

Article

*The Proto-Afrasian Comparanda of PIE *H₃ word-initially*

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Abstract: The article deals with the Proto-Indo-European laryngeal H_3 word-initially. It is shown that in that position H_3 corresponds to Proto-Afrasian phoneme * ʕ (*ʕayin*), a voiced pharyngeal.

Keywords: Proto-Indo-European, Laryngeal, Afrasian.

1. Introduction

The article deals with the Proto-Indo-European (PIE) laryngeal H_3 word-initially. As is well-known since Saussure's postulation of “coefficients sonantiques” in his *Mémoire* in 1879 PIE most probably had at least three proto-phonemes, now called laryngeals, which are symbolized H_1 , H_2 , H_3 . In his *Mémoire* Saussure showed that the paradigm of apparently irregular alternations could be made parallel and similar to that of explicitly regular alternations provided the postulation of unattested entities, which he himself wrote e , A , O :

$eC \sim oC \sim \emptyset C$
$eI \sim oI \sim \text{!}$
$eR \sim oR \sim \text{r}$
$eN \sim oN \sim \text{n}$
$eM \sim oM \sim \text{m}$

Explicitly regular alternations

On the basis of these regular alternations between the e-grade, o-grade and zero-grade Saussure had it that the following alternations: $\bar{e} \sim \bar{o} \sim e$, $\bar{a} \sim \bar{o} \sim a$, $\bar{o} \sim \bar{o} \sim o$, which involve long and short vowels could be integrated in the regular mold according to the following reformulation:

Data	With <i>coefficients</i>	With <i>laryngeals</i>
$\bar{e} \sim \bar{o} \sim e$	$e+e \sim o+e \sim \emptyset+e$	$eH_1 \sim oH_1 \sim \emptyset H_1$
$\bar{a} \sim \bar{o} \sim a$	$e+A \sim o+A \sim \emptyset+A$	$eH_2 \sim oH_2 \sim \emptyset H_2$
$\bar{o} \sim \bar{o} \sim o$	$e+O \sim o+O \sim \emptyset+O$	$eH_3 \sim oH_3 \sim \emptyset H_3$

Apparently irregular alternations and their formulations

Saussure (1879:145) contains similar tables for the “coefficients” A and O in the Greek, Italic and Proto-Germanic languages. The original idea of Saussure was reworked by Möller who suggested immediately afterwards that the coefficients had to be some kind of guttural sounds. Sweet made a similar suggestion as well in 1880. Following Benveniste's approach of PIE roots it is generally accepted that PIE roots never started with vowels but with laryngeals, so that the postulated laryngeals H_1 , H_2 , H_3 also existed word or root-initially with similar vowel coloring: $H_1e > e$, $H_2e > a$, $H_3e > o$.

So far the exact nature of these laryngeals has remained somewhat elusive. Explicit traces in the Anatolian branch of the Indo-European family confirmed the validity of Saussure's approach but that testimony does not address all the issues. This paper will (try to) show that PIE * H_3 corresponds most adequately with PAA * ʕ (*ʕayin*), a voiced pharyngeal, word initially.

2. Comparanda

As explained in the preceding paragraph the PIE laryngeal *H₃ is characterized by a stable vocalism, which only accepts *o and *ō throughout the Indo-European languages and never alternates with either *e or *a. A number of reconstructed roots and words display that feature. For the sake of clarity PIE items are cited in two formats: the traditional framework with *t, d, dh* and **e* (Late PIE) and the Nostratic format with *t, t', d* and **a* (Early PIE). In my perspective this is mainly a convenient way of converting the two formats into each other rather than a truly chronological reality. In addition this also entails that I consider the so-called apophonic vowel *e/o to be actually /a/ and that PIE never had a phonemic contrast between *e/o, that is to say /a/, and whatever extra phoneme *a as some Indo-Europeanists postulate. Be it written **e* or **a* the apophonic vowel is in my opinion /a/. Apart from Pokorny, who is our main reference, we cite Bomhard (2008) and Mallory-Adams (2006) although that latter book is often at odds both with Pokorny and the PAA comparanda.

