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A historical grammar of Phrygian

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I Introduction

I.1 A brief overview of the history of Phrygia and the Phrygian language

The Phrygians, a term used to designate the speakers of all the historical stages of the Phrygian language, were a people who are known to have lived in central Anatolia during the first millennium BCE and the first few centuries of the common era.

The precise chronology of Phrygian movements before their migration into Anatolia is unknown. As an Indo-European people, they migrated from the steppes after the break-up of the Proto-Indo-European community. Initially, the Phrygians and the Greeks would have formed a singular group that migrated into the southern Balkans, to the north of modern-day Greece. This Proto-Graeco-Phrygian community eventually separated into two groups: the Proto-Greeks and the Proto-Phrygians. The former migrated southwards, forming the Proto-Greek speaking community that eventually spread to the entirety of Greece. The Phrygians, on the other hand, established themselves in Illyria, western Macedonia, and northern Epirus by the eleventh century BCE (Hammond 2006: 652). The Phrygians apparently continuously migrated from their Balkan homeland into Anatolia (Brixhe 2002b: 246), crossing the Hellespont along the way.

The date of this series of migrations is uncertain. It was approximately concurrent with the Bronze Age collapse of the Anatolian kingdoms and city states in the late second millenium BCE (Brixhe 2008: 69). Earlier

scholarship suggested Phrygians may have played a part in the Bronze Age collapse in Anatolia, but that is not necessarily borne out by the archaeological data (*ibid.*).

In the literary and historical sources, the Phrygians are first mentioned in the Iliad (3.184-185) as allies of Troy (Anfosso 2020: 17-18ff.). Much later, Herodotus (7.73) talks of Phrygians as ultimately having migrated from the Balkans, at which point they were still supposedly called Βρυγες (*ibid.*).

The archaeological record establishes the Phrygians as having become established in central Anatolia by the tenth century BCE (Thonemann 2013: 9). The earliest Phrygian inscriptions date from the 8th century BCE (Brixhe 2008: 70), when a Phrygian speaking community was already firmly established in Anatolia. This community would have traded with the coastal areas of southern Anatolia, as is suggested by the Phrygian adoption of the alphabet. While it is unclear whether the Phrygians adopted and adapted a modified version of an early variant of the Greek alphabet or whether the invention of the alphabet was fundamentally a blending of Greek and Phrygian modifications (see §II.1.1), the extremely early use of the Phrygian alphabet shows that the Phrygian speaking community was very much a part of the broader Mediterranean trading community and had contact with Cilicia, where the alphabet presumably originated (Young 1969: 255, PhL 27, Adiego 2018: 150; §II.1.1).

During the 8th and 7th centuries, there was an independent Phrygian kingdom in Anatolia, its most important city being Gordion (LL 1816). At least one Phrygian king is widely known: Midas, who was later mythologised in the Greek-speaking world as being able to turn objects into gold by touching them.

The area of the earlier Phrygian kingdom was ultimately taken over by the Achaemenid empire in the 6th century BCE (Brixhe 2008: 71). For the

following two centuries, a Persian elite would have proliferated in the area, though its linguistic influence on the Phrygian-speaking community was apparently minimal: no loanwords from any Iranian language have been securely identified in the Phrygian corpus and the language continued being written.

Alexander the Great passed through Phrygia in the late 4th century BCE and famously made a stop at Gordion, where he cut the eponymous knot. The entirety of the Phrygian-speaking area was incorporated into his empire (LL 1816). This marks a fundamental breaking point in the history of Phrygia.

The only Phrygian inscription written from the period of Alexander's conquests up to the first centuries of the common era, °W-11, dates to the late 4th or early 3rd century BCE, shortly after the death of Alexander (CIPP II 7). It is the first Phrygian inscription written in the Greek alphabet and it includes two Greek names as well as at least one loanword from Greek, suggesting that the Hellenization of the more prominent parts of Phrygia was extremely rapid and pervasive (cf. Brixhe 2002b: 247).

After the disintegration of Alexander's empire and the subsequent politically chaotic period, the original Phrygian speaking area eventually became a part of the Kingdom of Pergamon in the 2nd century BCE (LL 1816).

One major upheaval that took place during the period following the disintegration of Alexander's empire was the migration of the Galatians into Phrygia during the 3rd century BCE (Brixhe 2008: 71). This migration of Celtic speakers may have well contributed to the linguistic recession of the Phrygian language, though the Phrygian language itself shows no trace of any kind of a Celtic linguistic influence. There is one inscription from the 2nd century CE, °130^{NW}, where the person named in the inscription has

a clearly Celtic name, Brogimaros, who is described as an ἀρήτηρ (high priest) of Zeus in the Greek portion of the inscription, and which includes a curse formula in the Phrygian language (Avram 2015: 205-206 *et passim*). If nothing else, this inscription clearly shows that the cultural milieu of Phrygia was and remained complex for centuries.

The Phrygian-speaking areas were eventually incorporated into the Roman Republic in 129 BCE (LL 1816). New Phrygian inscriptions began to emerge again during the 2nd century CE, when Phrygia was a province of the Roman Empire (LL 1818).

