PART II: Acrostatic neuter -u- stems in Italic

The Nominative Singular of Genu 'Knee' and Comu 'Horn'

By a tradition going back at least to the Latin Grammarian Priscian (2, p. 362, Keil) the nom. acc. sg. of all neuter -u- stems is supposed to be long: Ego in usu pariter in omnibus produci invenio casibus haec nomina. Nec irrationabiliter. Omnis enim in quacumque parte terminatio in 'u' desinens productur 'I find that these nouns in use are lengthened equally in all cases. With good reason. For every termination ending in 'u' whatever its part of speech is lengthened'. Yet Priscian himself is aware of another doctrine according to which the nom. acc. and vocative are short: quibusdam artium scriptoribus videatur temporum esse differentia- dicunt enim, nominativum quidem et accusativum et vocativum corripi, reliquis vero produci. 'To some grammarians there seem to be a difference of length - for they say that the nominative accusative and vocative are shortened but that the other cases are lengthened', and this doctrine is also reported by Diom. (1, 308 Keil): nam in nominativo accusativo vocativo correpta 'u' proferuntur, in genetivo dativo ablative producta. 'for in the nominative accusative and vocative short u's are found, but in the genitive dative and ablative long u's (are
found). In fact, long ᾱ in the nom. acc. sing. is securely attested for
genū 'knee' (Verg. Aen. 1,320, Ov. Met. 4.340, 12.347) and cornū
'horn' (Cic. Ar. 30, Verg. Aen. 11,859, Ov. Met. 9.97, Fas. 3,869).¹
The long ᾱ of the nom.-acc. sing. is not actually attested for pecu 'herd'
(see TLL, X, 1, vi, p. 918), or veru 'a spit' (on the supposed verū of Plt.
Truculentus 628, see Enk, p. 146. who prefers the reading verum, a
form also found at Rud. 1304).² In view of these facts, it is only
necessary to offer an explanation for cornū and genū. From these the
length could have been generalized to the other neuter -u- stems. There
have been, so far as I know, four main lines of explanation:³

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¹ It is also attested for gelū Nux 65, which is only secondarily a neuter
-u- stem. Cato Agr. 40.4 and others have the masculine -u- stem
gelus. Still, this form does suggest that the long -ū- was extended to
forms beside genu and cornu.

² And also at Rud. 1302 which, however, is athetized by Marx, p. 221.
The by-form verum was, no doubt, called into existence by the co-
ocurrence of cornum and cornū. On these facts, see discussion under
*gHrū.

³ Not comparable, however, are the long -ū's of Olr gliū n. 'knee'<
*ānū- and Mid. Pers. zēnūg 'knee' since these lengthenings occur
before further suffixes and therefore cannot be separated from cases of
so-called pre-suffixal lengthening. Cf. e.g. Skt. madhūka- 'bee' < mádhū
'honey'. For the phenomenon of pre-suffixal lengthening in general, see
W. Meid, 'Zur Dehnung praesuffixaler Vokale in sekundären
Nominalableitungen', If, 62, 1956, pp. 260-295. On the other hand, some
cases considered by Meid to be pre-suffixal lengthening are better
explained as examples of lengthening by laryngeal. See below on
pecūnia.
1) M. Leumann *LG*, p. 441, considers genū and cornū to be a purely metrical phenomenon. But if this is the case, why is there no example of the unlengthened *genu* or *cornu*, both of which were perfectly suitable to dactylic verse?

2) J. Schmidt, *Pluralbildungen*, p. 49, suggested that the length originated in a collective *pekū* i.e. *peku-h₂* which became *pecū* 'herd of domestic animals'. Morphologically, phonologically and semantically this is unobjectionable.⁴ There may well have been such a formation and it may well have contributed to the formation of the Priscianian doctrine. But it seems strange to explain the lengthened ū phenomenon starting from a word which did not clearly have a long ū and which was never all that common anyway.

3) E. Hamp *Gl.*, 48, 1970, p. 72 has suggested that the long ū originates in the plural of genu, i.e. ĝenu-h₂ cf. Skt. *jānū* 'knees'.⁵

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⁴For the collective meaning 'herd', cf. Plt. *Rud.* 942: *non vides referre me uvidum retem sine squamoso pecu?* 'Don't you see me bringing back a wet fishing net without my scaly herd? Cf., also Plt. *Bacch.* 1123, 1139. On the other hand, the plural pecua seems, at least in the first instance to have meant 'herds', e.g. in the very archaic prayer preserved by Cato *Agr.* 141.3 *pastores pecuaque salva servassis* 'Keep secure the shepherds and their herds.' If *pecua* here had referred to the many individual animals i.e. a herd, one might have expected it to be conjoined with a singular *pastorem*. Most other OLatin passages are ambiguous (Naev. tr. 44, *com.* 56, Plaut. *Mer.* 509; *Truc.* 956, Caecil. 93, Cato *Orig.* 95 e, *Acc. tr.* 177), but in Hostil. *cam.* frg. 2 *greges pecuum* can only be understood as 'flocks of animals', not 'flocks of herds'.

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This theory has the advantage of trying to explain a form that is actually attested. But 'knee' should not in the first instance have been particularly common in the plural -genu refers to four legged animals infrequently and not apparently in Old Latin- but rather in the dual. The same is true of cornu. This brings me to the fourth attempt at explanation.

4) Sommer, p. 425 and K.E., p. 111 suggests that genū and cornū are ultimately reflexes of the dual. In the Handbuch he suggests that *-ū- < *-u-ḥ, the masc and fem. nom.- acc. dual of -u- stems (Cf. Ved. Skt. sūnū, OCS syny) was extended to the neuters and that in the case of genū and cornū, two nouns describing natural pairs, the nominative dual replaced the nominative singular. 6

5But this form is not Rig Vedic; jānu acc. sing. is the only form to occur in the RV (1X). For the nominative plural of a neut -u- stem cf. RV purū 'many'. See MacDonnell, p. 222.

6 In support of this idea one might cite two examples from Vergil where the nom.-acc. sing. of a neut -u- stem could be given dual sense: 1) Aen. 1.320: nuda genu nodoque sinus collecta fluentis. ('Venus was) bare-kneed (lit. naked in respect to her knee but presumably both knees were showing) having tied her flowing robes in a knot'. 2) Aen. 11.858-9: Dixit, et aurata volucrem Threissa sagittam / deprompsit pharetra cornuque infensa tetendit. She spoke, and the Thracian woman drew a winged arrow from her gilded quiver and stretched her bow (lit. horn, but what is meant is the the pair of horns that make up a bow) with hostile intent'. Neither of these cases, however, is very convincing. In the former one might explain genū a poetic singular. Cf. Whittier's 'Barefoot boy with cheek of tan'. In the latter, cornū could be used in the singular as the name of the material from which the bow is made. Cf. ferrum 'sword',


In K.E. Sommer doubts that the neuter nom-acc. dual -ī Skt. urvī 'heaven and earth', Aves. vaṅvhi 'good' < *yaśyī was necessarily old. Perhaps more archaically, Sommer supposes, the neuter dual was the same as the masc.-fem. This latter idea seems rather unlikely. The agreement of Greek ὀδός, Ved. Skt. akṣi, Aves. aši, OCS oči 'eyes' dual, Arm. ač'k 'eyes' pl. < du. < *h₂okd'-ih₁ secures the neuter dual ending for PIE. Surely one would not like to suppose that different athematic stem classes could have had different endings. But the dual theory as a whole seems to me to be the most promising. In itself the idea that the masc.-fem. nom-acc. dual could have spread to the neuter is typologically unobjectionable. In Greek this is exactly what has happened e.g. nom.-acc. neuter dual ὀδὸπε 'two spears' *dory-e (ll. 10.76 +). In Balto-Slavic and OIr., on the other hand, the neuter nom. acc. dual has been generalized to the animate dual e.g. Lith. dukteri 'two daughters',

e.g. Enn. scen.198 date ferrum qui me anima privem 'Give me a sword whereby I may deprive myself of life.'

7According to Hilmarsson, p. 109, TB keni / kenine TA kanwem 'knees' dual presuppose a dual *gōnu-h₁ 'which was in turn extended with an endocentric individualizing n-suffix, yielding *kænwānā > *kænwāyā > TA kanwem' and in TB *kenni > keni. Hilmarsson may be correct in this, but this would not, of course, prove that the PIE neuter -u- stem nom.-acc. dual ending was -u-h₁. Rather it could equally well be interpreted as another case of the spread of the masc. and fem. dual ending -h₁, at the expense of the neuter ending -ih₁.
OCS jeleni 'two deer'.\textsuperscript{8} As for the spread of a dual stem form into the singular in a noun describing a natural pair, this too can be paralleled. Cf. for example the trisyllabic scansion of the instrumental sing of hanu-\textit{hānuvā} at RV 1.168.5. This scansion implies a pre-form \textit{*hanuH-aH} which seems to be formed on the dual stem hanū < \textit{*g}(h)ēnuh,\textsuperscript{9}

Yet one might also consider what would have become of the expected neuter dual e.g. \textit{*gēnu-ih₁} in Latin. Phonologically, one would probably expect the outcome to be \textit{*-yī}. Cf. the fate of the Latin correspondents of \textit{-u-} stem adjectives which, when extended by \textit{-is,}\textsuperscript{10} end up as \textit{-vis}, e.g. \textit{suāvis} 'sweet' ~ \textit{ηὔος} 'sweet' < \textit{*suā dus}, \textit{gravis} 'heavy' < \textit{*gōre}h₂u-~ Ved. Skt. \textit{gurū-} 'heavy'.\textsuperscript{11} But, on the other hand, no Latin \textit{-u-} stem

\textsuperscript{8}See Rix \textit{HGG}, p. 180. On the other hand, there is no reason the OIr. form carait 'two friends' taken by Rix from \textit{*karōntī} cannot simply be from \textit{*karōnt-e} with the same dual ending seen in Greek \textit{*hēle} < \textit{*h₁e}.

\textsuperscript{9}The Proto-Indo-European word for jaws apparently had an acrostatic paradigm to judge from Toch. A ś\textit{anwem} fem. dual. 'jaws' < \textit{*gēnu/uy-}. The long \textit{ū} of the nominative dual has also spread to the inst.-dat.-abl. dual \textit{hanūbhyaṁ}(TS lv.1.10\textsuperscript{2}, vii.3.16\textsuperscript{1}) vs. expected \textit{hanubhyaṁ} (VS vii.8). A similar spread of the nom.-acc. dual to the inst.-dat.-abl. dual is seen in \textit{akṣībhyaṁ} 'eyes' (RV 10.163.1). A related phenomenon is the introduction of \textit{-i-} stem inflection into the singular of \textit{auris} 'ear' on the basis of the dual \textit{*h₂(e)us-ih₁} (Aves. \textit{uśi}'ears').

\textsuperscript{10}This would be a rather precise parallel if one believed that the \textit{-i-} of these forms comes from the the \textit{devī} suffix \textit{*iḥ₂}. But this is probably not the case. See the discussion of this question in Parker, pp. 282 ff.

\textsuperscript{11}See H. Fischer, 'Lateinisch \textit{gravis} 'schwer', \textit{MSS}, 41, 1982, p.33-34, for the justification of this pre-form.
paradigm has any trace of a consonantal variant of the -u- suffix. Therefore one might expected that a syllabic -u- would have been restored before the dual ending *-t. What would have been the fate of *-u̯t in Latin? Conceivably, it could have contracted to -ū . But none of the three examples claimed by Leumann LG, p. 121, for this contraction is conclusive:

1) The alternative dative of the fourth declension in -ū, e.g. Plt. Rud. 294 hisce hamī atque haec harundines sunt nobis quaestu et cultu 'these hooks and rods are our bread and butter' etc. is taken by Leumann to be the result of a contraction of the more widespread dative -u̯t < *ou-ei. This explanation is, to my mind, superior to the alternative theory which explains these forms as the outcome of the endingless locative *-ēu.

This theory, as Leumann and Lejeune rightly note,\(^\text{12}\) fails to take account of the fact that -ū is used solely as a dative and never as a locative. On the other hand, Leumann's contraction theory does not and cannot take account of the Umbrian -u- stem dative, e.g. trīfo, vii a 11, 'for the tribe', Trebo, vi a 58, 'for the god Trebu\(^\text{13}\) Ahtu, lia 10, 11, 'for the god Ahtu-

\(^{12}\)M. Lejeune, 'Notes sur la declinaison Latine' REL, 21, 1943, p. 93.

\(^{13}\) Incidentally, Ahtu may perhaps be compared with the Ogam personal name Acto gen. sing. from the -u- stem *Aktu-, and the Personal name
stem gen. sg. *-eiš : i- stem dat. sg. -ei, :: -u- stem gen. sg. *-ous : X, Italic and perhaps Celtic\textsuperscript{14} created a -u- stem dat. sg. *-ou. If Lejeune is correct then this example of the supposed contraction of -ui to -ū falls by the wayside.\textsuperscript{15}

2) Leumann considers the by-form of fluitat 'flows' flūt at (Lucr. 3.189 etc.) to be the result of contraction. But it might just as easily be considered an example of the syncope of *-uyVC- in an open syllable seen for example in crudus 'raw' < *kruy-id-.

3) Leumann LG, p. 443, considers the nom. pl. of the animate -u- stems

\textsuperscript{14}Cf. Gaulish θυμβρόμαρος δεδε Ταρανος βρατον δεκαυμ 'Wembromaros in gratitude dedicated a tithe to Taranus'. Lejeune, REL, 21, p. 98. For the translation see, O. Szemerényi, 'A Gaulish Dedicatory Formula', reprinted in Scripta Minora, I, pp. 216-255. On the problem of acc. s. *-m becoming *em in Gaulish, see P Schrijver, Ériu, 42, 1991, p. 14. The name of the Celtic thunder god seems to be a "divinizing" -u- stem made from an -o- stem base (Welsh and Breton taran < *terh\textsubscript{2}-no- with assimilation. See L. Joseph, Ériu, 33, 1982, p. 55). Cf. the Hittite storm god Tarih-unt-\textsuperscript{2}). This is highly reminiscent of the Italic "sacral -ur-' phenomenon. See discussion under pax.

\textsuperscript{15}In Classical Latin, of course, the dat. ending -ū is, with few exceptions, limited to neuter -u- stems. This may also be the result of the analogical influence of the -i- stem. In this case, the homonymy of the dat. and abl. sing in neuter -i- stems e.g. mar-i dat. and abl. sg. 'sea', encouraged the use of the dat. ending -ū in order to achieve a parallel homonymy in the neuter -u- stems, i.e. dat. and abl. sg. gen-ū. When the nom., acc., dat., and abl. of the neuter -u- stems all had the same ending, there would have been great pressure to eliminate the gen. ending -ūś and treat these noun as indeclinable in the singular. In fact, a gen. sing. cornu does eventually appear, e.g. in Celsus 5.22.2 etc.
-ūs to be from *-uis < *-oûes. The form -ūs can much more plausibly be seen as a result of the same syncope seen for example in plūs 'more' < plous (SC de B.) < *ploy-īs. In a like manner *-oûes > *-ous > -ūs. None of these examples can be said to be probative.\(^\text{16}\)

In any case, of all the theories advanced to account for the long -ū, the dual theory in one of its varieties seems to me to have the greatest chance of being true.

Proto-Italic *pekū 'movable wealth'

\(^{16}\) On the other hand, if what was restored in the nom. acc. dual was not -uyi- but simply -ui- realized as a diphthong, it would not have been unlikely that such a comparatively unnatural diphthong -ui- would quickly have been eliminated, perhaps by contraction to -ū. Typologically, one might compare Šaur. dhūdā, Mar. dhuv, Singh. ḍū 'daughter' < *dhuitā < Skt. duhitā. See P. Tedesco, Sanskrit adāh 'illud', Lg., 23, 1947, p. 121.
Proto-Italic *peku 'movable wealth'

This noun is securely attested or Proto-Italic by the agreement of Latin pecū 'livestock' and Umbrian pequo n. pl. (Ti vi a 30 etc., 11x ). Traces of the original meaning 'movable wealth' can still be seen in Umbrian where pequo is formulaically opposed to castruo 'landed properties'.

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18There is lack of unanimity in the literature about the meaning of Osc and Umb. *kastru-*. Some, e.g. Buck, in his first edition, p. 236, Devoto, p. 199, Poultney, p. 222, favor a translation 'caput' 'head'. This is inspired mainly by two passages of the Tabula Bantina, where castru- stands in opposition to eitua 'money': 1) *TB* l.8: Piscopat post exac comono haffest meddis dat castrid en eitulas, 'whichever Meddix hereafter will hold a meeting about castru- or in regard to money' 2) *TB* l.13: Suaepis pru meddixud altrei castrous auti eitulas zicolum dicust 'If any magistrate will name a day (in regard to a case involving a fine of) castru- or money for another,'. Since in Latin legal language a the loss of one's pecunia 'money' is habitually opposed to the of loss of one's 'caput' 'head', i.e. the death penalty, it has been supposed that castru- should be translated 'head'. But, although this translation works well for Umbrian kastru- at Va 13,18, 20,22 where pusti kastruvu(f) can reasonably translated 'per head', it makes little sense in the formulas nerf, arsno, veiro, pequo, castruo, fri salva seritu 'Keep safe the men, rites, slaves, pecuo, castruo, and crops.' and nerf, arsno, veiro, pequo, castruo, fri pinatu 'Purify the men, rites, slaves, pequo, castruo, and crops.' See immediately below in the text for a discussion of Buck's attempt to maintain a translation 'capital' in this context. Furthermore, the obvious etymological connection with Latin castra and castrum becomes much harder to maintain on this theory. The other main school of interpretation, represented by Vetter, p. 20, translates *kastru- by praedium 'landed property, estate'. This sense fits all the contexts. Furthermore it can be made to fit nicely with what Benveniste and Watkins have argued about the PIE folk taxonomy of wealth.

