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Struktur, Funktion und Semantik der Wurzel im Indogermanischen

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Lengthened grades of PIE **(C)aC* roots

H. Craig Melchert

1. Introduction

It is not my intention here to reexamine in full the question of whether PIE had a phoneme */a/ independent of the allophone *[a] of */e/ adjacent to **h₂* (likely */χ/ or */ħ/). With all due respect for opposing opinions, I regard the existence of PIE */a/ (and a rarer */a:/) as established, following MAYRHOFER (1986: 169–170 and 172–173), MEIER-BRÜGGER (2000: 75–76 and 85–87), FORTSON (2009: 66–67), and others, against LUBOTSKY (1989) and others. I should also make explicit that I follow the widespread, but far from universal, view that PIE */e:/ remained *[e:] adjacent to **h₂* and **h₃* ("Eichner's Law"). See EICHNER (1973: 72) for this analysis, accepted by MAYRHOFER (1986: 132–133 and 141), MEIER-BRÜGGER (2000: 110–111), and others, against (among others) LINDEMAN (1997: 110–111 and elsewhere).

My decidedly more modest aim is to revisit the following question: if we indeed assume that there were some PIE roots with a basic vowel */a/ instead of the usual */e/, to what extent did roots of the former type undergo ablaut? Quantitative ablaut */a/, */a:/, /∅/ in roots with phonemic */a/ (in analogy to */e/, */e:/, */∅/ in parallel morphological environments) would seem to be necessarily implied by the assumption of some */a:/ beside */a/, but explicit handbook discussion is rare. There is no mention in MAYRHOFER (1986: 170) of **na:s-* beside **nas-* 'nostril', and his only cited example for */a:/ (1986: 172) is */ma:tér-/ 'mother' based on a Lallwort. There is also no discussion of possible ablaut of roots in */a/ by MEIER-BRÜGGER (2000: 135–142) in his quite extensive treatment of PIE ablaut. FORTSON (2009: 81) does argue for a zero-grade **sl̥-* < **sal-* 'salt' in Eng. 'silt' and Germ. *Sülze* 'brine' < Gmc. **sultjō-* (cf. KROONEN 2013: 491, but also 425) and also explicitly for lengthened grade **nās-* in Lat. *nārēs* and Eng. 'nose' (also in the Skt. nom.-acc. dual *nā́sau*). Fortson thus implicitly rejects (as do I) the unconvincing attempt by FRITZ (1996) to derive the attested forms of 'nostril' and 'nose' from the root **h₂enh₁-* 'to breathe' via an *ad hoc* sound change (cf. already EICHNER 1988: 132 with note 32).

In the absence (to my knowledge) of any recent systematic discussion of the issue, it seems worth briefly reexamining possible evidence for ablaut in PIE roots with phonemic */a/. The examples that follow are necessarily limited to those that happen to have come to my attention (some through the help of colleagues), and I make no claim that the list is by any means exhaustive. I have tried as much as possible to cite cases where for various phonotactic reasons derivation from **h₂* is particularly difficult. As is well-known, however, one reason that the status of PIE */a/ is so fraught is that it is often effectively impossible to prove whether an attested sequence *CaC* reflects PIE **TaT* or **Th₂T* (where T stands for an obstruent). That indeterminacy will inevitably make its appearance here. I will first treat the question raised

above of quantitative ablaut in */a/ roots and then the more controversial possibility of qualitative ablaut (that is, alleged *o*-grade or *ē*-grade forms to */a/ roots).

