

Relative chronology in the development of Hittite /o/

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Outline

1. Introduction
2. Scholarly chronicle
3. Relative chronology
 - Hittite /o/ as a recent innovation (Rieken 2005)
 - Hittite /o/ as a retention of PIE *o (Kloekhorst 2008)
 - Hittite /o/ as a separate phoneme
4. The PA phoneme */o/
5. Summary and conclusions

Introduction


- The signs <u> and <ú> denote different **vocalic phonemes** in Hittite cuneiform

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- <u> = /o/ e.g. <Cu-u-uC> = /CoC/

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3. Motivate reconstruction of **+1 Proto-Anatolian** back vowel phoneme

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- **Sturtevant** (1942) separates /e/ and /i/, but *not* /u/ and /o/

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 - *“It should always be kept in mind that the Hittite phonemic system existed first and that the scribes made do with a writing system originally designed for another language.”* (p. 94).

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- *“Der Hauptfehler der bisherigen Betrachtungsweise liegt darin, da man über dem Sammeln der Schreibvarianten die Aussagekraft der Invarianten nicht zur Kenntnis nimmt”* (pp. 138-139)

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- Not all diphthongs yield <u>

Hitt. <wa-ah-nu-ú-mi> 'I turn' /uahnūmi/ < PIE suffix *-néu-

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Secondary phoneme (not PIE ***o**) brought about chiefly by the loss of PIE ***h₂**

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PIE monosyllabic accented ***ó** before ***m** Hitt. /**Cón**/ < PIE ***#Cóm#**

Hitt. /**kon**/ <ku-**u**-un> ‘this’ (ACC.SG.C) < PIE ***kom** (already **Hrozný 1917**)

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Problem: what about PIE *eu-diphthongs?

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*hu (< *h ₂ u)	*hu	*ho	ho
*uh# (< *uh ₂)	*uh	*o# (e.g. /aSo/ 'goods')	o#
*CouC ^[-ALVEOLAR]	*CuC ^[-ALVEOLAR]	*CuC ^[-ALVEOLAR]	CoC ^[-ALVEOLAR]
*CouC ^[+ALVEOLAR]	*CauC ^[+ALVEOLAR]	*CauC ^[+ALVEOLAR]	CauC ^[+ALVEOLAR]
*Ceuk	*CuK (e.g. C ^[-ALVEOLAR])	*CuK	**CoK

E.g. Hitt. /m_okae-/ 'to invoke' < *moug-o-ié/ó- vs. Hitt. /htuka-/ 'fearsome' < *h₂teug-o-

Relative chronology: Hittite /o/ as a recent innovation

Per Rieken (2005): Hitt. /o/ is a **recent** innovation, **split** of Pre-Hitt. *u

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*Ceuk	*CuK (e.g. C ^[-ALVEOLAR])	*CuK	**CoK

Moreover: demonstrative pronouns /kos/, /kon/ (etc.) remain unexplained (no prehistoric *u)

Relative chronology: Hittite /o/ as a retention of PIE *o

Per Kloekhorst (2008): PIE *o is retained in sequence *#Cóm(s)# (e.g. /kon/ < *kóm)

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*uh# (< *uh ₂)	*uh#
*CouC ^[-ALVEOLAR]	*CauC ^[-ALVEOLAR]
*CouC ^[+ALVEOLAR]	*CauC ^[+ALVEOLAR]
*#Cóm# / *#Cóms#	*#Cóm# / *#Cóms#
*Ceuk	*Ceuk

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*uh# (< *uh ₂)	*uh#	o#
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*#Cóm# / *#Cóms#	*#Cóm# / *#Cóms#	#Cóm# / #Cós#
*Ceuk	*Ceuk	Cuk

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*#Cóm# / *#Cóms#	*#Cóm# / *#Cóms#	#Cóm# / #Cós#
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*#Cóm# / *#Cóms#	*#Cóm# / *#Cóms#	#Cóm# / #Cós#
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- **Avoids** change to **a*
- More **symmetrical** system at every phase

Relative chronology: Hittite /o/ as a separate phoneme

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<i>*uh₂#</i>
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<i>*CouC^[-ALVEOLAR]</i>	<i>*Co₂C^[-ALVEOLAR]</i>
<i>*CouC^[+ALVEOLAR]</i>	<i>*CouC^[+ALVEOLAR]</i>
<i>*#Cóm# / *#Cóms#</i>	<i>*#Co₂m# / *#Co₂ms#</i>
<i>*Ceuk</i>	<i>*CuK</i>
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$*uh_2\#$	$*o_2\#$
$*CouC^{[-ALVEOLAR]}$	$*Co_2C^{[-ALVEOLAR]}$
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Parallel: Hitt. NOM/ACC.PL.N /**as:o**/ ‘goods’ < PIE ***h₁o-h₁su-h₂**