The Phrygian speaking area at the beginning of the common era was severely reduced when compared to its pre-Alexandrian state, far smaller in size and generally limited to more remote locations (Brixhe 2008: 71-72). The centuries of Hellenization had left an indelible mark on the language by this point: the new inscriptions were all written in the Greek alphabet and the majority of Phrygian inscriptions from this era are preceded by a Greek-language text (PhL 22). The number of Greek loanwords or terms referring to Hellenic cultural items in the Phrygian texts increased as well. Nevertheless, the language did not die out and remained actively used, though we may speculate that many of its speakers, in particular those who commissioned Phrygian inscriptions, would have been fluent speakers of Koiné Greek as well.

By the end of the 3rd century CE, Phrygian inscriptions stopped being written (LL 1818). This would have been the result of a gradual adoption of (late) Koiné Greek as the primary language by the remaining Phrygian-speaking local population, a trend that had begun several centuries earlier. There would have been a period when Phrygian was no longer used as a written language, but remained spoken by progressively smaller remote communities.

When the Phrygian language died out entirely is ultimately unknown, as scattered communities may have persisted in certain social environments in isolated areas for some time, but its trajectory toward demise was nigh inevitable by the 4th century CE.

The last historical record of the Phrygians is in the 5th century CE. The text of church historian Socrates states that Selinas, a successor of Wulfila, was the child of a Phrygian mother and preached to the local population in their language (Brixhe 2002b: 252). Since Selinas is mentioned in the context of a Gothic Arian church, it is possible, and indeed likely, that the local language being referred to is Greek rather than Phrygian. Nevertheless, he is the last descendant of the Phrygian people we can name.

I.2 Attestation of Phrygian

The Phrygian language is directly attested in a total of about 500 inscriptions (PhL 7-9).

The corpus of Phrygian inscriptions is traditionally divided into two periods: Old Phrygian and New Phrygian. For the past two decades, a third period, Middle Phrygian, is commonly used to describe the period between the two larger phases of Phrygian attestation. Currently, the Middle Phrygian corpus only consists of inscription °W-11.

The Old Phrygian inscriptions are the older of the two and encompass all inscriptions written since the language began being written (in the 8th century BCE) up to the 5th or 4th century BCE (depending on the dating of some inscriptions). Ultimately, the dividing line between the Old and Middle Phrygian periods is the incorporation of Phrygia into Alexander's

empire, after which point the language would be subject to heavy influence by a Greek superstrate.

The Old Phrygian corpus consists of about 400 inscriptions (PhL 7). These are all written in a native Phrygian alphabet and on a variety of materials: stone, pottery, wood, and even a singular clay tablet. Presumably, more perishable materials would have been used as well, though none are known to survive.

The vast majority of Old Phrygian inscriptions are mostly only a word long. These are graffiti or etchings into pottery and many, particularly those found on pottery sherds, are fragmentary. Unfortunately, it is practically impossible to perform any sort of linguistic analysis on such single word texts; for the most part, they can generally be used to corroborate readings and analyses of words found in other inscriptions.

The longer Old Phrygian inscriptions, i.e. those that lend themselves to proper linguistic analysis, are seemingly of a monumental nature and written in stone. Among these, some, such as the inscriptions from Midas-town, the M-series, give credit to those who commissioned or consecrated a monument and seem to have a broader public, either religious or political, purpose. Others may have had a variety of different functions, with funerary inscriptions being the most common variant.

The Old Phrygian inscriptions found up to 2004 are compiled in Brixhe-Lejeune (1984 = CIPP), Brixhe (2002 = CIPP1), and Brixhe (2004 = CIPP2). These works are still the best collection of Old Phrygians texts in terms of providing an image, a reading, an interpretation, and all preceding literature discussing the individual inscriptions up to the point of publication. The three works in question, beginning with Brixhe-Lejeune (CIPP) also provide what are currently the canonical designations of the

Old Phrygian inscriptions. The inscriptions are given a letter, designating the area in which they were found, and a number, generally derived from when an inscription was discovered or first analysed as Phrygian. The naming scheme for inscriptions based on these criteria is currently more than sufficient for the purposes of Phrygian scholarship and there seems to be no pressing need to emend it in any way.

Obrador-Cursach's *The Phrygian Language* follows Brixhe and Lejeune's naming scheme and provides readings of all Old Phrygian inscriptions, along with commentary and literature appearing after the publication of the three parts of CIPP. This is sufficient for the majority of scholarly purposes. The CIPP series of publications currently remains the source one should consult in an effort to come as close to the original material as possible, since it provides photos and drawings of Old Phrygian inscriptions, allowing one to engage with the form of the inscriptions themselves and thereby obviating the need for consulting older literature where technical limitations required either verbal descriptions or taking provided readings at face value when not having access to the original materials themselves.

Very few Old Phrygian inscriptions have been identified since the publication of CIPP2 in 2004, so there is currently no pressing need to replace CIPP as a compilation of Old Phrygian inscriptions, which continues to serve its purpose. Nevertheless, an update of CIPP would be welcome; not necessarily as linguistic work, which may become superseded, but by providing more photographic material to allow future scholarship to engage better with the primary material.

