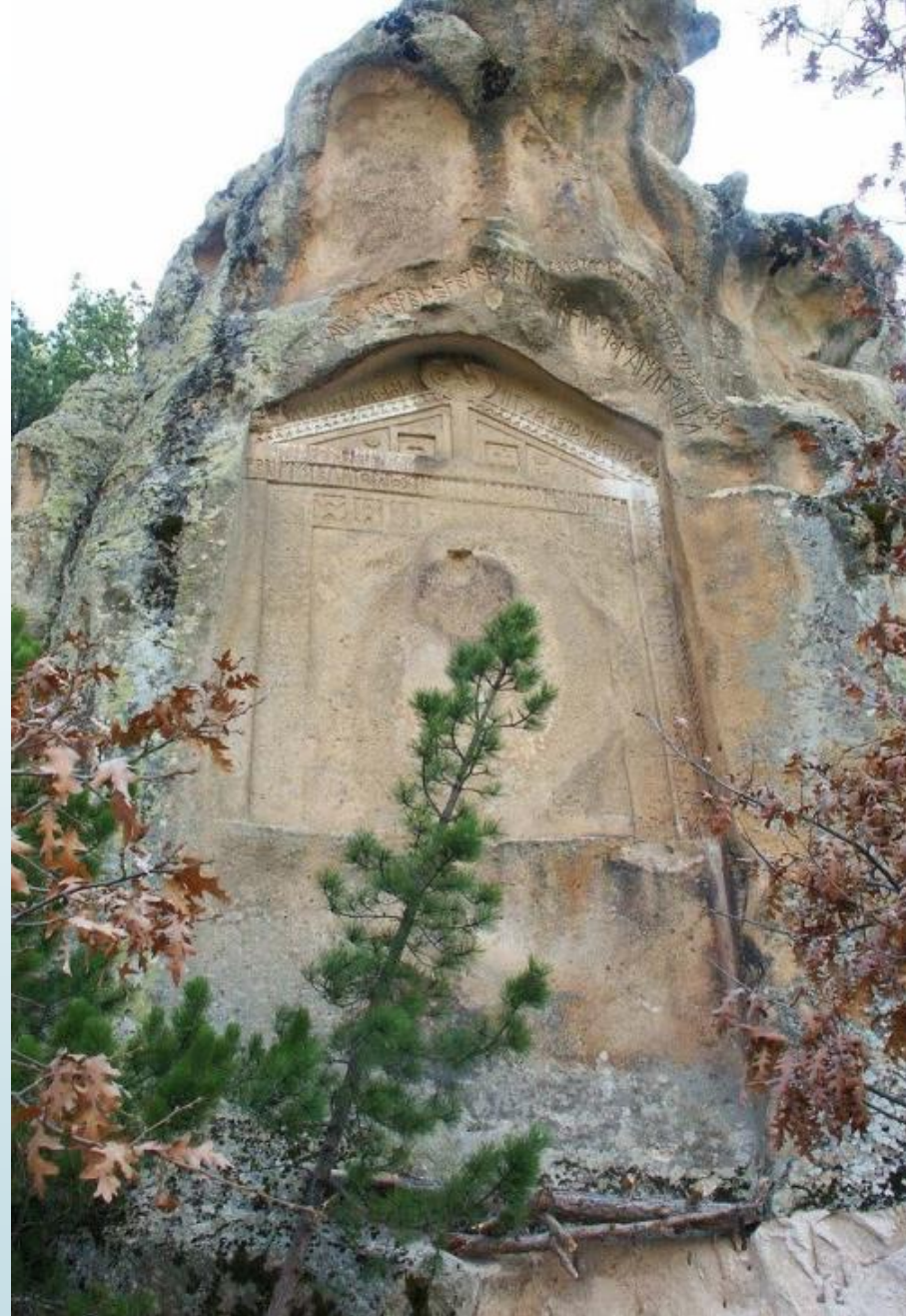


The Phrygian 3rd Person Singular Active Secondary Ending $-t/-\tau$

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Archaisms vs. innovations: topics in relative chronology*



The Phrygian language

- Attested in two phases: Old Phrygian (8th to 4th century BCE) and New Phrygian (2nd to 3rd century CE).
- Old Phrygian:
 - around 400 inscriptions;
 - written in a native alphabet.
- New Phrygian:
 - around 100 inscriptions, mostly malediction formulae;
 - written in the Greek alphabet.



The Graeco-Phrygian branch

- Phrygian and Greek both belong to a single branch of Indo-European.
- Common innovations:
 - vocalization of laryngeals: $*\#h_{1/2/3}C > *\#e/a/oC$; $*Ch_{1/2/3}C > *Ce/a/oC$
 - $*h_1su > ev, \epsilon\upsilon$; $*h_2n\bar{e}r > \alpha\nu\alpha\rho, \acute{\alpha}\nu\eta\rho$; $*h_3nh_3mn > onoman, \acute{o}\nu\omicron\mu\alpha$
 - $*d^hh_1so- > devo-, \theta\epsilon\acute{o}-$; $*ph_2tr- > \pi\alpha\tau\rho-, \pi\alpha\tau\rho-$; $*h_3nh_3mn > onoman, \acute{o}\nu\omicron\mu\alpha$
 - debuccalization of $*s$: $*VsV > *VhV$
 - 3sg middle imperative ending $*-sd^h\bar{o}(d)$
 - OPh. *-do*, NPh. *-δου*; Gr. *-σθω*
 - pronoun **auto-*
 - OPh. *avto-*, Gr. *αὐτό-*
 - masculine *a*-stem paradigm
 - OPh. *mekas*; Gr. *μέγας*

The Phrygian 3sg ending *-t* / *-τ*

- Primarily found in the 3rd person singular of the imperfects:

- 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'

- The Phrygian imperfects: present stem verbal forms.