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But! Can't ***h₂-lowering** be after PIE ***o** > Hitt. /**a**/? (eliminating need for intermediate phoneme)

The PA phoneme /ø/

There is **no direct reason** to assume retention of ***-h#** (< ***-h₂#**) in **Proto-Anatolian**

The PA phoneme /ɔ/

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PL ***-a#**

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PL ***-a#** < PA ***-a#**

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E.g. Lyc. **tawa** ‘eyes’

- **Kloekhorst (2019)**: ***h₂**-lowering also valid for **Luwic**

E.g. Lyc. NOM/ACC.PL.N **tija** ‘these’

<< PL ***k^wa** < PA ***k^wæ** (***k^wē**) < **PIE**

***k^wi-h₂**

The PA phoneme /ø/

Thus: $*h_2$ -lowering = **Proto-Anatolian** sound law

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⇒ Lowering of $*-uh_2\#$ is Proto-Anatolian

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Thus: $*h_2$ -lowering = **Proto-Anatolian** sound law

⇒ Lowering of $*-uh_2\#$ is Proto-Anatolian

⇒ $*-uh_2\#$ cannot become PA $*o$ (< PIE $*o$), crucially not Hitt. $**/as:a/$

The PA phoneme /o/

Thus: $*h_2$ -lowering = **Proto-Anatolian** sound law

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PA $*o >$ Hitt. **/a/** *after PA times*

(separate outcome in **Luwic**, $*o >$ Lyc. **/e/**)

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(separate outcome in **Luwic**, $*o >$ Lyc. $/e/$)

⇒ Forces reconstruction of +1 PA back vowel phoneme $*/o_2/$ (< PIE $*-uh_2\#$, etc.)

The PA phoneme /o̥/

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PA $*o >$ Hitt. **/a/** *after PA times*

(separate outcome in **Luwic**, $*o >$ Lyc. **/e/**)

⇒ Forces reconstruction of +1 PA back vowel phoneme $*/o_2/$ (< PIE $*-uh_2\#$, etc.)

Or rather: $*/o̥/$ cf. $*/e̥/$ < PIE $*ei$ (Melchert, 1994, p. 51)

The PA phoneme /ɔ/

Phase I (PIE)

**uh₂#*

**CouC^[-ALVEOLAR]*

**CouC^[+ALVEOLAR]*

**#Cóm# / *#Cóms#*

**Ceuk*

**CoC*

The PA phoneme /ɔ/

<u>Phase I (PIE)</u>	<u>Phase II (PA)</u>
	1) Loss of final <i>*h₂</i> 2) Conditioned monophthongisation/lowering to <i>*ɔ</i> 3) Conditioned monophthongisation to / u /
<i>*uh₂#</i>	<i>*ɔ</i>
<i>*C<u>o</u>C^[-ALVEOLAR]</i>	<i>*C<u>ɔ</u>C^[-ALVEOLAR]</i>
<i>*C<u>o</u>C^[+ALVEOLAR]</i>	<i>*C<u>o</u>C^[+ALVEOLAR]</i>
<i>*#C<u>ó</u>m# / *#C<u>ó</u>ms#</i>	<i>*#C<u>ɔ</u>m# / *#C<u>ɔ</u>ms#</i>
<i>*C<u>e</u>uK</i>	<i>*C<u>u</u>K</i>
<i>*C<u>o</u>C</i>	<i>*C<u>o</u>C</i>

The PA phoneme /ɔ/

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<i>*uh₂#</i>	<i>*ɔ</i>
<i>*CouC^[-ALVEOLAR]</i>	<i>*CɔC^[-ALVEOLAR]</i>
<i>*CouC^[+ALVEOLAR]</i>	<i>*CouC^[+ALVEOLAR]</i>
<i>*#Cóm# / *#Cóms#</i>	<i>*#Cɔm# / *#Cɔms#</i>
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<i>*Ceuk</i>	<i>*CuK</i>
<i>*CoC</i>	<i>*CoC</i>

The PA phoneme /o/

<u>Phase I (PIE)</u>	<u>Phase II (PA)</u>	<u>Phase III (Old Hittite)</u>
	1) Loss of final <i>*h₂</i> 2) Conditioned monophthongisation/lowering to <i>*o</i> 3) Conditioned monophthongisation to /u/	1) <i>*o > /a/</i> 2) <i>*o > /o/</i>
<i>*uh₂#</i>	<i>*o</i>	<i>o#</i>
<i>*CouC^[-ALVEOLAR]</i>	<i>*CoC^[-ALVEOLAR]</i>	<i>CoC^[-ALVEOLAR]</i>
<i>*CouC^[+ALVEOLAR]</i>	<i>*CouC^[+ALVEOLAR]</i>	<i>CauC^[+ALVEOLAR]</i>
<i>*#Cóm# / *#Cóms#</i>	<i>*#Com# / *#Coms#</i>	<i>#Com# / #Cos#</i>
<i>*Ceuk</i>	<i>*CuK</i>	<i>CuK</i>
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The PA phoneme /o/