The New Phrygian inscriptions were initially thought to have been written in some local variety of Greek; this assumption was bolstered by the fact that many of the New Phrygian inscriptions actually began with actual

Greek and only ended with a short phrase in New Phrygian. In the late 19th century, the inscriptions of the area where we now know New Phrygian was spoken were simply numerically numbered in sequence of discovery: inscription °1 was seen first, then inscription °2, and so on. All inscriptions found in the Phrygian speaking area, regardless of the language in which they were written, were assigned a number. This traditional numbering based entirely on the broad area of discovery become entrenched, and no effort was made to separate the Greek language inscriptions from the Phrygian language inscriptions. Eventually, only the newly discovered New Phrygian language inscriptions began being assigned a number as part of this specific corpus, with Greek language inscriptions no longer being added to it, but the already established designations of the inscriptions persisted. For this reason, there is no Phrygian inscription °1; the local inscription designated as °1 is written entirely in Greek.

The numbering scheme established in the 19th century continues to be used to this day: a recently discovered inscription, found near Nakoleia, is automatically assumed to be inscription °130, for instance.

The designation scheme of New Phrygian is obviously problematic: the number ascribed to any individual inscription is fundamentally arbitrary, only based on time of discovery, and provides no additional information. We may contrast this with the naming scheme of the Old Phrygian inscriptions, where the designation itself already provides the general area where the inscription was discovered. Information of this type is crucial for easily detecting areal characteristics of inscriptions.[1]

[1] For instance, the curse formula with γεγρειμεναν is only attested in inscriptions found in the eastern area of Phrygia. If one were to only look at the numerical designations of inscriptions where this formula is attested, namely °32^{E}, °34^{E}, °59^{E}, °76^{E}, etc., no such geographic affinity between them would be suggested.

Orel (1997) attempted to create a new naming convention for Phrygian inscriptions, eschewing the more common distinction of taking Old and New Phrygian as belonging to two separate corpora numbered separately, by using designations which provide the geographical area where an inscription was discovered and an asterisk to mark that the inscription belongs to the New Phrygian period (e.g. inscription °2^{W} is designated as W*-12 in Orel). Orel's attempt at re-designating the corpus was ultimately unsuccessful and was never adopted by Phrygian scholarship.

In his *The Phrygian Language,* Obrador-Cursach (2020) abandons the old numbering system in favour of a novel system based primarily on the location where an inscription was discovered. Thus, for instance, traditional inscription °2 is 4.1 in Obrador-Cursach's system, with the number designating the specific town or village in or around where an inscription was discovered (in this case 4 = Üçüyük). Nevertheless, the author thankfully consistently includes the traditional designation in parentheses to allow for easier reference to older works.

Obrador-Cursach's monograph is likely to be broadly used by the following generation of Phrygian scholars, but it remains to be seen whether his naming convention will ultimately be adopted.

It is my opinion that Obrador-Cursach's approach is overly ambitious in its implementation, a trait it shares with Orel's ultimately unsuccessful attempt from a quarter of a century ago. Certainly, the naming scheme of New Phrygian inscriptions has been ripe for a make-over for decades by this point, and a naming scheme based on geographic locations is the optimal choice. Obrador-Cursach's attempt leaves something to be desired for one fundamental reason: it attempts to entirely supersede the previous system, thereby requiring anyone engaging with previous Phrygian scholarship, all of which uses the traditional numbering system, to continuously make use

of the concordance tables. In essence, it is not "backwards compatible". At present, even Obrador-Cursach himself gives both his and the traditional designation for an inscription, but if his system were generally adopted, all pre-2020 Phrygian scholarship would inevitably become far more tedious to consult. I do not believe, however, that the field of Phrygian studies has reached a point where previous scholarship ought to be so strongly relegated to the margins. On the other hand, if both his and the traditional designations continue to be used side by side, the inscription designations will for all intents and purposes become more bloated and redundant.

The solution I adopt in this work attempts to be a compromise between the traditional numbering system and the more informative area-based systems in an effort to preserve a link to previous scholarship while adding the relevant geographic information in as transparent and simple manner as possible.

I.2.1 The designation of New Phrygian inscriptions in this work

New Phrygian inscriptions in this work are designated by the number they were assigned in the traditional New Phrygian designation system. After the number of the inscription, however, superscript capital letters are added; they designate the general area in which the inscription was discovered. Thus, the traditional numbering system is preserved entirely,

with the superscript capital letters simply providing an additional piece of information on the place of origin. [2],[3]

The entirety of the area in which New Phrygian inscriptions have been found has been divided into nine rectangular area for the purposes of designating the inscriptions. The geographical limits of these areas are:

designation	*geographical limits*	*number of inscriptions*
NW	latitude between 39,2° and 40° N; longitude between 30° and 31° E	7
N	latitude between 39,2° and 40° N; longitude between 31° and 32° E	2
NE	latitude between 39,2° and 40° N; longitude between 32° and 33° E	0
W	latitude between 38,4° and 39,2° N; longitude between 30° and 31° E	34
C	latitude between 38,4° and 39,2° N; longitude between 31° and 32° E	12

[2] In contrast, Obrador-Cursach (in PhL) designates inscriptions by giving specific towns and villages in and around which inscriptions were found a specific number, but this results in a total of 66 locations being differentiated in his naming scheme, which seems to me overly specific, and potentially overly confusing, for purely naming purposes.

[3] Furthermore, as an additional hurdle, Obrador-Cursach opted to use numbers as a means of designating geographical areas. Using superscript numbers to give information on the place of origin would have resulted in an unnecessarily confusing format: for example, °35^{62} does not suggest as obviously that the superscript is an addition giving further information rather than fundamentally modifying the basic number. The use of a letter is also more convenient for purely practical purposes: when writing by hand or when using a text format that does not allow subscripted letters, something like °2W (for °2^{W}) remains unambiguous, whereas Obrador-Cursach's 4.1 has the potential to be confused for old °41, to say nothing of a hybrid system using his numerical designations, with °2^{4} designating old inscription °2 and adding the area number in PhL as a superscript.

