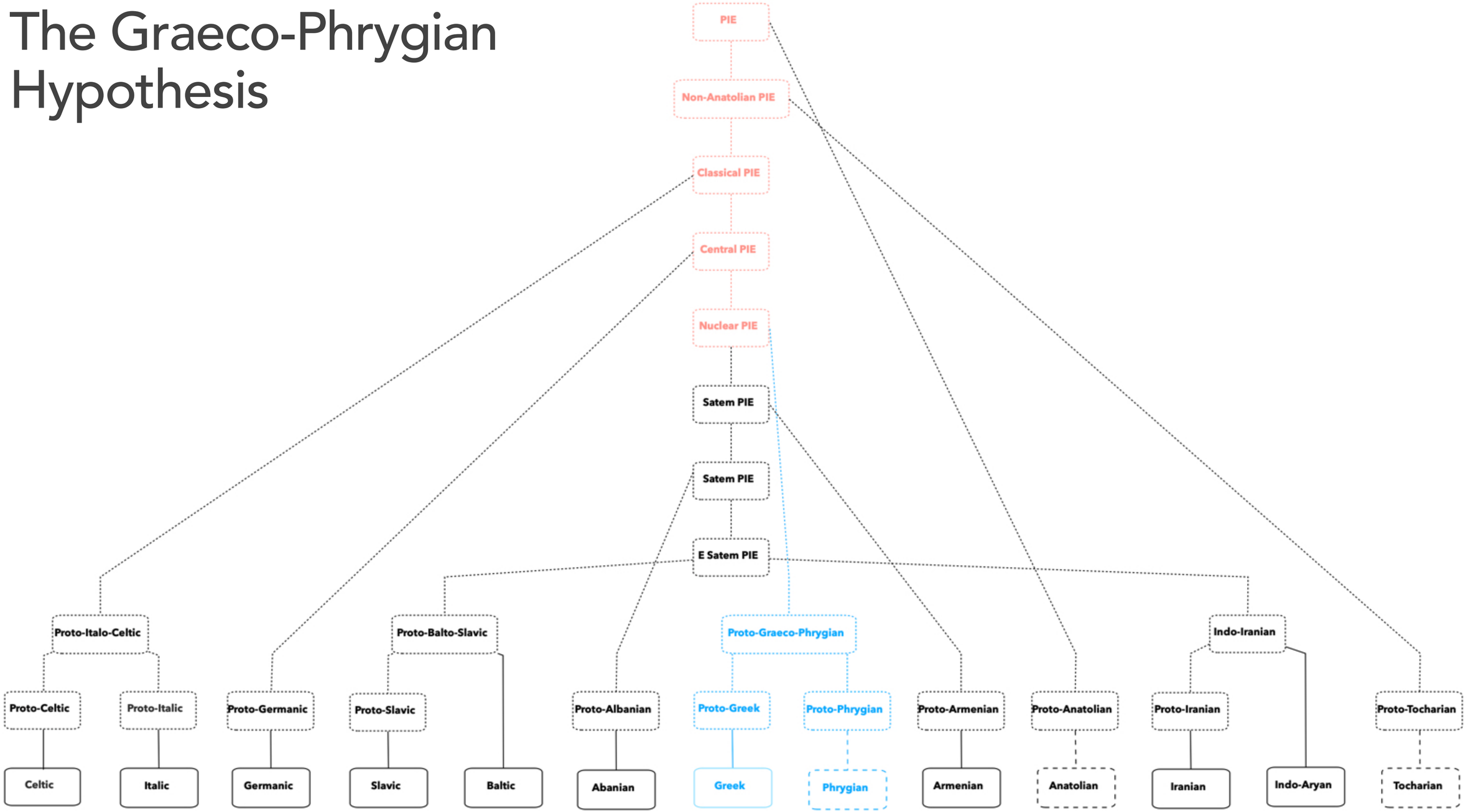
Towards the Reconstruction of Proto-Graeco-Phrygian

First Phrygian Workshop, 17–18 Sept 2021, Madrid-Barcelona (via zoom.us)

Orsat Ligorio
(Belgrade University)

The Graeco-Phrygian Hypothesis



“If Phrygian were not so poorly attested **perhaps we could reconstruct Proto-Graeco-Phrygian**.”

—Obrador-Cursach 2020: 124

Introduction
section one

The Reconstruction of Proto-Graeco-Phrygian Phonology
section two

A Story in Reconstructed Proto-Graeco-Phrygian
section three

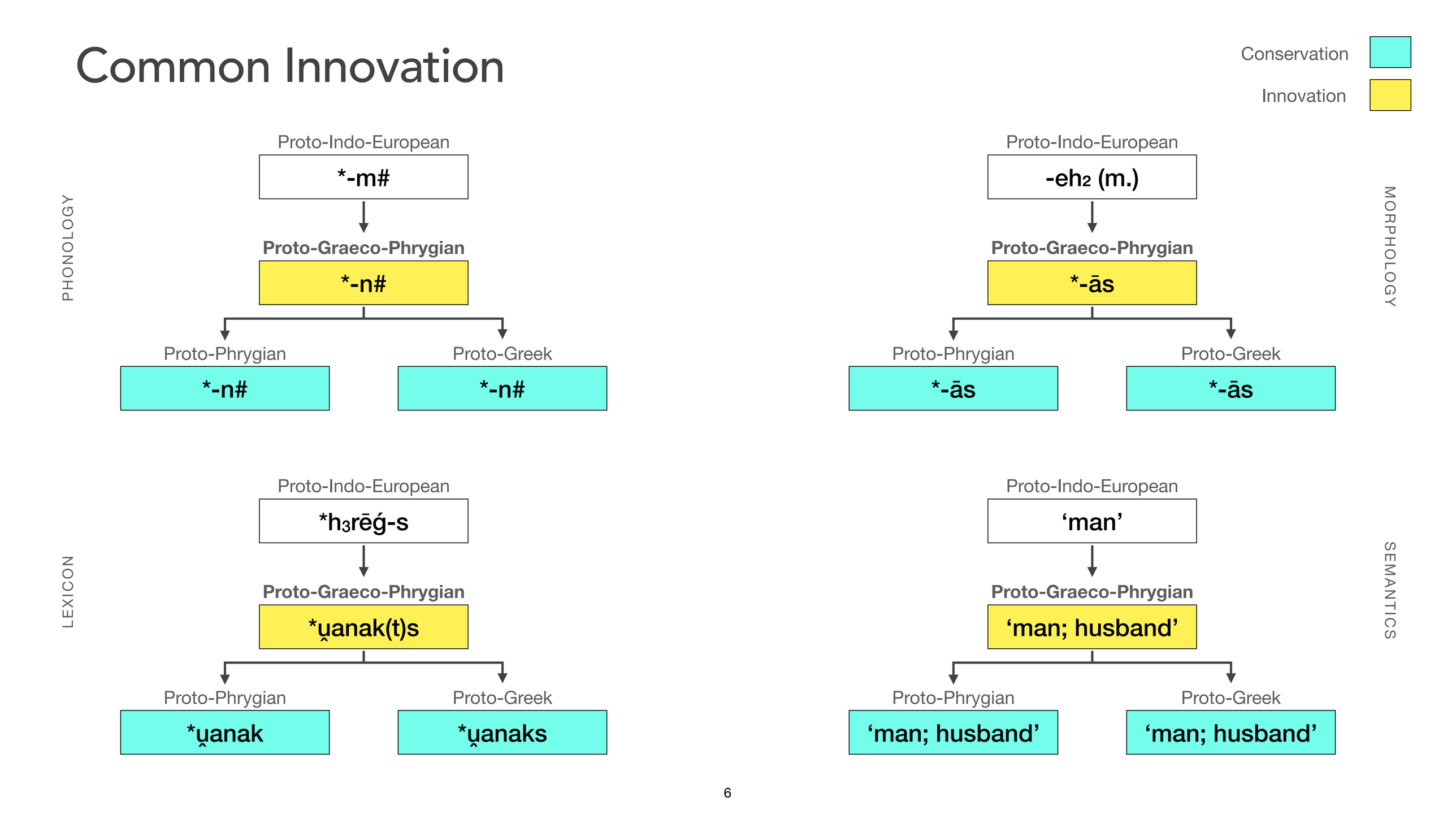
Types of Data used for Reconstruction

- Common Innovation
- Common Conservation

- Innovation in Phrygian, Conservation in Greek
- Innovation in Greek, Conservation in Phrygian

- Innovation in Greek, Phrygian Unknown
- Conservation in Greek, Phrygian Unknown