According to the schemata that Watkins has convincingly sketched out in his article NAM.RA GUD UDU in *Hul*, pp. 269-282 the possesion of the
Traces of this distinction are seen in Grk. κεμήλια τε πρόβατον τε 'immobile and mobile goods' and Hittite iyata dameta 'mobile and immobile goods' according to Watkins. The PIE term for 'mobile wealth' including humans was *pekū which maintained its original meaning in Indo-Iranian and Germanic. What the PIE cover term for immobile wealth was is unclear. At the same time *pekū also had a more specific marked sense 'livestock'. That this sense too was possible in PIE is clear from the agreement of the Umbrian and Avestan merisms veirū pequo 'slaves and livestock' and pasu-ūra- 'livestock and slaves'.

In many traditions this double meaning of *pekū led to its replacement in one or the other of its sense. Thus, in Hittite, it was replaced in the sense 'mobile wealth' by iyata a derivative of the root *h₁-ei- 'go'. In Greek, it was replaced by πρόβατος a derivative of another verb 'to go'. In Latin, it was replaced by its own derivative pecūnia on the history of which see below in the text.

In this light the etymology of Oscan eitua- / eituva-pecūnia becomes clear. As Watkins has pointed out, (NAM.RA GUD UDU, p. 282 n.21) it too is a derivative of a verb meaning 'to go', in this case the same root *h₁-ei- which is the source of Hittite iyata. Morphologically, it may be analyzed as a collective in *-ā (< *h₂ā) built to a verbal abstract in *-tu- i.e. *h₁-ei-tu- 'going' (~ Skt. inf. étum 'to go'). See Brugmann II 1, pp. 159, 441.

Since the Oscans saw fit to replace *pekū in its broader sense with a derivative of a verb meaning 'to go', this means that the distinction mobile vs. immobile wealth was still operative in Proto-Sabellic. If in Oscan one finds an opposition of eitua- and castru- the former of which must, at least in the first instance, have meant 'mobile wealth', it is not implausible to see in the latter the term for 'immobile wealth'.

Whether or not land was considered private property in PIE times (on this question see Jolowicz's discussion of the original sense of res mancipi, p. 141 n. 21), as soon as the concept of the private ownership of land arose, a plot of land would have been classifiable as the immobile wealth par excellence. Not only did land not move by itself, but it could not possibly be moved by humans, except, of course, by the shovelful. Thus, although landed estate might originally have been only one kind of immobile wealth, the term for landed estate could have also done double duty as the cover term for immobile wealth in general. Therefore, I propose that *kastro- which by its etymology should originally have meant
a cut, a portion of land' (see note 20) was also generalized in Proto-
Sabellic to cover the more general sense 'immobile wealth'. A possible
parallel for this development may exist in Hittite dameta 'immobile wealth'.
Watkins has proposed deriving this from the root *dem- 'build'. To my
mind, a more attractive comparison would be with *
temh₁₃- 'cut' (cf. Greek
táμῳν 'I cut', and especially τέμενος 'a piece of land cut or marked off' etc.
For the final -h₁₃-, see Peters, p. 27-29.). Dameta from an immediate
pre-form * dametar, cf. dametar-yaŋ- 'abundant', could be from *
*temh₁₃-eh₁₃-t₃- 'that which is cut, a cut'. Whether this referred originally to
a portion of land or simply a portion of some other form of wealth is not
clear. Latin merx 'a commodity' mercēs 'wage' Oscar anamīcum also
would show a similar semantic development if, as I believe, they are to be
connected with Hittite mark- (b) 'to divide, to cut'. See C.H.D. s.v..
I hope to provide more detail on this elsewhere.

Now to return to the TI passages mentioned above, nerf, arsmo,
veño, pequo, castruo, fri salva seritu 'Keep safe the men, rites, slaves,
pecuo, castruo, and crops.' and nerf, arsmo, veño, pequo, castruo, fri
pihatu 'Purify the men, rites, slaves, pequo, castruo, and crops.' It
has been generally agreed since Wackernagel, KZ, 43, 1909-1910, pp.
295 ff., that veño, pequo, must be taken together as a merism of IE
antiquity. On the other hand, it has also been supposed, and, to my mind,
with good reason, that castruo owes its -u- stem inflection to the
influence of the -u- stem pequo. Such a contamination could only occur
if castruo and pequo were formulaically conjoined. See above note 17.
It seems impossible to determine to which merism pequo belongs.
A plausible explanation of this situation could be as follows: Veño and
pequo form one merism defining 'mobile wealth'. Castruo and fri form
another merism defining 'immobile wealth'. The cover term for 'mobile
wealth' in PIE was also *pekube and this sense was maintained in Proto-
Italic to judge from the prehistory of pecūnia. In a similar fashion, I
propose that *kastru- was both one of the two terms defining 'immobile
wealth', and also the cover term for 'immobile wealth' in general. Thus
underlyingly the structure of objects is: (veño pequo) *pequo
(*castruo (castruo fri)). On the surface the redundant pequo and
castruo were deleted. It may perhaps have been the desire to keep the
members of the higher level merism pequo castruo together that which
brought about the inversion of the lower level merism *pequo veño (=
Aves. pasu- vira-) to veño pequo.
Umbrian *pequo* is taken by Buck as a genitive plural.\(^{19}\) This is certainly not correct. *Pequo* always occurs in the same formulaic contexts: *nerf, arsmo, veiro, pequo, castruo, fri salva seritu* 'Keep safe the men, rites, slaves, *pecuo*, landed property, and crops.' and *nerf, arsmo, veiro, pequo, castruo, fri pihatu* 'Purify the men, rites, slaves, *pequo*, landed properties, and crops.' One would be surprised to find in this context a break in parallelism such as required by Buck's interpretation of *pequo castruo* as *pecuum capita* 'heads of cattle'.

Furthermore, it is certain that the -*u*- stem inflection of *castruo* is an innovation vis-a-vis the Latin -*o*- stem neuter *castrum* 'a fortified settlement' and the neuter *plurale tantum castra* 'a military camp'.\(^{20}\)

\(^{19}\)Buck *GOU*, p. 236.

\(^{20}\) *Castrum* is derived by W-H, I, pp. 179-180, from *kHz-trom*, a derivative of the root *kHz* 'to cut' (Skt. šāsti 'cuts', κεάζεω 'I split'). Normally the suffix *-trom* was used to form instrument nouns, e.g. *aratum* 'plow' < *arare* 'to plow', or names of places e.g. *θέατρον* 'theater' < *"a place for seeing'.* Neither of these functions is appropriate in this case. If this etymology is correct, *-trom* must also have been able to form result nouns, for a *castrum* could only be one's portion of land. Cf. the American English gangster dialect 'cut' in the sense of share. From this basic meaning could have derived the Latin meaning 'fortified camp'. An interesting semantic and morphological parallel is found in Greek δαιρόν 'one's portion' (II. 4.262) < δίσω 'I divide, I distribute'. The unusual place of the accent -instrument nouns in Greek are regularly barytones—presumably served to distinguish δαιρόν from *δαιρον* 'instrument for cutting'. In exactly parallel fashion Italic had beside *kastrom* 'one's portion (of land)' *kastrom* 'an instrument for cutting'. This latter noun can be inferred from the denominal verb *castrare* 'to castrate', but also 'to thin
Now it is precisely in a formulaic conjunction such as "pequo castro 'pequo and landed property' that a form castruo could arise by contamination.\textsuperscript{21} It is much harder to see how this could have happened out (of plants)', e.g. Cato, Agr. 33.2 veleres (vites) quam minime castrato 'thin out the old vines as little as possible'.

If this account of the etymology of castrum is correct, then it must have been from the beginning a neuter -o- stem. There is no suffix *-tr-, either in Latin or in PIE. On Latin tonitrus 'thunder' which might be mentioned as an apparent example of the suffix -tr- see the discussion under veru. As for Quinquatrus 'a festival of Minerva celebrated on the 19-23 of March', and the other names of festivals ending in -atu- see Wackernagel KS, pp.1298-1299 who explains the -u- stem inflection as due to the analogy of fidú's 'the ides'. The remodelling of *kastro- to *castru- under the influence of *peku- was suggested among others by H. Reichelt, KZ, 46, 1914, p. 337.

\textsuperscript{21}For an exact parallel, cf. Latin mortuus 'dead' replacing an expected *mortus by contamination with vivus 'living'. The same contamination also occurred in Venetic vivol...murtuvoi 'to (him) living and dead' Lejeune Manuel, 75 ter, p. 224, and in OCS mr̃tvv 'dead'.

Since castruo owes its -u- stem to pequo- and since castruo is clearly trisyllabic (cf. the spellings kastruvu(f) in the native alphabet) one might suppose that pequo was also trisyllabic, but it is conceivable that an epenthetic -u- could have been inserted after the heavy syllable castr-. Cf. again *yǔyō- 'alive' (Lat. vivus, Ven. vivoi) vs. *mortuyō- 'dead' (Lat. mortuus, Ven. murtuvoi). Therefore nothing can be inferred from castruo about the metrical shape of pequo. The spelling <qu> is also found in the tribal name Piquier V b 9, 14 and this might be either *pikuy-iyo-, or *pikuyjo- a genitival -iyo- derivative of the sacral -u- by-form of <peico> / pikami 'a woodpecker', i.e. 'Those of the woodpecker' (on peico see Meiser, p. 46). In the first instance one might have expected a pre-form *pikuy-iyo- to become *pikuyjo- > *pikją about *akuya 'thread' < *that of the needle (acus) > *akuja > *akua > *akja > *akia > aca, but *pikuy-iyo- could easily have been restored on the analogy of *piku-. Therefore nothing can be learned about the scansion of pequo from this form. The spelling <qu> could be
in a headed construction 'heads of cattle.'

Etymology and Accentual Paradigm of *pekū

Proto-Italic *pekū is a descendent of the PIE acrostatic neuter *pekū *pek'os. The acrostatic paradigm is established by the genitive and dative of Skt. pāśu, pāś vaḥ and pāśve, since the root accentuation, and zero-grade of the suffix in the oblique cases can only be combined in an acrostatic paradigm. Whereas acrostatic neuter -u- stems from roots ending in a resonant have, scattered throughout the various daughter languages, clear traces of both o- and e-grade root vocalism, those from roots ending in an obstruent seem either to have always had a persistent e-grade root, or to have levelled all traces of an o-grade in PIE. For example, there is no trace of a *modhu besides the well-attested descendents of *médhu-'honey, sweet-stuff' (Grk. μέθυ 'wine,' Skt. mādhu- 'sweet, sweet drink, honey', Aves. mađu- 'wine', OCS consistent with either disyllabic or trisyllabic scansion of pequo.

22 Also reflected by Gothic faihu < PGmc. *fēhu and OLith. pēkus AP 2 in Daukša. See. Illich-Svitych, p.48.
23Ved. Skt. and Avestan also have the masculine endocentric derivative paśūḥ, pasu- m.
24O-grade is shown, for example, by Grk. δόρυ = Ved. Skt. dāru 'wood' < *dóru, Grk. γόνον = Ved. Skt. jánu 'knee' < *gonu, Grk. οὐ 'not' = Ved. Skt. áyu 'vitality' < *h₂ōJu. For this last see the discussion under iūgis.
med- m. 'honey', Lith. medūs m. 'honey', OHG metu m. 'mead', OIrish. mit 'mead', Toch. B mit 'honey'). In exactly parallel fashion, the various Indo-European languages reflect only *peku (Skt. pāśu 'livestock', Gothic faihu 'wealth', Lith. pēkus (AP 2), OPruss. acc. sg. pecku). There are no traces of *po̞ku.25

Derivatives of *peku

Although Sabellic has no other traces of this noun, Latin has a super-abundance of interesting derivatives.

First, there is pecus pecoris n. 'livestock'. There is no appreciable

25Arm. asr gen. asu 'fleece' is thought by some, e.g. Pokorny, p. 797, to be from *po̞ku. Yet this is hardly compelling evidence. First of all, PIE *o is normally retained in Armenian as o, e.g. otn 'foot' < *podr̥. There are, indeed, a small number of cases where PIE *e seems to become Armenian a, e.g. alk 'white hair' ~ Grk. πολιός 'gray', ateam 'I hate' ~ Latin ódī, and ačk 'eyes' ~ Grk. δισσε 'eyes' dual. But there are also a number of cases where PIE *e seems to be represented by an Armenian a, e.g. tasn ten' ~ Grk. δέκα etc., vat' sun 'sixty' ~ Grk. εξήκοντα. Finally, it is also thinkable that asr should be compared with Greek πόκος 'fleece' (Hom.+), and πέκος n. 'fleece' (An. Ox. 2. 464). If besides the neuter *pekoš there had been an animate by-form *pekōs (cf. *kreu̞h₂s > Grk. κρέας 'meat' vs. *kr(e)u̞h₂ s > Lat. cruor 'gore'), or pokōs (with o-grade borrowed from the thematic noun), it could presumably have become *asūs, and by Entgleisung have joined the -u- stem paradigm. Cf. e.g. caltr, gen. caltu 'laughtner' which corresponds to the Greek animate -s- stem γέλως 'laughtner'. See Klingenschmitt, p. 147. In any case, Arm. asr is very weak evidence for the existence of an o-grade in the PIE paradigm of *peku.
difference of meaning between it and pecū and there are no traces of a similar extension of *pekū elsewhere in PIE. But the extension of an acrostatic neuter -u- stem by a seemingly meaningless -s- stem suffix is well paralleled. For example besides *h₂oījū, there seems to have been already in the proto-language an -s- extended *h₂o/hejus (Vedic āyus 'vitality' ~ Grk. αἰεσ 'forever'). Thus *pekus might go back a long way. ²⁷

Next, there is the -d- extended pecus, pecudis 'livestock'. This suffix too has no appreciable meaning. One can only compare pecus to the series of animal names with the suffix -d- e.g. ἰμὼς 'fresh-water tortoise' (Arist.) πηλαμὼς 'young tunny' (Soph.+). OHG hirut < *kero- ²⁸

Pecūnia, 'property, possession' on the other hand, does seem to mean something different than pecū. Yet the difference in meaning is not quite so large as it seems at first. As Benveniste has shown, the original

²⁶See W-D II 2, p. 478-479.
²⁷It is conceivable that the -s- stem was originally a collective. Cf. Ved. Skt. vēh 'bird' < *h₂yois vs. vāyas- 'flock of birds, Geflügel < *h₂yele-os-, if not simply the pl. of vēh
²⁸*Kerud-o* itself could be analyzed as having a possessive suffix -o-added to *kerud- 'horn'. *Kerud would stand in the same endocentric relationship to *keru- 'horn' (inferred from the possessive derivative cervus 'deer', Welsh carw 'deer' < *k(e)or- o- as pecud- does to pecu-. On *kerud- o-etc., see Nussbaum, p. 7.
meaning of 'peƙu was 'movable wealth' which subsequently in various
cardinons was specialized in the meaning 'livestock'. Thus pecũnia may
be considered a derivative of this original meaning. Pecũnia seems to
presuppose a *pecũno-.*Pecũno-, in turn, may be a thematized
Hoffman derivative of pecũ, i.e. *peƙukヌn-o- 'he who has movable
wealth'. The thematization presumably served to substantivize the
Hoffmann adjective,29 cf. fortũna 'fortune' originally 'she who is in charge
of chance' < *fortu- 'chance', cf. fortu-itus 'determined by chance';
Portũnus 'the god of doors' originally 'he who is in charge of doors' <
portus 'harbor', but archaically 'door'.30 Pecũnia then could be the
substantivization of a genitival adjective in -iļo- and would therefore
mean 'that which belongs to him who has movable wealth', i.e. movable
wealth. Cf. e.g. Portunium 'the temple of Portunus in Rome or its

29 H. Rix has reached exactly the same conclusions about pecũnia in his
article 'Lat. patronus, matrona, colonus, pecũnia', in FS Meld. As a
parallel case of thematization serving to substantivize an adjective Rix
cites *h2yẽhíptō- (> Lat. ventus 'wind', Goth. winds 'wind' etc.), <
*h2yẽhīpt- 'blowing (Hitt. ḫyuant- 'wind').

30 It is clear from his rite that Portũnus was originally the god of doors not
of harbors as the OLD would have it. Cf. Schol. Veron. Verg. Aen. V.24:
huius dies festus Portunalia quo apud veteres claves in focum ad(ditas
cre)mare institutum. 'His fast day (was) the Portunalia when it was the
custom among the ancients to burn keys which had been thrown onto the
hearth.' See. R.E, XXII,1 c. 400. The meaning 'door' for portus is
preserved in the Twelve Tables (Font. iur., p. 20): is tertiiis diebus ob
portum obvagulatum ito. 'Let him go within three days to complain at the
door'.
precincts' i.e. 'that which belongs to him who is in charge of the door'.

Finally, there is pecūlīum 'money or property managed more or less as his/her own by a person incapable of legal ownership', e.g. a slave. As Benveniste points out this seems to presuppose a *pecūlis.\textsuperscript{31} The reconstructable triplet pecū : *pecūlis : pecūlīum is parallel to the reconstructable triplet *edu- : edūlis 'edible': edūlīum 'foodstuff'.\textsuperscript{32}

\textsuperscript{31}Cf. also tribūlis 'a fellow tribesman' (Ter. +) < tribus 'tribe', and curūlis 'adjective applied to the consular seat' (Scip. Elog. 5 +) < *currūlīs by the Mamilla rule (Leumann, LG, p. 184)?