E	latitude between 38,4° and 39,2° N; longitude between 32° and 33° E	31
SW	latitude between 38,4° and 39,2° N; longitude between 30° and 31° E	11
S	latitude between 38,4° and 39,2° N; longitude between 31° and 32° E	11
SE	latitude between 38,4° and 39,2° N; longitude between 32° and 33° E	8

Table #1: The areas in which New Phrygian inscriptions have been found.[4]

Should the need arise, the system employed here can be easily emended to provide as broad or as narrow a geographical designation as is required for any specific purpose. For the purposes
of this work, the nine areas designated above have proven sufficient. If one wished to examine the inscriptions even more closely in areal terms, however, there is no reason why, for instance, °103^{C} and °104^{C} could not be further sub-designated as °103$^{C\text{-}Turgut}$ and °104$^{C\text{-}Asagipiribeyli}$.

I.3 Aim of this work

Phrygian is a poorly attested language. Since it was first identified as an Indo-European language, practically every major insight or interpretation of the Phrygian inscriptions for the better part of a century owes its discovery to this fundamental linguistic fact. Only after certain inherent

[4] There is a single inscription that was found slightly outside the nine designated areas, namely inscription °97^{W+}. It was was discovered in Çardavhisar, which is located at approximately 39,19° N 29,6° E, i.e. to the west of area designated W. For this reason, it is designated with a superscript W+.

characteristics of the language were established could the post-philological era of Phrygian studies begin, arguably with Gusmani's *Le iscrizioni dell'antico frigio* (Gusmani 1958). Haas's (1966) introduction was the first attempt at creating a monograph that would condense all the knowledge on Phrygian that was available at the time. Nevertheless, in those early years of Phrygian studies, many insights we may take for granted now were still under heavy dispute. The actual moment when the modern phase of Phrygian studies began was with the publication of Brixhe-Lejeune's monumental CIPP (1984). This work and its addenda are still of great importance when dealing with Old Phrygian inscriptions. Unfortunately, no New Phrygian corpus was published in as comprehensive a volume at the time, though Brixhe did make the effort to collect and publish the New Phrygian inscriptions in article form.

Since the beginning of the 1980s, a handful of attempts have been made to provide a new monograph on Phrygian that would supersede Haas's outdated introduction. Unfortunately, none have been successful. Diakonov and Neroznak published their own introduction to Phrygian in 1985, *Phrygian*, but their work was not overly informative on the topic of alternative, more common, analyses, and rather focused on their idiosyncratic treatment of Phrygian that largely ignored the insights of the scholars of the late 60s and 70s.

In 1997, more than 30 years after Haas's monograph, Orel published a monograph on Phrygian that could have easily superseded Haas's work as the go-to resource for Phrygian, *The Language of Phrygians*. Unfortunately, Orel decided to mostly ignore scholarship on Phrygian and opted to publish a Phrygian "primer" that was entirely at odds with the dominant scholarship on Phrygian at the time. Certainly, some ideas could be viable, but the rejection of Phrygian scholarship in general was palpable.

It took more than another twenty years, until 2020, before a representative monograph on Phrygian would be published, a total of 54 years since Haas's long since superseded work. The work in question is, of course, *The Phrygian Language* by Bartomeu Obrador-Cursach. It functions splendidly as an introduction to Phrygian studies: for any prospective scholar of Phrygian, the entire corpus is provided in functional terms, and all the major insights of previous scholarship are faithfully included. For anyone wishing to be introduced to Phrygian, there is no better introduction.

The aims of *The Phrygian Language* are clear: to be the definitive linguistic introduction into Phrygian. The aim of this work is to go a step further: whereas *The Phrygian Language* serves in an introductory and largely descriptive capacity, the goal of this work is to provide the first systematic grammar of Phrygian in both synchronic and diachronic terms to the best of our ability, beyond simply listing attested forms. This will enable future scholars to more fully utilize Phrygian as a means of reconstructing Proto-Indo-European.

The author of this work is certainly fortunate by not needing to have written an introduction to Phrygian. While every effort has been made to make this work readable on its own, and scholars of Indo-European ought to be able to follow the arguments by following the footnotes and comments, engaging with this work is truly most rewarding if one is familiar with Obrador-Cursach's *The Phrygian Language.* Once again, the target audience of this work are not people wishing to catch a glimpse of Phrygian, but rather those who wish to deepen their knowledge of this fragmentary language.

I.4 Methodology

Attempting to properly analyse a language as scarcely attested as Phrygian is inherently fraught with a number of difficulties.
Phrygian possesses a corpus that is composed of a series of inscriptions. Many of these are formulaic to some degree. Formulaicity is a double-edged sword in interpretative terms. On the one hand, comparing different types of formulaic expressions allows one to identify syntactic and morphological identities of what would otherwise be unparseable forms, thereby allowing the construction of a rudimentary grammar. On the other hand, as wide-spread a formulaicity as is found in the Phrygian, particularly the New Phrygian, corpus greatly restricts the number of forms we may securely identify outside a very specific context.