2.1 Items with clear phonetic and semantic correspondences

- IEW 772-3 **od-* => **H₃aṭ-* ‘to smell’ ~ Arabic *ʿaṭīr* ‘to smell (good)’, *ʿaṭar* ‘smell, perfume’. Cf. Bomhard (2008:II 713-4), Mallory-Adams (2006:483).
- IEW 773 **od-* => **H₃at-* ‘to be angry, to hate’ ~ Arabic *ʿaṭīb* ‘to be angry (against sby)’. Hittite is *hatukiš* ‘terrible, dreadful’. Cf. Mallory-Adams (2006:483).
- IEW 775 **ōk-* => **H₃aH₁k-* ‘fast’ ~ Egyptian *ḥ* ‘to fly’, Cushitic **ḥa* ‘to fly’. Cf. Latin *accipiter* ‘fast-flyer’. Cf. Mallory-Adams who reconstruct (2006:483) **H₁ōk-us* ‘fast’ and (2006:481) **H₂ēH_xtró-* ‘quick, fast’.
- IEW 775-7 **okw-* => **H₃akw-* ‘to see, eye’, 774 **ok-* ‘to think’ ~ Arabic *ʿaqal* ‘to understand, recognize’, Egyptian *k* ‘to learn’, *rk* ‘to understand’; Cushitic **ʿak*, **ak* ‘to know, see’, **ʿariḳ* ‘to understand, see’. Cf. Mallory-Adams (2006:483) **H₃okw-* ‘eye, to see’.
- IEW 777 **ol-* => **H₃al-* ‘to destroy’ ~ Arabic *ʿall* ‘to strike repeatedly’. Hittite is *hullāi-*, *hulliya-* ‘fight, struggle’. Cf. Mallory-Adams (2006:483) **H₃elH₁-* ‘to destroy’, *H₃lem-* ‘to break’.
- IEW 777 **ol-* => **H₃al-* ‘to die’ ~ (?) Arabic *ʿalīl* ‘to be ill’. Possibly not the same word as the preceding. Cf. Mallory-Adams (2006:483) **H₃ligos* ‘ill, bad’.
- IEW 778 **om-* => **H₃am-* ‘strong, energetic’ ~ √*m*: Arabic *ʿaʿamm* ‘strong, tall’, *ʿamaj* ‘to go fast’.
- IEW 779 **on-* => **H₃an-* ‘fault, to scold’ ~ Arabic *ʿanat* ‘adultery, sin’, (V) *ʿanit* ‘to spy sby's faults or weaknesses’, *ʿanad* ‘to go astray’. Cf. Mallory-Adams (2006:483) **H₃enH₂-* ‘to quarrel, contend’.
- IEW 780 **ongh-*, also **onkh-*, **onugh-* => **H₃an-g(u)-* ‘(finger)nail’ ~ Egyptian *ʿn-t* ‘nail’. Cf. Mallory-Adams (2006:483) **H₃nogh(w)* ‘(finger- or toe-)nail’.
- IEW 780 **op-* => **H₃ap-* ‘rich’ ~ Semitic **ʿbr*: Arabic *ʿubr* ‘abundance, high number of’, *ʿabīr* ‘numerous’. Hittite is *happinahh-* ‘to become rich’.
- IEW 781 **op-* => **H₃ap-* ‘to choose, think’ ~ Semitic **ʿbr*: Arabic *ʿibra* ‘consideration, esteem’.
- IEW 781-2 **orbh-* => **H₃arb-* ‘work, slave’ ~ Semitic **ʿabd*: Arabic *ʿabd* ‘slave’. PIE is infixed (**r*). The meaning ‘orphan’ is possibly another root.
- IEW 781-2 **orǵh-* => **H₃arǵ-* ‘testicle, grape’ ~ Arabic *ʿaraq* ‘raisin’. Cf. Albanese *hardhi* ‘vine, grape, round fruit’ and *herdhe* ‘testicle’. Quite unexpectedly Hittite is *arki* ‘testicle’ (no *h*). Cf. Mallory-Adams (2006:484) **H₄órǵhi* ‘testicle’.
- IEW 340 **[e]rs-* => **H₃ars-* ‘tail, buttocks’ ~ (?) Semitic **ʿuḥ-*: Arabic *ʿuṣuṣ*, *ʿaṣaṣ* ‘tailbone’; Chadic **wuḥ-* ‘tail, penis’. Most Indo-European cognates have **o*. PIE is infixed (**r*). Cf. Mallory-Adams (2006:480) **H₁órs(o)-* ‘rear-end’.
- Latin *unio* ‘onion’ (< **usn-*?) ~ (?) Arabic *ʿunṣal* ‘wild onion’. Latin vowel quantity is unknown.
- IEW 783 **ost(h)-*, also **osk-*, **osbh-* => **H₃as-* ‘bone’ ~ Semitic **ʿaḥm*: Arabic *ʿaḥm* ‘bone’. Hittite is *hastai*. It can be noted that the affricate **ḥ* is probably the merger of **š* and **t*: Semitic **ʿaš-* ‘bone’ exists as well, Arabic *ʿaš* ‘(leg, wing) bone’. Cf. Mallory-Adams (2006:482) **H₂ost-* ‘bone’.

- IEW 785-6 **ozd-*, also **ozgh-* ‘branch’ ~ Semitic **ʿaṣ-*: Arabic *ʿaṣ* ‘rod, stick, branch’, Arabic *ʿāṣ* (*√ʿyṣ*) ‘grove, bush’. Cf. Mallory-Adams (2006:482) **H₂óst-* ‘branch’, (2006:487) **H_xósghos* ‘knot (in wood)’.

2.2 Additional lexemes with apparent metathesis

Two PIE verbs seem to have undergone metathesis from **H₃aC-* to **CaH₃₋*:

- IEW **pō-* ‘to drink’ ~ Semitic **ʿab-*, **baʿ*: Arabic *ʿabb*, *baʿ* ‘to drink’, Cushitic **ʿab* ‘to drink’, Chadic **Hab* ‘to drink’. According to Afrasian languages, PIE **pō* is a rearrangement of **ʿab*. It can be noted that Arabic is itself segmentally unstable.
- IEW **dō-* ‘to give, (archaic) to seize’ ~ Semitic **ʿat-*: Arabic *ʿatā* (*√ʿṭw*) ‘to take in hand, to give (as a present)’, Akkadian *eṭeru* ‘to take away’. The expected form should be PIE **od*. As with **pō-* ‘to drink’ it is probable that reduplication caused some segmental reanalysis of the root.