\textsuperscript{32}Edu- is also suggested ON jptunn 'giant' originally 'eater' < *h₁edu-nos and ḏūwn ‘ḏūwn ‘pain’. Probably the most direct trace of this *u-stem is Iranian *ādu- 'grain' first identified by R.E. Emmerick, TPS, 1966, 1-7 (YAv. ḏū.frādanm 'grain-prospering', OP ādu-kanaiša- 'March-April' literally 'grain-sowing time' < *ādu- + kan- 'to throw' (cf. BSogd. pr’kn ‘sow’ < *parā-kan-), BSogd. *ḏwḵ ‘crop’ < *āduka-). For the semantic shift from 'edibles' to 'grain', Emmerick (TPS, 1969, p. 202) compares Ossetic Dig. xvrūn, Iron xārīn ‘to eat’ vs. D.xvar, l. xor ‘grain, corn’. Iranian *ādu- is probably from *h₁ēdu- not *h₁ōdu- since roots in final stops seem to have generalized e-grade in acrostatic *u-stems already in the proto-language, and the lengthened grade ē would not be suprising in a derivative of the root *h₁ēd- which has clear Narten characteristics (Latin ēst ‘eats’ edim etc.).
Proto-Italic *gʰeru 'spit'

This word is securely attested for Proto-Italic by the agreement of Latin veru (Pit. +) and Umbrian berua acc. pl. (TI IIa 26, 33), berus abl. pl. (TI IIa 23, 25). The meaning of the latter can most clearly be seen at TI IIa 23: berus aplenies pruseśia kartu 'Skewer' the prosicia (i.e. severed

1 The following considerations have led me to offer the translation 'skewer' for kartu. Pisani, p. 192, suggested a not implausible meaning 'roast' and compared Lith., kuriu 'I heat'. But this is problematic. There is, in fact, no good evidence for a PIE verbal root *ker- 'to heat'. Kuriu 'I heat' is considered by Freenkel, LEW, p. 319, to be an inner Lithuanian specialization of kuriu 'I build'. On Skt. kūḍayati 'burns', which certainly does not belong here, see Mayrhofer, EWAI, p. 385. This leaves only OCS kuriti 'smoke' etc. which must go back to an immediate pre-form *kour- and may be a denominate to *kur- 'smoke' (Sorb. kur 'smoke', Russ. dial. kur 'smoke' etc. See Trubachev ESSJ, p. 124.) In any case, kuriti could not be compared phonologically to Umb. kartu.

Vetter, p. 196-197, compares kartu with Latin carpere which he claims is the appropriate Latin verb for the pulling apart of meat. Phonologically, this is unobjectionable, cf. hatu 'take' < *hahtu < *haftu < *habitād. See Meiser, p. 179. But one might take issue with Vetter's claim that carpere is the vox propria (eigentliche Ausdruck) for the pulling apart of meat. Although this meaning does occur often, it seems to be first attested in Ovid, e.g. Fast. 6.137: nec carpere lecur Tityi voluces 'nor did birds pluck apart the liver of Tityus'. See TLL, 3, col. 493. Furthermore, in Latin veru did not describe a utensil used to tear away chunks of meat from the sacrificial victim, but rather one used to skewer chunks that had already been torn away, presumably with a knife. Cf. also the description of a Greek sacrifice at II. 1.465: μίστυλλον τ' ἄρα τάλα καὶ ἀμφ' ὅθελοσιν ἐπεὶραν 'And then they cut up the other (pieces of meat) and skewered them on spits'.

Buck sought to connect kartu with the root of Latin carō 'meat', Osc. cameis 'part' gen. s. (Vetter, 2.3), Umb. karu 'meat' (TI V a 24), Greek κελρω 'I cut' etc. This seems to me to be the most plausible possibility.
portions of a sacrificial victim consisting of the major organs) with

**aplenies** berus**. Although the meaning of some of the words in this

But, instead of Buck's translation 'distribuito' 'distribute', I would prefer to translate **kartu** 'configito' 'skewer'. This is exactly what one expects to be done with spits (cf. the Homeric passage cited above), and matches exactly the meaning of the Hittite cognate *iškär-*. E.g., *KBo* III 8 ll. 5-6 + *KUB* VII 1 ll. 40: *nu-kan anda UZU huitya ispäri* 'And in addition he also skewers meat.' (Puhvel's. trans.) See Puhvel HED, pp 416-417 for further examples. Formally **kartu** could be, from the Umbrian point of view, either a simple thematic verb (cf. deito 'say' < *deiti-ko-ádi* or a -je/o- present (cf. hahtu 'take' < *habji-eto*). In PIE this verb seems to have been an o-grade present with -h₂e endings of the type identified by Jasanoff, 'The position of the -hi conjugation', in *Hul*, pp. 79-90. This can be inferred from the fact that Hittite has a -hi conjugation verb and from the variety of ablaut grades and suffixes that form the present of this root in other traditions which suggest that an original athematic present has been replaced: Greek has a full-grade -je/o- present (κείπω). Germanic has a full-grade thematic present (OHG skeran 'to cut'). Lithuanian skirti, skirti 'trennen' has a zero-grade -je/o- present. Arm. has an e-grade *kere*- 'scratch off', but also an apparent o-grade *kore*- 'scratch'. Klingenschmitt, p. 142; however, thinks this could be from a causative. OIr. has scaraid 'separates' from an immediate pre-form *sketr₃-. On the supposed Skt. *kṛṇāti* 'injures, kills', see Mayrhofer, *EWAI*, p. 311. It is unclear whether the root should be reconstructed with or without a final laryngeal. On the one hand, the acute intonation of Lithuanian points to a set root. On the other hand, Greek *kaprós* 'shorn' (IG II² 1514, 39 ff. etc.) would seem to argue for an anit root, as would the isolated Skt. cár-man- 'skin' and Latin *curtus* especially in the meaning 'circumcised'. If one assumes no final laryngeal, which, to my mind, is the likelier alternative, *kṛ-e- could conceivably have had a Lindeman variant *kṛ-e-> kare-. *Kṛje-, on the other hand, would have become *korje-, cf. *morion* 'I die' < *mrje-. Thus it seems that **kartu** can only be from a simple thematic present.

²None of the etymologies of **aplenies** on record are really satisfactory
sentence is uncertain, it is clear that it describes some action done to 
some part of the internal organs - for the meaning of prusešla is not in 
doubt - on or with a beru-. Since in Roman ritual the internal organs were 
roasted on spits, cf. Verg. Aen. 1.112: subciunt veribus pruinæs et 
viscera torrent. 'They put coals under the spits and roast the viscera.', 
and Varro L.L. 5.9.8 where he is describing the unusual treatment of the 
exta 'the upper internal organs' of the aries 'ram': Haec sunt quorum in 
sacriñiciis exta in olla, non in veru coquuntur 'These are (the animals) of 
which the exta in sacrifices are cooked in a pot, not on a spit.', beru- 
could hardly be anything but the Umbrian equivalent of Latin veru.

Italic gburst- finds its closest relative in OIr. bir n. -u- stem, Mid 
Welsh ber m. and f. 'spit'. But the oft-cited Gothic marginal gloss qainu 
'pale' supposedly from <urst, is no more, since Ebbinghaus General 
Linguistics, 19, 1979, pp.188-189, has said that the manuscript actually 
reads pairu.

from a morphological or semantic point of view. See Ernout's catalogue of 
suggestions, DO, p. 110. Probably, if one wished to hazard a guess, one 
might suppose that aplenies is a prepositional governing compound 
*am-plen-i'jo- with the suffix -i'jo- common in such forms, e.g. egregius 
'outstanding' < *e grege 'out of the herd'. See Leumann LG, p. 290. But 
what this should mean is unclear to me.
Avestan grauua-

Lidén, *IF*, 19, 1906, p. 325 has suggested that Y.Av. grauua- 'stick, staff' (acc. s. graom and gen. s. grauuaha V. 9.14) should also belong to this family. If one accepted Lidén's comparison, one would have to offer an explanation for the different ablaut grade and thematization apparently shown by grauua- < *gʰreyo-. Since the meaning of grauua-, although slightly different from the other representatives of *gʰenu-, cannot easily be explained as the result of a possessive derivative of *gʰrey- i.e. *gʰrey-o- 'having a spit', one would be loath to explain the thematic vowel as the suffix -o- with possessive sense. One might also consider whether the thematization might not be of the mechanical, semantically neutral type so often found in YAv. texts. But none of the other neuter -u- stems have met a similar fate. There is no *yauua- from āiu 'life(time)', no *drauua- from dāru- 'wood' (cf. Mod. Pers. dār), no *žnauua- from zānu- 'knee'. Thus the parallel of Germanic *knewa- 'knee' (Gothic knīw, etc.) and *treya- 'tree' (Goth. triw etc.) invoked by Lidén is specious. Iranian shows no evidence for a parallel development.

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3 W-D, II,2 p. 136, e.g. vatsa- 'calf' < *yets-o- from *yetos 'year' (Grk. ἔτος).
4 Cf. e.g., the thematic ablative θανανάτ 'bow' (Yt. 10.39) from the -r / -n stem θανιάρ-/θανιάν-.
5 See Mayrhofer *EWAI*, p 585, for the Old Iranian evidence for this word.
The comparison of *grauiua-* with *veru* probably should be rejected.\(^6\)

Hesychian *βαρός* - δένδρα 'trees'

The connection, first made by Fick, *BB*, 2, 1878, p. 341, with the Hesychian gloss *βαρός* - δένδρα 'trees' is formally and semantically quite plausible. *βαρός* could be explained as the reflex of an animate derivative of *\(^5\)γερυ*, i.e. *\(^4\)γερυ(*)rus*. Such animate derivatives of neuter -\(\_\)u- stems are well paralleled. For example, beside the Ved. Skt. neuter *pāśu* 'livestock', there is also a masculine *pāśuḥ* 'id.'. The antiquity of the masculine form is confirmed by Aves. *pasu*- m. 'livestock'. A particularly close semantic and morphological parallel may be Greek δρός 'oak' but originally 'tree'.\(^7\) This can only be considered an animatizing derivative

\(^6\)Since YAv -\(\_\)\(\_\)\(\_\)\(\_\))- can also come from P.Ir. -\(b\)-, it is conceivable that Bartholomae's connection of *grauiua-* with *grab-* 'greifen', *AIV*, col. 529, may be correct. This may be supported by one of the passages in which *grauiua-* occurs, V. 9.14: ἄδρανταίως α omas srūm pauruua... naēmāt ehe grauuahe. 'Du solltest befestigen das Blei(gefäss) vorn dem Stock..'. Perhaps the *grauiua-* was a special gripping stick on which some vessel was fastened. It could then be explained as the o-grade oxytone agent noun *\(^4\)ghrobhós 'gripper > 'gripping stick' from the root *\(^4\)ghreb(h)h\(_2\) - (Aves. *garuulaia* 'nimm fort' etc.) corresponding to the o-grade barytone *nomen actionis* Skt. *grāha-* m. *Besitzergreifen* (RV 7.4.8). See Mayrhofer *EWAI*, p. 506.

\(^7\)Cf. Sch. II. 11.86: δρόν ἐκάλουν οἱ παλαιοί πᾶν δένδρον 'The ancients called every tree δρόν'. The long \(\_\) of nom. and acc. sing. is secondary and analogical to laryngeal final stems like ὶσ 'pig'. The original short \(\_\) is
of δόρυ n. 'shaft of wood'. In this example the semantic effect of this process can still be seen clearly, since δόρυ, with one exception, is never used in Homer of a living tree. In exactly parallel fashion the neuter *gυρυ (Latin veru etc.) designates a non-living piece of wood, but its animated derivative *gυρ(ε)rus designates a living tree (Grk. βαρύς).

It is not entirely clear what type of accentual paradigm βαρύς originally belonged to. An acrostatic paradigm is ruled out by the zero-grade of the root and the suffixal accent. A proterokinetic paradigm is rather unlikely, since a nom. pl. βαρύς could only have belonged to a singular *βαρύς, *βαρύς, and the zero-grade of the suffix in this paradigm is inconsistent with proterokinetic inflexion. In no case, to my knowledge, has inflexion of the type gen. s. -εος < *ευος, dat. s. -ει < *ευι originating in a proterokinetic paradigm been replaced by inflexion of the type -νος, -νι.

The remaining possibilities are a hysterokinetic or amphikinetic

still preserved in the dat. pl. ὀρνύτω II.14.398, Od. 9.186, H. Merc. 349. Δρύς has an exact cognate in Ori. daur f. -υ- stem 'oak' which can only be from the Lindeman variant *dύναμι.

8On the exception Od. 6.167, see LfgE, 2, col. 337.

9In fact, it is the -εος type of inflexion that has been spread in Greek. For example, The originally acrostatic χαστινυ 'city' (Cf. Skt. vāstu < *yāstū) has a genitive χαστος. Cf. also πόλυ pl. πόλεα 'flock' which must be from an originally acrostatic *poh₂ju- from the root *poh₂- 'protect' (Hitt. paḫš-, Latin pasco 'I pasture').
paradigm. Since it is hard to point to a certain example of a hysterokinetic paradigm serving as the internal derivative of an acrostatic base, it would seem, by process of elimination, that an amphikinetic paradigm would be the best choice to account for ἑρόες. Amphikinetic paradigms often occur as the internal derivatives of acrostatic paradigms, e.g. *ὑδῷρ ‘water’ (Hitt. ýatar etc.), > *ὕδῷρ ‘water’ coll. (Hitt. ýidār ‘waters’, Grk. ὕδωρ). Amphikinetic paradigms often generalize zero-grade of the root in Greek, e.g. Grk. ὕδωρ, and the one clear representative of an

10] I assume that veru probably originally followed an acrostatic paradigm with -vē,- ablaut of the root, although no o-grade forms are preserved. This is hardly surprising, since Latin also generalized the e-grade in genu ‘knee’. Celtic also seems to have generalized the e-grade of neuter acrostatic -u- stems to judge by Welsh. derwen ‘oak’ Breton dervenn ‘id.’ singulative from Welsh derw ‘oaks’, and Breton dero. Cf. also OIr. derb ‘certain’ < *derb-o-, derucc ‘acorn’. On OIr. dau r f. ‘oak’, see above note 7.

It is just possible that Ved. Skt. paśūḥ may have originally followed the hysterokinetic paradigm. The dat. s. paśāve, to be sure, is unambiguously proterokinetic. But since -āve is the productive ending, paśāve cannot be considered probative. Furthermore if paśūḥ had been proterokinetic, one would have expected traces of a genitive *paśōḥ which is not found in the RV. The gen. s. paśvās is unambiguously hysterokinetic. But there remains the possibility that paśvās is actually the gen. of the acrostatic neuter paśu with the accent shifted to the ending by contamination with paśūḥ.

11] Slight evidence for an originally amphikinetic paradigm may be the Hesychian gloss ἀροῦν· ἀρχαῖον. Ἀρχαῖοι. If this can be taken as evidence for a possessive derivative with the thematic vowel *droy-δ- ‘having strength’ metaphorically from *‘having (living?) wood’. See. Nussbaum, p. 15.
originally amphikinetic -u- stem, i.e. νέκυς, νοσ 'corpse' (= Aves. acc. s. nasūm 'corpse') has generalized the zero-grade of the suffix as well. Thus an animatizing internal derivative with amphikinetic inflection *głŷrōs could have been made from an acrostatic neuter -u- stem *glŷrō. In pre-Greek the weak cases, e.g. gen. sg. *glŷryōs etc. would have become by regular sound change *glŷryōs ( > *baryōs) etc. This stem could have been generalized to the strong cases to yield a new nom. s. *glŷrūs ( > *barys). From the nom. the syllabic -u- was generalized to the weak cases giving barys etc.

The By-form Verum

Besides the neuter -u- stem veru, Latin also has a neuter -o- stem verum (Plt.) which, given the comparative evidence surveyed above, must be an innovation. It is quite probable that this form is based on the analogy cornu : cornum :: veru : X. X= verum. The neuter -o- stem cornum (Ter. +) is undoubtedly inherited (= Gothic haurn n. 'horn', Galat. κάρυον). The neuter -u- stem cornu, however, probably is the result of a contamination of *ǩynom ( > comum) and *koru'horn'\textsuperscript{12} This analogy is also responsible for the -o- stem by-forms gelum 'frosty weather'

\textsuperscript{12}For the evidence in favor of reconstructing this -u- stem, see Nussbaum, p. 14-15.
(Varro +) and *genum 'knee' (in the archaist Fronto Aur. 1 p. 246) of the neuter -*u- stems *gelu (Q. Cic. +) and *genu (Lex Reg. +) respectively.¹³

¹³The neuter -*u- stems show other interesting by-forms. Beside *cornu and *genu there are attested the nom. *cornus (Varro. Men. 131) and *genus (Lucil.162+). In the case of *gelu, it seems that the more archaically attested masculine *gelus (Cato +) is the original. This variation could easily be explained if one assumes that Latin also inherited animate derivatives of one or more of the neuter -*u- stems. This process is well-established (see above in the text), but the best candidates for once having had animate derivatives, i.e. *veru (Gk. βαιρές) and *pecu (Ved. Skt. paśūḥ) unfortunately do not appear to have any masculine by-forms in Latin.

Another case of the co-occurrence of neuter and masculine -*u- stem requires a different explanation: Festus, p. 246 M, lists *tonitru 'thunder' (instead of *tonitrus m.) as a neuter -*u- stem. In fact, this nom. s. is never actually attested. It is no doubt back-formed from the nom. acc. pl. *tonitra (Cic. +). *Tonitra itself is a replacement for a more archaic *tonitra (Acc. trag. 480). These facts can only be explained if one assumes that *tonitrus is the result of a contamination of the neuter -o-stem *tonitrum pl. *tonitra [cf., for the suffix, *fulgetrum 'heat lightning' (Varro +) with a plural *fulgitrua (Hyg., Fab. 183.2) showing contamination with *tonitrau] and the masc. -tu- stem *tonitus (~Skt. tanayitnu- 'thunder'). This account is preferable to the theory that *tonitrus is dissimilated from *tonetnu- < *tonatnu- and approximately the equivalent of Skt. tanayitnu- 'thunder'. See W-D II 1, p. 697. There is no PIE suffix -*tu- either.