Much work has already been done in identifying various syntactic and grammatical constructions of Phrygian, and a large number of vocabulary items have already been clearly defined. These analyses, most of which are generally endorsed in this work, principally followed two methods: 1) the combinatorial method, and 2) the etymological method.

For the former, we may give this simple example:
ιος νι σεμουν κνουμανει κακουν αδδακετ 'whoever would do something bad to this grave'
ιος νι σεμουν κνουμανει κακουν αββερετ 'whoever would bring something bad to this grave'
A simple comparison of the two variants clearly suggests that αδδακετ and αββερετ are similar in meaning and that they are likely morphologically

identical forms, since both end with -ετ. Once the meaning of one is known, the meaning and morphological make-up of the latter can likely be compared.

The latter method hinges greatly on the fact that Phrygian was identified as an Indo-European language at an early stage.
Sound laws were established for how Phrygian developed from PIE on the basis of some rudimentary apparent correspondences; e.g. *matar* 'mother' ~ PIE **meh₂tḗr* 'id.'*, materan* 'mother (ASg)' ~ PIE **meh₂-ter-m* 'id.'.

In general, modern Phrygian studies emerged from these two methodological approaches combined. New etymological and combinatorial analyses would be generally considered and examined on a primarily individual basis.

While this work explicitly considers the two methodological approaches to identifying Phrygian forms as its primary basis, it differs from and expands on the traditional analysis of Phrygian in a fundamental sense.
The attested grammatical forms are not analysed in an individual manner. Rather, every form is assumed to belong to what would have been a coherent system of phonology, morphology, and syntax, and the implications of the various forms belonging to such a system are pursued.
The culmination of this pursuit is the present work, where the Phrygian phonological/phonetic and grammatical system is presented in terms of various categories belonging to different domains of the language, as opposed to the more common approach where categorising the forms is secondary, with interpretations of specific inscriptions or lemmata taking precedence.

For such an analysis to be possible, invididual lemmata and inscriptions do naturally need to be interpreted on a case-by-case basis. This is always done in service of providing a broader systemic picture, however. For this reason, certain individual forms need to examined extremely closely, and such analyses of individual forms make up much of the chapter on the nominals and the verbs. On the other hand, if the morphological make-up of a specific form is evident (for instance by being directly comparable to some other form), it need not be examined in as much detail, even if some element of it remains obscure, but irrelevant for the category at hand.[5]

In a great number of instances, a certain form can be equally validly interpreted in more than one way. When such a situation occurs, every effort has been made to list all reasonably viable possibilities.
Such possible analyses are mutually exclusive, so the question naturally arises under which grammatical category a specific form should be listed. For the most part, the placement of a form is given under the category which the author feels is best suited to include the discussion of the form. Commonly, this will also be the grammatical category that has been assumed by earlier scholarship; specifically, the work that seemed to provide the best argumentation up to this point.

As a demonstration of this principle, consider the form κενα. It agrees syntactically with the thematic adjective whose case form is παντα 'all', apparently a NAPl neut., and the verb ιννου, the 3pl imperative verbal form

[5] For instance, in §V.3.9.2, the synchronic present stem δακε- of the verbal root δακ- is analysed from the perspective of a thematic present, where the stem behaves entirely regularly. The diachronic perspective is examined separately in §V.3.9.2 and §V.3.9.3.

of the verbal root ει- 'to go, come, become'. Quite clearly then, κενα, whatever its meaning, likewise shows the nom./acc. pl. neut. desinence -α. Formally, this desinence could belong to: a) a neuter *s*-stem nominal κεν-ες-; b) a neuter *o*-stem nominal κεν-o-; c) a neuter root noun κεν-. All three options are listed as possibilities when the word is discussed. Nevertheless, the form has been listed under the category of *s*-stems for the following reasons: 1) previous scholarship tended to assume an *s*-stem declension;[6] 2) κενα only requires an extended analysis if we assume it to be an *s*-stem noun: if the form belongs to the *o*-stems or the root nouns, its behaviour is entirely predictable and requires no commentary whatsoever; 3) κενα serves as a possible parallel to the pair NASg ακκαλος / NAPl ακαλα, which most likely belong to the category of *s*-stems, so treating the three together in a single section makes the related arguments easier to follow in a linear fashion.

Do note that this is one example of the approach in practice. Throughout the work, the reasoning for why a specific form has been cited under a certain grammatical category will not be as explicitly laid out as here, but follows the same general principles. Where relevant, footnotes are provided to guide the reader to the appropriate section.

Another characteristic of this work is that certain allowances have been made to allow the work to be used by Indo-Europeanist scholars of different persuasions. The reality of the field is that in a good number of cases there exist different approaches to the reconstruction of some facets of the proto-language. Explicitly following a specific model, while that would

[6] This ascription was based on the mistaken assumption that an s-stem κενος would have been cognate with Greek γένος (§III.3.9). Nevertheless, even if the root elements are not formally compatible, an *s*-stem declensional type remains a distinct possibility.

significantly simplify some analyses, runs into the issue of making entire sections of this work effectively useless to those following an alternative model. The aim of this work is to provide a systematic historical grammar to all Indo-European scholars. As such, a conscious effort has been made to make this work at least somewhat model-proof, allowing every mainstream Indo-European scholar to follow the argumentation given without needing to take excessive effort to "undo" idiosyncrasies of a specific model.

