45. Thessaloniki: Centre for the Greek Language.
- Morante Mediavilla, Bibiana. 2007. *Studia Phrygia : la incidencia del testimonio de la literatura griega y romana en la descripción y las tentativas de determinar la posición lingüística de la lengua frigia desde la Antigüedad hasta el auge de la Lingüística Indoeuropea*. Barcelona: PhD dissertation.

- Neumann, Günter. 1986. Zur Syntax der neuphyrgischen Inschrift Nr. 31. *Kadmos* 241: 79–84.
- Neumann, Günter. 1988. *Phrygisch und Griechisch*. Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- Obrador-Cursach, Bartomeu. 2016. Phrygian *mekas* and the recently discovered New Phrygian inscription from Nacoleia. *Indogermanische Forschungen* 121: 177–86.
- Obrador-Cursach, Bartomeu. 2017. The Phrygian God Bas. *Journal of Near Eastern Studies* 76(2): 307–17.
- Obrador-Cursach, Bartomeu. 2019. Γορδίας and Γόρδιον: a remark on Phrygian onomastics and ethnics. *The Journal of Indo-European Studies*, 47, 3–4, .
- Obrador-Cursach, Bartomeu. 2020. *The Phrygian Language*. Leiden: Brill.
- Obrador-Cursach, Bartomeu. Forthcoming. The last verse of the Middle Phrygian epigram from Dokimeion. *Indogermanische Forschungen*.
- Opfermann, Andreas. 2017. Griechische, Armenische und Albanische ‚Frauen‘ und die Wurzel \*G<sub>u</sub>en-. In: H. Bichlmeier, A. Opfermann (eds.). *Das Menschenbild bei den Indogermanen*: 55–80. Hamburg: Baar-Verlag.
- Payne, Annick, David Sasseville. 2016. Die lydische Athene: Eine neue Edition von LW 40. *Historische Sprachforschung* 129: 66–82.
- Peters, Martin. 1993. Beiträge zur griechischen Etymologie. In: L. Isebaert (ed.). *Miscellanea Linguistica Graeco-Latina*: 101–8. Namur: Société des études classiques.
- Risch, Ernst, Ivo Hajnal. 2006. *Grammatik des mykenischen Griechisch. 1. Bd. Einleitung und Phonologie*. Available: <<http://www.uibk.ac.at/sprachen-literaturen/sprawi/mykgr.html>> [Accessed 09.20.2019].
- Rix, Helmut, 2001. *Lexikon der indogermanischen Verben*. Wiesbaden: Ludwig Reichert.
- Rougemont, Georges. 1977. *Lois sacrées et règlements religieux*. Paris: de Boccard.
- Tsetschladze, Gocha R. 2007. Thracians versus Phrygians: about the origin of the Phrygians once again. In: A. Çilinciroglu, A. Sagona (eds.). *Anatolian Iron Ages 6*: 283–310. Leuven: Peeters.
- Tzitzilis, Christos. 2013. Greek and Phrygian. In: *Encyclopedia of Ancient Greek Language and Linguistics*. Available: [http://dx.doi.org/10.1163/2214-448X\\_eagll\\_COM\\_00000160](http://dx.doi.org/10.1163/2214-448X_eagll_COM_00000160) [Accessed 07.20.2019].
- Vijūnas, Aurelijus. 2009. *The Indo-European Primary t-stems*. Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck Bereich Sprachwissenschaft.
- Vine, Brent. 2010. Old Phrygian iman. In: R. Kim, N. Oettinger, E. Rieken, M. Weiss (eds.). *Ex Anatolia Lux. Anatolian and Indo-European Studies in Honor of H. Craig Melchert on the Occasion on His Sixty-Fifth birthday*: 343–355. Ann Arbor: Beech Stave Press.
- Wodtke, Dagmar S., Britta Irslinger, Carolin Schneider. 2008. *Nomina im indogermanischen Lexikon*. Heidelberg: Winter.
- Woodhouse, Robert. 2006. Conditioned devoicing of mediae in Phrygian. *Studia Etymologica Cracoviensia* 11: 157–191.
- Zgusta, Ladislav. 1984. *Kleinasiatische Orstnamen*. Heidelberg: Carl Winter.

*Бартомеу Обрадор-Курсак. К вопросу о месте фригийского языка в индоевропейской семье*

Основная цель статьи — исходя из наших текущих представлений о фригийском языке, собрать вместе те его особенности, которые могут быть релевантны для определения его генеалогической позиции в составе индоевропейской семьи. Оказывается, что большая часть этих особенностей объединяет его с греческим языком, что в целом согласуется с традиционными мнениями о близких связях между этими языками и об их возможном общем предке. Напротив, особые связи с такими другими индоевропейскими языками как армянский представляются не столь тесными, несмотря на наличие отдельных совместных изоглосс.

*Ключевые слова:* фригийский язык; индоевропейская диалектология; генетическая классификация языков; изоглоссы; протогреческий язык.