Common Innovation

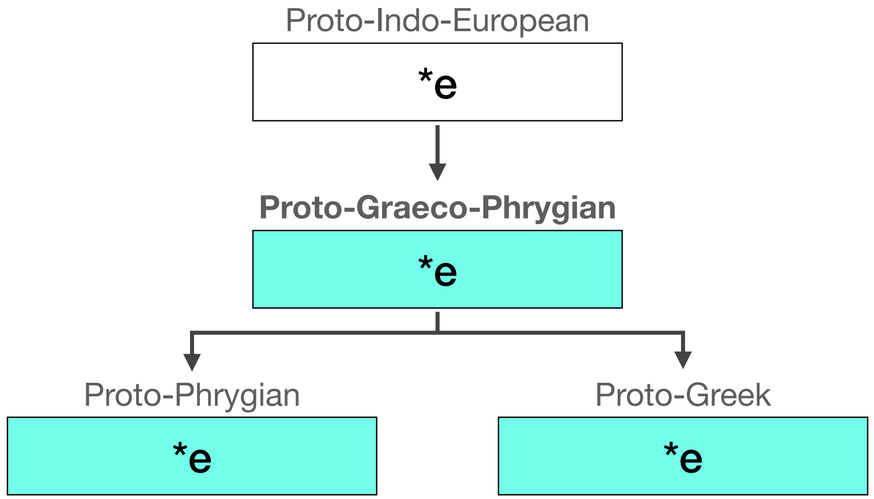


Common Conservation

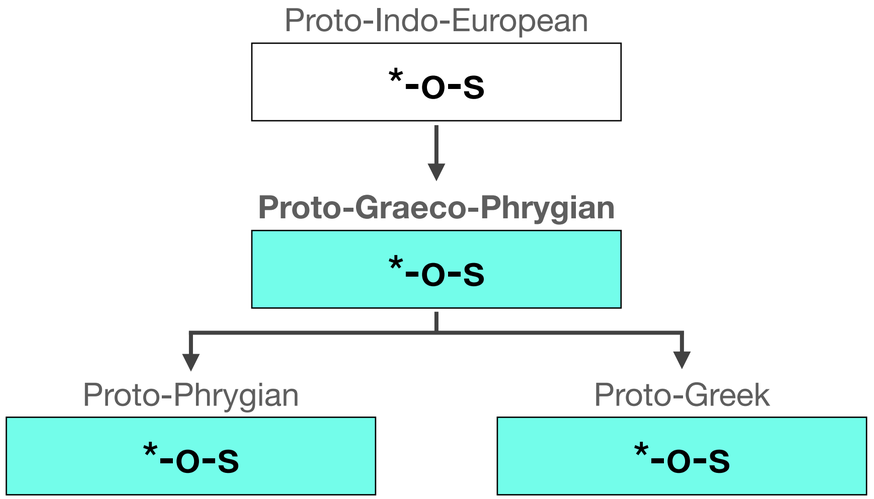
Conservation

Innovation

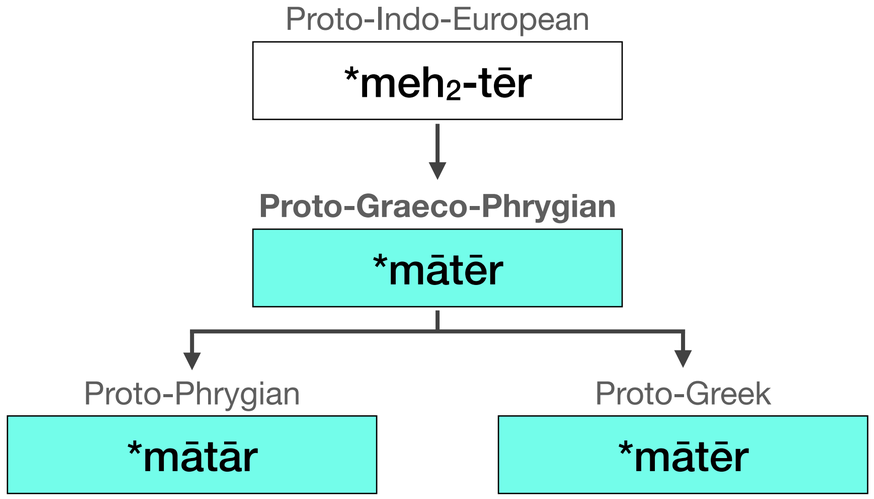
PHONOLOGY



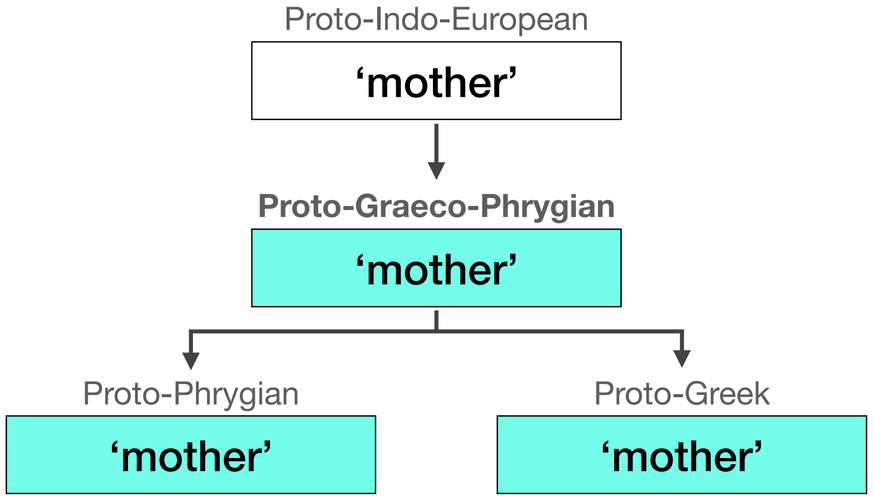
MORPHOLOGY



LEXICON



SEMANTICS

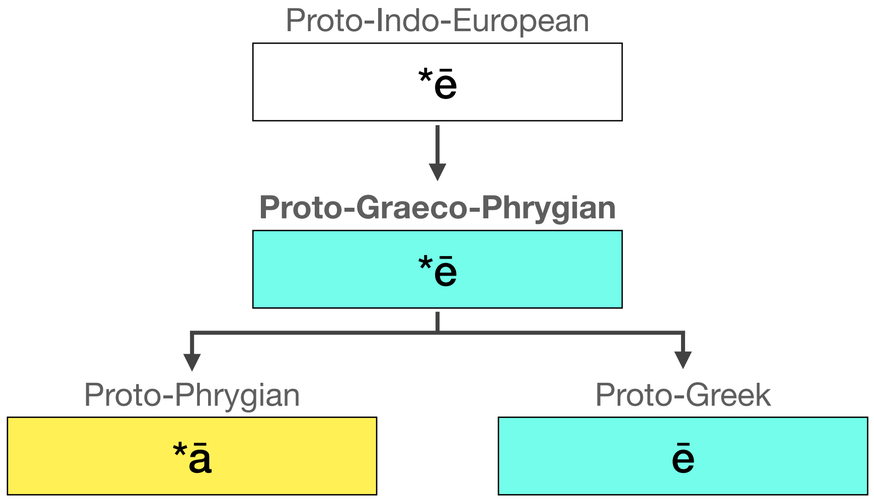


Innovation in Phrygian, Conservation in Greek

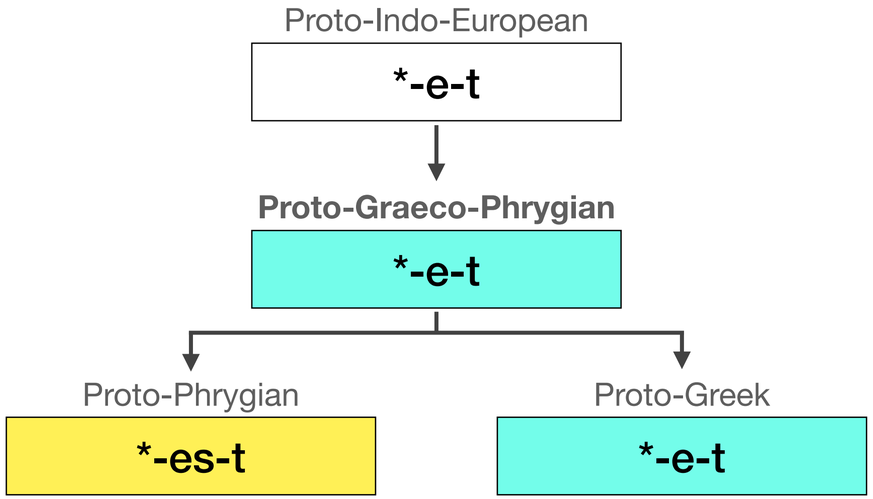
Conservation

Innovation

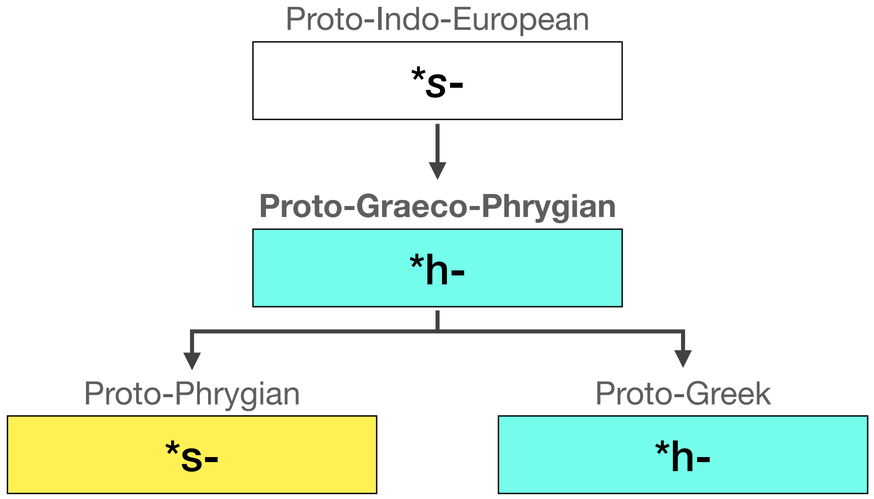
PHONOLOGY



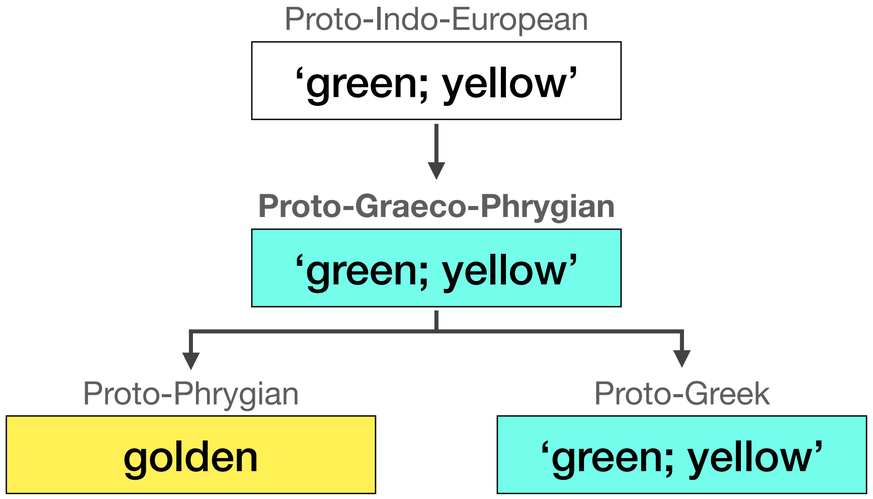
MORPHOLOGY



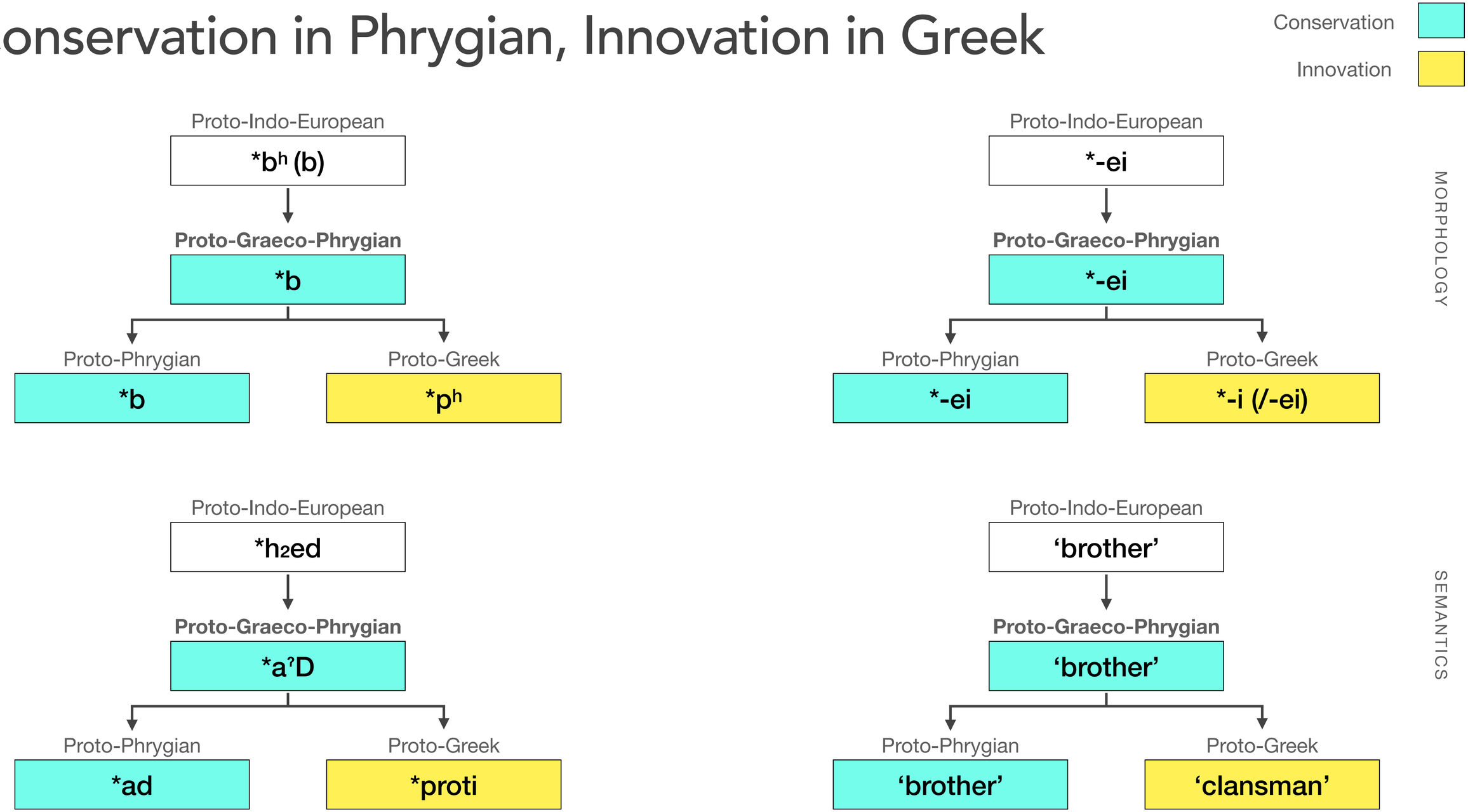
LEXICON



SEMANTICS



Conservation in Phrygian, Innovation in Greek

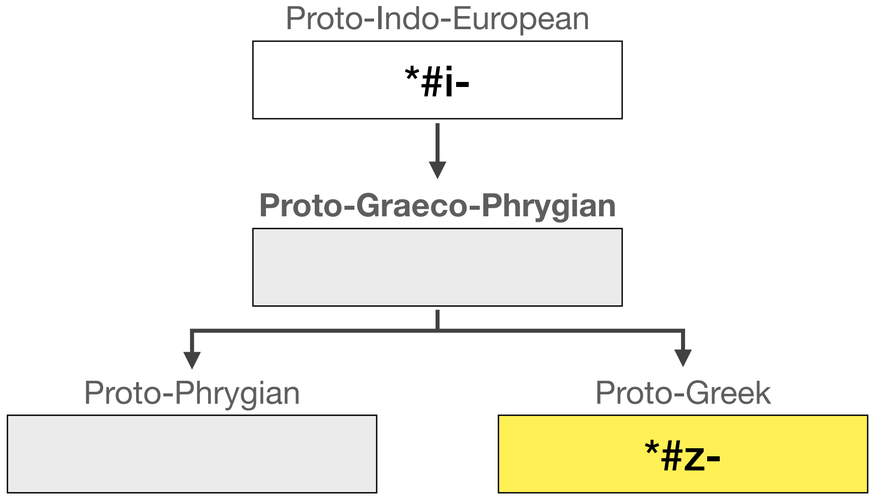


Innovation in Greek, Phrygian Unknown

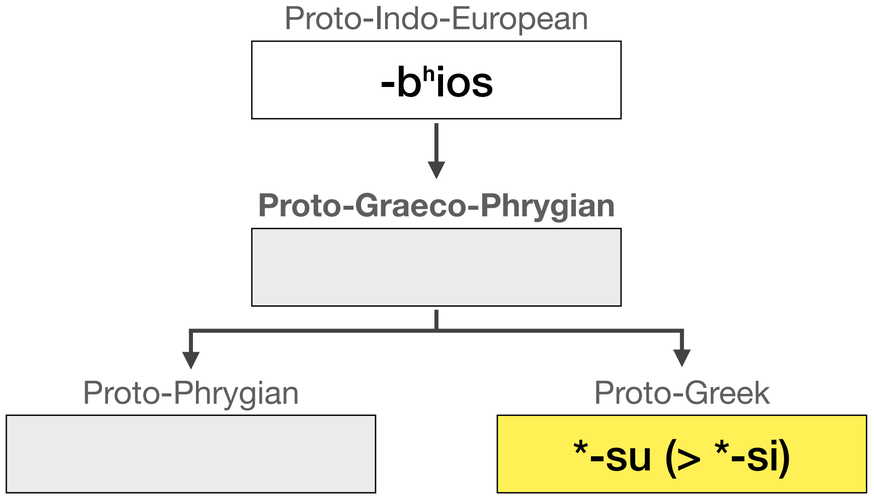
Conservation

Innovation

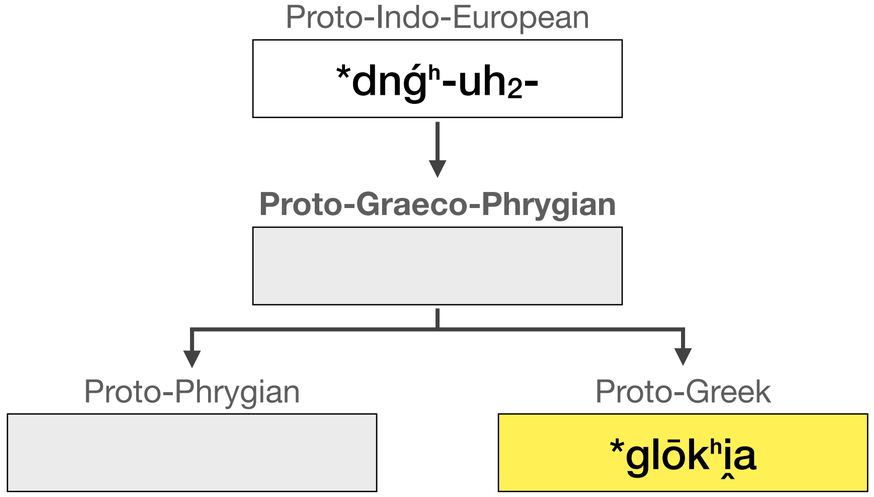
PHONOLOGY



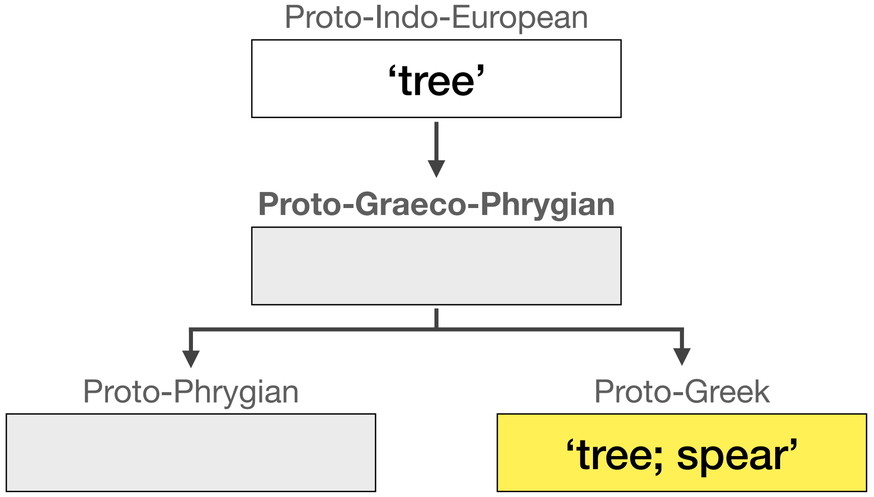
MORPHOLOGY



LEXICON



SEMANTICS

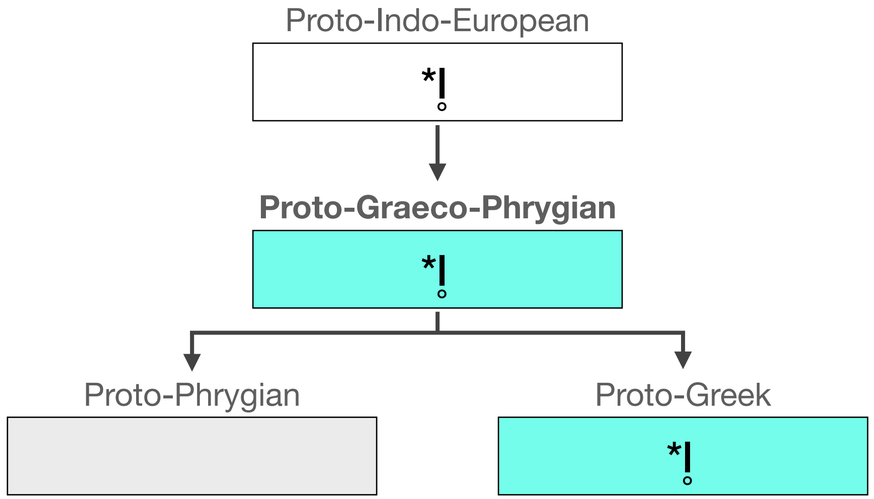


Conservation in Greek, Phrygian Unknown

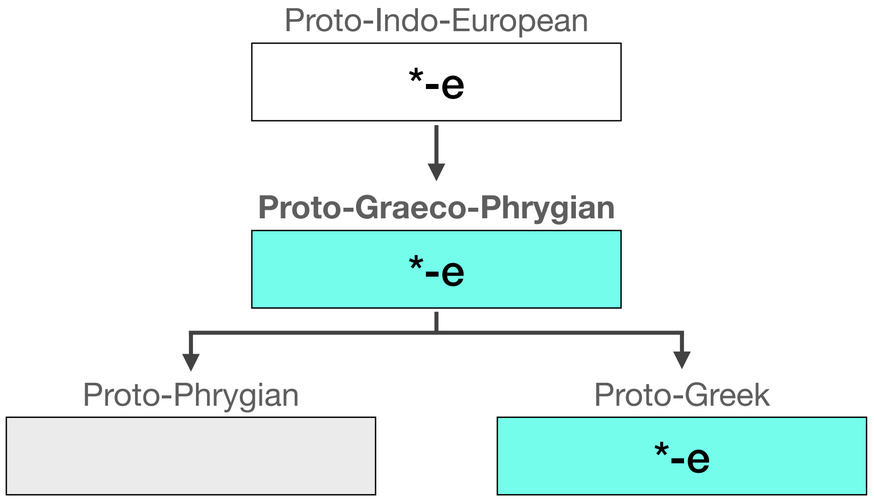
Conservation

Innovation

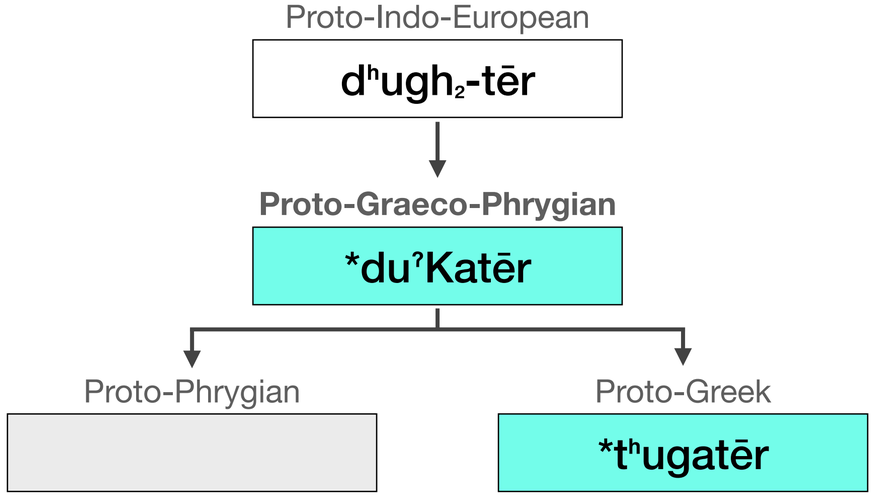
PHONOLOGY