- All attested examples are thematic:

- *dak-e-t*/δακ-ε-τ < **d^heh₁k-e-*;

- βερ-ε-τ < **b^her-e-*;

- *et-e-(t)* < *?*h₁ed-e-*.

The New Phrygian curse formula

- °57^C: ιος νι σεμουν κνουμανει κακουν αδδακετ, τιττετικμενος ατ τι αδειτου
 - 'whoever would do something bad to this grave, may he become judged by Zeus'
- In conditional clauses, the imperfect has an epistemic modal meaning.
- In main clauses of conditional sentences, the imperfect has a deontic modal meaning:
 - °86^W: ιος νι σεμουν κνουμανι κακουν αδδακετ (...), βαs ιοι βεκοs μεβερετ, (...)
 - 'whoever would do something bad to this grave (...), may Bas give away his bread, (...)'

The Phrygian 3sg ending *-t* / *-τ*

- Also found in the 3rd person singular of the sigmatic optatives:
 - °W01b: *yosesait materēy eveteksetey ovevin onoman daΨet, lakedokey venavtun avtay materēy*
 - 'whoever would put his(?) own(?) name to this Mother *Evetekset*(?), may he be seized by the Mother herself'
 - °58^C: *μονανμρο τη εγεσιτ, γεγρειμενον*
 - '*monanmro*(?) he would hold/have to Zeus, cursed (may he become)'
 - °B-05: *kelmis ke umniset ...*
 - 'and Kelmis he would *umnit*(?)'
- Sigmatic optatives: An innovative verbal formation showing the *-si/e-* suffix (< PIE **-s-* + *-ih₁-*).



From PIE *-t?

- At first glance, Phrygian -t/-τ seems to be a direct reflex of the PIE secondary ending*-t (cf. Skt. -t, Lat. -d, Hitt. -t).
- Endorsed by Obrador-Cursach (2020) and Orel (1997).
- However, Phrygian lost final stops in its prehistory.

Loss of final stops

- 3sg active imperative ending:
 - PIE **tōd* > NPh. -του
 - e. g. εἴτου 'may he become' < **h₁eitōd*.
- Nom./acc. neuter of the demonstrative pronoun:
 - **kíd* > OPh. *si*
 - e. g. *si keneman* 'this niche'.
- 3sg optative desinence:
 - **-oih₁t* > -oi.
 - e. g. *kakoioi* 'he would harm'.
- Common innovation of Proto-Graeco-Phrygian.

From PIE *-ti?

- Haas (1966) and Sowa (2007) suggest development from primary *-ti with loss of final *-i.
- Impossible, since the ending -ti is preserved.
 - Appears in thematic presents:
 - °W-11 πεννιτι ιος κοροαν δετουν σουν ...
 - 'whoever will pass by this interred girl ...'
 - °B-05 ... tubetiv oy nevos deraliv
 - 'may he / he will tube(?) his grandson deraliv(?)'
 - Also appears in sigmatic optatives:
 - °P04a *ios ni akenan egeseti ...*
 - 'whoever would / will hold the *aken* ...'
 - °B-05 *yos niy art sint imenan kaka [...] dedasitiy*
 - 'whoever would do bad things to this monument'
 - °99^w ... με κε οι τοτοσσειτι βασ βεκος
 - '... may Bas give away his bread'

From PIE *-to?

- Ligorio and Lubotsky (2018) suggest that -t/-τ is a middle ending.
- Unlikely, since two middle endings are already attested.
 - °73^W ιος νι σεμον κνουμανι κακον αββερετορ ...
 - 'whoever would cause something bad to be brought to this grave'
 - °129^W ιος νι σα ματερε κακον αββερετοι ...
 - 'whoever causes something bad to be brought to this mother'
- Loss of final *-o is unlikely in any case:
 - PIE **tos*o > OPh. *tov*o

Analogical origin from primary endings

- The likeliest conclusion is that Phrygian *-t/-τ* developed analogically, most likely on the basis of the primary ending *-ti*.
- Any model must take into account Phrygian phonetic developments.
- Models based on 1sg are problematic due to PIE **-m* > Phr. *-n*:
 - *-mi* : *-n* = *-ti* : X is unworkable.
- Models based on 3pl are problematic due to **-nti* > *-vvi*:
 - *-nni* : *-n* = *-ti* : X is dubious due to the geminate.

Analological origin from the second person singular

- The second person singular endings $*-si$ and $*-s$ provide the best model.
- However, one must bear in mind the debuccalization of $*s$.
- The thematic paradigm or vowel-final athematic verbs cannot provide the model.
 - $*-e-si > ^+e-hi$; thus $^+e-hi : ^+e-s = -e-ti : X$ is unsuitable.
- Consonant-final athematic verbs do provide a suitable model.
 - $*-C-si : *-C-s = *-C-ti : X$, $X = -C-\underline{t}$
- Relative chronology:
 - after the restriction against final stops is lifted;
 - before $*-Cs > -C$ (cf. NSg $*u\grave{a}naks > OPh. vanak$).

Analogical origin from middle endings

- Another possibility is the proportion $*-toi : *-to = *-ti : X$, $X = *-t$.
- But the ending *-toi* is used in the aorists, so is it really a primary ending?
- How does the ending *-τορ* fit into the primary-secondary opposition?
- Until the Phrygian middle system is better understood, this possibility is difficult to endorse.



Conclusion

- The Phrygian 3sg secondary ending *-t/-τ* is not inherited from PIE **-t*.
- It is likewise not a regular development of any other PIE ending.
- The ending developed analogically based on the 3sg primary ending **-ti*.

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