A somewhat similar theory may explain testu n. 'an earthenware pot', but with the archaic sense 'cover, lid' (Cato+) beside testum 'lid' (Cato +) vs. testa in Cato 'earthenware material used for pavement', e.g. Agr. 18.7: de testa arida pavimentum struito. The archaic meanings of this family of words make a connection with the root *(s)teg- 'cover' (Latin tego etc.) desirable. This would be confirmed by Umb. *tehtēñm `<*tektēñ> (TL IV 20) which as Vetter, p. 217 has shown, is probably the exact semantic equivalent of Latin testu 'lid'. If connection with the root *(s)teg- is correct, then testu could be the result of a contamination of *(s)teg-s-tu- m. 'covering' and *(s)teg-s-tom the neuter of an adjective *(s)teg-s-
In the next chapter, we will consider an acrostatic -u- stem which is not directly attested in the Italic languages.

*teg-s-tu- m. 'covering' and *teg-s-tom the neuter of an adjective *teg-s-to- 'having covering'. Formally *teg-s-tu- would be a masculine -tu-stem built to the neuter -s- stem *tego/e-s (Grk. στέγης 'roof', Olr. tech n. -s- stem 'house') comparable to such formations as Olr. tess m. -u-stem 'heat' < *tep-s-tu- cf. Skt. tápas- 'heat'. See Vendryes LEIA T 54-55. *Teg-s-to-, on the other hand, would be comparable to e.g., scelestus 'criminal' < scelus 'crime' except that, more archaically, the zero-grade of the -s- suffix preceded the possessive suffix -to-. For the phonology, cf. Sestius < *sekstios. See Sommer, p.269.

Finally, one may note the apparent neuter -s- stem by-forms of genu, i.e. genus acc.s. (Cic. Arat. 261 +), gen. s. genoris (Carm. Epigraph., 1253, 5). These are undoubtedly to be explained as created on the analogy of pecus, pecoris n. beside pecu n.
Proto-Italic descendents of PIE *₇h₂oᵣu 'vitality, eternity'

If any of the conceivable ablaut grades of the originally acrostatic neuter -u- stem *₇h₂oᵣu 'vitality, eternity' had survived into Italic, i.e. *₇h₂oᵣu (Skt. ṭṛu- 'vitality', Greek οὖ 'not'), *₇h₂eᵣu- (Grk. αἰὼ 'forever') < *₇h₂eᵣyei the dat. sg.) or *₇h₂iᵣyei (Aves. gen. sg. yaoš 'life(time)'), sound change would quickly have obscured both their morphological analysis as -u- stems and their relationship to each other. One could hardly expect to find a unitary paradigm *ᵣ < *oᵣ < *₇h₂oᵣu or *ᵣ < *₇h₂eᵣu. Yet traces of *₇h₂oᵣu are identifiable in Italic.

Aevum, Aevus 'life(time)'

To begin with, Latin has a thematic neuter aevom 'life(time)'.

Beside this there is also a masculine aevus attested only four times (Pl.

1 'Life(time)' is the only old meaning of this word, e.g. Plautus Poen. 1187 per lovem vivimus vitalem aevum 'It's by Jove's grace that we live a vigorous life.' with the masculine by-form aevus; Enn. An. Sk. 307 qui tium vivebant atque aevum agitabant 'who then were alive and lived their lives'; A n. Sk. 110 Romulus in caelo cum dis aevum degit 'Romulus lived his life in heaven with the gods.'; Pacuv. Trag. 262 in armis aevum agere 'to live a life in arms'; Carm. Epigraph. 362, 2 non aevo exacto vital 'a lifetime of life not lived'. Note the frequent co-occurrence of the descendents of *ʰ²h₃ -'live' and *₇h₂oᵣu, on which see the excursus on iūgis. The meaning 'time' does not seem to occur before Lucretius.
Poem. 1187, Lucr. 2.561, 3.605, and CIL 12.2130 (= Carm. Epigraph. 762.2) a christian inscription.² There are a number of possible scenarios to explain the relationship between these thematic stems and the underlying -u- stem. First, it is conceivable that a non-vṛddhied thematic adjective with possessive meaning could have been derived from the weak stem *h₂əju-. This adjective *h₂əju-o- could then have been substantivized not only in the neuter *h₂əju-o-m > aevum 'period of time' containing someone’s vitality > 'lifetime', but also in the masculine, presumably in agreement with a masculine substantive meaning perhaps 'time'.³ The co-occurrence of both masculine and neuter gender would then be comparable to such cases of substantivized adjectives as e.g. cavis (Hor. etc.) vs. cavum ‘a concavity’ both derived from the adjective

²From aevum / aevus is derived aetas / aevitas ‘the number of years one has lived, one’s lifetime’. This was borrowed into Oscan (aitatum Vetter, 3 aitatais Vetter 123) and Paelignian (aetate Vetter 214). There is no reason to suppose that aetas is derived from *aiyī-tāti- as Pokorny, p. 17, for example, seems to believe. Although y was lost in Latin only between like vowels, both of the like vowels could be the result of weakening. Cf. e.g. dītis gen. sing. of dīves / dīs ‘rich man’ < dīvītis < *deiȝetes.

³What this substantive may have been is not easy to say. Latin, at least, does not have any masculine words meaning ‘time’. The general word for ‘time’ is, of course, the neuter tempus. The gloss aevus·eiusdem aetatis, par ‘of the same age, equal’ (Gloss. IV.306.29) is probably corrupt for either coaevus or aequus according to the TLL I, p. 1170. It is not likely to be the sole example of supposed adjective *aiyī-.
cavus 'hollow, concave', or modius vs. modium (Cato. Agr. 58) 'a measuring vessel of standard size' two substantivizations of reconstructable *modios 'of a measure' < modus 'a measured amount'. This adjective could also have served as the base for the derivative aetas / aevitas formed with the suffix -tās, -tātis which commonly makes de-adjectival abstracts e.g. libertas 'freedom' < liber 'free'. But since -tās can just as well be added to nouns, e.g. civitas 'a state, citizenship' < civis 'citizen', aetas / aevitas is no argument in favor of a substantivized adjective.

Against the adjectival theory one may argue that although such an adjective is theoretically unobjectionable (cf. Ved. Skt. vatsā- 'calf' < *vets-o-literally 'having a year' < *vetos 'year', Grk. (φ)ετος, it is supported by no comparative evidence. Nowhere among the Indo-European languages is there trace of an adjective *h₂ eupe- 'having vitality'.

4The masculine substantivization in this case is perhaps due to an understood urceus 'a kind of vessel'.

5Tarentine αἰ (only Hdn. Gr. 1.497) 'forever' is sometimes supposed to be the instrumental of a thematic substantive, but this is hardly trustworthy. Is there, in fact, any non-ambiguous evidence for an instrumental singular ending -ē in the thematic paradigm? It could also be the instrumental of the -u- stem, cf. Ved. Skt. paśv-ē. See on this and other Greek forms Peters, pp. 76, 78. One finds apparent thematic forms in the second part of a compound, e.g. Latin longaeus 'of great age' (Vergil +), Grk. διψακός 'long-lived' (if this does not simply have the
Therefore it may be worthwhile to explore an alternative hypothesis. As noted above, the loss of intervocalic -ί- in Italic would have rendered the paradigm of *h₂òīu rather obscure. The nom.-acc. would have become *ou. The prevocalic weak stem would have become *aḯy-. This difficult situation could easily have been eliminated by means of a meaningless thematization, and given that the base stem was a neuter, one would predict that the thematic stem would also have been neuter. Thus from *aḯy- was derived the synonymous *aḯyom. The same phenomenon may account for Goth aiw-'eternity'.6 As a parallel for productive adjectival suffix -αίος ), but these may be explained as example of the well-known process of thematization of athematic forms in the second member of bahuvrīhis e.g. δμαίμος 'of the same blood' (Hdt. +) < *δμαίμος vs. the simplex αῖμα 'blood' (Hom +) < *ʔ-mp. In Germanic, one finds the Gothic substantive aiw-. Again, there is no trace of an adjective. See note 6.

6 In Gothic only the gen.s aiwis (L. 1.70; L. 16.8; L. 20.35), dat. s. aiwa (J. 9.32; J. 8.35; J. 8.51.52), acc. s. in adverbal sense 'ever' aiw (often), gen. pl. aiwe (E. 3.11.26; T. 1.17), and dative pl. aiwam (R. 9.5) are attested. Thus, it is not at all clear that this noun was a masculine -a- stem, since the decisive nom. sing, nom. acc. pl. fail to show up. Furthermore, there are no exact cognates elsewhere in Germanic pointing indubitably to masculine gender. Presumably; masculine gender is assigned to this noun on the basis of the unambiguously animate accusative pl. aiwins (M. 6.13). But since there is no reason to assume that Gothic had a 'heteroclitic' -a/- paradigm, one cannot infer anything about the gender of an -a- stem noun from the gender of an independent -i- stem, and there is, to my knowledge, no compelling evidence that would lead one to assume that -i- stem derivatives of thematic bases inherited their gender. Thus one is forced to conclude that aiws m. rests
such a semantically neutral thematization, one might compare Gothic jēr n.

OHG jēr n. etc. 'year' < PGmc. *jēra₇, and Czech. jaro 'spring', OPol.

jaro 'spring' < *Pre-PSl. *jōrom or *jērom,⁷ which show an apparently
meaningless thematization in comparison to the athematic stem still
preserved in Aves. yēra n. 'year'.⁸ This parallel is particularly

on no firm basis. In this light, one may suppose that Gothic aiw- is in fact
a neuter from PGmc. *aiwa₇. This neuter would be exactly parallel to
Latin aevum, and owe its existence to parallel morphological processes.

If Germanic had inherited an acrostatic -u- stem *h₂ aju / *h₂ ejuV it
would have quickly have become unwieldy, just as happened in Latin, as a
result of the loss of intervocalic -j-. This problem could have easily been
eliminated by a morphologically determined thematization. In the other
branches of Germanic, this word survives only as an adverb 'ever'. OE á
with its inexplicable variant ò (on which see Campbell, p. 52) derives
unambiguously from *św < *śwa- < *aiwa-₇ (cf. sná 'snow' <
*snaíwaz), since a pre-form *aiwi-₇ would have become *ae. (cf. sae
'sea' from *saiwiz ~ OHG dat. pl. sewim), and since á is an isolated
adverbial form, it is not likely that it could be the result of analogy with a
non-umlauting form of an original -i- stem paradigm. See Campbell, pp.
165, 167. On the other hand OHG and OS éo could be from either
*aiwa- or *aiwi-. Cf. OHG and OS sēo < *saiwiz and sńeō <
snaíwaz. ON with its profusion of variants æ, ei, ey, also seems to be
ambiguous. Cf. sær~sjór and sńaer~sńjör. See Noreen, pp. 75, 131.

Given this morphological analysis, Goth. ni...aiw, OHG nēo, OE ná, nó,
'not...ever' might be directly compared with Greek où 'not' and Arm.
óc "not" but for the the morphological thematization of the Germanic
forms.

⁷The reconstruction *jōrom is somewhat more likely than *jērom. If
the latter were the correct reconstruction, one would have expected there
to be some variants in *(j)e-. To my knowledge, no such variants exist.

⁸This word for year presents some interesting problems and parallels.
The root vocalism of Aves. yēra is, of course, ambiguous. But Germanic
(Goth. jēr etc.) clearly reflects *ē. Greek ὑπα 'any period of time fixed by
natural laws and revolutions' (= RCS jara, Bulg. dial. jara 'spring') and Slavic iaro on the other hand, point to *ā. Since it is not easy to motivate an o-grade in either an secondary -eh₂ or -om formation, it would seem necessary to assume that both e-grade and o-grade were found in the athematic paradigm from which the various thematic formations were derived. One may therefore provisionally reconstruct an acrostic o/e ablauting neuter *h₄jōh₄r, *h₄jēh₄r. If, however, one wishes to uphold the etymological connection with * Jeh₂- 'go' (Skt. yāmi 'I go', Lith. jótī 'ride', OPol. resultative ptc. jat from an inferrable *Ja-c, OPol. jachac 'ride') (cf. Lat. annus 'year' Goth. aþna- 'id.' < *h₂ etno- ~ Skt. átati 'goes'), it would be necessary to assume, as H. Eichner does (J. Schindler p.c.), an acrostic paradigm with e/e/o ablaut. *h₄jēh₂r would be reflected by Germanic *jēra h₄jōh₂r would be reflected by Greek and Slavic. Traces of such an ablaut pattern are found in the PIE word for 'snake' *h₁ōgʰhis (Grk. ὔφις). *h₁ēgʰhis (Skt. áhiḥ, Grk. ἕφις 'viper'), *h₁ēgʰhis (Arm. iž) (J. Schindler p.c.). Given the close relationship between acrostic nominal inflexion and Narten verbal paradigms, it might be worthwhile to consider whether R éxat', Lsorb. jěš, Cz. jetí etc. vs. OP jachac, SCR. jāhati might not be taken as remnants of an original Narten paradigm.

Another similarity is presented by the Slavic -i- stem *jarv (OR jăr̥ f. 'summer-crop', Ukr. jar 'spring, summer-crop', OPol. jarz f., OCz. jěf 'spring', S-Cr. jăr gen. -i 'summer seed') which cannot simply be explained via the well-known transfer of athematic nouns to the -i- stem paradigm on the basis of the phonological convergence of the acc. sing. *-im < *-m with *-im < *-im. Since *h₄jōh₄r was a neuter, there never would have been an acc. sing. *-im < *-m. The co-existence of a neuter o-stem, and an animated -i- stem both apparently functioning as semantically empty derivatives of an athematic base is highly reminiscent of the situation reconstructed for Germanic *aiwi- *aiwa- above in note 6. Could it be that these -i- stems were originally based on the locative of the athematic nouns in question *h₂eiy-i (~ Greek αἰν(φ), άη(ν) 'always'< *áiyi, on which see Peters, p. 76) and *h₄jēh₄r-i respectively? In Germanic *-i and *-i might have merged in *-i before ultimately being lost after a "long root", e.g. Goth. gast acc. sg. 'guest' < *gasti < *gasti and bairip 'he carries' < *bhereti. Therefore *aiwi <
interesting since *h₂oiu and *hₐte/ohₐ are closely related semantically.

It would then remain to explain the masculine aevus. To my mind, the
closest comparandum lies in lat. cælus m. 'heaven' vs. cælum n.
'id.'. The etymology of cælum is unknown, but there is nothing to
suggest that it was originally an adjective. The masculine by-form can
only be explained as a personification or animatization of the neuter. In
fact, Caelus is attested as the name of a god (Enn. An. Sk. 24 Saturno
quem Caelus genuit 'Saturn whom Caelus sired'). A similar animatization
may lie behind the masculine aevus. This innovation could have been
especially favored by a desire to reduce arbitrariness in gender

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*₂h₂oiu- perhaps in the phrase *ne ... *aiwi 'not in a lifetime', i.e. 'never'
could at some point have been reinterpreted as the accusative of an -i-
stem with the concomitant interpretation 'not for a lifetime', i.e. 'never'. The
same process could have been at work in Slavic with *jarv. An original
locative *jarv would have been phonologically indistinguishable from the
nom. and accusative of an -r- stem < *-i- stem. One could imagine the
the reinterpretation came about in a dialogue of the following sort: Son:
When shall we plant the crops, O father? Father: *jarv, My boy! The
father, of course, meant 'in the spring' using the archaic locative of the -r-
stem (for the independent temporal locative, cf. OCS zimē 'in the winter'),
but the son might think that he meant 'during the spring' understanding the
form as the accusative of an -i- stem. Note that the temporal accusative
can also denote a point in time in OCS e.g. i treti doinu vs stanetv 'and
on the third day he shall rise again' (Mt.17.23). See Lunt OCSG, p. 126.,
Vaillant V, p. 28. Such transfers as I have proposed here are particularly
likely in the case of words with inherently temporal meaning.

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9For the attestations of cælus, see TLL, 3, p. 79.
10For the attempts thus far, see E-M, p. 84, and W-H, I, pp.130-131.
assignment: the word for 'animacy' (cf. Plautus Poen. 1187 per lovem vivimus vitalem aevum 'It's by Jove's grace that we live a vigorous life.') should itself be animate.\(^{11}\)

luvenis etc.

As is well known, \(*h_2\omega^i\mu\) also served as the basis for the Hoffmann-suffix derivative \(*h_2\mu^-h_\omega^i\) on- 'young, young man' originally 'having vitality'. This survived into Italic and is attested by numerous derivatives some of which also seem to be of PIE date:

1) Latin \(i\)uvenis,'young, young man' is the most direct reflex of the original \(-n\)- stem paradigm best preserved in Ved. Skt. \(yuv\dot{\text{\(\acute{\text{e}}\)}}\), gen. sg.