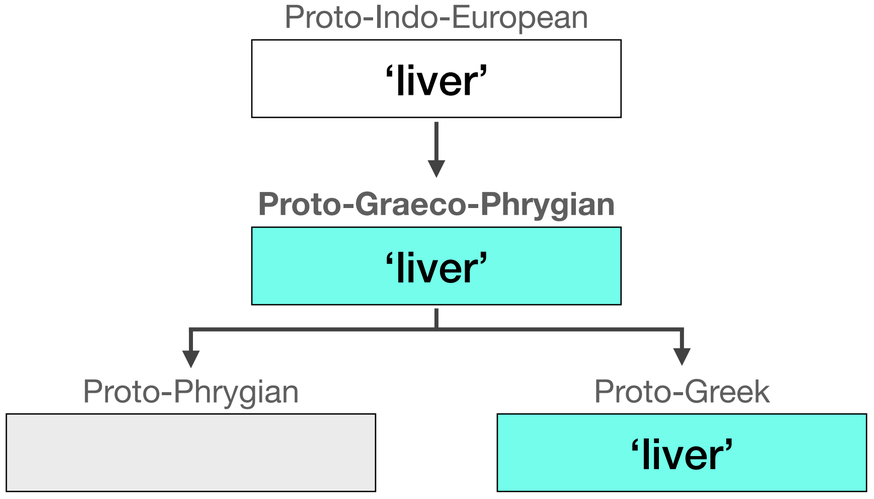
MORPHOLOGY



LEXICON



SEMANTICS



Introduction
section one

The Reconstruction of Proto-Graeco-Phrygian Phonology
section two

A Story in Reconstructed Proto-Graeco-Phrygian
section three

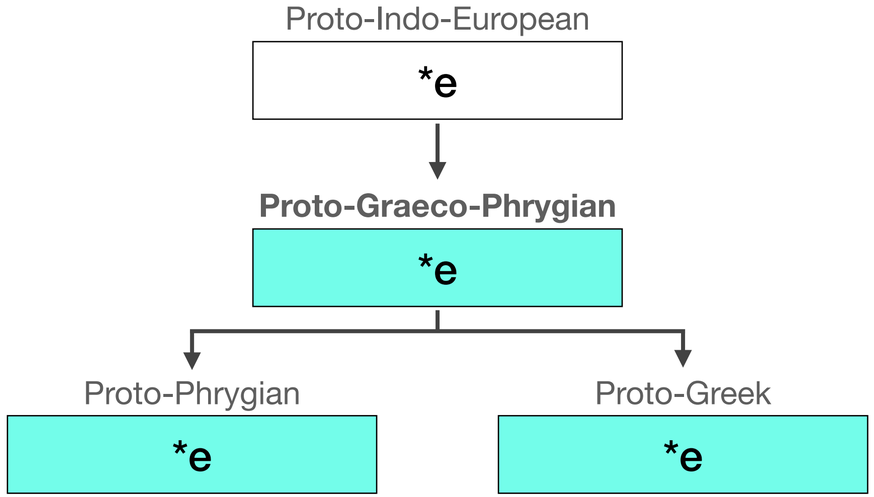
PIE Vowels

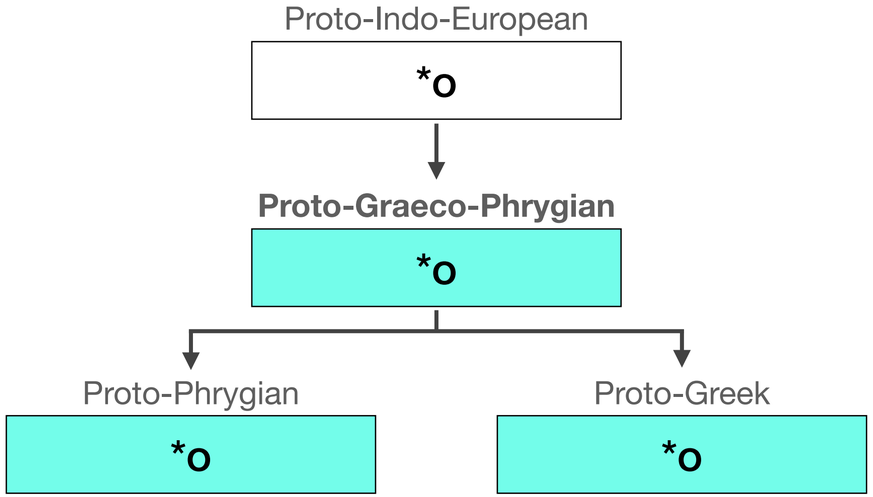
*e	*ē
*o	*ō

Reconstruction of PGPh. Short Vowels

Conservation

Innovation





Examples of PGPh. Short Vowels

Conservation

Innovation

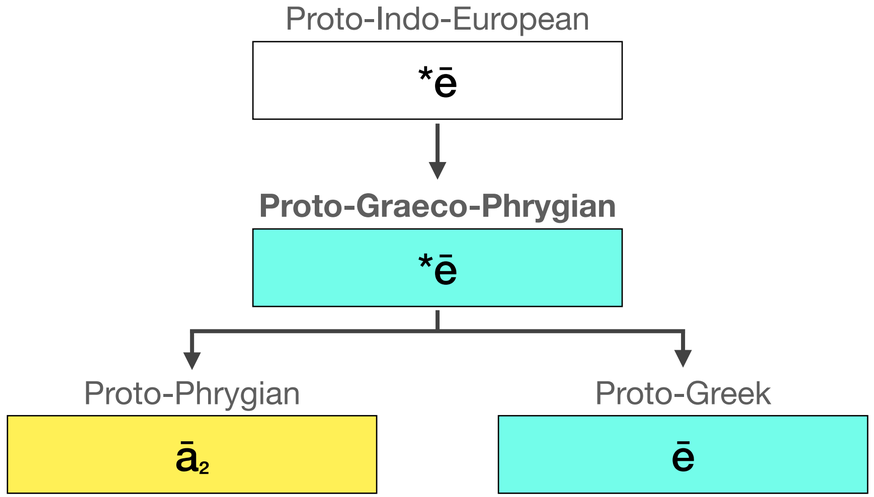
PIE *e	*k^{w}**e** ‘and’
PGPh. *e	*k^{w}e
OPh. e	k**e**
NPh. ε	κ**ε**
PPh. *e	*k^{w}**e**
Myc. e, C**e** /**e**/	q**e** /k^{w}**e**/
Gk. ε	τ**έ**
PGk. *e	*k^{w}**e**

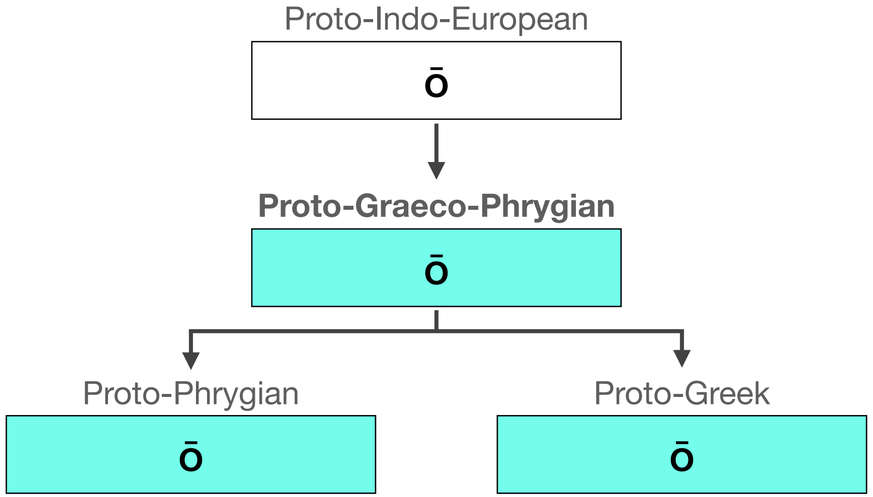
PIE *o	*-**o**-s
PGPh. *o	*-os
OPh. o	-os
NPh. o	-oς
PPh. *o	*-os
Myc. o, C**o** /**o**/	*-**o** /-os/
Gk. o	*-oς
PGk. *o	*-os

Reconstruction of PGPh. Short Vowels

Conservation

Innovation





Examples of PGPh. Long Vowels

Conservation

Innovation

PIE *ē	*meh$_2$-tēr
PGPh. *ē	*matēr?

OPh. **a**	mat**a**r
NPh. **α**	ματ**α**ρ
PPh. *ā	*mātār

Myc. **e**, C**e** /ē/	ma-t**e** /mātēr/
Gk. **η**	μήτ**η**ρ
PGk. *ē	*mātēr

PIE *ō	*-sd^{h}ō
PGPh. *ō	*-sdō?