This is not to say that the author does not have preferences of his own, and these will undoubtedly shine through or be explicitly stated. Thus, while an effort has been made to have the work be useful and accessible to most mainstream Indo-European scholars regardless of specific views, no claim can be made that the work is entirely "model-neutral".

Finally, while this "ambiguous" approach to reconstruction tends to be followed, there do exist certain limits. Broadly contested hypotheses and fringe models will be entirely disregarded, unless there is some good reason to include them.[7]

In some cases, what some scholars may consider to be unproven hypotheses have been adopted; most notably Bozzone's work on "schwa secundum" or Martinet and Olsen's hypothesis of laryngeal hardening (along with Kortlandt's work on the matter). Where following argumentation hinges on the adoption of such a hypothesis, this is explicitly marked. For the most part, even if one rejected these specific hypotheses, this would only affect a handful of forms without any broader systemic implications, and an alternative model is provided.

[7] For instance, on the Phrygian-specific level, Čašule (in, e. g., Čašule 2014) presents a model of Phygian that disregards the vast majority of all other Phrygian scholarship and will, as such, not be discussed.

As a general heuristic principle, the lemmata being discussed, unless explicitly stated otherwise, are assumed to ultimately be of Indo-European origin, unless some reason exists to suspect otherwise.

In some instances, an Indo-European origin of some constituent element of an analysed lemma is absolutely secure and evident. The majority of such secure cases have been successfully identified by decades of previous scholarship. For instance, there can hardly be any doubt that the form βερετ is composed of the reflex of the PIE root **b^{h}er-* 'to bear, bring', the thematic vowel, and a 3rd person singular ending.

Other instances are more contentious: some components of a form can clearly be identified as having an Indo-European origin, but some element, almost exclusively the lexical root with a possible suffix of some kind, remains unexplained. Still, many forms with unknown semantics and an enigmatic sequence can be formally analysed within Phrygian. For instance, one does not need to know what the origin of the synchronic lexical element *mem-* was to identify the attested form *memevais* as being composed of the elements *mem-* and the nom. sg. form of the suffix *-evais*, which is attested elsewhere. Nor is it necessary to know the meaning of ακκαλος to identify that it is a neuter *s*-stem in the NASg on the basis of its syntactic function.

There are some instances where the reverse approach is adopted and a possible etymology of the lexical root provides insight into a form that could otherwise not be parsed. It should go without saying that any analysis predicated on an assumed etymological origin of a lexical root is in

principle less secure than analyses proceeding from the opposite direction and is generally avoided. Perhaps the best example of this approach in action is the analysis of the attested form γουμεις.[8] Formally, we may identify the form as a dative plural form of either an *e*-stem γουμε- or an *m*-stem γουμ-. Since *e*-stems are generally limited to non-native names in the Phrygian corpus, the interpretation of the form as an *m*-stem is preferable to begin with. Semantically, we may guess as to the broad function of the form: it appears as part of a curse formula meaning 'if anyone should do something bad to this grave-plot or these *goumeis* [dat. pl.]'. If we assume an IE origin for an *m*-stem γουμ-, with *m*-stems generally being extremely uncommon in the Indo-European languages, the list of possible candidates quickly boils down to the PIE noun for 'earth', **dʰeǵ-om*-, with the derived form **dʰǵʰom*- providing the basis for Greek χθών and Sanskrit *kṣā́m*. This derived form would likely regularly develop into Phrygian γουμ-. We then have two reasons to uphold this etymological connection: 1) the only Phrygian *m*-stem formally fits a known derivation of the only known PIE *m*-stem, assuming **dʰǵʰ*- > Phr. γ-; 2) the meaning fits with only a minor shift from 'ground' to 'a specific piece of land' required: *burial-plots* or *[burial] grounds*. The given analysis is quite strong and, in turn, now allows us to more firmly postulate that **dʰǵʰ*- > PPh. **g*-. While other, more indirect evidence, suggests this development, this analysis of the form now provides a crucial piece of evidence for what the development of PIE "thorn" clusters was in Phrygian and, by extension, Graeco-Phrygian.

Thus, whenever such a "root etymology" is sought out, the cumulative evidence suggesting Indo-European origin must clearly outweigh the

[8] For a full account, see §II.3.1.2.2.

possibility of some element of the form being loaned. In the case of γουμ-, the analysis of this element as non-native has no positive indication whatsoever and only makes sense if one assumes that any form with a possible non-native element *must* be interpreted as inherently non-native until proven otherwise. As a principle, this would be misguided. As Beekes (1996: 215) laid out in his paper on identifying substrate vocabulary: "One might argue that the starting point must be that a word in an Indo-European language must be IE, unless this proves not to be the case. And heuristically this is the best way we can work."

In some instances, however, there do exist clues that we are dealing with non-native material. While every loan must have obviously been adapted to fit Phrygian phonology and morphology through the process of nativization (Hock 1991: 390ff.), some clear indications can usually be found. These fall into two broad categories: 1) phonological/phonetic; and 2) morphological.

The phonological/phonetic indications are usually quite transparent: either some alternation that cannot be explained in Phrygian-internal terms can be found, or some phonotactic reason suggests a non-native origin. For the former, the best example is the co-existence of both σκελεδρια- and σκερεδρια-. No native process can reasonably explain the alternation of λ and ρ; most likely it is borrowing from a language where some resonant could be interpreted by the Phrygians as either their λ or ρ. For the latter, the best example is μδυ-. No other word in Phrygian is known to violate the sonority hierarchy by having the stop appear after a resonant at the onset of a syllable.