<u>Phase I (PIE)</u>	<u>Phase II (PA)</u>	<u>Phase III (Old Hittite)</u>
	1) Loss of final <i>*h₂</i> 2) Conditioned monophthongisation/lowering to <i>*o</i> 3) Conditioned monophthongisation to /u/	1) <i>*o > /a/</i> 2) <i>*o > /o/</i>
<i>*uh₂#</i>	<i>*o</i>	<i>o#</i>
<i>*CouC^[-ALVEOLAR]</i>	<i>*CoC^[-ALVEOLAR]</i>	<i>CoC^[-ALVEOLAR]</i>
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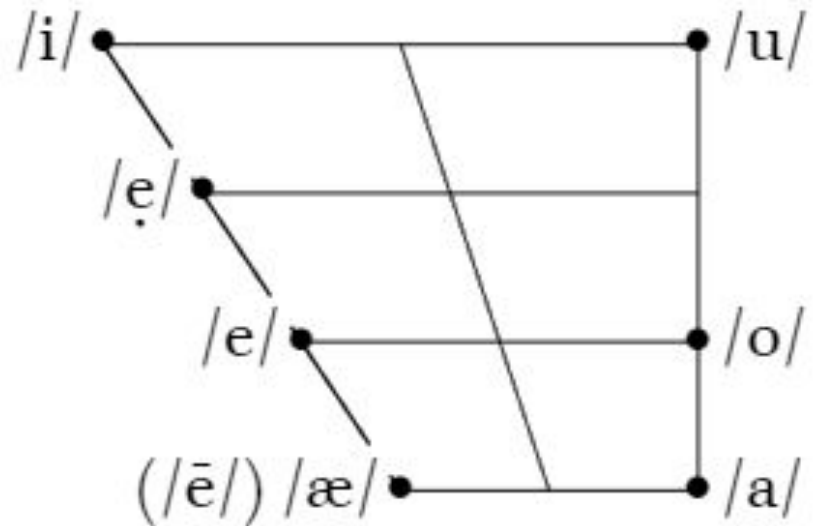
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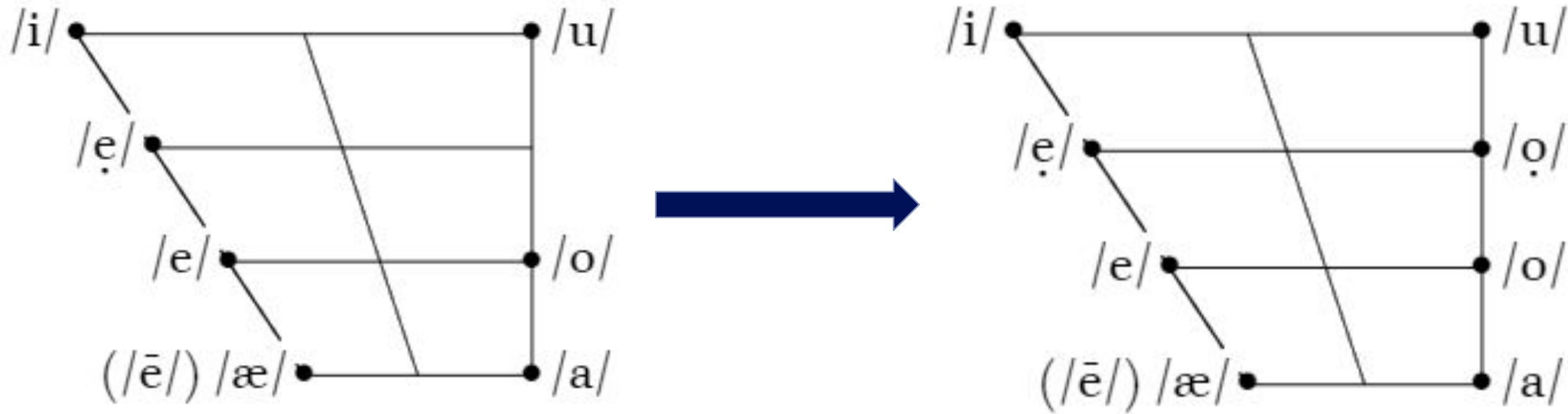
Summary and conclusions

The Proto-Anatolian vowel inventory



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Thank you!



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