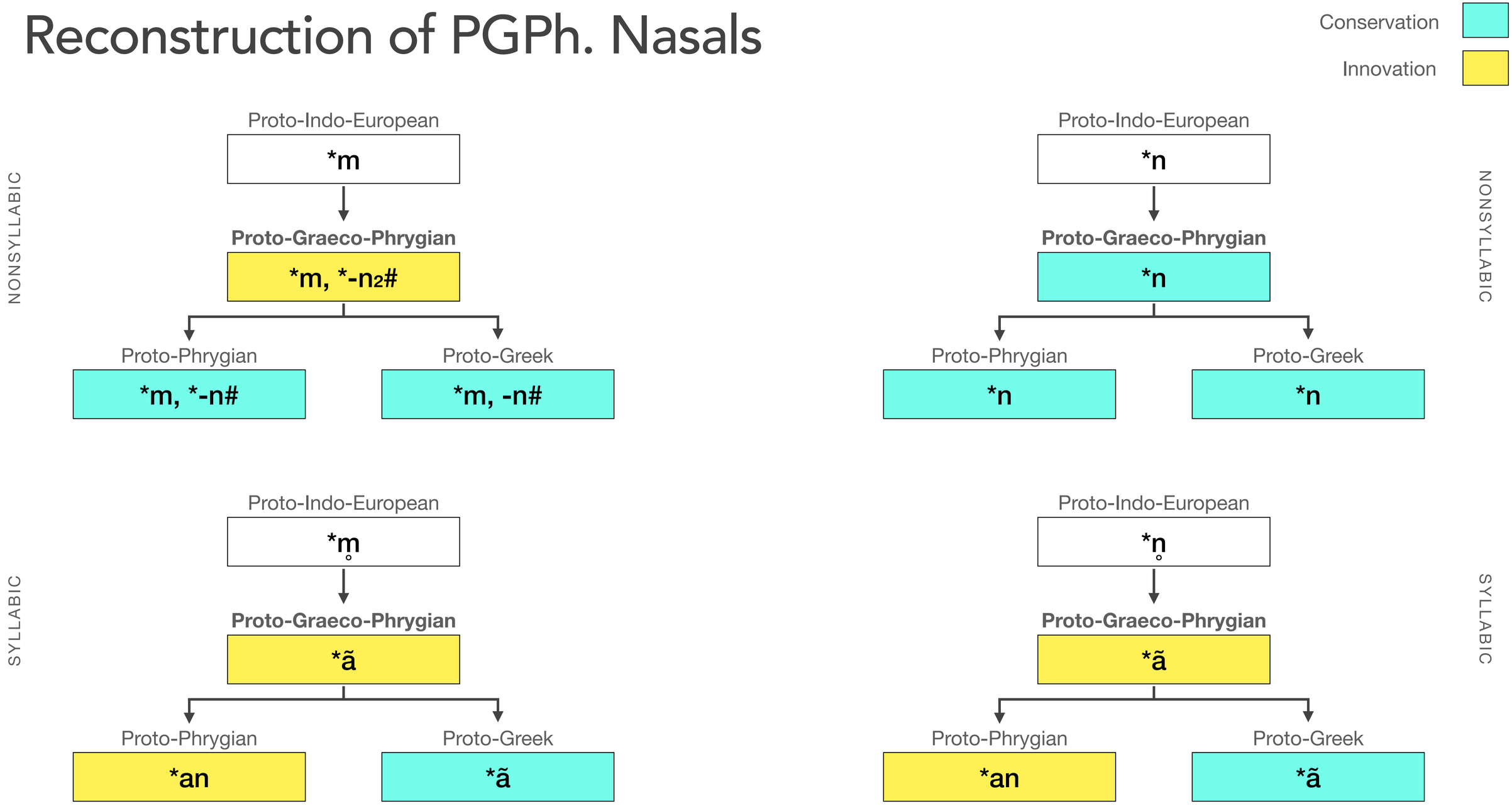
OPh. **o**	-d**o**
NPh. **ου**	-δ**ου**
PPh. *ō	*-dō

Myc. —	
Gk. **ω**	-σθ**ω**
PGk. *ō	*-st^{h}ō

PIE Resonants

NASALS		LIQUIDS		SEMIVOWELS		LARYNGEALS			
*m	*n	*r	*l	*i̯	*u̯	*h_1	*h_2	*h_3	NONSYL.
*m̥	*n̥	*r̥	*l̥	*i	*u	*h_1̥	*h_2̥	*h_3̥	SYLL.

Reconstruction of PGPh. Nasals



Data for PGPh. Nasals

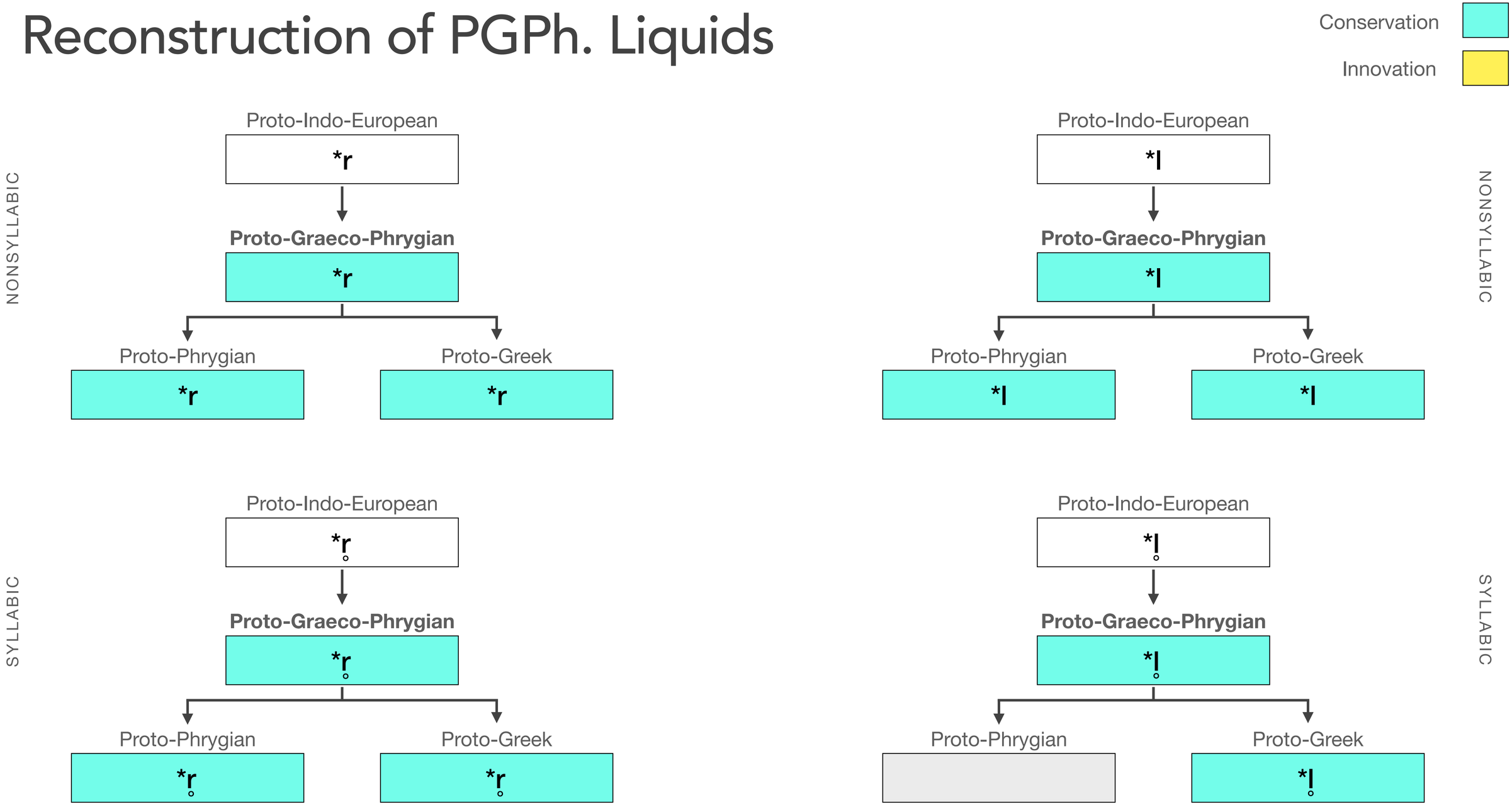
Conservation

Innovation

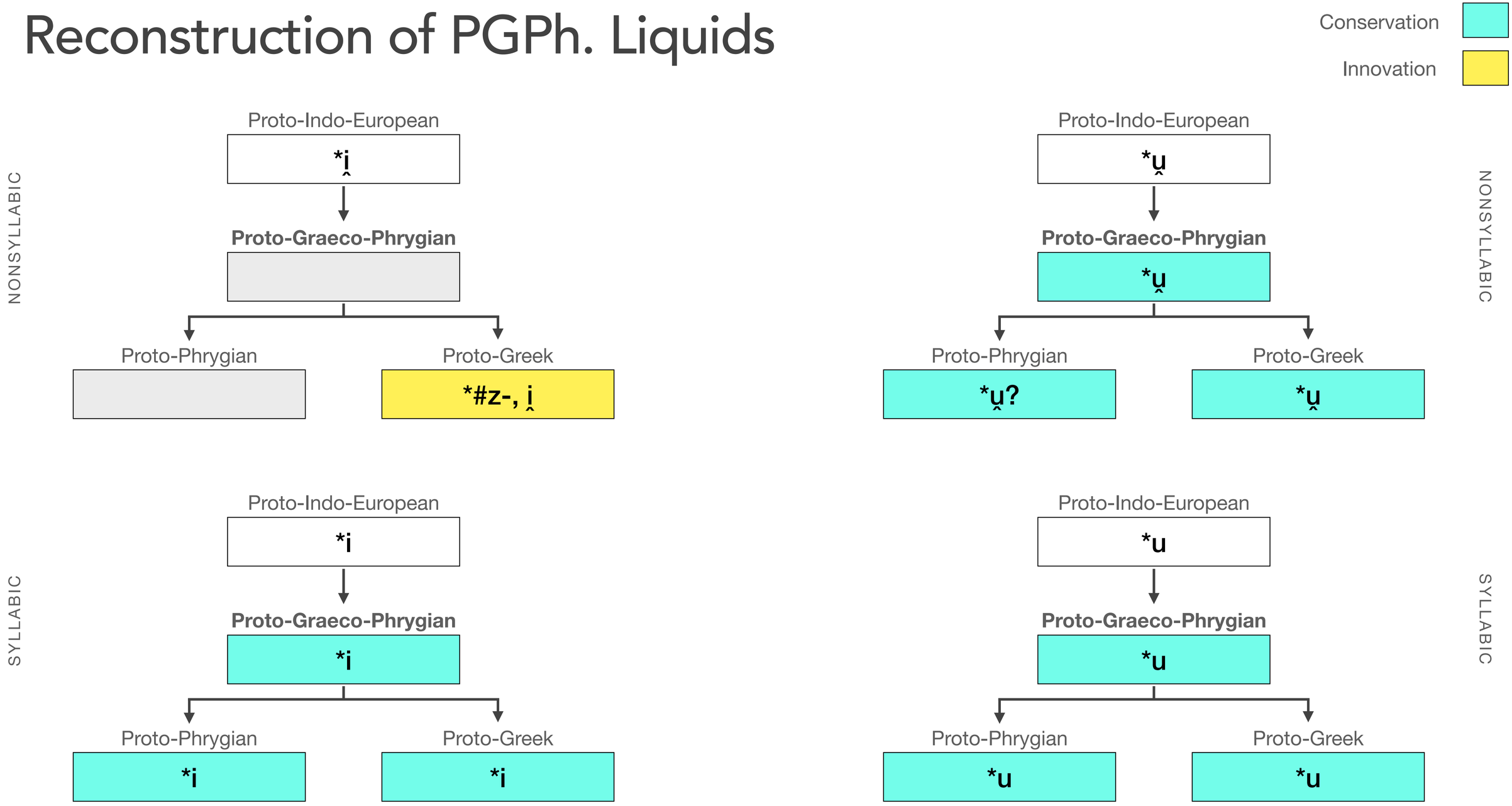
PIE *m / m̥	*meh$_2$-tēr	-o-m	-m̥
PGPh. *m, n / ã	*matēr?	*-on?	*-ã?
OPh. m, n / an	matar	-un	-an
NPh. m, n / αν	ματαρ	-ουν	-αν
PPh. *m, n / an	*mātār	*-un	*-an
Myc. /m, n/ /a/o/	/mātēr/	/-on/	/-a/
Gk. μ, ν / α	μήτηρ	-ον	-α
PGk. *m, n / ã	*mātēr	*-on	*-ã

PIE *n / n̥	*h$_{3}$nh$_{3}$-mn̥-ø
PGPh. *n / ã	onomã?
OPh. n / an	onoman
NPh. ν / αν	ονομαν
PPh. *n / an	*onoman
Myc. /n/, /a/o/	—
Gk. ν / α	ὄνομα
PGk. *n / ã	*onomã