The morphological indications are usually not as clear cut. One known indication that we are dealing with a loan is the declension of a nominal as

an *e*-stem. The category is almost exclusively limited to personal names that also appear elsewhere in Anatolia. As Phrygian adopted such names, it innovated a quasi-thematic *e*-stem declension on the basis of the thematic stems. In general, whenever an *e*-stem nominal is identified, it is likely a non-native personal name. Nevertheless, it appears that the *e*-stems expanded in productivity and could form derivations from native material as well, one such examples being the personal name *Bateles*, whose constituent morphemes are all of native Phrygian provenance.
Other likely non-native material is identified on the basis of similar considerations.

I.4.1 Graeco-Phrygian as an interpretative tool

In addition to the approach laid out above, one other element greatly informs the analysis of individual forms: the acceptance of the Graeco-Phrygian hypothesis.

The Graeco-Phrygian hypothesis suggests that, after splitting from PIE proper, the predecessor of both all the Greek dialects and Phrygian was initially a unitary Proto-Graeco-Phrygian language that underwent a series of innovations before splitting into Proto-Greek and Proto-Phrygian, which then developed separately, the first into the various Greek dialects, and the latter into attested Old, and later New, Phrygian.

I.4.1.1 Preliminary evidence for the existence of a Graeco-Phrygian branch

The strongest and most widely accepted hypothesis on the phylogeny of the Phrygian language is that its closest relative was Greek. There is, however, a marked wariness in the literature against using the terms Graeco-Phrygian for the branch of Indo-European including Greek and Phrygian or Proto-Graeco-Phrygian for the proto-language of that branch. In some instances, this terminological avoidance may be ascribed to the authors perhaps not considering the Graeco-Phrygian affinity as genetic, but rather the result of two late-PIE dialects emerging in close proximity to the other. Others may have wished to reserve judgement on the matter until some later time. Nevertheless, even when an author explicitly agrees with the existence of a post-PIE proto-language that later gave rise to both Greek and Phrygian and which should, by every metric, be called Proto-Graeco-Phrygian, the term continues to be strongly avoided. Perhaps this is due to an attempt to not ascribe undue importance to Phrygian in the context of Indo-European and Hellenic studies, due to scholars themselves not being convinced that the data is sufficient to warrant broad acceptance of the clade, or even due to a tacit understanding that any scholar of Phrygian would be familiar with the hypothesis and that no explicit acknowledgement of a Graeco-Phrygian hypothesis is necessary.

This is unfortunate, since it perpetuates the idea that Phrygian should be considered comparable to the other "Paleo-Balkan" languages, which are extremely sparsely attested, if even that, and whose genetic affiliation is for all practical purposes currently impossible to determine with any degree of certainty. In essence, the "Paleo-Balkan" group is the designation for the group of minor IE languages appearing in the general area of the Balkans

that do not allow better categorisation.[9] Indeed, Phrygian is included in this group in some major introductions to Indo-European languages and linguistics.

I hope that the recent, though currently still minor, scholarly trend of explicitly acknowledging the existence of a Graeco-Phrygian genetic clade, to which this work aims to contribute, will finally lay rest to the old question of Phrygian genetic affiliation, permitting the field to make broader use of the vast interpretative potential provided by the adoption of the Graeco-Phrygian hypothesis.

The evidence in favour of a Graeco-Phrygian branch is robust. Note that none of the arguments provided in this section originate in the present work; all of them have actually been published before the present work began being composed. For this reason, they are given as "preliminary" evidence; though, as it will turn out, this "preliminary" evidence is already entirely conclusive on the matter.[10] Throughout this work, a number of other instances of common innovations will surface.

[9] The other outlier is Messapic, whose corpus is only second to Phrygian in terms of size among the so-called "Paleo-Balkan" languages. Even so, the inclusion of Messapic in that group is at least warranted on the basis of it not clearly belonging to any of the other established clades of Indo-European.

[10] Obrador-Cursach (2019) has recently compiled this already existing evidence into a definitive article discussing the placement of Phrygian among the Indo-European languages.

- **Phonological**
  - **Treatment of laryngeals** (LL 1823; §II.3.1.1.2)
    - **#$h_{1/2/3}$C > *e/a/oC*;
    - **-C$h_{1/2/3}$# > *-Ce/a/o*;
    - **C$h_{1/2/3}$C > *Ce/a/oC*;
    - **C$h_{1/2/3}$RV > *CaRV*
    - **CR$h_{1/2/3}$C > *CRē/ā/ōC*;
- **Morphological**
  - **Proclitic pronominal **e*** (Obrador-Cursach 2019: 235; §IV.13)
    - The pronominal proclitic particle **e*- can attach itself to the beginning of a pronominal form;
      - Gr. ἐ-κεῖνος ‘this one (masc. nom. sg.)’, Phr. *e-sai* ‘this one (fem. dat. sg.)’.
  - **Pronoun *auto-** (Obrador-Cursach 2019: 235; §IV.5)
    - This pronoun is composed of the reflex of the adverbial **h₂eu*- ‘again’ and the pronominal stem **to*- ;
      - Gr. αὐτο- ‘he/she/it(self)’, Phr. *avto*- ‘id.’, both < PGPh. **h₂eu-to*-.
  - **Masculine *a*-stem paradigm** (Obrador-Cursach 2019: 236; §III.3.10)
    - The nominative singular case of this paradigm receives the innovative ending *-*s* (Obrador-Cursach 2019: 236);
      - Gr. μέγας ‘great, big (nom. sg.)’, Phr. *mekas* ‘id.’.