2.3 Additional lexemes with some problems

- IEW 772 **obhel-* => **H₃ab-* ‘to sweep’ ~ (?) Arabic *miʿbad* ‘kind of shovel to remove dirt’
- Latin *ob-* => **H₃ab-* ‘in front of, against’ ~ (?) Egyptian *ʿb* ‘to face, opposite’.
- Germanic **ōfer* ‘riverbank’ ~ (?) Arabic *ʿabr*, *ʿibr* ‘riverbank, shore’. Cf. Mallory-Adams (2006:485) **H_{ae}H_xperos* ‘river bank, shore of sea’.
- IEW 784-5 **oitos* => **H₃ayto-* ‘oath’ ~ (?) Semitic **ʿayt-*: Arabic *ʿadd-* ‘to begin to do smth’. Cf. Mallory-Adams (2006:480) **H₁óitos* ‘oath’.
- IEW 775 **oktō-* => **H₃akt-* ‘eight’ ~ (?) Arabic *ʿukd* ‘middle’. Speculatively the middle finger of the hand indicating 5+3: one hand plus half the other hand. Cf. Mallory-Adams (2006:487) **H_xoktō(u)* ‘eight’.
- IEW 778 **om(e)s-* => **H₃am-* ‘shoulder’ ~ (?) Arabic *ʿamr* ‘sleeve’. Unclear as Arabic may be a derivative of ‘to cover’. Cf. Mallory-Adams (2006:483) **H_{1/4}ómsos* ‘shoulder’.
- IEW 778 **ongw-* => **H₃amgw-* ‘to smear, anoint’ ~ (?) Egyptian *ʿmʿ* ‘to rub’. Cf. Mallory-Adams (2006:483) **H₃engw-* ‘to anoint (with salve), (be)smear’.
- IEW 784-5 **ous* => **H₃aws-* ‘mouth’ ~ Semitic **ʿač-*: Arabic *ʿadd-* ‘to bite’; Cushitic: **ʔačVč-* ‘lower jaw, cheek’. PIE seems to be infixd (**w*). Cf. Mallory-Adams (2006:487) who provide only a derivative **H_xousteH_{a-}* ‘mouth, lip’. This supposes a simplification of the emphatic lateralized phoneme **č* into a plain sibilant PIE **s*.

2.4 Unacceptable items

- IEW 784 **owi* => **H₂awi* ‘sheep’ ~ Egyptian *ʿw-t* ‘sheep and goats’, Berber Canarian *aó* ‘sheep’. Luwian is *hawa*. This word does not begin with **H₃*, as is shown by Tocharian. Cf. Bomhard (2008:II 714-5). Cf. Mallory-Adams (2006:482) **H₂owis-* ‘sheep’.

3. Reconstructible items

The following roots can be reconstructed for the ancestor language of PIE and PAA:

- **ʿab-* ‘to drink’, **ʿab-* ‘work, slave’, **ʿam-* ‘strong, energetic’, **ʿap-* ‘to choose, think’, **ʿap-* ‘rich’,
- **ʿat-* (< (?) **ʿat-*) ‘to give, to seize’, **ʿat-* ‘to be angry, to hate’, **ʿat-* ‘to smell’, **ʿaṣ*, **ʿaṣt* (< (?) **ʿas-*) ‘bone’, **ʿaṣ* ‘branch’, **ʿuṣn* ‘onion’, **ʿuč* ‘tail’,
- **ʿal-* ‘to be ill, die’, **ʿal-* ‘to strike, destroy’, **ʿač-* ‘mouth, to bite’,
- **ʿan* ‘(finger-)nail’, **ʿan-* ‘fault, to scold’, **ʿar(ǵ)-* ‘grape’,
- **ʿak-* ‘to think, know’, **ʿakw-* ‘to see, eye’, **ʿah-* ‘to fly, fast’.

Quite surprisingly there seems to be no example of the least marked **ʿat-* and **ʿas-* but it can be noted that Arabic has both *ʿatā* (*√ʿṭw*) and *ʿatā* (*√ʿṭw*) ‘to give, to offer’, so it seems probable that the oldest

form is ^ʕatā (√^ʕtw), with a secondary emphatic in ^ʕaṭā (√^ʕṭw) through emphatic harmonization. The same observation can be made about *^ʕaṣ, *^ʕaṣt ‘bone’ and Arabic *^ʕasīb ‘tail-bone’.

4. *Conclusions or perspectives*

As a conclusion the paper showed that nearly all PIE words with a reconstructed initial *H₃ have very clear PAA cognates with *^ʕ (^ʕayin) as initial. More than twenty roots pertaining to all places of articulation: labials, coronals, laterals, dorsals, have been presented.

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