

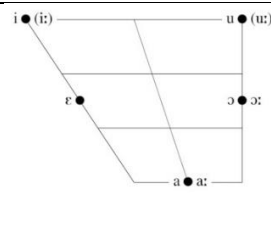
Sound Changes from Old Phrygian to New Phrygian in an Areal Context

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The Phrygian language is attested in two phases: 1) Old Phrygian (8th to 4th century BCE), written in a native alphabet; and 2) New Phrygian (2nd to 3rd century CE), written in the Greek alphabet.

The Old Phrygian phonemic system

	labial	dental	alveolar	palatal	velar
voiceless	/p/ <p>	/t/ <t>			/k/ <k>
voiced	/b/ 	/d/ <d>			/g/ <g>
affricate		/ts/ <↑>, <ś>			
fricative		/s/ <s>, /s:/?			
nasal	/m/ <m>	/n/ <n>, /n:/?			
resonant			/r/ <r>, /l/ <l>		
semi-vowel				/j/ <y>, <i>	/w/ <v>



diphthongs: /ai/, /ei/, /oi/, /au/, /eu/, (/ou/), /āi/, /ōi/

Developments from Old to New Phrygian

- /āi/, /ōi/ > /ā/ in /ō/, then /ō/ > /ū/;
- /V:/ > /V/;
- a special development for *-ōis* (*o*-stem dat. pl. ending) into what is written as <ω> in New Phrygian;
- during New Phrygian: /ei/ > [ē].

The reconstruction of a typical New Phrygian malediction formula

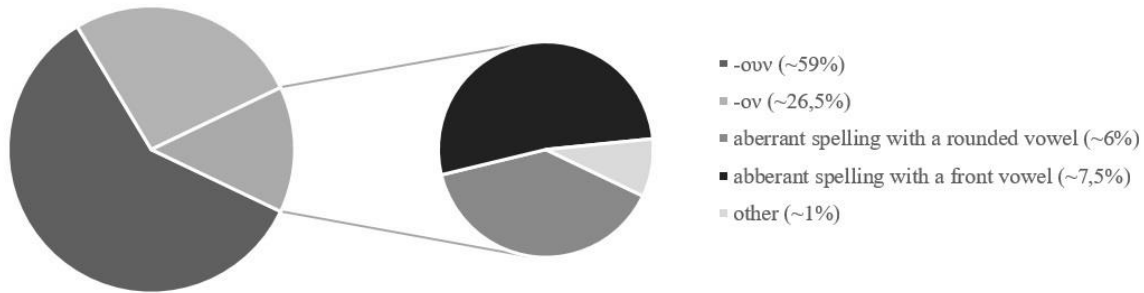
ι <u>ος</u>	ν <u>ι</u>	σε <u>μ</u> ο <u>ν</u>	κ <u>ν</u> ο <u>υ</u> μ <u>αν</u> ει	κα <u>κ</u> ο <u>υ</u> ν	α <u>δ</u> δ <u>α</u> κε <u>τ</u>		
nom. sg.	/	dat. sg.	dat. sg.	acc. sg.	3sg act. sec.		
'whoever	(particle)	to this	grave	bad	does'		
μ <u>ε</u>	ζε <u>μ</u> ε <u>λ</u> ω <u>ς</u>	κε	δε <u>ω</u> ς	κε	Τ <u>ι</u> η	τι <u>τ</u> ε <u>τι</u> κ <u>μ</u> ε <u>ν</u> ο <u>ς</u>	ει <u>τ</u> ο <u>υ</u>
	dat. pl.		dat. pl.		dat. sg.	nom. sg. perf. med. ptcp.	3sg imperative
'among	earthlings	=and	gods	=and	by Tios	cursed	may become'

Plosives in coda

Final plosives are only preserved in some prepositions and the secondary verbal ending *-τ* (written *-τ* 62 times, assimilated 3 times, lost 3 times). Final oral stops in pre-consonantal position assimilate to the following segment, producing a geminate which is sometimes shortened. Phonetically, final oral stops were at some stage most likely unreleased and only fully pronounced before a vowel. The verbal *-τ* ending with its apparent full release must have been generally re-introduced from its pre-vocalic allomorph.