2. Zero grade in */a/ roots

There are at least a few undeniable cases of zero-grade reflexes from roots in */a/. The first two cited here have been previously recognized, but the latter two have not been fully appreciated. First, PIE **(h₁)ai-* 'be(come) warm, hot' is attested in both the medio-passive Hitt. *a-a-ri* 'becomes warm, hot' from a full-grade **(h₁)áy-ori* and in the transitive active Hitt. *inu-* 'make warm, hot' from a **nu-*present **(h₁)i-néu/nu-*. The absence of an initial *ḫ-* precludes a PIE root †*h₂ei-*, and the spelling *i-nu-* in Old Hittite/Old Script confirms that the vowel of the *nu*-stem is in fact the expected *i-* < **i-*: see MELCHERT 1984: 38 with note 78 and LIV 229, against KLOEKHORST 2008: 164–166. Second, the root **kwas-* 'kiss' shows a zero-grade **kus-* in Grk. κυνέω and ἔκυσσα. For the root shape **kwas-*, whose full grade appears in Hitt. *k(u)waššš-*, see EICHNER 1988: 133 and LIV 373. A preform **kuh₁/₃-s-* would yield Hitt. †*kušš-* (compare *kuššan* 'wage' < **kuh₁/₃s-ṇ* with KLOEKHORST 2008: 498), while **kuh₂s-* would produce †*kuḫš-* (compare *paḫš-* 'to protect' < **peh₂s-*).

As already seen by EICHNER (1978: 151 with note 28), Hitt. *unu-* 'adorn' must represent **(h₁)u-néu/nu-*, a *nu*-present to the root **(h₁)au-* 'put on (clothing)'. What is crucial in this example is the consistent spelling of the stem as *ú-nu-*^{o} with the sign <ú>, which in a *nu*-present can only reflect a zero-grade **(h₁)u-* (for spellings with <ú> as representing Hittite [u:] vs. those with <u> as representing a synchronic [o:] see *in extenso* KLOEKHORST 2008: 35–60 with references to RIEKEN 2005 and others). A root **h₂euH-* with initial **h₂-* (LIV 275 after Klingenschmitt) or **h₃-* (KLOEKHORST 2008: 918–920) is impossible. First, both **h₂u-* and **h₃u-* would lead to †*ḫu-*. Second, even if one assumes loss of the initial laryngeal, both **h₂* and **h₃* cause lowering of adjacent **u* to Hitt. /o/, spelled with <u>, even when subsequently lost: compare coll. pl. *a-aš-su-u* 'goods' [á:sso:] < **-uh₂* and **s(e)uh₃-o-* > *šu-u-wa-* 'be full' [so:wa-] (seen in the ptc. *šu-u-wa-an-t*^{o}). The third laryngeal is confirmed by Palaic Pret3Sg *šu-ú-na-at* < **su-né-h₃-t* (*pace* KLOEKHORST 2008: 786)—for the "accent retraction" in the Palaic see YATES 2015, especially section 4.2.2. A preform **s(e)uh₁-V-* with first laryngeal leads rather to *šu-ú-wV-*: compare *šu-ú-il-* 'thread' [suwil-] to **seuh₁-* 'to sew'. Likewise, the PIE root **(h₁)au-* 'to perceive, see' (for this as the necessary shape of the root see the next section) is attested in the zero-grade in Skt. *uvé* 'I perceive' (RV 10.86.7) and in the weak stem of Hitt. *au(š)-* 'to see', an ablauting *ḫi*-verb. Here we find a weak stem in /u-/, spelled always with <ú> (e.g., Pret1Pl *ú-me-e-ni*, Pres3Pl *ú-wa-an-zi*) versus the strong stem in Pres1Sg /ó:χ:i/spelled <u-uχḫ-ḫi>, reflecting **(h₁)áu-h₂ei*. For further non-Anatolian examples of ablaut **ai~i* and **au~u* see STRUNK 1993: 430–434 (my thanks to Norbert Oettinger for this reference).