\(^{11}\)This phenomenon cannot be separated from the phenomenon discussed by Meillet, 'La catégorie du genre et les conceptions indo-européennes', in LHLG, pp. 211-229, i.e. the coexistence of neuter and animate synonyms for the same concept, for example \(*\omega\dot{\text{\(\acute{\text{d}}\)}} \omega^i\) n. 'water' vs. \(*h_2\omega^i\) \(\omega^i\) f. 'water', and \(*\omega^i\omega\dot{\text{\(\acute{\text{d}}\)}} \omega^i\) n. 'fire' vs. \(*h_1\omega\dot{\text{\(\acute{\text{g}}\)}}\omega\dot{\text{\(\acute{\text{n}}\)}}\) fire' m.. Meillet hypothesized, plausibly in my opinion, that the animate forms originally characterized the designated objects as \(\text{étres agissant}\)s (p. 216). See also C. Watkins, 'Une désignation indo-européenne de l'eau', BSL, 1972, 67,1, pp. 39-46. Not comparable, however, are Grk. \(\delta\rho\omega\gamma\) 'year', or Slavic \(*\omega^n\gamma\). The former does not occur before the Alexandrian poet Euhorion 58. The latter was, no doubt, originally a genitival adjective 'of this year'. This meaning is still clearly preserved in e.g. OR \(\omega^n\gamma\) 'spring-', summer-', R \(\omega^n\gamma\) \(\omega^n\gamma\) \(\rho\) 'first swarm of bees this year', Czech \(\omega^n\gamma\) 'vernal', Polish \(\omega^n\gamma\) 'of this year', Scr. \(\omega^n\gamma\) \(\omega^n\gamma\) 'summer grain', Sloven. \(\omega^n\gamma\) 'spring-', etc. The masculine substantives Ukr. \(\omega^n\gamma\) 'spring', Pol. \(\omega^n\gamma\) 'spring', Scr. \(\omega^n\gamma\) 'spring' are presumably substantivizations of this adjective.
yūnah. It has, however, undergone a semantically neutral ",-, thematicization" of a sort well-paralleled in Latin. Cf. e.g. navis 'ship' vs. Attic Grk. ναῦς 'ship'; mensis 'month' vs. Grk. acc.s. μήν-α 'month'.

12 On lūna, lūnīx 'heifer', and Etruscan Uni, see H. Rix, 'Rapporti Onomastici...', in Gli Etruschi e Roma, p. 104-126.

13 Brugmann, II.1, p. 171. A particularly interesting parallel ",-, thematicization" is amnis f. (later m.) (Naev. +) 'river' since amnis was also originally an amphikinetic Hoffmann-suffix -n- stem. Cf. OIr. nom. aub f. 'river'< *abū < *h₂ab-h₁h₃d. acc. abīnnī < *abonīnī < *h₂ab-h₁h₃ongī. See E. Hamp, MSS, 30, 1972, pp. 35-37. Since *h₂ab-h₁h₃on-īn would have become *abonem > *abinem in Latin and *h₂ab-h₁h₃nīv would have become *aban- > *abīn-, one has to assume that a form with full-grade, i.e. *h₂ab-h₁h₃dī or *h₂ab-h₁h₃ongī survived long enough for the laryngeal of the suffix to be lost before the following vowel and became *ab-on-. Subsequently, a new weak stem *abn- was created on the analogy of other amphikinetic -n- stems which had always had paradigms of the shape nom. -C-dī, acc. -C-ongī, weak, -C-n-. One may say that this process of "-, thematicization" was not too far in the prehistory of Latin, since traces of the original consonant stem declension are almost always found for these nouns, e.g. the genitive plurals iuvenum, canum, mensum. In the case of amnis there is no gen. pl. *annum, but a form without added -i- is presupposed by the place name Interamna. This can only be the nominalization of prepositional governing compound *inter-amno- 'between rivers'. One would have expected *Interamnia from an -i- stem base *amni-.

This example brings up the interesting question of the identity of the initial laryngeal of the Hoffmann suffix. Hamp has argued that the b of OIr. aub etc. vs. the p of Ved. Skt. root noun aḍp- 'water' suggests that the laryngeal of the Hoffmann suffix was the same as the laryngeal that caused the voicing of p to b seen in Skt. pibati 'drinks' OIr. iibid 'drinks'. Although Hamp does not explicitly state this, one would normally assume that this means h₂. But this is hardly conclusive. C. Watkins, 'River in Celtic and Indo-European', Ériu, 24, 1973, pp. 80-89, has pointed out that b in the word for river is not limited to the -n- stem. Watkins notes that the ancient name of the Humber 'Aβος seems to preserve a thematic
The original consonant stem inflection is still preserved in the genitive pl. iuvenum e.g. Verg. Aen. 2.355, CIL 2.2008.

A difficult question is presented by the vowel of the second syllable of iuvenis. Phonologically one would have expected a sequence -uyVC- to form of this word, and this is supported by the thematic forms of Hittite ḫapaš 'river' (with single <р> < *b according to Sturtevant's Law) e.g. the directive ḫapaš 'to the river'. In fact Watkins is even inclined to doubt the genetic relationship of *h₂ab- 'river' and *h₂ap- 'water'. A second supposed example of Hoffmann suffix voicing suggested by H. Eichner is Palaic malitannaš 'honied' derived from *malit 'honey' (Hitt. mili 'honey' etc). The single t of this form is interpreted as representing a d according to Sturtevant's Law which was voiced by the addition of the Hoffmann suffix. See. Mayrhofer. IG, I/2, p. 144. But final t was voiced in Hittite, and this could equally well have been the case in Palaic. If this were true then malitannaš could have been formed not to *malit but to *malid.

Douglas Adams in 'The expansion of the PIE n-stems in Tocharian', TIES, 2, 1988, p. 10 reconstructs the Hoffmann suffix with an initial h₁ in his symbolism E. In this he is followed by Hilmarsson, p. 105. He offers no explicit defense of this reconstruction. He argues that forms such as Grk. ἑλάκτω -ην 'a species of fish' < ἑλάκτατη 'distaff' (on which see Solmsen Beiträge, pp. 116-146) point to a hysterokinetic variant of the Hoffmann suffix, and it is presumably for this reason that he decides upon a reconstruction *h₁eṇ-. In this he may well be correct, but the Greek forms could just as well be generalized from a hysterokinetic nominative *-h₂ėn or */-h₂ėn with non-coloration by Eichner's Law.

Another possibly relevant parallel is omnis 'all' if, as both W-H and E-M believe, this is correctly derived from ḥ₂ep- 'abundance' (Latin ops 'wealth' etc.). Morphologically this could be understood as yet another "-i-thematicization" of an original Hoffmann-suffix adjective ḥ₂ep- on- 'having abundance, abounding'. Yet how this would work semantically is a little difficult to understand.
have been syncopated to -ūC-. Cf. crūdus 'raw' from *kruyɨ-ido-< 
*kruh2-ido-. Possible explanations for the unsyncopated second
syllable of iuvenis are detailed in footnote 15.

A pre-form *kruyɨh2-ido- would also have given crūdus. But given the
absence of full-grade forms of this root in Latin e.g., cruo 'gore',
cruentus 'bloody', and the synchronic isolation of crūdus, it seems rather
less likely.

It seems worthwhile at this point to try to account for the distribution of
the two allomorphs *juven- and *jūn- in Italic:
1. iuvenicus, iuvenitus, and iuventa must show the regular outcome of
   *h2juhXgC-. To judge from the example of cruentus 'bloody' <
   *kruyentO- < *kruh2-glo-; it seems probable that -uvVCC- - contrary to
   the treatment of -ogVCC- - was not regularly syncopated. Thus
   *juyenC- probably remained unsyncopated.

2. lūnō, lūnīx 'young heifer', the name lūnius and iūnīor are, in
   principle, ambiguous. On the one hand, they could reflect an Italic *jūn-
   < *h2juhxn-V-. On the other hand, they could be syncopated from
   *juven-V, just as crūdus is from *kruyido-. At first glance, the Latin
distribution iuvenC- vs. iūnV- would seem to argue in favor of the
syncope hypothesis. But this hypothesis has serious weaknesses. First
of all, it would require that iūnīx be separated from Etruscan Uni since
Uni is attested from at least 500 B.C.E (e.g. on the Pyrgi bronze), a date
too early to allow for the borrowing of an already syncopated *jūnī- <
*juvenī-. Second, to explain *jūn-V- as from *juyen-V- by syncope
requires the analogical generalization of the allomorph *juyen- from pre-
consonantal position where it was phonologically regular to pre-vocalic
position where it was not. Third, the apparent complementary distribution
iuvenC- vs. iūnV- which made the syncope account attractive in the first
place is destroyed by iuvenis. Finally, the same distribution can just as
well support *h2juhXn-V- vs. *h2juhXgC- at an earlier date. Therefore
the syncope hypothesis is rather less likely.

3. In the light of what has been said above in 2, it is probable that iuvenis
is an analogical replacement for *jūnis (cf. lūnius). The stem form
iuven- must derive from some form of the shape iuvenC-. An additional
motivation for adopting the iuven- allomorph may have been the
2) *juvencus 'young adj., (e.g., Lucr. 5. 1074 equus florenti aetate *juvencus 'a young horse in full bloom of life') young bull' and *iuvenca 'heifer'—Umbrian *iuengar n. pl. (Ti vii b 2) are the equivalent of Ved. Skt. *yuvaśa- / yuvakā- 'youthful, young person' and Gothic *juggs 'young' < *juyungąz. These forms all go back nicely to a PIE *h₂juḥ₃∅-r/kós .

Olr. oac 'young', Welsh *iuwanc 'young', on the other hand, reflect a PCeltic *jyůŋko-₁⁶ < *jėyŋko-, with full-grade root analogical influence of the antonym senēs as was first suggested by Brugmann (ALL, 15, p. 7). Alan Nussbaum suggests that sen(ex) itself is probably a transformed root-noun meaning originally 'old man', to judge from the gen. pl. senum. Its closest relative may be Lithuanian sēnis 'old man' transferred to the -i- stem paradigm in the well-known Balto-Slavic manner. From the weak stem of an original ablauting root noun *sen-s *s(p)n-os, an adjective in -o- with vṛddhi could have been derived which functioned as the antonym of *h₂juḥ₃on-. Vṛddhi derivatives of this sort are essentially genitival in meaning and can also express similarity. This meaning is found in Skt., Lith., Germ., and Celtic. See Wackernagel, GGN, 1914, p. 114. *Seno-subsequently underwent a semantic widening, in some traditions, to be used eventually of all things that were old, i.e. not new *neyo-. In Greek this latter meaning is the only sense of ἔνος

₁⁶On the other hand, the Gaul. personal names lōuinco-rix, lōvincus, etc. and the OCor. iouenc seem to reflect an immediate pre-form *jouenko-, since *-p- gives -an- in Brittonic and Mainland Celtic, cf. OWelsh argant 'silver', OCor. argans 'silver', Gaul. Place name Arganto-magus 'Silver-field' < *h₂(e)rogen, cf. Skt. rajatām 'silver'. See P. de Bernardo Stempel, pp. 77, 132. But these forms cannot be taken as serious evidence for a form *jouenko- of any antiquity. Pace de Bernardo Stempel, the suffix in this word is not *-enko- ~ *-ŋko- (= Germ. -ingen ~ -unga-), but a conglomerate of the zero-grade of the Hoffmann suffix *-h₃∅- and a diminutive suffix *-ko - The agreement of
presumably to the comparative *iweyūs. 17 *h₂juh₂pko/kos was originally a diminutive of perhaps even a substantivized h₂ju-h₂ on-. Cf. Skt. putrakā- 'little son' < putrā- 'son', Lith. žirnīkas 'little pea' < žirnis 'pea'. 18 Phonologically speaking one would have expected *iuvincus since e is raised to i before nK. Cf. e.g. ting(u)ō 'I wet' vs. Grk. τέγγω 'I wet'. 19 Again one must assume the analogical influence of iuventas.

3) iuventas f. 'young men (collectively)' (Plt. +) may be compared with OIr. oltiu, gen. sg. oited m. (and occasionally f.) 'youth' < *ioutu-tūt- with the Gothic iuggs 'young' and Skt. yuvaśā- 'young' Welsh ieuanc from *h₂j(e)u₂h₂pko- make it highly unlikely that OCor. and Gaul. alone preserve evidence for a PIE by-form *h₂j(e)u₂h₁enko- which would then require the Hoffmann suffix to be reconstructed with an h₁. But de Bernardo Stemme points the way to an explanation with her reference to the suffix *-enko- ~ *pko-. Presumably, OCor. and Gaul. reanalyzed *iouvanko- as consisting of the stem *iouv- and the suffix *-anko- ~ *pko- and replaced the suffix *-anko- with the semantically equivalent variant *-enko-. The OCor. form could also conceivably be explained as a borrowing from Pre-OIrish.

17 Jay Jasanoff p. c. This is only presumably the case since Iranian seems to have some evidence that points to a full grade in the paradigm of the positive itself i.e. Y.Av. yauua, which is, however, ambiguous due to the vagaries of Avestan spelling but which seems to be supported by the Armenian loan words yavanak, yovanak. Das Junge von Eseln u.s.w.' (Hübschmann, I, p. 198). See Peters, p. 188, n. 143, with further reference to Hoffmann Aufsätze, p. 382-383. This, however, could also be analogical to the full-grade of the comparative.

18 See Fruyt, p. 135. For the semantics of Latin iuvenicus, cf. OCS junucv 'young bull'.

19 Leumann LG, p. 45.
proviso that Celtic has again apparently replaced the expected zero-grade with the full-grade of the comparative. Since iuventus has an exact cognate in Irish and since the suffix -tūs -tūtis was not productive in Latin, it seems almost certain that this form was inherited. It therefore seems to be the most likely candidate for the source of the unexpected e's of iuvenis and iuvenicus. One must then ask what are the possible sources of this e in iuventus itself. The immediate pre-form of iuventus could have been either *juuentūti- or *juventūti- since *-ant- in non-initial syllables regularly became -ent-. Cf. e.g. talentum 'a talent' borrowed from Grk. τάλαντον 'a talent'.

20 Latin has only iuventus, 'youth' senectus 'old age' (Pit +), virtus 'manliness' (Pit. +), servitus 'servitude' (Pit. +) and the very rare anitus 'old-woman-hood' (CGL) and tempestus 'time' (Varro). See Leumann LG, p.375. In Celtic this suffix was apparently more productive, especially in the not entirely phonologically clear form -atu. See Brugmann II 1, p. 454 and Pedersen VGKS, II, p. 40-41. Yet the productive forms generally show innovative masculine gender. Oiltiu, on the other hand, has traces of the feminine gender (see Vendryes LEIA, s.v.) which must be original to judge from the agreement of Latin -tūti- f. and Gothic -dūpi- f. In other traditions too this suffix was not productive. Germanic has only four examples, (see note 9 under iūgis). The supposed YAves. gaðōtūt- 'robbery' is an uncertain reading of one manuscript. See Bartholomae AlW, c. 489.

21 Whereas *-uγV- was syncopated in both open and closed syllables, e.g. iūrat 'swears' < *jūvesājeti cf. Duenos vase iovesat 'iūrat', but also nūndinae 'a market day' < *novendinai originally 'a period of nine days' by inclusive reckoning (= OIr. noīnden f. 'id.'), *-uγV- may have been syncopated only in open syllables. Thus while *kruγ-edo- became crudus, *kruγ-ento- < *kruh₂-pto- remained as cruuentus 'bloody'.
"juyarduti"- would seemed to be ruled out by the following arguments: OIr. o̞t̄iu can only reflect an immediate pre-form "joymudūpi- and not "joymudūpi-. But "joymudūpi-, in turn, could come from either "joymontūti- or "joymantūti-. Now "joymantūti- could only come from "h2\(e\)yh2\(e\)entu₂ti- 25 This reconstruction would have yielded Italic "juyardūti-, but requires one to assume first, that the laryngeal of the Hoffmann suffix was h₂, and second, that while "h2\(e\)u-h₂p-\(K\)ō - (cf. Skt. yuvaśā, Gothic jūgs, Archaic OIr. o̞c etc.) clearly had the zero-grade of the Hoffmann suffix before the suffix "-kə *h2\(e\)yrh₂entu₂ti- had,

22Other examples are probably 1) Calendae < *kalandaï without analogical replacement of the phonologically regular outcome by Osthoff's Law from *kalandaï 'Calends, first day of the month' originally belonging to calare 'to call' (W-H, I, p. 136). Of course, Umbrian has a second conjugation verb kařtu 'calato' (TI, I b 33), but it seems preferable to explain Homerus ex Homero. 2) parentes < *parantes < *parāntes originally the present participle of parare 'to prepare' also 'to get children' e.g. Varro. Men. 552 liberō parare 'to get children'. This seems to me better than assuming that beside pario parare 'to get' and parare there was yet a third Latin present pare- or parē- with more or less the same meaning.

23See Warren Cowgill, 'On the Fate of *w in Old Irish', Lg., 43, 1, 1967, pp. 129-138. A following *a would not have caused palatalization of $ \gamma$, and a sequence *o̞ya would have become <ō>, cf. cór(a)e 'fitness, peace' < *ko-wariā. Vendryes LEIA, p. C-152.

24For the development of *-ant > *-ent > *-edd-, cf. OIr. étan m. 'forehead' < *entonos < *antonos

25This reconstruction could also theoretically account for the Welsh form ieuaint on which, however, see immediately below in the text.
for some reason, the full grade. These assumptions are not positively supported by anything obvious. On the other hand, *joyentuti- could derive either from *h₂₁(e)yx₇ptuh₇ti- or *h₂₁(e)yxₑentuh₇ti-. But this latter reconstruction can be ruled out by the same arguments that were used above to discount the possibility of the reconstruction *h₂₁(e)yx₂entuh₇ti-, i.e. it requires the reconstruction of the Hoffmann suffix with *h₁ and it requires an inexplicable full-grade of the Hoffmann suffix before the additional suffix *tuh₂ti-. Furthermore, the reconstruction *h₂₁(o)yxₑentuh₇ti- would seem to be ruled out by Welsh ieuaint 'youth', which could, however, come from *h₂₁(o)yx₇tuh₇ti-.²⁶ This form is attested for the first time only in 1632, but may, in fact, be much older.²⁷

So *h₂₁(o)yx₇tuh₇ti- remains the likeliest possibility to account for all the Celtic forms. Now the sequence h₂₁u₂₇h₇C- could only have resulted in

²⁶ In Middle Welsh the final í umlaut (which can reflect, among other sources, final û) of a is written <ei>, e.g. ieuinc 'young' pl. < *joupk₁, deigr 'tear’ < *d a ū. See Jackson LHEB, pp. 384, 581, but in Modern Welsh this is spelled <aí> e.g. Mid. Welsh ugeint 'twenty’ < *γιρκγτί, but Mod. Welsh ugain, Mid. Welsh ain second’ < *aļjos, but Mod. Welsh ail. See CCCG, p. 108. On the other hand the final í umlaut of e is written with the letter <y> e.g. cylyll < *cylīlī

²⁷ An argument in favor of the antiquity of ieuaint may be its antonym henaunt ‘oldness’ which is attested already in the 13th cent. See GPC II, p. 1849. henaunt is, of course, a derivative of hena ‘old man’, but it would seem to owe its suffix to ieu-aint. In fact, the reconstruction *jougtlu- would be definitively confirmed if the Gaul. personal names louantucarus and louantus are from *louantūtī- with haplogy. See de Bernardo Stempel, p. 133.
Italic *iυeνC- which is the outcome shown by Umbrian iuengar etc. < *h₂iυ-hᵢp-ᵢð-, and where the e cannot be the result of vowel weakening in non-initial syllables. Therefore iuventus can only be from an immediate preform *iυεντůt-, which, in turn, comes from from *h₂iυ-hᵢp-tuhᵢt-.