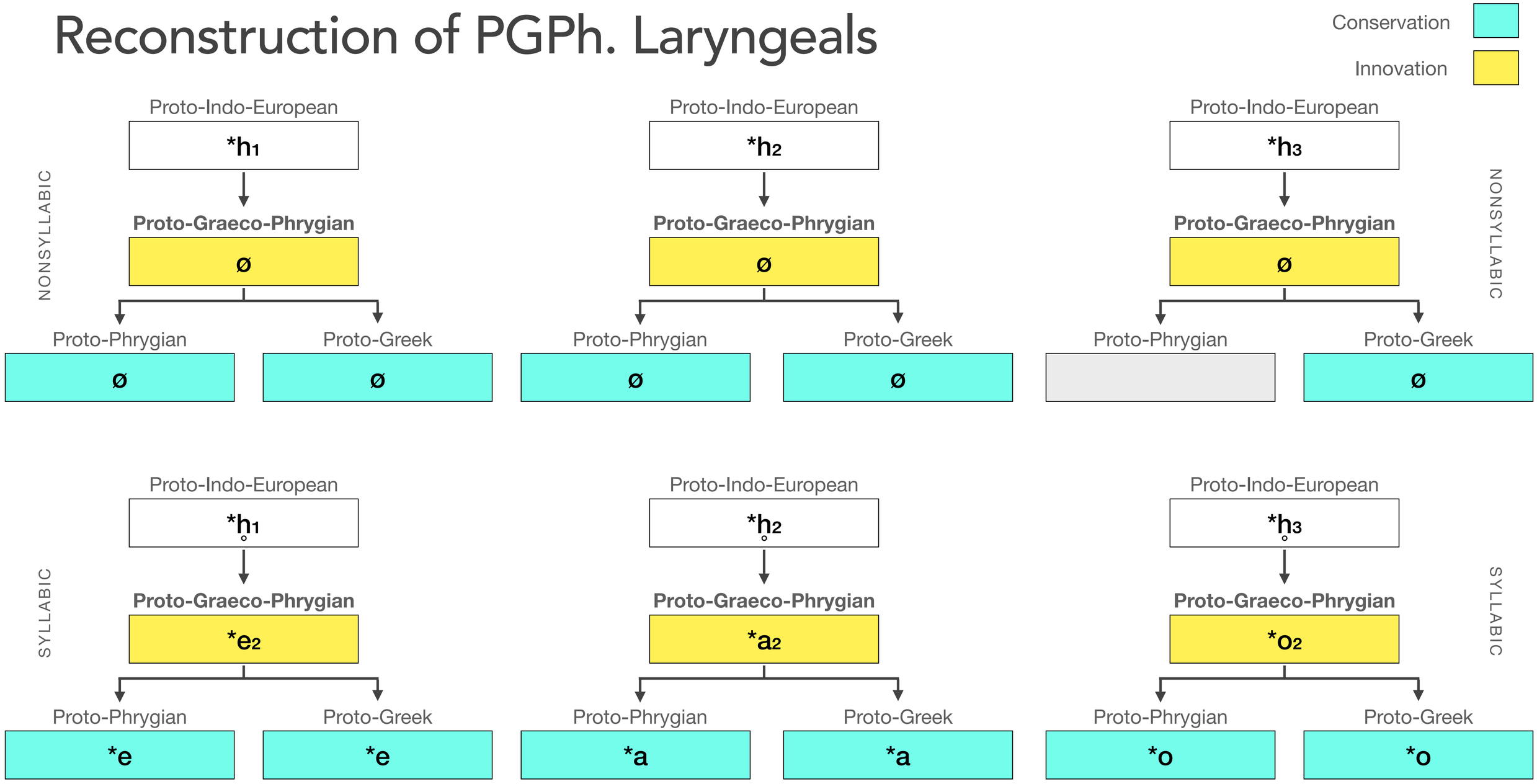
Reconstruction of PGPh. Liquids



Reconstruction of PGPh. Liquids



Reconstruction of PGPh. Laryngeals



Data for Laryngeals

Conservation

Innovation

PIE *$\underset{\circ}{\mathbf{h}}_1$	*d$^{\mathrm{h}}\underset{\circ}{\mathbf{h}}_1$-s-o-s
PGPh. ***e**	*d**e**hos?
OPh. **e**	d**e**vos
NPh. **ε**	(δ**ε**ως)
PPh. ***e**	*d**e**os
Myc. **e**, C**e** /**e**/	t**e**-o /t$^{\mathrm{h}}$**e**hos/
Gk. **ε**	θ**ε**ός
PGk. ***e**	*t$^{\mathrm{h}}$**e**hos

PIE *$\underset{\circ}{\mathrm{h}}_2$	***-$\underset{\circ}{\mathbf{h}}_2$**
PGPh.	*-**a**?
OPh.	**—**
NPh.	**-α**
PPh.	*-**a**
Myc.	-C**a** /-**a**/
Gk.	-α
PGk.	*-**a**

PIE *$\underset{\circ}{\mathbf{h}}_3$	*$\underset{\circ}{\mathbf{h}}_3n\underset{\circ}{\mathbf{h}}_3$-mn-ø
PGPh. ***o**	*o**n**omã?
OPh. **o**	**o**n**o**man
NPh. **o**	**o**νο**o**μαν
PPh. ***o**	*o**n**oman
Myc. **o**, C**o** /**o**/	**—**
Gk. **o**	**ὄ**νο**o**μα
PGk. ***o**	*o**n**omã

Sidenote 1: GPh. Laryngeals & #HC-Vocalisation

#HC-Vocalisation in GPh. and (Th)A.

PIE *$\mathbf{h}_{1}$su-
OPh. **e**v-, Myc. **e**-u- /**e**hu-/, Gk- **ἐ**ϋ-
Arm. —

PIE *$\mathbf{h}_{2}$nēr
NPh. **α**ναρ, GK. **ἀ**νήρ
Arm. **a**yr

PIE *$\mathbf{h}_{3}$nh_3-mn-ø
OPh. **o**noman, NPh. **o**noman, Gk. **ὄ**νομα
Arm. **a**nun

No #HC-Vocalisation elsewhere

PIE *$\mathbf{h}_{1}$su-
Skt. su-, Av. hu-, PSl. *sŭ-

PIE * $\mathbf{h}_{2}$nēr
Skt. nā́, Osc. niir …

PIE * $\mathbf{h}_{3}$neh$_3$-mn-ø
Skt. nā́ma, Lat. nōmen …

Counterexample of #HC-Vocalisation in GPh.

PIE ***H**i-o-s
OPh. yos / ios, NPh. ιος, Gk. ὅς
Skt. yaḥ, OAv. yā

PIE Consonants (Traditional)

LABIALS	DENTALS	PLAIN VELARS	PALATOVELARS	LABIOVELARS	
*p	*t	*k	*ḱ	*k^w	TENUES
*b	*d	*g	*ǵ	*g^w	MEDIAE
*b^h	*d^h	*g^h	*$ǵ^h$	*g^{wh}	M. ASPIRATAE

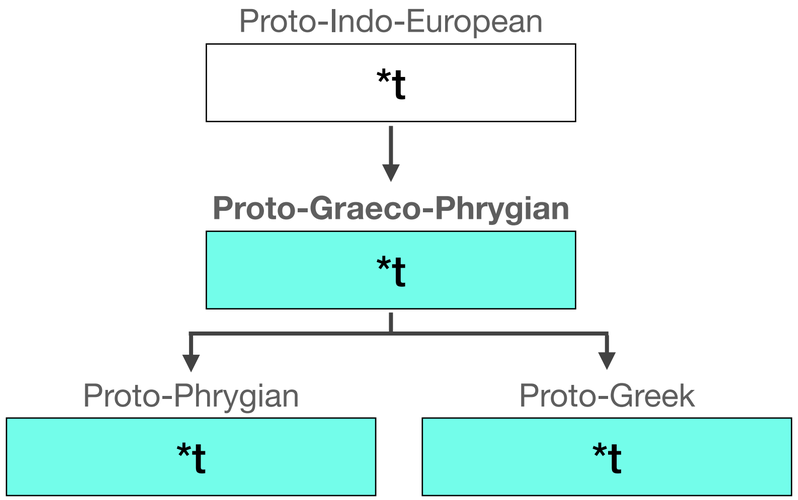
*s

PIE Consonants (Glottalic, Nuclear PIE)

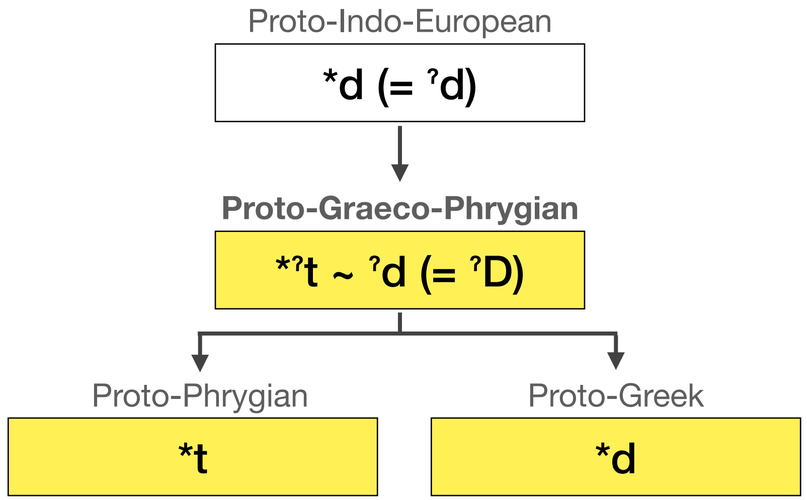
LABIALS	DENTALS	PLAIN VELARS	PALATOVELARS	LABIOVELARS	
*p	*t	*k	*ḱ	*k^w	TENUES
*ʔb	*ʔd	*ʔg	*ʔǵ	*$ʔg^w$	MEDIAE
*b	*d	*g	*ǵ	*g^w	M. ASPIRATAE

*s

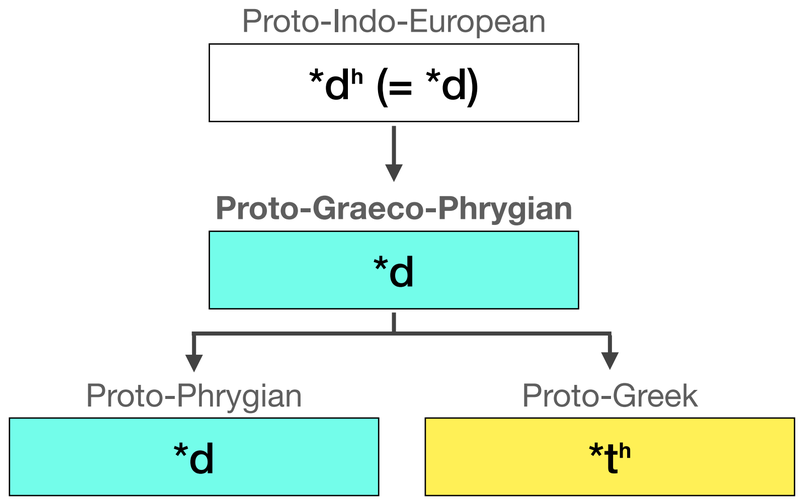
Reconstruction of PGPh. Dentals



TENUIS



MEDIA



MEDIA ASPIRATA

Examples of PGPh. Dentals

Conservation

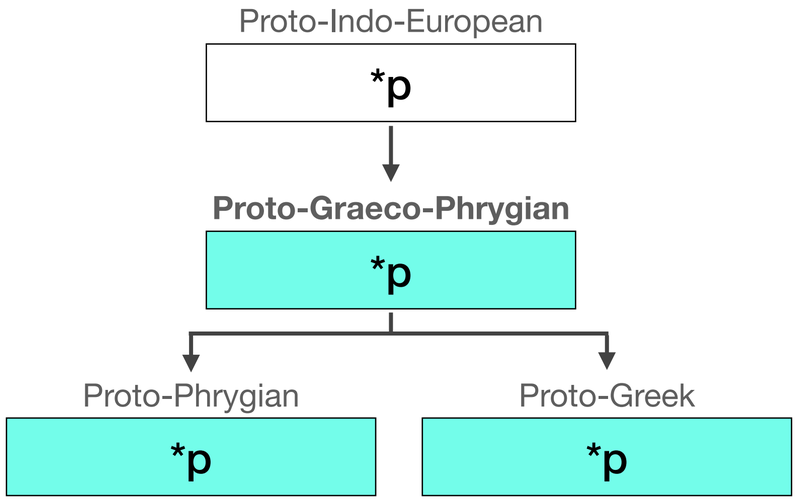
Innovation

PIE *t	*meh$_2$-tēr
PGPh. *t?	*matēr?
OPh. t	matar
NPh. τ	ματαρ
PPh. *t	*mātār
Myc. *tV /t/	ma-te /mātēr/
Gk. τ	μήτηρ
PGk. *t	*mātēr

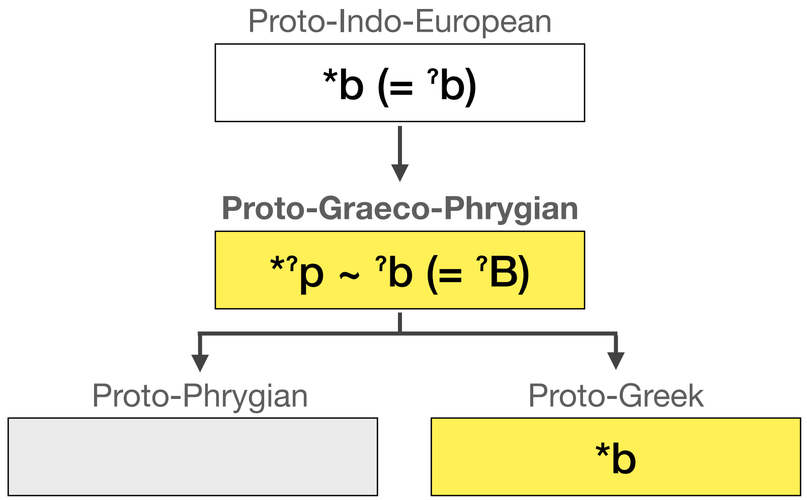
PIE *d (ʔd)	*di-u-os	*dh$_3$-t-i-m
PGPh. *ʔD?	*ʔTiu̯os?	*ʔTotin
OPh. t	—	totin
NPh. τ	τιος	—
PPh. *t	*ti(u̯)os	*totin
Myc. *dV /d/	di-wo /diu̯os/	—
Gk. δ	Διός	δόσιν
PGk. *t^h	*diu̯os	*dotin

PIE *d^h (d)	*d^{h}h$_1$-s-o-s	*d^{h}h$_1$-t-o-m
PGPh. *d?	*dehos	*deton
OPh. d	devos	—
NPh. δ	—	δετουν
PPh. d	*deos	*detun
Myc. tV /t^h/	te-o /t^{h}ehos/	—
Gk. —	θεός	θετόν
PGk. *t^h	*t^{h}ehos	*t^{h}eton