3. Lengthened grade in */a:/ in */a/ roots

One example that is difficult to explain away is Grk. γῆρυς/γᾶρυς 'voice' < **gār-u-* and likewise the long **ā* in OIr. *gáir* and MWelsh *gawr* 'shout, cry' to the verbal root **ĝar-* seen in OIr. *-gair* 'call'. A root **ĝeh₂r-* is prohibited by PIE root structure constraints, and the Old Irish verb precludes analyzing the nouns as a root **ĝeh₂-+ r-*suffix. See SCHUMACHER 2004: 333–334 and LIV 161 (the latter also offers evidence for a zero-grade reflex). The adverb attested in Skt. *āvíḥ* = Av. *āuuiš* 'manifest, visible' represents **āw-is* (thus with DUNKEL 2014: 2.106–109). The cognacy of Skt. *āvíḥ* = Av. *āuuiš* and Grk. αἰσθάνομαι 'to perceive' is undeniable (cf. CHANTRAINE 1968–80: 42 and FRISK 1955–72: 45 and 49). Given then a Hittite ablauting verb *au-/u-* 'see' (sic!), the invention of a root **h₁eu-* just to account for the latter (e.g., LIV 243, JASANOFF 2003: 167, note 41) is an egregious violation of Occam's Razor. Indo-European and cross-linguistic evidence for semantic overlap or shifts in perception verbs (e.g. TochAB *wär-* 'to smell' < **u̯er-* 'to perceive'; Mandarin Chinese *wén* 'to hear; smell'), argues for the cognacy also of Lat. *audiō* 'to hear' (see for the formal details of the Greek and Latin MEIER-BRÜGGER 1980 and HACKSTEIN 2002: 15–18).

Likely but less than assured is Grk. προμηθεύς (Dor. προμᾱθευς) *'thief' (compare Skt. *pra-math-* 'steal') reflecting **-māth₂-* to the root **math₂-* 'snatch away, steal'. If one accepts this etymology of NARTEN (1960: 135, note 40, after Kuhn), then a lengthened grade seems most plausible, since a root **meh₂th₂-* is improbable (cf. LIV 442, note 1).

In sum, while the number of persuasive examples is expectedly small, there seems no justification for doubting that PIE roots with phonemic */a/ could and did in some cases show quantitative ablaut */a/, */a:/, /∅/ in analogy to the dominant pattern */e/, */e:/, */∅/.

4. Qualitative Ablaut */a/, */o/, */e:/?

Far more controversial is the issue of whether PIE roots with phonemic */a/ ever show qualitative ablaut: that is, *o-* or *ē-*grade. Such a pattern is entirely possible in principle by a different analogy. Coloring (and non-coloring) effects of the second laryngeal were already present in PIE. Thus the root **h₂eĝ-* 'drive' (phonetically *[ħagʲ-]) could form *o-*grade and *ē-*grade derivatives by the normal pattern: hence Grk. ὄγμος 'furrow, track' and Latin *ēgī* 'I drove' (the ultimate source of the lengthened grade in this example may be left open). Similarly, ON *ægir* 'sea' reflects a preform **h₂ēkʷi̯ós* to **h₂ekʷ-* 'water' (KROONEN 2013: 115).

Non-linguist speakers are not conscious of phonotactic restrictions (in this case limitation of surface [a]~[o]~[e:] alternations to positions next to [ħ]), so an extension to */a/ roots is in principle already possible for PIE, but I know of no assured examples. Such an extension becomes more likely with the loss of laryngeal coloring as a synchronic rule or of laryngeals entirely. But do any examples exist even in the prehistory of individual languages?

The topic was bruited by POKORNY (1959: 408 and 528) under the roots given as **ghabh-* 'to seize, take' and **kap-* 'to seize', but the latter is analyzable as **keh₂p-* (thus LIV 344–345 –

though **kap-* is not excluded – and in prelaryngealist guise already in ERNOUT-MEILLET 1959: 97). Evidence for **ghabh-* beyond Italo-Celtic is disputed (see ERNOUT-MEILLET 1959: 288 and LIV 195) and the status of Oscan *hipid* 'shall take' (with *-p-*!) is troubled under any analysis (see LIV 237 with note 6). Neither example can be regarded as compelling.