Now that it is clear that iuventus must be from *iυεντůti-, one may wonder whether this form sheds any light on the question of whether Proto-Italic syllabic nasals were colored by preceding laryngeals in non-initial position as they seemed to have been in initial position. Two possible scenarios arise: 1) Laryngeals did color in this position. Therefore lack of coloration is a sign that the non-coloring laryngeal was present in this particular case, and thus that the Hoffman-suffix began with hᵢ. 2) Laryngeals did not color in this position. Thus the Hoffmann suffix may be still be reconstructed with any laryngeal or specifically with h₂ following Hamp. It is very difficult to reach a conclusion on this point.

A relevant case may be Latin planta 'the sole of the foot' (Plt. +), if

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28As is shown by the well-known Rix's Law examples umbilicus 'navel' < *h₃ɔbbhel-iko- ~ Grk. ὄμπελος 'navel' < *h₃pbbhl- vs. OE nafela 'navel' < *h₂nobhVl-Vn , am(ð)i-around ~ Grk. ἀμφί 'around', OHG umbi < *h₂pt-bhi (Cf. TB antapi 'both', see J.Jasanoff, 'L'Un et l'Autre en I.E.', BSL, 71,1, 1976, pp. 123-131.) etc. H. Rix, MSS, 27, 1969, pp. 79 ff.
planta is from *pleh₂-ŋt-əh₂ literally 'the flat one'. Yet this seems to me entirely ambiguous: Once the stage *plah₂ŋt- had been reached it is hard to see what outcome other than *plant- would have been possible in italic- whether or not the h₂ colored the following p. And even if one could be sure that coloration of p did, in fact, take place in the environment *-eH₃C-, it would not necessarily follow that it also took place in the environment *-uH₃C-. In theory cruentus < *kruh₂-ŋt- would be a decisive example, assuming that coloration across a morpheme boundary is possible, but one cannot be sure whether cruentus is from *kruanto- or *kruento-.

4) iuventa 'youth as an abstract' (Laber. +) may be comparable to Gothic junda 'youth' < *jyuŋundō. There is no serious reason to prefer

29 As suggested to me by Alan Nussbaum. Cf. for the semantics Latin palma 'palm of the hand' < *p₁h₂-meh₂ from the same root *pleh₂- (Latin planus 'flat' etc.). Two other interesting words which may be relevant here are glans 'the fruit of mast-bearing trees, esp. acorn or beechmast' ~ βάλανος < *g₂h₁h₂-nə- 'acorn', ~ RCS ζειφδυ 'acorn' < *g₂əh₁h₂-ə/nənd- and trans 'across' originally the present participle of *terh₂- 'cross'. These could be derived regularly from *g₂leh₂ŋd- and *treh₂ŋt- respectively, but this would require positing schwebe ablaut for both cases. Is it possible that *g₂h₁h₂ŋd- and *terh₂ŋt- became, not italic *g₂aland- and *tarant- as one might have expected, but rather *g₂länd- and *tränt-? Another possibly relevant example may be the name of the Oscan town Bantia, if this is from *g₂eh₂ŋt-ʃə-, a derivative of the participle of the verb *g₂eh₂- 'to go' (Greek ἱππος, etc.). For the semantics, compare Skt. gātū- 'Gang', vs. OP gāthu- 'place'. 
the explanation of Hey\textsuperscript{30} who supposed that \textit{iuventus} was a inner Latin creation formed on the analogy of \textit{senecta}.\textsuperscript{31}

5) \textit{iuventus} 'the period or condition of early manhood' (Lucr. +) seems to have no direct comparandum in the other branches of PIE.\textsuperscript{32} Furthermore it is not attested before the late republican period. It is therefore probable that \textit{iuventas} is an inner Latin formation created perhaps by the analogy \textit{tempestus} 'last time for augury'.\textsuperscript{33} \textit{tempestas} 'a portion of time' :: \textit{iuventus} : X, X = \textit{iuventas}.\textsuperscript{34}

\textsuperscript{30}Jbb. kl. Phil. Suppl. 18, 183ff.

\textsuperscript{31}A close morphological parallel to \textit{iuventa} as noted by Brugmann II 1, p. 418, would be \textit{Carmenta} 'a Roman goddess' (Liv. 1.7.8) if this name is in fact derived from \textit{carmen} 'song'. It is interesting to note that beside \textit{Carmenta} occurs the much better attested by-form \textit{Carmentis} (Varro +). This variation is reminiscent of *\textit{h}_2\textit{juh}_x\textit{p}-\textit{téh}_2 \ (Latin \textit{iuventa}, Gothic. \textit{junda}) vs. *\textit{h}_2\textit{juh}_x\textit{p}-\textit{tíis} 'youth, young woman' (Ved. Skt. \textit{yuvaítih}, 'young woman', OHG \textit{jugund}, OE \textit{geogud} with \textit{g} from laryngeal). To my mind, this speaks in favor of the derivation of the name \textit{Carmentis} from the latin \textit{Sprachgut}.

\textsuperscript{32}It may, however, be noted that Avestan \textit{yauuué-tét-} 'eternity' shows the same suffix added to the dat. sg. of the Aves. descendent of PIE *\textit{h}_2\textit{oju}.

\textsuperscript{33}Varro L.L. 7.51 \textit{Libri Augurum pro tempestate tempestatem dicunt supremum auguri tempor}us 'The Book of Augurs calls the last time for augury a \textit{tempestus} and not a \textit{tempestas}'. (Trans. R. Kent. p. 317.). I see no reason to doubt the existence of \textit{tempestus} as does Leumann, p. 378, who supposes it is based on a misinterpretation of the adjective \textit{tempestus} which is only attested in Paul. \textit{Fest}. p. 362 M.

\textsuperscript{34}Although the primary meanings of \textit{iuventas} and \textit{iuventus} are different, there is also considerable semantic overlap, since \textit{iuventus} can also have the sense 'period or qualities of early manhood' e.g. Sal. Cat. 5.2 \textit{ibi iuventutem suam exercuit} "There he spent his youth".
It is also claimed that Italic has traces of the primary comparative and superlative adjectives built to *h₂oju, *h₂iēg joṣ (Ved. Skt. yāviyas-'younger') *h₂iēglisto- (Ved. Skt. yāvisṭha- 'youngest'. Av. yōśta- 'id'.) Latin, of course, has replaced this primary formation with iūnior 'younger', a new comparative based on the positive. But it is sometimes claimed e.g. by Bechtel35 that Umbrian has preserved an indirect trace of the original formation in iovies d. pl. (TI Vlb 62, VIIa 13, 14, 28, 50) iovie acc. pl. (TI VI b 59, VIIa 48). The meaning of this noun is quite clear from context e.g. TI VII a 13-15 presotota šerfa šerfer martier futu fons/ pacer paše tua pople totar iliovinar, tote iliovine... erar neru šihitir anšihitir, iovies hosatir anostatir Prestosta Ceria of Cerius Martius be propitious and favorable with your propitiousness (?) to the people of the Iguvine state, to the Iguvine state, to its manly men girded and ungirded, to the youth armed and unarmed." The iovie- are some arms-bearing segment of Iguvine society opposed to the neru d. pl. 'full-grown-men'. These can only be the Umbrian equivalent of the Latin iuniores 'younger men, especially those of military age'. Yet, iovie- cannot be directly compared to Skt. yāviyas-. First of all, the amphikinetik paradigm of the animate comparative adjectives has no form from which an e-grade could be

35F. Bechtel, BB, 7, 1883, pp. 4ff.
generalized. Second *iovie- is clearly a fifth declension noun. True
iovies could be a dat. pl. of an -i/io- stem (cf. Atiierser 'Atiediis' 'to the
Atiedian brethren'), but only the fifth declension can account for an
accusative pl *iovie. I can think of no way in which a primary comparative
*h₂iyēy-īōs, could have ended up as the fifth declension *iovie-.

One must wonder whether it is necessary for *iovie- to be formally a
comparative. Note that the term it is compared to is not another
comparative but simply a noun ner-. In Latin too men of fighting age are
called iuvenes as well as iuniores, e.g. Catullus 64.4: lecti iuvenes,
Argivae robora pubis 'choice warriors, the strength of the Argive youth'.

Formally, *iovie- may most immediately compared to Latin abstracts in-
ies. Some of these clearly belong to Caland systems, e.g. macies
'leanness' (Trag. inc., Cic. +) ~ macer 'lean' (Plt. +) ~ maceo 'I am thin'
(Plt. +) ~ macor 'leanness' (Pacuv.), ac-ies 'a sharp edge' (Plt. +) ~
aceo 'I am sour' (Cato +) ~ acidus 'sour' (Plt. +) ~ ac-us 'a needle' (Plt.
+). The Caland system of the root *mak- also includes a primary

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36 The neuter was probably originally proterokinetic to judge from the
zero-grade suffix formant of Latin magis, 'to a greater extent', Gothic
mais 'more'.

37 Others, of course, are in variation with by-forms in -ia e.g.,
materies-materia 'timber' nequities-nequitia 'moral worthlessness'.
These, following D. Steinbauer apud Mayrhofer IG I/2, p. 133, may be
taken as evidence of an originally hysterokinetic paradigm nom. -iarching
acc. -iarching. Steinbauer also plausibly supposes that the Caland -iēs
comparative *mak-į́dās (Grk. μακρός 'longer' (Hom. +), Aves. māsiš 'greater'). If this primary comparative had survived into Italic, the co-occurrence of *mak-(i)į́dās and *mak-(i)į́dēs would have served as a model for the creation of *h2Įéy-(i)į́dēs, on the basis of *h2Įéy-(i)į́dās assuming this itself had survived into Italic. 38, 39 In the first instance, this would presumably have had abstract sense 'vitality' which subsequently was

suffixed also originally had a hysterokinetic paradigm. Thus Latin acies < *h2(ε)k(į)į́dēh2s and PGerm. gjó 'point, sword-edge' (OHG ecke, OS eggia) with ablaut grade of the suffix generalized from the accusative *h2(ε)kį́dēh2 så can be combined in a single paradigm. What the further morphological analysis of this suffix is, Steinbauer does not say.

38 For evidence that the primary comparative did survive, see below on loviste.

39 Another interesting case is per-nic-īes 'physical destruction, source of ruin' (Plt. +). This root has a partial Caland system made up of root-noun *nek-šdeath' (Latin nex, 'violent death' Grk. νέκτος, νέκρος 'corpses' Hesych.), and the -ro- adjective *nek-rōšdead' (substantivized in Grk. νεκρός 'corpse'). In addition to these forms there is also good evidence for a protokerobatic -u- stem substantive *nék-u-s *jęk-eus-'death' which can be inferred from OIr. éch 'death', Mid. Welsh angheu 'death' < *ęk- eu- and TB enkwe, TA onk, 'man' originally 'mortal' < *ęk-y-e- (see E. Campanile, SSL, 9, 1969, pp. 201-204) and its amphikinetic -u- stem derivative *nék-oú-s, *jęk-o-ós 'corpse'. This can be reconstructed from Aves. nasāu- 'corpse' and Greek νάσκος 'corpse' originally a possessive adjective *'having death'. If *nék-ų-u-death' had survived into Italic (-traces of this -u- stem may be identifiable in Latin nequa-alia detrimenta 'diminishments' Festus, p. 162 M) it would have been approximately the antonym of *h2 ůju 'life'. The derivative *nék-lāu-s would have also been, in a sense, the antonym of *h2 įu-hān- Could this root also have played a part in the creation of lovīe-?
concretized as 'the vital ones', just as English 'youth' originally referred to the abstract quality 'youness' but now can also be used in the concrete sense 'young person'.

Finally, mention must be made of *ioviste compositum a *love et *lusto 'a compound of Jove and justly' Fest. p. 105 M. This is sometimes taken to be equivalent or related to *iovestod *lusto of the forum inscription.40 But Watkins has suggested that this should be compared directly with Ved. Skt. *yáviṣṭha- 'youngest' a frequent epithet of Indra. Phonologically and morphologically Watkins explanation is entirely unobjectionable and accounts nicely for the mention of Jove in the gloss by assuming that *ioviste was originally a vocative epithet describing this god. *ioviste would go a long way towards proving the survival of a primary comparative and superlative of *h₂iuh₂(ɔ) in Latin. But, naturally, it cannot be considered certain.

There is, in my opinion at least one more derivative of *h₂oʃu in Italic, i.e. Latin iūgis 'overflowing' the etymology of which is considered in detail in the following excursus.

40W-H, I, p. 733.
Excursus I: The Etymology of Latin \(i\tilde{u}g\tilde{i}s\) 'overflowing'

The Latin \(-i-\) stem adjective \(i\tilde{u}g\tilde{i}s\) 'overflowing' is said to be a derivative of \(iugum\) 'yoke' according to W-H and E-M. W-H compare it formally to ON \(eykr\) 'beast of burden, horse' which they derive from \(\acute{\nu}oug\tilde{i}s\). This traditional comparison is, however, seriously flawed.

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1 After I had written the majority of this excursus, I was happy to discover, that Ferdinand de Saussure had anticipated many of the ideas sketched out herein. In a brief and brilliant note on the etymology of \(\acute{\nu}ign\tilde{t}is\) (MSL, 7, 1892, pp. 89-90.) where he proposed the widely accepted etymology < \(^*h_t\tilde{u}g\tilde{i}s\) \(\acute{\nu}ign\tilde{t}is\), de Saussure also suggested an alternative etymology comparing \(\acute{\nu}ign\tilde{t}is\) to Aves. \(yauua\acute{\nu}f\) 'living forever.' He then went on to hint at the possibility of comparing \(\acute{\nu}ign\tilde{t}is\) 'vigorous', \(i\tilde{u}g\tilde{i}s\) 'overflowing', and Cypriot \(\acute{\nu}f\tilde{a}t\tilde{i}w\) 'forever and ever'. Yet the details of his comparison, when they are provided at all, are rather different, and have clearly failed to convince. I hope that the arguments presented here will further the wider acceptance of de Saussure's basic insight.


3 The reconstruction of the pre-form of ON \(eykr\) seems to be unambiguous. De Vries, however, ANEW, p. 107, posits a pre-form \(\acute{\nu}aukijaz < \acute{\nu}oug\tilde{i}jos\). If De Vries' reconstruction \(\acute{\nu}aukijaz\) were, in fact, possible, one could assume that Germanic inherited a \(\tau\tilde{e}mos\) type noun \(\acute{\nu}aukaz\) 'yoking' < \(\acute{\nu}oug\tilde{os}\), cf. Ved. \(y\acute{\nu}g\tilde{a}\) 'yoking'. From this noun a genitival adjective \(\acute{\nu}aukijaz\) 'of yoking' could have been derived from which, in turn, a de-adjectival abstract \(\acute{\nu}aukijp\tilde{\theta}\) ON \(eykt\) 'the time between one yoking and the next' could have been formed. But this reconstruction is apparently excluded. Eykr nom. pl. \(eykir\), gen. pl. \(eykja\) is declined in the same fashion as bekkr 'stream', and words of this type can reflect both \(-i-\) stems and \(-ja-\) stems. For example, ON \(belgr\) 'sack' corresponds to Gothic \(balgs\) 'sack' a clear \(-i-\) stem, but ON \(be\tilde{p}\) m. 'bed' corresponds to the Gothic neuter \(-ja-\) stem \(badi\) 'bed'. See Noreen, p. 270. But there are no examples of original \(-ija-\) stems ending up in this paradigm. A pre-form \(\acute{\nu}aukijaz\) would have become \(\acute{\nu}yk\tilde{i}r\). Only a
First, it is an interesting fact that *iūgis* is used in Classical Latin, with one exception, only of water. The examples are: Cic. *Nat. Deorum*, 2,25 ex puteis iugibus 'from everlasting wells'; *Div.1,112 puteo iugi 'an everlasting well'; *Div. 2,31 aquae iugis 'everlasting water'; Sallust *lug. 89,6* opposed to *pluvia* 'collected rain-water'; Horace *Sat. 2.6.2 iugis aquae fons 'a fountain of overflowing water'; *Epist. 1,15,16 puteoso perennes iugis 'everlasting enduring wells'. Cf. also Festus *aquam iugem*, and the Gloss *iugis aqua ἄναυον τῇ ὠρῷ 'everflowing water'. On the theory that *iūgis* is related to *iugum*, this apparent specialization of meaning is inexplicable.