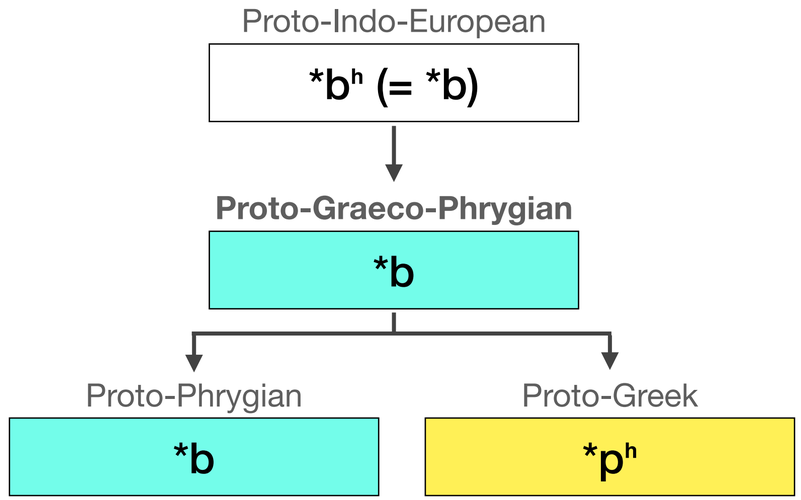
Reconstruction of PGPh. Labials



TENUIS



MEDIA



MEDIA ASPIRATA

Examples of PGPh. Labials

Conservation

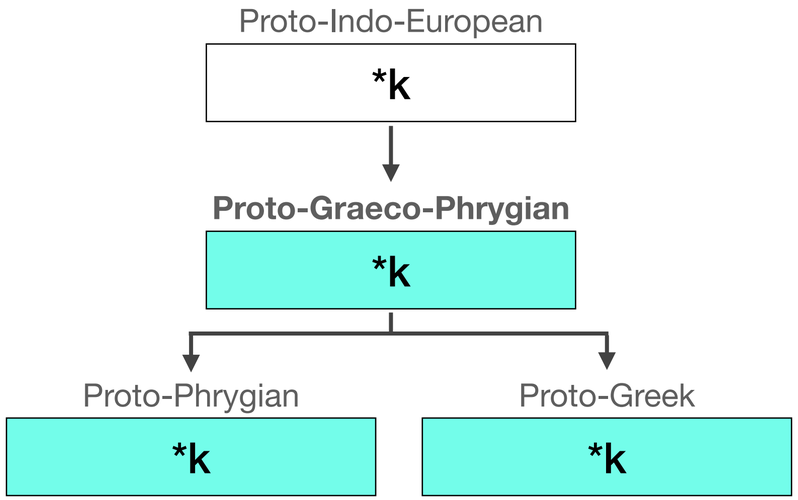
Innovation

PIE *p	*ph$_2$-tēr	*pod/ped-
PGPh. *p?	*patēr?	*poʔT-?
OPh. p	—	petes
NPh. π	πατερης	—
PPh. *p	*patār	*pet-
Myc. pV /p/	pa-te /patēr/	po-dV- /pod-/
Gk. π	πατήρ	ποδ-
PGk. *p	*patēr	*pod-

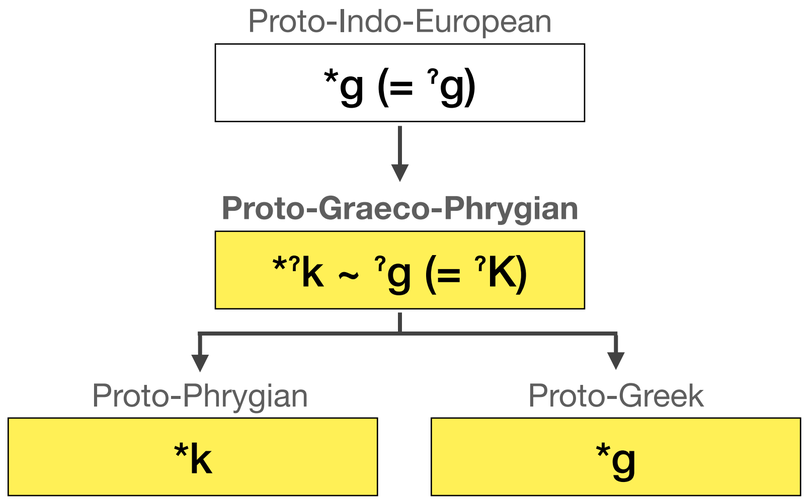
PIE *b (ʔb)	*bel-
PGPh. *ʔP?	*ʔPel-?
OPh. —	—
NPh. —	—
PPh. —	—
Myc. —	—
Gk. β	βέλτερος
PGk. *b	*bel-

PIE *bʰ (b)	*bʰer-	*bʰreh$_2$-ter-
PGPh. *b?	*ber-?	*brāter-?
OPh. b	—	braterais
NPh. β	-βερετ	—
PPh. *b	*ber-	*brāter-
Myc. pV /pʰ/	pe-re /pʰerei/	φράτηρ
Gk. φ	φέρω	—
PGk. *pʰ	*pʰer-	*pʰrāter-

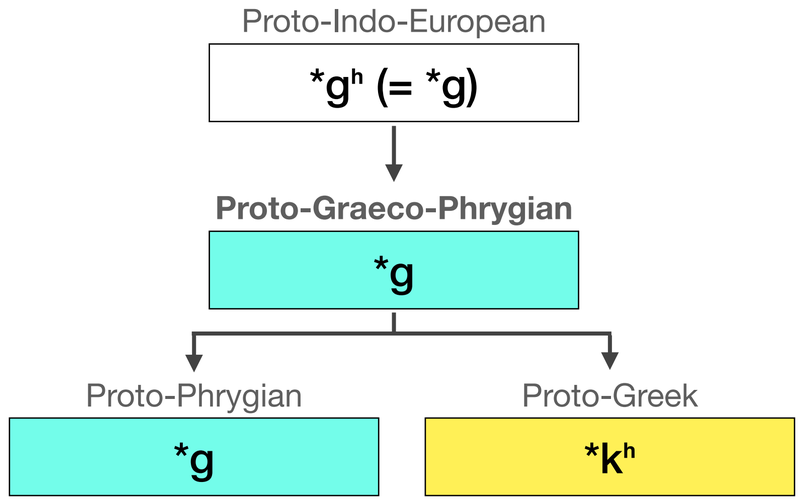
Reconstruction of PGPh. Plain Velars



TENUIS



MEDIA



MEDIA ASPIRATA

Examples of PGPh. Plain Velars

Conservation

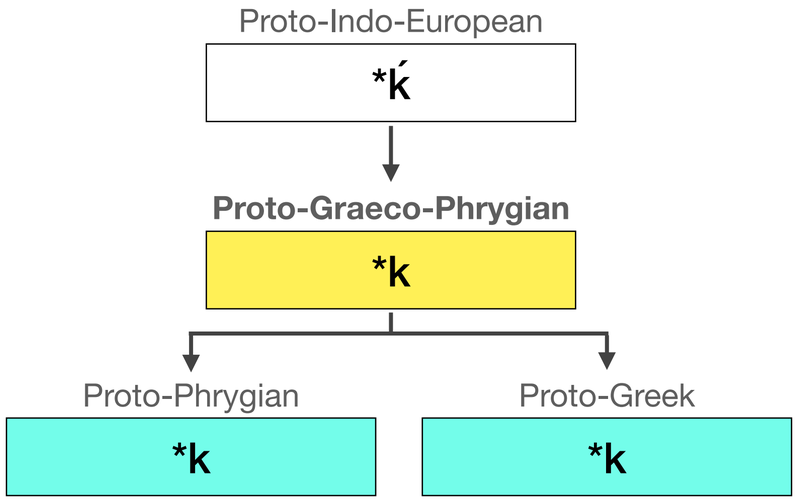
Innovation

PIE *p	*gʷh₃-eu+k⁽ʷ⁾olH-o-s	*kenh₁-mn-ø
PGPh. *k	*ʔKʷoukolos?	*kenemã?
OPh. k	—	keneman
NPh. —	—	—
PPh. *k	—	keneman
Myc. kV /k/	qo-u-ko-ro /gʷoukolos/	—
Gk. κ	βουκόλος	—
PGk. *k	*gʷoukolos	—

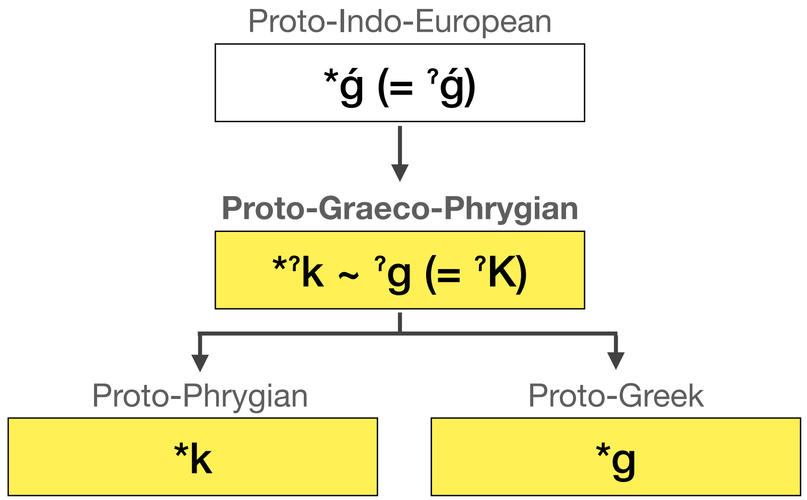
PIE *g (ʔg)	*dʰughₓ-tēr	*bʰh₁g-os-ø
PGPh. *ʔK	*duʔKatēr?	*beʔKos?
OPh. k	—	βέκος
NPh. κ	—	βεκος
PPh. *k	—	*bekos
Myc. kV /g/	tu-ka-te /tʰugatēr/	—
Gk. γ	θυγάτηρ	—
PGk. *g	*tʰugatēr	—

PIE *gʰ (g)	*h₁e-h₁ug⁽ʷ⁾ʰ-e-toi/tor	*gʰe-gʰr(e)iH-
PGPh. *g	eugetoi/tor	gegr(e)i-
OPh. —	—	—
NPh. γ	—	γεγρειμενος
PPh. *g	—	*gegrei-
Myc. kV /kʰ/	e-u-ke-to /eukʰetoi/	—
Gk. χ	ἔυχεται	κεχρι-
PGk. *kʰ	*eukʰetoi	*kʰekʰri-

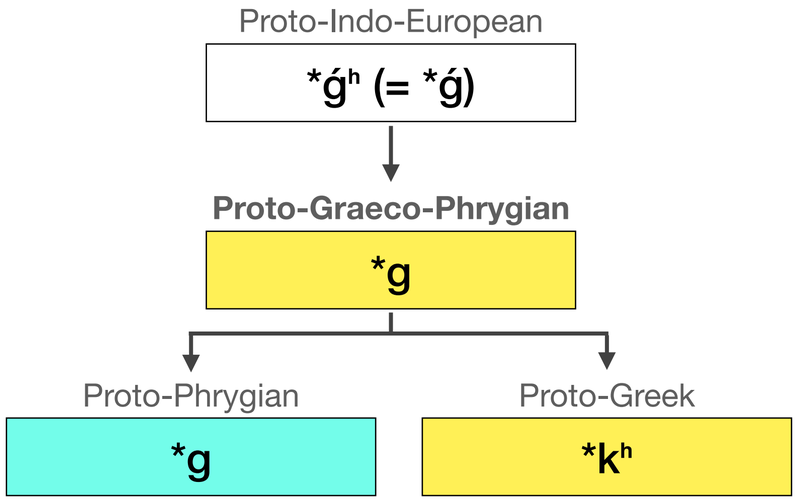
Reconstruction of PGPh. Palatovelars



TENUIS



MEDIA



MEDIA ASPIRATA

Examples of PGPh. Palatovelars

Conservation

Innovation

PIE *ḱ	ḱrh₂-ter-m	*pērḱ-
PGPh. *k	*krāterã	*pērk-
OPh. k	—	en-e-park-es
NPh. —	—	ἐν-ε-παρκ-ες
PPh. *k	—	*pārk-
Myc. *kV /k/	ka-ra-te-ra /kratēra/	—
Gk. κ	κρᾱτῆρα	—
PGk. *k	*krāterã	—

PIE *ǵ (ʔg)	*meǵ-h₂-s	*h₂eǵ-
PGPh. *ʔK	*meʔKas	—
OPh. k	mekas	—
NPh. κ	μεκας	—
PPh. *k	*mekas	—
Myc. kV /g/	—	a-ke /agei/
Gk. γ	megas	ἄγει
PGk. *g	*megas	*agei

PIE *ǵʰ (g)	*seǵʰ-
PGPh. *g	*heg-
OPh. g	an-eg-eseti
NPh. γ	εγ-εδου
PPh. *g	*eg-
Myc. kV /kʰ/	e-ke /hekʰ-ei/
Gk. χ	ἔχ-ει
PGk. *kʰ	*hekʰ-

Sidenote 2: Ph. Palatalization & PPh. Labiovelars

Palatalization of Plain and Palatal Velars

PIE *dʰ**ǵʰ**(e)m-el-
NPh. ζεμελως, Gk. χθαμαλός

PIE *ǵʰes-r-
NPh. ζειραι, Gk. **χ**εῖρ-ες

PIE *ǵʰeu-mn-ø
NPhr. ζευμαν, Gk. **χ**εῦμα

No Palatalization of Labiovelars

PIE *k**ʷ**e
OPhr. **k**e, NPhr. **κ**ε, Myc. qe /k**ʷ**e/, Gk. **τ**ε

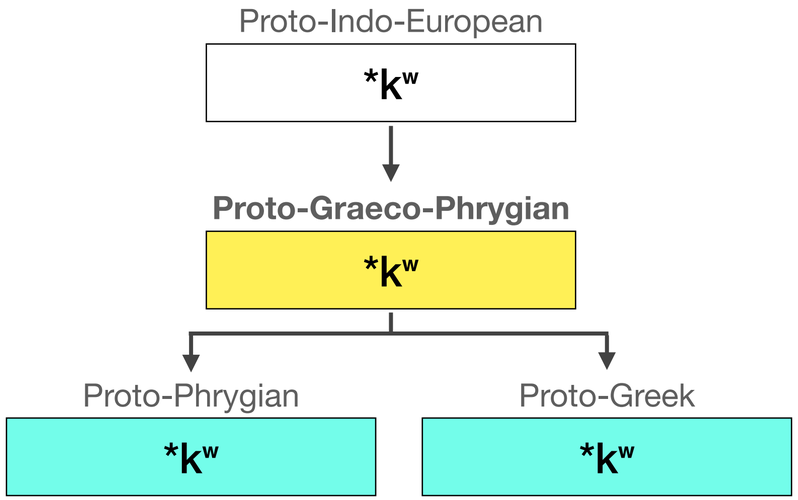
PIE *pen**k**ʷe
NPhr. πιν**κ**ε, Gk. πέν**τ**ε