A possible example has been suggested by PINAULT (2004: 258–259 with notes): TochA *lāk** 'stallion' (attested in Perl. *lāksā* and NomPl *lāśi*), as well as Grk. λάξ '(striking) with the foot/heel' point to a root **lak-*. The semantic connection between the two is seen in Baltic forms: Lith. *lẽkti* 'run; fly' (*lekiù*), Latv. *lèkt* 'fly; jump, hop' and frequentative *lę̃kât*, also in the noun *lēkša* 'jumping mare', etc. (see FRAENKEL 1962–65: 353); also sometimes adduced is Grk. (Hsch) ληκῶν 'futuere'. If the forms cited are all cognate, they point to a root **lak-* 'run, spring, jump' with a lengthened grade in **ē*. However, this putative example is complicated by the short-*e* reflexes in Baltic, which would need to be secondary back-formations.

This paper was initially stimulated by my belief that I had found a compelling example for lengthened *ē*-grade in a root with phonemic */a/ in Anatolian. The case remains worth discussing in detail, because the full evidence has not been acknowledged or correctly understood. However, further investigation has shown that this example does not prove what I had thought it does. Hitt. *ḫ(u)wapp-* 'to do evil to, mistreat' has been reconstructed as **h₂wap-*, based on the Pres3Sg *ḫuwapzi*, where an *o*-grade is totally unmotivated (thus EICHNER 1988: 133 with note 35 and MELCHERT 2007: 513–515). See the latter for detailed arguments (following Hoffner) for separation of an **intransitive** *ḫuwapp-* 'to do evil to, mistreat' construed with the **dative-locative** from a **transitive** *ḫi-*verb *ḫuwapp-* 'to hurl, throw' (against PUHVEL 1991: 431–432).

There is also a set of derivatives from a base **ḫuipa-* in cuneiform Luvian. The precise sense is indeterminable, but the contexts point clearly to 'wicked(ness)' or something very similar, with GÖTZE 1938: 87–88 (the more specific 'cruel(ty), ruthless(ness)', as per PUHVEL 1991: 360, is possible, but unprovable). The most thorough treatment of the set is by RIEKEN (1999: 113–114), but her misguided attempt to deny their Luvian character leads to insuperable problems in accounting for their derivation. Luvian status is proven by *ḫuipama-* (attested in the D-LPl *ḫuipamanza* 'evil-doers' or similar at KBo 13.260 ii 28 in a purely Luvian context). Luvian origin is also consistent with *ḫuipayat<t>an* 'wickedness' in the Ritual of Tunnawi (KUB 7.53+12.58 ii 60 in a list of evils) and (likely Hittitized) *tarpīn ḫuipin* 'evil/wicked *tarpi-*' (KBo 23.57 iv 17)—on *tarpi-* paired with the undeniably Luvian *annari-* see OTTEN-SOUČEK 1968: 29–32. The vocalism and consonantism of Iron Age Luvian (SIGILLUM)*hwa/i-pa-sa-nu-* 'to do harm' (cf. HAWKINS 2000: 550) is ambiguous.

The derivational chain in Luvian is reasonably clear: a virtual **h₂wḗpo-* led to **ḫuipa-* 'evil, wicked' whence directly *ḫuipama/i-* 'evil-doer' or similar (for the type see MELCHERT 2014: 208–209, but the gloss needs to be corrected) and *ḫuipatta-* 'wickedness' (D-LSg *ḫuipatti* at KUB 36.83 i 18—the attested form may be Hittite). From a substantivized **ḫuipa-* 'evil, wickedness' were formed adjectives in **-iyo-*: both an older type with deletion of the final *-a-*

of the base, whence *ḫuipi(ya)-* 'evil, wicked' (seen in Hittitized NPlC *ḫuipiy*[*e/aš*] at KBo 23.57 iv 16 and ASgC *ḫuipin* ibid. iv 17), and a newer type without deletion, whence **ḫuipaiy(a)-* 'evil, wicked', base of *ḫuipayatta-* 'evil, wickedness' attested in N-ASg *ḫuipayat<t>an* at KUB 7.53+12.58 ii 60. For the coexistence of *ḫuipi(ya)-* and **ḫuipaiy(a)-* (both with "*i*-mutation", whence the Hittite *i*-stem) compare *parli(ya)-* ~ *parlaiy(a)-*, *ušantali(ya)-* ~ *ušantalaiy(a)-*, and *ušantari(ya)-* ~ *ušantaraiy(a)-* and for the productivity of both types see CARRUBA 1982 and MELCHERT 1990: 198–205. A base adjective **ḫuipa/i-* with "*i*-mutation" as per MELCHERT (2014: 209) is not impossible, but gratuitous. One should note that the position of the accent on the first syllable is required to explain the "lenition" of **p* to [b]. Given the low productivity of vr̥ddhi-formations in Anatolian and no assured trace of the base in Luvian, accent "retraction" in the morphologically opaque **h2u̯ēpó-* is predicted: see again YATES 2015. The existence of lengthened *ē*-grade forms in this root is assured.