There is not one example of *iūgis* that in any way supports its supposed original adjectival meaning 'yoked'. Even granting that this is an reconstruction *iourgis* will accurately account for *eykr*. Since there seems to be no convincing evidence for a *vṛddhi* formation with o-grade either within Germanic or elsewhere (see Darms, p. 422), it is not possible to explain *iourgis* or as *vṛddhi* derivatives of *iugom* 'yoke'. One could compare it formally with Greek τρέφων 'swollen, well-nourished' < τρέφω 'to nourish'. While Germ. *jaukiz* < *iourgis* was still an adjective meaning 'yoked' a de-adjectival abstract in -iōb *jaukibō* could have been derived from it, the source of ON *eykt*. Cf. Goth. *hauhs* 'high' > *hauhipa* 'height'. On the other hand, *jaukiz* might be a possessive -i- stem derived from an inherited *τόμος* type noun *jaukaz* 'yoking' < *iōugos*. I see no easy way to decide between these two alternatives.

4The earliest occurrence of *iūgis* (Plautus *Pseud.84*: thenaurus *iugis*) happens to be used metaphorically of a treasury.
argument from silence, and that the specialization of ḫūgis in the meaning 'overflowing' could have been pre-literary, one would still have to overcome a considerable semantic distance starting from an original adjective *iōugis 'of the yoke', via a more generalized meaning 'continuous', to arrive finally at a respecialized meaning 'overflowing.'

A step in the right direction was taken by Danielsson, who is reported to have thought that ḫūgis should be connected with aevum 'span of life'.⁵ W-H presumably rejected this etymology for two reasons. First, because they did not see or believe that aevum 'lifetime', Goth. aiw- 'time, eternity', Skt. āyu- 'vitality', etc., and iuvenis 'young man', Gothic juggs 'young', Aves. gen. sing. yaoš 'vitality' etc. can all be related as exemplars or derivatives of a PIE neuter -u- stem *h₂oju 'vitality, eternity'.⁶ Second, they may have been leery of this suggestion

⁵Grammatische und Etymologische Studien p. 49¹, according to W-H, I, p. 727, but I have read this footnote very carefully and found no mention of ḫūgis, although various words of the *h₂oju- family are discussed.

⁶*h₂oju must be reconstructed as a -u- stem of the *dóru *gōnu type, i.e. as an originally acrostatic o/e ablauting paradigm. The o grade is guaranteed by Greek οὐ (Warren Cowgill, Language, 36, 1960, pp. 347-50). The e-grade is suggested by Grk. αἰτί 'forever' < *h₂ejuei most probably interpreted as the dative of this -u- stem. In Indo-Iranian the original weak stem *h₂ejju- was replaced by *h₂jeu- the source of the Aves. gen. sg. yaoš. Cf. Ved. Skt. nom. / acc. sg. dāru gen. s. drōḥ < P.In.-Ir. *dāru, *drāuš.

It seems necessary to assume that both 'vital force' and 'eternity' were possible meanings of *h₂oju already in the proto-language. The former
because there is no evidence at all for the PIE or Latin suffix -gi- which is apparently required for Danielsson's etymology. But if the morphological details could be made to work, this etymology would be far more appealing on semantic grounds, for the family of \( ^*h_2 oju \) is very apt for describing an overflowing fountain, cf. e. g. Greek κρήνης τ' ἄειναος 'overflowing fountain' (Hes. Op. 595) and κρήνη ἄειρος 'overflowing fountain' (Soph. OC. 469).\(^7\)

\[\text{proto-meaning seems secure, since } ^*h_2 lju^-h_2 on- \text{ 'young man'} \text{ (Ved. Skt. yūvā, Lith. jūnas 'young', OCS. jūnъ 'young', Latin. iuvenis, OIr. oac 'young' < } ^*h_2 lewtjuh_2 ko- \text{, Goth. juggs 'young' } < \text{ } ^*h_2 lhuh_2 ko- \text{ etc.}) \text{ can only be explained as a derivative formed with the possessive suffix } ^*h_2 on- \text{ (K. Hoffmann, MSS, 6, 1955, pp. 35-40) from a base noun meaning 'vital force'. But the meaning 'eternity' must also have been ur sprachlich to judge from the semantic agreement of αἰτί 'forever', and the Aves. dative or directive (?) yavvuaē 'forever'. Furthermore, Cowgill's etymology of Grk. oὐ 'not' and Arm. ač 'not' as extracted from *ne...*h_2 oju (k₂id) 'not...ever' requires an early meaning 'eternity'. This double meaning strikes the 20th century New Jersey mind as rather odd. It is not, however, unparalleled. Lithuanian viėkas means 'vital force', but OCS věktъ means 'human life, eternity' and traces of the meaning 'vital force' are also found, according to B. Unbegau, in the Old Russian bez věka 'invalid' literally 'without force' and in the verb uvěčitъ 'mutilate' literally 'deprive of vital force.' See B. Unbegau, 'Un parallèle sémantique greco-slave' in FS Krahe, p. 173-176. But the interpretation of the OR juncture bez věka is not certain. Avanesov, II, p. 294, translates věkъ, in this context by Russian uvečiye 'damage'. The semantic development of \( ^*h_2 oju \) can perhaps be understood if one assumes that the original meaning was 'life'. In certain case forms, e.g. the dative, the meaning 'for life' may then have acquired the meaning 'for ever, for eternity'. From here the meaning 'eternity' was generalized to the entire paradigm...} \]
To my mind, the apparent suffix -gi- finds its closest match in the Germanic *aJu-ki-'eternal' found in Gothic ajukdups 'eternity' and OE ēce, æce8 'eternal' < *aJu-ki-. Now it is surely not coincidence

Furthermore, words for 'river', or 'water' are sometimes derived from the semantically related root *g2ih3-'live', e.g. Ved. Skt. jīrī- 'flowing water', Paelignian and Umbr. biam 'fountain', (Vetter 212, 234). Furthermore *g2ih3jej2 h2op-s 'living water' may have been a PIE idiom for 'fresh', i.e. not stagnant water' in view of the semantic agreement of e.g. Ved. Skt. jirādānu- 'pouring forth quick drops', Latin aqua viva 'fresh water' (Varro, R.1.11.2, etc.), the Serbo-Croatian idioms živa voda 'spring' literally 'living water', and the folkloric živica voda 'the living one, the water' (Wayles Browne p.c.), Russian voda živaja 'running water, spring water (Avanesov l, p. 451), and OE cwic wære 'fresh water'. It therefore seems plausible to me to derive the Indo-Iranian *rajita 'stream, watercourse', (OP yaaviyā 'canal', Mod. Pers. jōi 'watercourse, canal', Ved. Skt. yavā 'stream', e.g. RV. 8.98.8 vār na... yavabhis 'wie ein Gewässer durch Bäche' (Geldner)) from *h2jej2-jej2, an *-jej2 derivative of *h2oju. Formally, one could compare Ved. vasavya- 'wealth' derived from vāsu 'good'.

Campbell, p. 100, considers æce (Vespasian psalter, Rushworth Gospel, Kentish charters) to be the regular outcome of < *aeci- < *aeyci- < * ae jyki- < *a juki-, but he regards ēce (Caedmon eec) as unexplained.

The comparison of Latin iūgis and Gothic ajukdups was made already by Benveniste in his classic article BSL 37, 1938, pp. 103-112. The reconstruction of an -i- stem adjective seems to me the simplest hypothesis to account for the correspondence of Goth. ajukdups and OE ēce for the following reasons: Goth. ajukdups is formed with the feminine de-adjectival abstract suffix -dūpi- (= Latin -tūs, -tūtis etc.). The adjective at the base of this abstract could have been a thematic stem *ajuka-. For the syncope of a thematic vowel before the suffix -dūpi-, cf. manag-dups 'abundance' from the thematic base manags 'many' and mikil-dups 'greatness' from the thematic base mikils 'great'. On the other hand, the base adjective could also have been an -i- stem *ajuki- which
that both *iūgis and *ajukduḥs apparently show an otherwise unparalled suffix *-gi- added to what in Germanic is certainly, in Latin possibly, a form of PIE *h₂oju. This comparison is very supportive of Danielsson's basic insight, but the question remains: what is this apparent suffix *-gi-

would certainly have lost its -i- before the suffix -duḥi-, just as the -i-stem adjective gamains 'common, unclean' lost its -i- to make the abstract gamain-duḥs 'fellowship'. The base adjective could not, however, have been *ajukija- since this could only have formed the abstract *ajuki-duḥs. Cf. Gothic andi-laus 'endless' < *andija-lausa-. See Krause, p. 91. As for OE ēce, it could reflect either an -i- stem or an -ja- stem but not, of course, an -a- stem. In view of these facts, one could imagine that Gothic and OE inherited from Proto-Germanic a thematic adjective *ajuka- 'eternal'. In Gothic this adjective served as the base of the abstract ajukduḥs but was itself lost. In the ancestor of OE *ajuka- was substantivized, and from this unattested substantive *ajukan or *ajukaz 'eternity' an adjective *ajukija- 'eternal' was derived, the direct ancestor of ēce. But it is far simpler to suppose that both Gothic and OE inherited an adjective *ajuki- from Proto-Germanic which in Gothic was the base for the abstract ajukduḥs and in OE became by sound change ēce.

Since the reconstruction of a thematic stem *ajuka- is unlikely, the traditional comparanda, i.e. Germanic adjective in -ka-, e.g. Gothic ibuks 'backwards' and the adverbs anaks 'suddenly', alakjo 'all' and PIE adjectives in -go- become rather less interesting. A particularly favored comparandum, the Rig Vedic 1,116,1 hapax ārbhaga- 'young' seems to be nothing more than a volksprachlich variant of the much better attested arbhakā-. See Mayrhofer, EWAI, p. 120 and Hoffmann Aufsätze p. 137, where other Skt. examples of variation between -ka- and -ga- are listed.

10One might point to the Lithuanian dveigys 'two years old', treigys 'three-years-old' ketvergils 'four years old' etc. which cannot be separated from OCS trizv 'three years old,' and 'Old Serbian dviz 'two years old.'
I propose that the putative 
*-gi- suffix is not a suffix at all, but rather a form of the root 
*g²elh₂- / g²ih₃- 'live'. Since neuter -u- stems of the 
*doru type show a zero-grade form as the first member of compounds, 
e.g. Ved. Skt. *jnubādh- 'bending the knees', Greek δρυσομος 'wood-
chopper', one would expect *h₂oju to appear as *h₂ju- in this position.

A root-noun of the root *g²ih₃- is attested in Avestan 
*bh. Therefore a bahuvrīhi combining *h₂ju- and *g²ih₃- meaning 'having a life for life ( = for ever)' or 'having a life which is eternal' would in the first instance be expected to be *h₂ju-g²ihs-s. I believe it is this PIE compound that underlies not only Latin iūgis and Germanic *ajuki-, but also Greek ὄψις 'sound, healthy'. and Avestan yauuaējī- 'having eternal life'. But in order

But the Serbian form reflects a Proto-Slavic *dviz-, or *dvez- and must, in turn, go back to *duelīgh(h)- with a palatal 
*-g(h). This form cannot be the result of BdC palatalization. See Lunt BdC, p. 19. One is tempted to compare the Hittite synonym daiga- 'two years old' which is presumably a compound of da- < *d乎h, 'two' and iuka- < *jukom 'yoke' in the meaning 'span of time' which is also found in Sanskrit 
yugam, but there seems to be no way to make this work phonologically. Next come to mind OHG zwīg branch' OE twig 'twig' < *duelīg(h)-, (but 
*duelīkō- is also possible) Albanian degë 'branch' < *duoighe₂. Yet this apparent suffix 
*-gho- seems to be closely related to the Greek numerical adverbs in -χα, e.g. ἕκχα 'in two'. See Brugmann II 1, p. 513-514. While a branch can easily be designated as 'the thing that splits in two', it is not easy to see how the sense 'X-years old' could somehow be derived from these fractional adverbs. I can see no easy solution to the problem of dveigys etc. Yet these forms can hardly be taken as evidence for a a PIE suffix 
*-gi-.
to arrive at a "suffix" *-gi-, which is apparently required for Latin and Germanic, from a root noun *-gʰi h₃-, one must explain both the replacement of the labiovelar by a velar and the apparent loss of the laryngeal.

The Missing Laryngeal

As for the apparent loss of the laryngeal, a number of possible scenarios could be sketched out. First, one might compare the cases where a laryngeal between sonorant and a consonant in the second member of a compound or after a syllable of reduplication seems to have been lost. Thus one finds in Sanskrit suṣuti 'easy birthing' from *h₁su-
suh₂-ti- vs. the simplex sūti- TS 'birth'. One finds both -bhū- and -bhu-
'being' in the second member of compounds from the root *bhu₃-, e.g.
pra-bhu- 'outstanding'. In Greek, one finds πιμπλαμεν 'we fill' and
ίλάσκομαι 'I am propitious' instead of phonologically expected *πιμπλημεν
< *pipʰ₁h₁-mes and *ιλισκομαι < *sisʰ₂ske-.\(^{11}\) By application of this

\(^{11}\)The example of ιλάσκομαι was pointed out by M. Peters (Armenian Lecture Fall 1991). True, one could explain πιμπλαμεν and ιλάσκομαι as super-zero-grades, but one expects rather *πιμπλεμεν since this is a root ending in the first laryngeal, cf. plēnus 'full' < *pleh₁to-. The Vedic examples of this phenomenon are discussed by F.B.J. Kuiper, Sprache, 7, 1961, pp. 24ff. See also Mayrhofer IG I/2, p. 150.
rule one would expect *h₂ju-gʰi₃h₃-s to become *h₂ju-gʰis.

Second, one might consider invoking a related rule of laryngeal loss: the so-called υςςςς rule whereby a laryngeal between a sonorant and a vowel was lost in the second member of a compound or after a syllable of reduplication, e.g. υςςςς 'new-born' < *neyo-ɡʰ₁o-, Goth. niuklahs 'childish' from *neyo-ɡʰ₁o-ko-by dissimilation, Skt. jajhe 'I am born' < *ɡeɡʰ₁h₁-₂₂₂, Grk. ἱγρος 'within the head' or 'brain' < *en-K₃h₂o₂. By the υςςςς rule, all prevocalic forms (i.e. the singular gen., dat., inst., loc.) of *h₂ju-gʰi₃h₃ would become *h₂ju-gʰi₃.¹³

Finally, one ought to consider whether either Latin iūgis and Gothic ajukdu₃s, OE ēce really require the laryngeal of *gʰi₃h₃ - to be lost phonologically. Neither Latin nor Germanic maintained a category of long -i- stems, and it is hard to see what else Latin and Germanic could have done to long -i- stem adjectives besides absorbing them in the regular -i- stem category. Compare the fate of *nepth₃h₃s 'granddaughter' (Skt. naptih 'granddaughter' etc.) in Latin and Germanic. In the former

¹²See Mayrhofer IG I/2 p.129, who, however, would limit this rule to the h₁. In view of ἅκρος, this seems to be incorrect.

¹³In addition, one might note that the vocative and the neuter nom. acc. s. *h₂ju-gʰi₃h₃ would have susceptible to the so-called in pausa laryngeal loss. Cf. the Ved. vocative Yami 'O Yam₁ ' RV 10,10,14, and OCS ženo 'o woman' < *gʰena < *gʰenah₂#, Umbrian Prestot-a 'O Praestota' < *-a < *ah₂#.
*neptihₚs simply was incorporated into the -i- stem paradigm as neptis 'granddaughter'. In Germanic, *neptihₚs was either treated as a feminine -i- stem, for example, ON nipt 'a female relative, sister', OHG nift 'granddaughter, step-daughter', or transferred to the -iᵲᵦ paradigm in order to mark more clearly its feminine gender, for example, ON acc. s. (hapax, Helgakviða 2.28) nipti, OHG nifta.

An adjective inherited from PIE and ending in -i- could hardly have escaped a similar morphological transfer. Thus the -i- stem adjective *ajuki- could simply be another example of the same morphological phenomenon.

There are, then, a number of possible scenarios which could explain the apparent loss of laryngeal. Similar possibilities exist to give a convincing explanation for the change from labio-velar to velar.

The Loss of the Labial Element of a Labio-Velar after U in PIE

The simplest hypothesis is to suppose that, already in PIE, a labiovelar lost its labialiality by dissimilation after *u. Thus according to this rule *h₂j₁u-gᵢh₃-s would have become *h₂j₁u-gᵢh₃-s. This idea was first proposed by De Saussure for PIE, yet it has never been taken

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14For ON see Cleasby-Vigfusson, p. 455, and Noreen, p. 270. For OHG see Wells, p. 440. In OE feminine -i- stems and -iᵲᵦ stems are indistinguishable. See Campbell, p. 242.
15MSL, 6, 1889, pp. 161-162.
seriously as an Indo-European, as opposed to a specifically Greek, phenomenon. Nevertheless, I believe it is quite probably correct. To demonstrate this will require a review of the possible examples and counter-examples.