- **Agentive suffix **-ē/eu-*** (Obrador-Cursach 2019: 236; §III.3.4.1)
  - Secondarily thematised in Phrygian;
    - Gr. ἱππ-εύ-ς ‘horse-rider (nom. sg.)’, Phr. *akenanog-av-os* ‘? (nom. sg.)’.
- **Locatival adverbial desinence **-dʰ(e)n*** (Obrador-Cursach 2019: 235; §VI.4)
  - In zero-grade in Greek dialects and in Phrygian, full grade in Attic;
    - Aeolic Gr. πρόσ-θα ‘before’, Phr. *upso-dan* ‘above’, both desinences < **-dʰn*.
- **3sg middle imperative ending **-sdʰō(d)*** (LL 1828; §V.2.4)
  - Created analogically on the basis of: **-te* (2pl active imperative) : **-tō(d)* (3sg active imperative) = **-sdʰe* (2pl middle imperative) : X (3sg middle imperative), X = **-sdʰō(d);*
    - Gr. ἐχέ-σθω ‘to hold (3sg mid. pres. impv.)’, Phr. εγε-δου ‘id.’.
- **The class of **-o-je/o-* denominal verbs** (cf. Obrador-Cursach 2019: 237; §V.3.5)
  - Late denominal present from thematic nouns, contrasted with early denominal presents from thematic nouns with **-e-je/o-*;
    - Gr. κακ-ο-ε/ο- ‘to do bad’, Phr. *kak-oj-oi* ‘to do bad (3sg pres. opt.)’.

- **Lexical**
  - **The addition of a suffix **-ik-* to the noun **gʷenh₂* 'woman'** (Obrador-Cursach 2019: 235; §III.3.10.2)
    - Gr. γυναικ- 'woman', Phr. *knayk-* 'id.'.
  - **The lexical item **kako-*** (Obrador-Cursach 2019: 237-238; §III.3.1.3)
    - Gr. κακο- 'bad', Phr. κακο- 'id.'.
  - **The lexical item **korŭ-o/ā-*** (Obrador-Cursach 2019: 238; §III.3.1.5)
    - Gr. κορή 'girl', Phr. κοροαν 'id.'.
  - **The lexical item **mōro-*** (Obrador-Cursach 2019: 238; §III.3.1.7)
    - Gr. μῶρος 'stupidity (nom. sg.)', Phr. μουρον 'id. (acc. sg.)'.
  - **The verbal root **sleh₂gʷ-*** (Obrador-Cursach 2019: 238; §V.3.2.3)
    - Gr. λαβ-ε/o- 'to grasp, seize (aorist stem)', Phr. *lak-e-* 'id. (aorist stem)[?]'.[11]

The features listed as exclusive to Greek and Phrygian are not trivial at all: alongside the entirely unique treatment of the laryngeals, the apparent morphological innovations, which are by their very nature unlikely to be of a non-genetic origin, encompass the pronominal, nominal, and verbal systems.

[11] Though this root may perhaps also be seen in Old English *læccean* 'to grab' (LIV_2 566).

The only reasonable conclusion one may draw from this data is that Greek and Phrygian must have undergone a period of common development that cannot be ascribed to areal proximity alone. This conclusion leads by definition to the fact that there must have existed a Proto-Graeco-Phrygian language.

It is clear that this Proto-Graeco-Phrygian language would have preserved much of the Late-PIE morphology and would not have been phonologically substantially different from it, with the exception of the laryngeal developments. Nevertheless, some period of explicitly common and exclusive genetic development is necessary. While this work makes no pretence at being an attempt at a complete formal reconstruction of Proto-Graeco-Phrygian, some morphological analyses throughout this work will provide various insights into its make-up and structure.

I.4.2 A note on terminology

Throughout this work, different chronological stages in the history and prehistory of Phrygian will be referred to. These stages will be referred to by the following names:

Proto-Indo-European

The common ancestor of all Indo-European languages, including Anatolian.

Proto-Graeco-Phrygian

The language stage encompassing the period from the separation of the predecessor of Greek and Phrygian from all other Indo-European languages to the separation of the predecessors of Greek and Phrygian.

Proto-Phrygian

The language stage encompassing the period from the separation of the predecessor of Phrygian from the predecessor of Greek up to the period of the first Phrygian inscriptions.

Old Phrygian

The language stage of the Old Phrygian inscriptions (approximately from the 8th to the 5th centuries BCE).

Middle Phrygian

The language stage beginning at approximately the time of Alexander's conquest of Phrygia lasting approximately until the beginning of the common era. Only attested in inscription °W-11.

New Phrygian

The language of the New Phrygian inscriptions and the unattested language stage immediately preceding it that already underwent the majority of characteristic New Phrygian developments.

Since language change is a continuous process, perfectly clear boundaries cannot be established between the various stages, especially during periods of slower change. Nevertheless, the terminology utilized here will mostly prove to be sufficient for our purposes. When a relative chronology within a single stage needs to be established, the terms "Early" and Late" will be used, but these are to be understood as relative terms in the immediate context, not as appellations of concrete, absolute language stages.