KLOEKHORST (2008: 369–371) argues that *ḫuwapp-* 'to do evil to, mistreat' also originally inflected as a *ḫi*-verb. His cited Pret3Sg *ḫuwappiš* in New Script alone would hardly be probative, given the coexistence of two synchronically homophonous roots. However, the mostly overlooked Pres3Sg *ḫuwappi* in the Middle Script protocol KBo 16.25 iii 15 ([*nu=kan*] *ḫuwappi kuiški kuedanikki* 'and someone is evil to someone') decisively supports Kloekhorst's claim. For the crucial example see HW^2: 3.817 after Hoffmann, but the latter credits GÜTERBOCK and HOFFNER 1994: 106. A root **h2u̯ap-* for 'to be evil' is not excluded by *ḫi*-inflection (see on *au-/u-* 'to see' above), but it is clear that in the absence of compelling positive evidence we must by default assume an ordinary root **h2/3u̯ep-* (the difference in sense and syntax argues decisively against the claim of KLOEKHORST, *loc. cit.*, that the roots 'to strew' and 'to do evil to' are the same). Note that the root 'to do evil to' shows ablaut, and the semantic connection of all the cited forms remained transparent, thus the absence of the "Saussure-Hirt" effect in the allomorph **h2u̯op-* is not a probative argument against **h2/3u̯e/op-*. Therefore this is not a compelling case for *ē*-grade in a root with phonemic */a/. A better example is available. HLuvian (CORNU)*ki-pu-tà-/ki-pu+ra/i-* means 'horn' (not 'hoof', *pace* YAKUBOVICH 2002: 206–207). The meaning 'horn' is clear in SULTANHAN §31: "LUNA"*-ma-sá-pa-wa/i-na |ha+ra/i-na-wa/i-ni-sá ||| á-pa-sá |*("CORNU")*ki-pu-tà-' |a-ta |tu-wa/i-i-' '*The Moon-god of Harran shall put him (the violator) on his horn' (thus with HAWKINS 2000: 406). For an *a*-stem /kibuda-/ (note the spelling with <tà> and the rhotacized variant) a D-LSg in *-a* is now expected (see YAKUBOVICH 2015: section 6.2). The collocation /kibudadi~kiburadi/ (PES$_2$.PES)/tarpi-/ 'trample with (one's) *kibuda-*' (KARKAMIŠ A2+3 §15 and KAYSERİ §16) may refer to the pointed shoes typically worn by Luvo-Hittite deities. Per the attractive proposal by OETTINGER (2016: 279), /kibuda-/ 'horn' is a neuter substantivization of a vr̥ddhi-adjective *'pertaining to the head' from a virtual **kḗbudo-* < **kḗput-o-* to **kaput-* 'head' seen in Lat. *caput*, OE *hafud*, and ON *hǫfuð*. "Lenition" of **-t-* to [d] between unaccented vowels again points to a preform with default initial accent in a morphologically opaque form. The shape **-ut-* of the suffix in Lat. *caput* etc. argues for a full-

grade root, but a zero-grade **kh₂p-* (thus KROONEN 2013: 215) cannot be entirely excluded, and this example, while highly suggestive, cannot be judged as entirely assured.

5. Conclusion

There is limited but compelling evidence for quantitative ablaut */a/, */a:/, */Ø/ in PIE roots with phonemic */a/. The question of whether such roots ever display qualitative ablaut in forms with *o-* or *ē*-grade must remain open.

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