Nasals in coda

The accusative singular ending of the o-stems in New Phrygian is generally spelt -o(v)v; in a number of examples, however, the spellings for this ending are unexpected.¹



Graph 1: Spellings of the o-stem accusative ending in σεμο(v)v and κακο(v)v.

Vowels before a final nasal are raised and nasalized, which results in a more centralized pronunciation. The segmental nasal might have been lost entirely. The resulting segments (likely merged for some speakers), closer to a central [ɨ]~[ɵ] than any of the phonological vowels, have no way of being represented in the Greek alphabet and are, as a result, written inconsistently.

Gemination

Gemination mostly arose as the result of assimilation of the final plosive of a preposition or preverb to the following consonant: e.g. αδδακετ (αδ=δακετ). Forms with an expected geminate are sometimes written with a single consonant, but the geminate spellings is about twice as common.

A probable relative chronology:

- 1) final plosives are assimilated to the following consonant (e.g. *αδ Τη > ατ Τη; *αδ βερετ > αβ βερετ);
- 2) the prepositions αδ and ττ, when part of a verbal phrase, become preverbs (e.g. *αβ# βερετ > αββερετ);
- 3) the malediction formula is composed, the canonical version has a metrically simplified geminate in ττ(τ)ετικμενος, which is prone to being replaced with its usual, but metrically incorrect, form;
- 4) earliest New Phrygian inscriptions;
- 5) simplification of word-internal gemination (e.g. αδδακετ > αδδακετ); the meter ceases being quantitative;
- 6) simplification of gemination across word boundaries (e.g. ατ Τη > α Τη); the meter is no longer understood, resulting in occasional hypercorrect graphic gemination.

The New Phrygian phonemic system

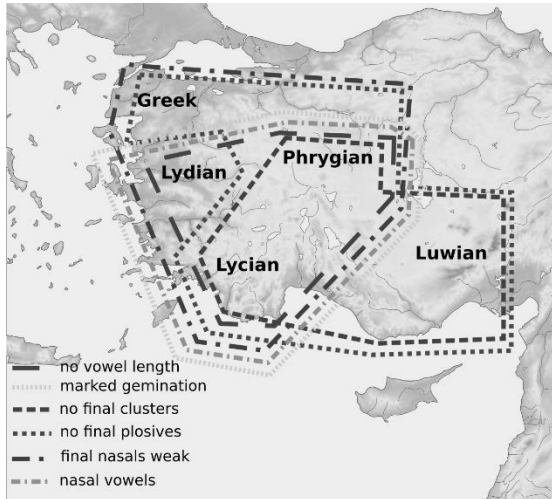
	labial	dental	alveolar	palatal	velar
voiceless	/p/ <π>	/t/ <τ>			/k/ <κ>
voiced	/b/ <β>	/d/ <δ>			/g/ <γ>
fricative		/s/ <σ> /z(:)/ <ζ>			
nasal	/m/ <μ>	/n/ <ν>			
resonant			/r/ <ρ>, /l/ <λ>		
semi-vowel				/j/ <ι>	/w/ <ου>

diphthongs: /ai/ <αι>, /oi/ <οι>, /au/ <αυ>, /eu/ <ευ>, (/ou/ <ου>?), early NPh. also: /ei/ <ει>

¹ NB: Vowel alternations in final syllables in a non-nasal context are otherwise entirely absent in New Phrygian.

Comparison with other nearby languages

By comparing all the developments from Old to New Phrygian against the phonetic systems and phonotactic restrictions of the neighbouring languages, Lycian clearly emerges as a likely influence. While all Phrygian developments are typologically trivial, the fact that they all have a parallel in Lycian makes the similarity unlikely to be simply the result of random chance.



Map 1: Developments from Old to New Phrygian as isoglosses

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