Counterexamples

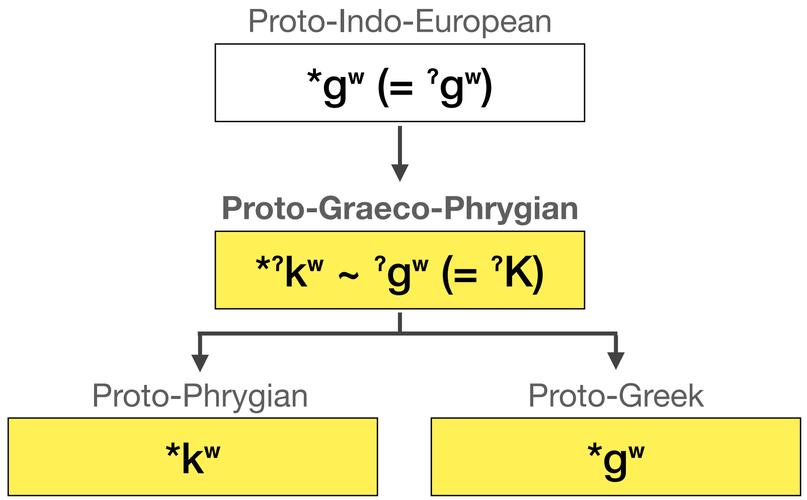
PIE *se**ǵʰ**-
OPh. an-e**g**eseti, NPh. ε**γ-**εδου, Gk. ἐ**χ-**έσθω

PIE *ǵenh$_1$-es-h$_2$
NPh. κενα, Hom. Gk. γένεα,

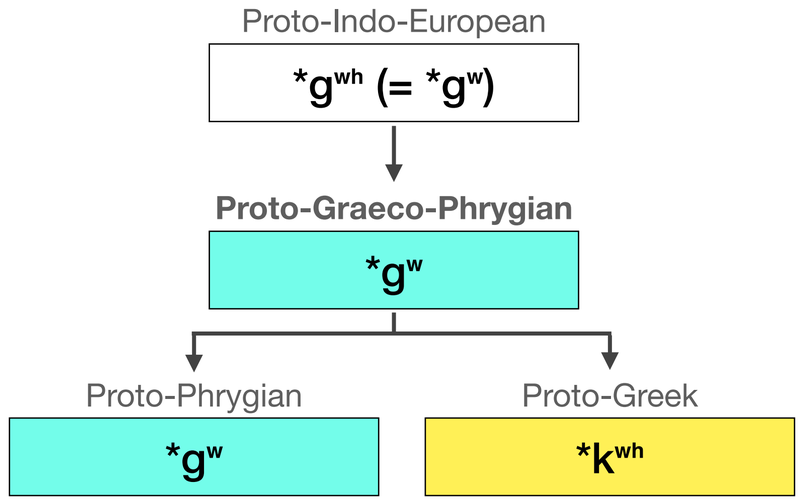
Reconstruction of PGPh. Labiovelars



TENUIS



MEDIA



MEDIA ASPIRATA

Examples

Conservation

Innovation

PIE *k^w	*k^we

PGPh. *k^w	*k^we
OPh. **k**	**k**e
NPh. **κ**	**κ**ε
PPh. *k^w	*k^we

Myc. **q**V, /**k**/	**q**e /**k**^{w}e/
Gk. **π**, **τ**, (κ)	**τ**έ
PGk. *k^w	*k^we

PIE *g^w ($^ʔg^w$)	*g^wn-

PGPh. *$^ʔK^w$	$^ʔK^w$n-
OPh. **k**	**k**n-ais
NPh. **κ**	**κ**ν-αικαν
PPh. *k^w	*k^wn-

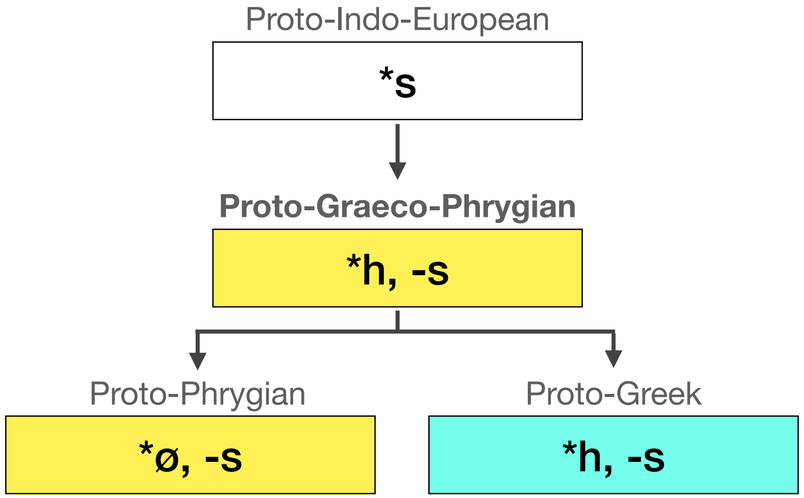
Myc. **q**V /g^w/	—
Gk. **β**, **δ**, (γ)	dial. **β**αν-ά
PGk. *g^w	*g^wn-

PIE *g^{wh} (g^w)	*d^hreg^{wh}-

PGPh. *g^w	*dreg^w-
OPh. —	—
NPh. **γ**	τι-δρε**γ**-ρουν
PPh. *g^w	*dreg^w-

Myc. **q**V /k^{wh}/	—
Gk. **φ**, **θ**, (χ)	τρέ**φ**ω
PGk. *k^{wh}	*t^hrek^{wh}-

Reconstruction of PGPh. Fricatives



Examples

Conservation

Innovation

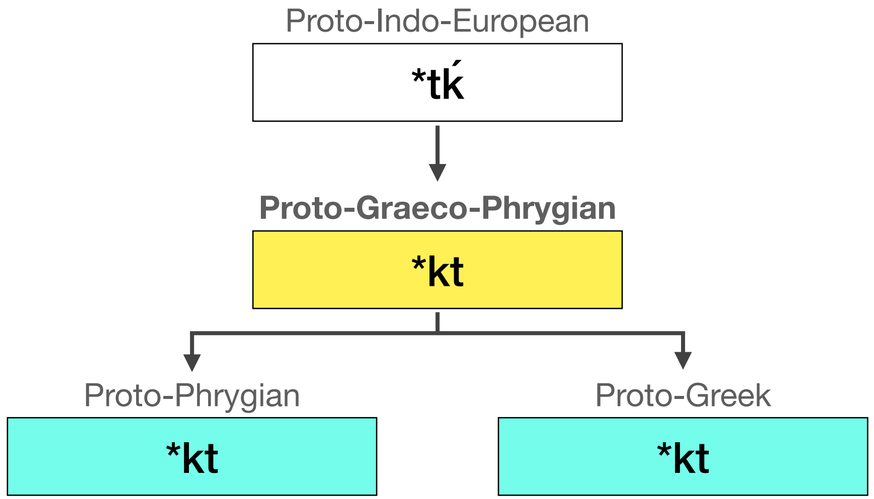
PIE *-**s**	*s**e**ǵ^{h}-	d^{h}h$_{1}$-**s**-os	-o-**s**

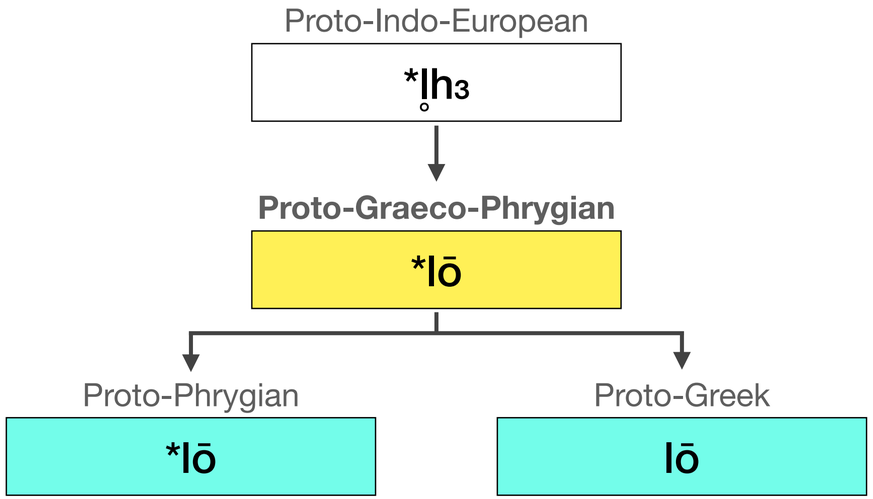
PGPh. ***h**, *-**s**	***h**eg-	*de**h**os	*-o**s**

OPh. **ø**	an-eg-eseti	devos	-o**s**
NPh. **ø**	εγ-εδου	(δεως)	-o**ς**
PPh. ***ø**, -**s**	*eg-	*deos	*-o**s**

Myc. **ø** /**a$_{2}$**/**h**/, -**ø**/-**s**/	e-ke /**h**ek^{h}-ei/	te-o /t^{h}e**h**os/	-o /-o**s**/
Gk. **ø**, -**ς**	ἔχ-ει	θεός	-o**ς**
PGk. ***h**, -**s**	***h**ek^{h}-	*t^{h}e**h**os	*-o**s**

Miscellaneous Combined Changes





Introduction
section one

The Reconstruction of Proto-Graeco-Phrygian Phonology
section two

A Story in Reconstructed Proto-Graeco-Phrygian
section three

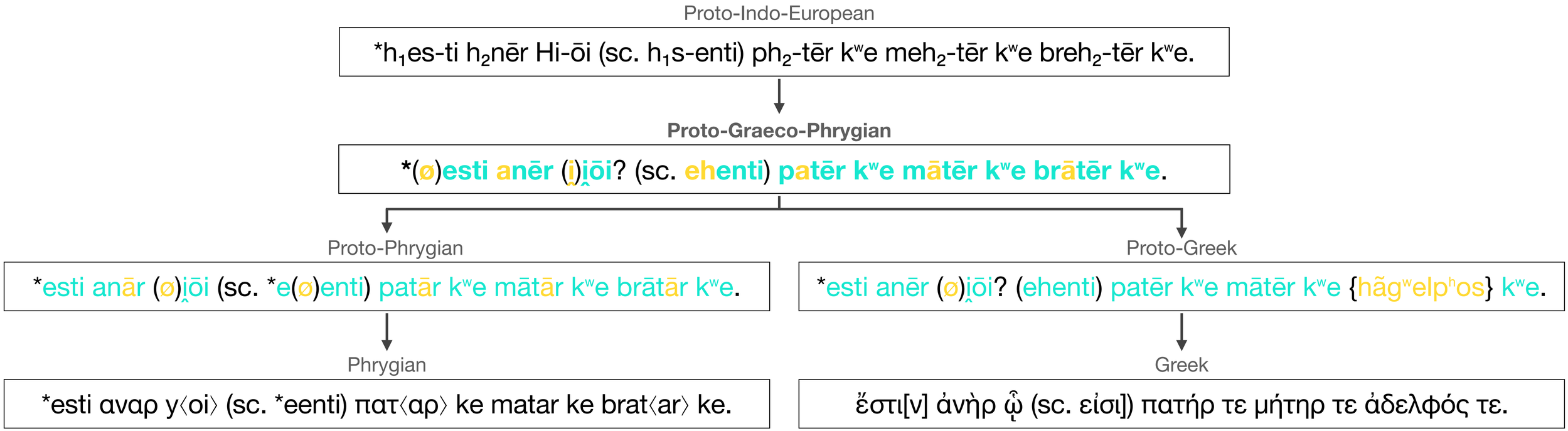
*h₂nēr ‘man; husband’	*dʰh₁-t-o-m ‘monument’	*ǵʰlh₃-r- ‘gold’	*Hi-o-s ‘which’	*pod- / ped- ‘feet’	*su-e ‘him; self’
*h₂eu+t-o-s ‘himself’	*dʰǵʰ(e)m-el-o- ‘lowly; man’	*gʷn-eh₂-ik-m ‘woman; wife’	*kʷe ‘and’	*penkʷe ‘five’	*tḱh₁-u(r)- ‘to acquire’
*bʰer- ‘to carry’	*dʰh₁-s-o-s ‘god’	h₁ei- ‘to go’	*knḱ-o-s ‘bad; evil’	*pr ‘in front’	*up-s-o-dʰ(e)n ‘from above’
*bʰeudʰ- ‘statue’	*ǵenh₁-es-h₂ ‘descendants’	*h₁en ‘in’	*koru̯-o-s ‘lad, boy’	*ph₂-tēr ‘father’	*ureǵ/uerǵ-o-m ‘work; idol’
*bʰreh₂-tēr ‘brother’	*ǵʰes-r- ‘hand’	*h₂eti ‘and’	*meǵ-h₂-s ‘great’	*seǵʰ- ‘to hold’	*uanakt-s ‘king’
*dh₃-t-i-m ‘gift, offering’	*ǵʰeu-mn-ø ‘stream; well’	*h₃nh₃-mn-ø ‘name’	*meh₂-tēr ‘man’	*sleh₂gu- ‘to take’	*dhregʷʰ- ’to make thick’

nouns	verbs	adjectives	pronouns	adverbs	etc.

A Proto-Graeco-Phrygian Story

Conservation

Innovation

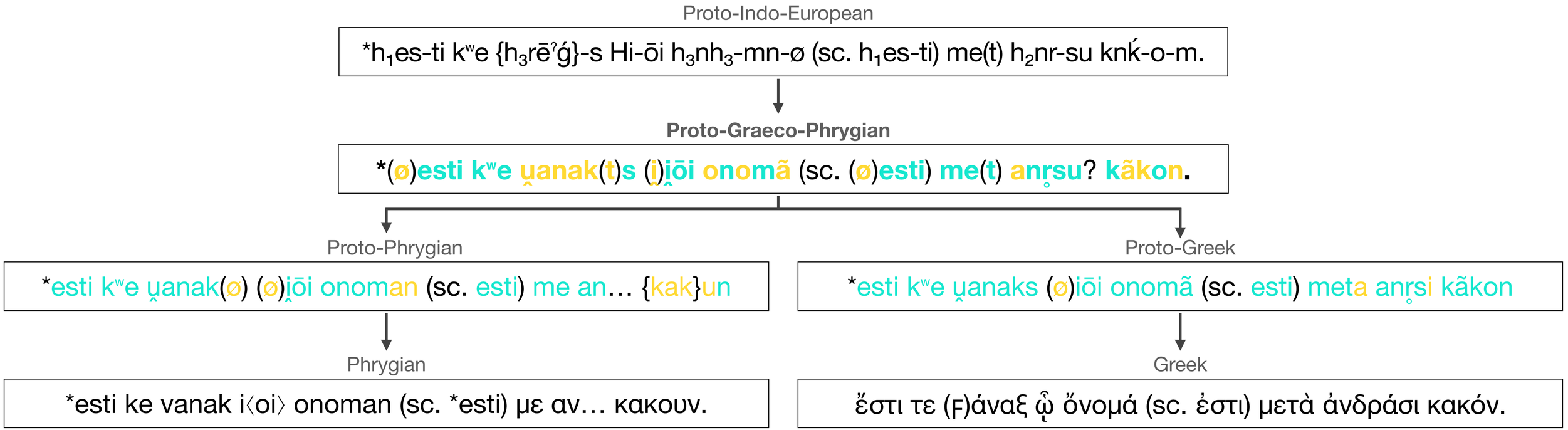


“There is a men who has a father, a mother, and a brother.”

A Proto-Graeco-Phrygian Story

Conservation

Innovation

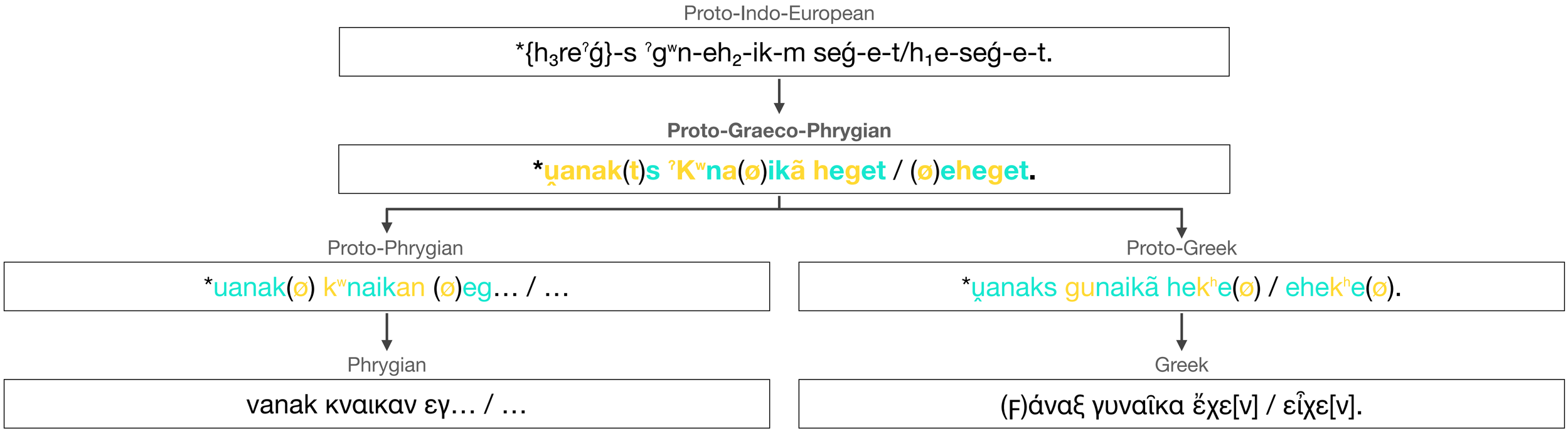


“And there is a king whose reputation amongst men is bad.”

A Proto-Graeco-Phrygian Story

Conservation

Innovation

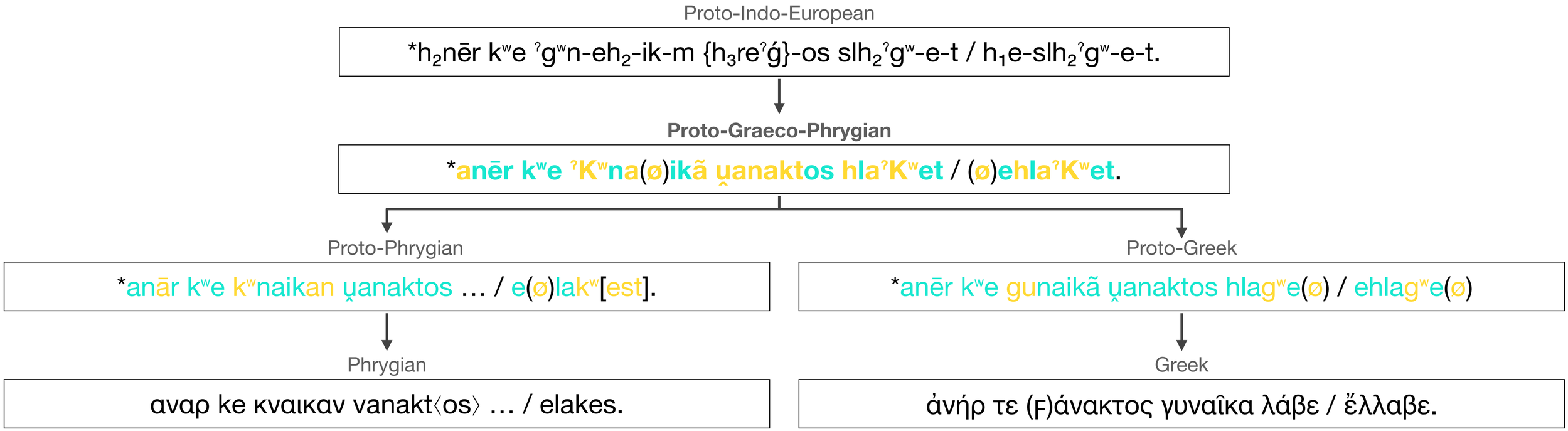


“The king used to have a wife.”

A Proto-Graeco-Phrygian Story

Conservation

Innovation

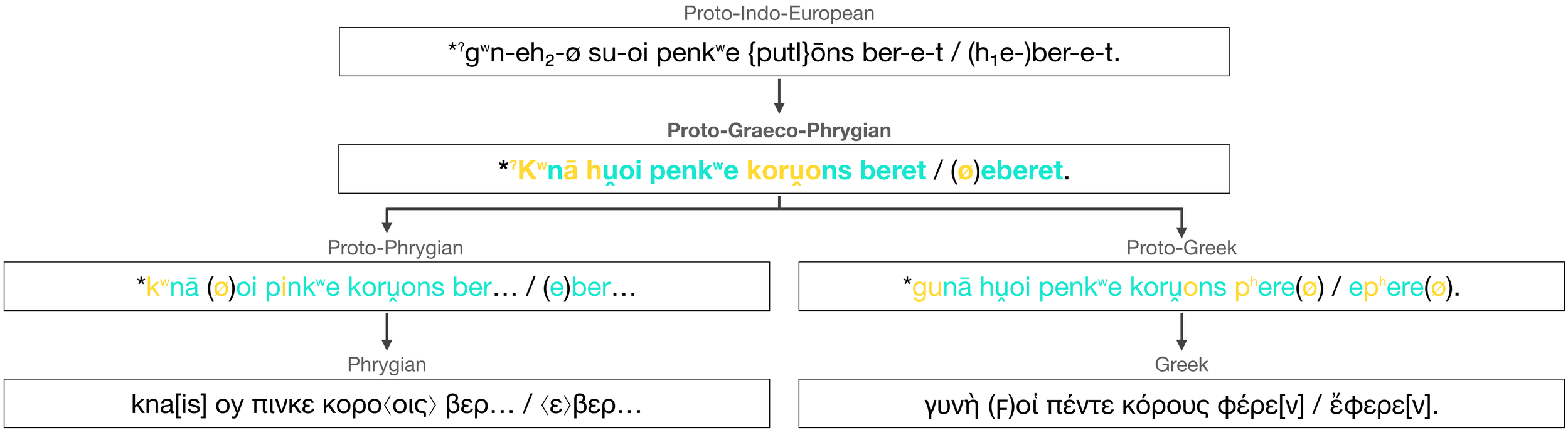


“But the man took the king’s wife.”

A Proto-Graeco-Phrygian Story

Conservation

Innovation

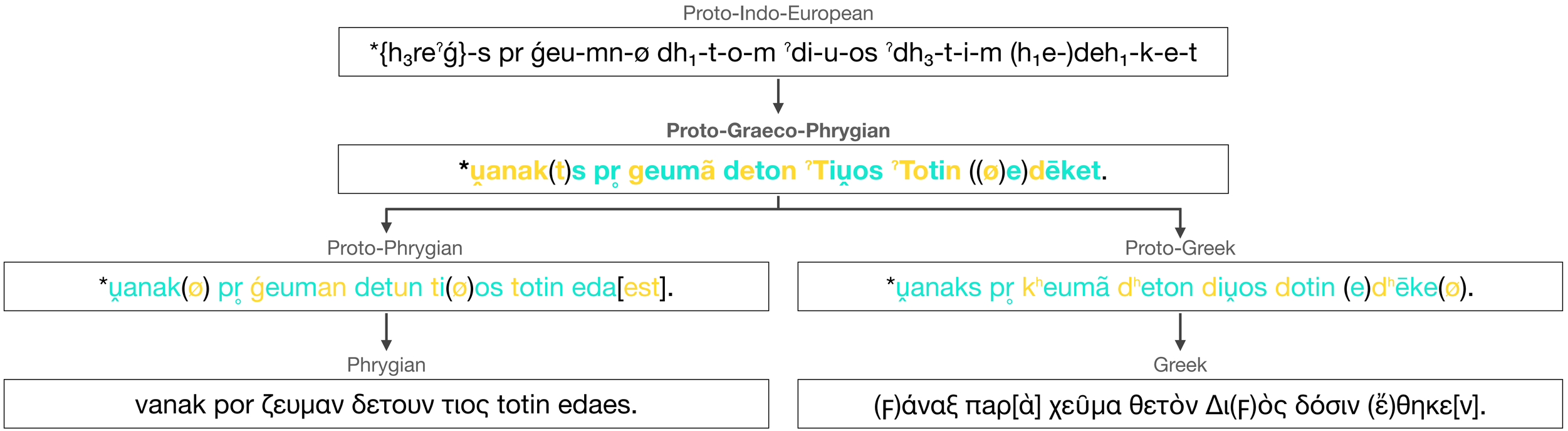


“The wife would bear him five boys.”

A Proto-Graeco-Phrygian Story

Conservation

Innovation

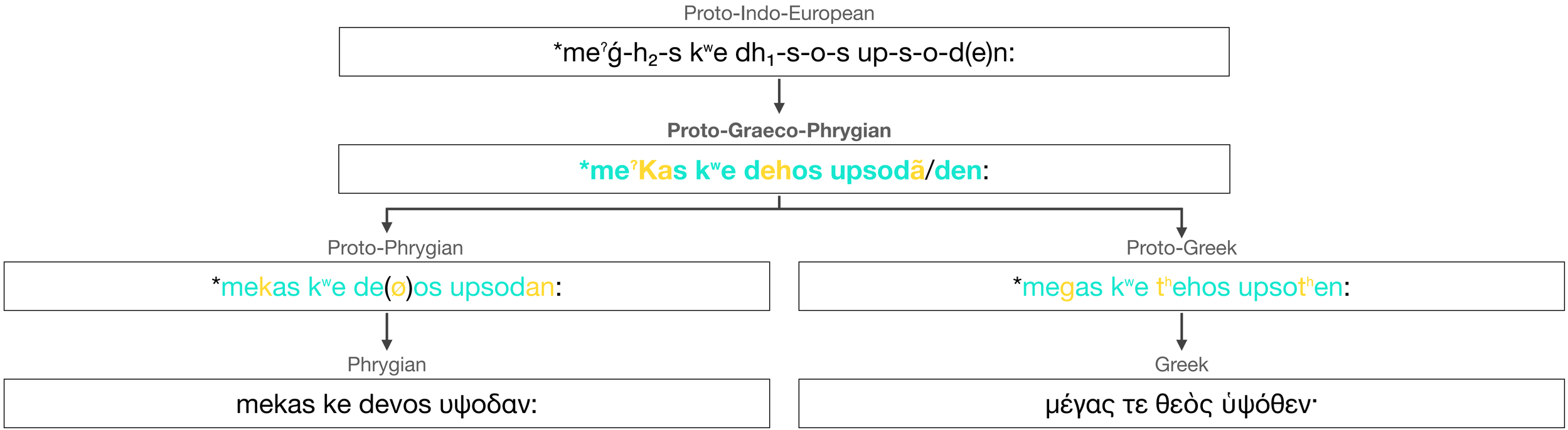


“King placed the idol of Zeus as an offering near a stream.”

A Proto-Graeco-Phrygian Story

Conservation

Innovation

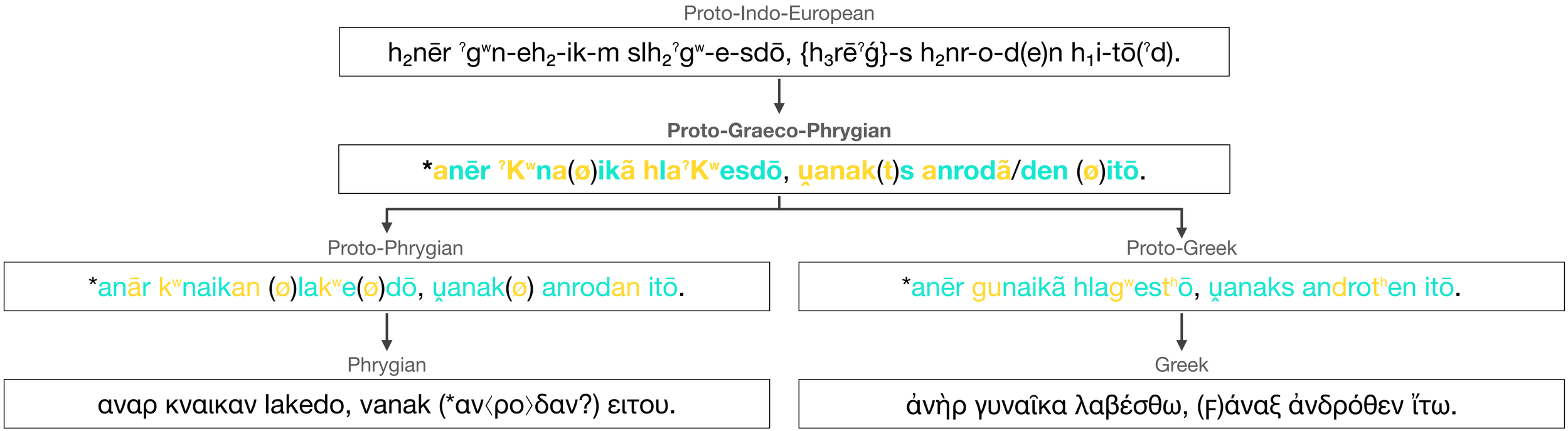


“But the great god (sc. said) from above:”

A Proto-Graeco-Phrygian Story

Conservation

Innovation



“Let the man take the wife for his own, let the king go away from the man.”

The End

Thank you!