PIE *gʰou-kolo- < *gʰou-kʰolo-

The best example of this rule is the word *gʰou-kolos < *gʰou-kʰolos 'neatherd' attested by Greek βοικόλος 'neatherd', Myc.qo-u-ko-ro, and the Celtic forms, OIr. bóchail, buachail 'bubulcus', MWelsh bugeil 'shepherd, boy', Cornish bugel, MBret. bugel, bugel, Vann. bugul 'boy' which apparently reflect a Proto-Celtic *gʰoukoli-. The second member of this compound, a derivative of the root *kʰel(h₅) 'to go round' (Greek πέλομαι 'I am', Skt. carati 'he wanders', Latin colo 'I inhabit' etc.)

originally began with a labio-velar as is established by Greek ἵππο-πόλος

16Pedersen VGKS, p. 127. Vendryes LEIA, p. B-107. Thanks to Jay Jasanoff for calling the Celtic forms to my attention. The -i- stem is curious, and quite possibly more archaic than the Greek thematic stem. Perhaps the compound was originally *gʰou-kʰoli- with the well-known substitution of -i- stem inflection for thematic inflection in the second part of a bahuverb. Cf. Latin anima (Naevius +) 'breath of life' but semianimis (Enn. +) 'half-alive', as well as semianimus (Sallust +) 'id.' Of course, one would then have to suppose that *gʰou-kʰoli- was originally a bahuverb, 'whose circuit is cows'.
'horse-herd' (Hom.+) etc. The simplest hypothesis to account for these data would assume that the dissimilation of the labio-velar after u was a PIE phenomenon rather than that the same dissimilation occurred twice independently.\textsuperscript{17}

There are, to my knowledge, no other clear cases of this rule.\textsuperscript{18} This is not really surprising, since the original labio-velar would have been irretrievably merged with a velar in the cases where u invariably preceded.\textsuperscript{19} One would therefore predict that velars would be particularly common in non-Schwebeablauting roots of the shape \textsuperscript{*}Ce\textsuperscript{y}G\textsuperscript{-}. On the other hand, if u did not invariably precede, then the labio-velar could have been restored analogically. One would then predict that only roots of the shape \textsuperscript{*}ye\textsuperscript{y}G\textsuperscript{y}- /uG\textsuperscript{y}- or roots of the shape \textsuperscript{*}Ce\textsuperscript{y}G\textsuperscript{-} with Schwebeablaut

\textsuperscript{17}A third conceivable alternative, that the Brittonic forms are borrowed from Irish, seems rather unlikely. Avatars of g\textsuperscript{y}oukoli- are attested in every Brittonic language, and what would have been the cultural motivation for the borrowing?
\textsuperscript{18}One is tempted to try to explain the strange case of Gothic auhns 'oven' <\textsuperscript{*}uknos ONorw. ogn, OSw. oghn, ughn ODan. ogn 'oven' <\textsuperscript{*}uknòs vs. OHG ovan OE. ofen 'oven' MLG oven and Greek ἵππος 'oven' by this rule. On the other hand, Mycenaean has \textit{i-po-no} determinative POT (Uc160, Kn 233 Docum.,\textsuperscript{2} p. 548.) which is thought with some degree of probability to be the equivalent of 1st millennium Greek ἵππος. If this is correct, then ἵππος would seem not to have a labio-velar at all, and the whole family remains difficult to account for under any theory. In any case, Szemerényi's multiple dissimilation and borrowing account (Scripta Minora IV p. 2236-2237) fails to convince me.
\textsuperscript{19}Furthermore, it is only the \textit{centum} languages which can provide examples.
would have evidence for a labio-velar following u. These predictions are, in fact, confirmed. Consider the apparent counter-examples:

A. False Reconstructions

1. *bhleug⁴- *flow*

The reconstruction of *bhleug⁴- to explain the alternation of fluo and fluxi²⁰ is supported by no comparative evidence. An analogical explanation for fluxi is not difficult to find. See the fuller discussion under frux.

2. *bhouk⁴os *flying insect*

Pokorny’s lemma *bhouk⁴os, p. 163, reconstructed to account for the comparison of Latin fūcus ‘drone’ and Old English bēaw ‘gadfly’, Low German bau ‘gadfly’ is far from certain.²¹ The name of a flying insect could easily be at least partly onomatopoetic, and E-Ms’ derivation of fūcus from *bhoikos, a derivative of the root *bhei- ‘bee’ (OCS bēčel <*bhikeleḥ₂, Lith. bitīs, OHG bīnī) is much more satisfactory semantically.²²

²⁰W-H, I, p. 519.
²¹OE bēaw and Low German bau (if this form is real: I have yet to find it in any Low German lexicon.) would seem to reflect a Proto-Germanic *bauuaaz. If one must have an etymology for such a word, one might compare the onomatopoetic root *b(h)eu- (Pokorny, p. 97.) said to be the source of Persian būm ‘owl’, Arm. bu ‘owl’ and MHG buc ‘blow’. One might also compare English buzz, bumblebee etc.
3 *luk₂-os 'wolf' > Sabellic lupo- > Latin lupus

It is often assumed that Latin lupus 'wolf' is a loan word from some Sabellic language where *kₚ became p. This Sabellic word, in turn, would seem to be derived from the same metathesized form of the PIE 'wolf' word that led to Greek λύκος, i.e. *lúk₂-os. If this account were true, then it would seem that Sabellic *lupo- would argue in favor of the retention of the labial element of a labio-velar after u in PIE. But the account is far from compelling. First of all, it is known that the Samnite and presumably Sabellic word for 'wolf' was the tabuistic hirpo-, i.e. 'the hairy one'. Second, why should the early Latins have required a loan-word for 'wolf', an animal which was presumably no more common in rural Samnium than in rural Latium? Instead it is far more likely that lupus is the genuine Latin reflex of PIE *lupo- 'dog-like animal'. Cf. Aves. urupi- 'dog' < *lupi-, etc.²³

B. Roots of the shape *yeGʰ-/*uGʰ-

4. *yek₂-/*uk₂- 'speak'

The Greek reduplicated aorist εἰπόν 'I said' < e-yeék₂ōm = Skt. ávocam 'I said' could have had its labio-velar restored at any time on the

²²See Meillet, MSL, 14, 1906-1908, pp. 476ff.
basis of the -s- stem noun (P)ἴσας 'word' since the etymological connection between εἰσαιν and ἐσις was never obscured. The Greeks, no doubt, felt the figura etymologica of the idiom ὑς ἐσις εἰσαιν 'to exaggerate a little', e.g., (Aesch. Pers. 714 etc.)

5. *yegʰ- / yugʰ- 'wet'

The most difficult apparent counter-example is the case of Latin āvidus 'wet' and its derivatives. But this too is only an apparent counter-example. According to W-H, āvidus and its family are to be derived from a root *yegʰ- 'wet'.\(^{24}\) The labio-velar is established by ON ṣvka > *yogʰe₂ 'wetness'. But this form also shows that the real full-grade of this root was *yegʰ-. This is confirmed by OIr. ſuál 'urine' < *yogʰio-. Thus the labio-velar could easily have been restored in the zero-grade *ugʰ-. A pre-form *ugʰ-ido- with a restored labio-velar, would become in Latin *uviḍo- and then by syncope āduṣ.\(^{25}\) From āduṣ a

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\(^{25}\) I have reconstructed the pre-form of Latin -idos as *-ido- on the basis of gelidus 'cold'. As Alan Nussbaum has pointed out to me, a pre-form *gel-edo- would have given Latin ṭolidus since i was velar before e, cf. Herculēs < *Hercēles with the anaptyctic vowel u. The e of Umbrian kaleřuf, kalersu cal(i)idos 'with a white spot on the forehead' = Latin calidus (Plt. +) 'id.' is hardly decisive, since e is sometimes written for i in Umbrian. See Meiser, p. 43. As for Latin soled- 'solid' CIL I.1529.12, this too is ambiguous in the light of such archaic spellings as tempestatebus. Perhaps the strongest evidence for original -edo- is Grk. μακρόνδις (Hom. +) 'tall'. This adjective seems to be a thematization of the
hyperarchaic ùvidus could have been created.

It is also possible that ùdus and the hyperarchaism *ùvidus could be the regular outcome of *ùég०ïdo- with full-grade in the correct position. For the proposed syncope and its result, cf. brûma 'the shortest day of the year' < *mreùghyïmo- or *mreùghyïismo-.

It is, indeed, difficult to decide whether a full- or zero-grade should be expected in any given *-ido- formation. On the one hand, one finds clear

-n- stem Maxètwv 'Macedonian' which may be analyzed, following Peters, as an individualizing -n- stem derivative of an adjective *-edo-. The suffix of this inerrable adjective *mak-edo- from the Calandish root *mak- / ñûk- (cf. µênkoc (Hom.) 'length', µakρóç (Hom.) 'long, big', µèkpiç (Hom.) 'tallest') would be exactly comparable to the Latin Caland suffix -ido- if from *-edo-. See Peters' discussion, p. 178 n. 131. Nevertheless I have opted for the reconstruction *-ido-. Secondar sequences of -eγC- seem to have become -uC-in both initial and non-initial syllables. Other examples are nûdus*-negùido- (or *negù-odo-, cf. Gothic naqzîs 'naked') and exclîddô 'I deny access to' < *eks-kleydô < eks-klaydô.

The pre-form underlying brûma is unclear. On the one hand, one might reconstruct *mreùghyïmo- not a superlative, but simply a positive 'the short one.' On the other hand, one might reconstruct a superlative *mreùghyïismo- provided that the syncope of *-eγûC < *-eγhûïC was before the loss of s with compensatory lengthening in the sequence *VšDV-, and thus that the development was *mreùghyïismo- > *breûgîmo- > *breùsmo- > *brûmo- and with substantivization *brûma. This chronology is supported by the examples of iùgllans (Cic. +) 'walnut' < *djùzglans < *dùjoujglans < *dùjouesglans 'originally Juppiter's nut' presumably a calque on Grk. Δίος θύλαξεν (Thpr. +) 'sweet chestnut' and audio 'I hear', it from *àyz-diùjô < *àyjz-diùjô cf. Grk. αὐτοθάνομαι < *αυτοθάνομαι, I perceive', Ved. Skt. ñvîh 'apparent'. In these two cases, however, the *û is not from a labio-velar.
full-grades in synchronically motivated forms like rūbidus 'red'. On the other hand, since *-ido- seems in some instances to be the Latin replacement of a PIE Caland suffix *-mo- e.g. crūdus 'raw' < *kruyido- < *kruh₂-ido-'raw' vs. Aves. xrūma- 'raw', nūdus 'naked' < *ne/og₂-idō- vs. Hitt. nekuma(nt)- 'naked', Aves. magna- 'naked' by metathesis from *nagra-,27 one would not be surprised to find the zero-grade characteristic of adjectives in *-mo- in at least some archaic *-ido-formations.

The verb üvesco 'be wet', only attested a few times,28 and the noun üvor 'wetness' (hapax)29 must have been formed secondarily to üvidus on the model of rūbidus 'red': rubesco 'be red': rubor 'redness'.

It is also worth mentioning a third conceivable possibility: üvidus etc. are derived not from *yeg₂- at all, but from the root *yeh₁ - / uḥ₁- also meaning 'wet'. This root is found in Vedic vār n. (disyllabic) 'water', Aves. vār 'rain', ON ūr n. 'water', and Latin ārīna 'urine' and ārinor 'to dive'

27 The surprising full-grade in *neg₂-mo- is presumably to be ascribed to the Narten characteristics of this root. Cf. Lith. nuogas 'naked' < *nōg₂-os
28 Lucr. 1.306; Hor. S. 2.6.70.
29 The existence of üvor is particularly suspected since it is clearly invented in the service of Varro's etymology of uva: uvae ab uvore L.L. 5.104.
(est mergi in aquam 'it means to be plunged into water' Varr. L.L. 5, 126)

and, according to Watkins, in Luvian wa-ar 'water', and Old Irish fir 'milk'.\textsuperscript{30} *Uhr\textsubscript{i}-ido- would regularly become *uyido- > ã̄dus. Cf. crūdus < *kruy-ido-< *kruh\textsubscript{2}-ido.\textsuperscript{31} The explanation of ã̄vidus etc. would be as before.

But, against this hypothesis one may argue that the root *ɣeh\textsubscript{i}-r*uh\textsubscript{i}- has no evidence for a Caland system, whereas *ɣeg\textsubscript{I}-r*ug\textsubscript{I}- clearly does. And since the suffix *-ido- is the productive Caland suffix in Latin, it is more plausible to suppose it was suffixed to the well established Caland root *ɣeg\textsubscript{I}-r*ug\textsubscript{I}.

On the other hand, it does not seem impossible to derive ã̄mor 'moisture' (Enn. +), ã̄midus 'moist' and ã̄līgō 'waterlogged ground' (Cato +) from the root *ɣeh\textsubscript{i}-r*uh\textsubscript{i}-r. The family of ã̄mor is supposed by W-H to be derived from a lost adjective *ã̄mos 'moist'.\textsuperscript{32} Although W-H cite

\textsuperscript{30}Calvert Watkins, 'Two Anatolian Forms' in FS Hoenigswald, p. 399-404.
\textsuperscript{31}F. Mezger, KZ, 62, 1935, p. 22.
\textsuperscript{32}W-H, II, p. 815. Perhaps this adjective is not quite lost in Italic. R. Schmitt-Brandt, 'Zwei verkannte Reklamtexte aus Latium', in FS Meld, p. 327, following Pisani, has seen this word in the well-known Faliscan text (Vetter 242) inscribed on a drinking vessel which he reads: pro pramod pramed umom pramod pramed umod etc. He interprets this to mean 'before lunch (pro pramod cf. Latin pran-dium 'lunch') first of all (pramed) juice (umom), after lunch (pramod) first of all (pramed) juice (umom)! In other words 'Drink all the time'. This seems to me plausible and quite in tune with the Faliscan Weltanschauung expressed in another
no parallel for the derivation of an -s- stem substantive from a thematic adjective, one might note the parallel of Latin squālus 'unkempt' (Enn. scen. 311), squālor (Plautus +) 'dirtiness,' squālidus (Enn. +) 'filthy.'

If W-H are correct in this, one must ask what are the possible sources of *ūmos? W-H suppose that *ūmos is from either *ūgũsos, *ūgũemos, or *ouguũsos. The last reconstruction can certainly be eliminated since it requires an unparalleled neo-full-grade. But one might rewrite the first two reconstructions *uguũsos and *ügũi/emos, both of which would adequately account for *ūmos. For the s extended root, one could compare Skt. ukṣati 'sprinkles'.

Yet there are some facts which, to my mind, favor the derivation of

well-known Faliscan inscription (Vetter 244) *toied vino pipao cra careto 'Today I'll drink wine, tomorrow I'll have none.' Incidentally Vetter 242 is quite probably meant to be poetry. The meter + - - , + - - (where + stands for a stressed syllable and - for an unstressed syllable) and the alliterative pattern, i.e. Ci, Ci, Cj, is certainly related to the meter and alliterative pattern found in some South Picene inscription e.g. Tetis tokam alyes 'the tomb of Titius Allius'.

33 Alan Nussbaum compares Greek πηρός (Hom. +) 'disabled' vs. πηρως - coco 'loss of strength' (πηρῶς Alc.). Another example may be δολή-χος (Hom. +) 'long' < *dolh₁i-gho- vs. ἐνδελχεχῆς (Pl. +) 'perpetual' < *en-delh₁ghes. Cf. Aves. drājah 'length' < *dleh₁ghos-. Of course the great variety of allomorphs occurring before *-gho- makes this example somewhat more uncertain. Examples of this process are also found in Slavic, e.g. OCS ljuto -ese 'terrible thing' < OCS ljut₁ 'terrible', OCS divo -ese 'miracle' < div₁ 'wild'. See Arumaa III, p. 44.
*ǔmos from *uh₁mo-. First, it should be note that ǔmidus etc. is not an exact synonym of ǔvidus.\textsuperscript{34} That which is ǔmidus has some moisture to it, but that which is ǔvidus / ǔdus is permeated with moisture. Thus in Old Latin, at least, ǔmor can refer to the soggy ground of a swamp, e.g. Pacuv. trag. 203 stagnorum umorem.. ǔnectus is applied by Cato Agr. 40.1 to damp places suitable for growing elms, and ǔmidus can mean 'sappy' e.g. Cic. Verr. 1.45 ex lignis viridibus atque umidis 'from green and sappy wood'. This distinction was still felt by Seneca nat. 2,25 cum sint (nubes) umidae, immo udae 'when clouds are moist, nay rather soaked'. On semantic grounds one would therefore prefer to explain ǔligō as a derivative of the family of *ǔmos rather than as a "Sabine" derivative from a pre-form *ug₂id(o)-.\textsuperscript{35} This is further supported by the parallelism *ǔmos: ǔmidus: ǔligō and fūmus 'smoke': fūmidus 'smoky': fūligō 'soot'. Since the formation fūligō has external parallels, (Skt. dhūli- f. 'dust', Mr. dāll 'desire' (for the meaning cf. ὀψίς 'desire, will'), Lith. dūlīs 'mist' < *dhuh₂li-) whereas ǔligō has none, one may suppose that ǔligō was created on the analogy fūmus: fūligō:

\textsuperscript{34}Despite Varro L. L. 5.109, uvidum enim quod humidum "uvidum' is the same as 'humidum'.

\textsuperscript{35}As W-H, II, p.811 do, following Conway, IF, 2, 1892-1893, p. 166.
*uh₁-li*. The reconstructable *ūmos* can, following Pisani, be compared to Lithuanian āmas 'quick', but in East Auks. and Žemait. dialects still with the meaning 'fresh, not dried out'. Since no derivative of the root *yegʰh₁*-*ugʰh₁* could possibly yield Lith. āmas, one is led perforce to reconstruct *uh₁mo-* as the ancestor of both the Latin and Lithuanian forms. Finally, if one accepts that āmidus is a derivative of *uh₁mo-* once can easily explain the unetymological ū of āvidus, without recourse to the theory of hyper-archaism, as a simple contamination with the bedeutungsverwandt āmidus.

To sum up, there are numerous possible scenarios to account for the apparent counter-example of āvidus.

C. Schwebeablauting Roots

6. *h₁eugʰh₁- / h₁yegʰh₁- 'speak solemnly'  

The root *h₁eugʰh₁-*, as is well known, happens to be attested only in the Schwebeablauting form *h₁yogʰh₁- in the languages which establish

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36 This analogy may have worked when there still existed an adjective *fumus* 'smoky' beside *fumus* 'smoke'. This adjective may be inferred from Lith. dūmai 'smoke' AP 1 vs. since its barytone accent suggests that it the result of a nominalizing accent shift. Skt. dhūmā- 'smoke', on the other hand, would then show nominalization without accent shift.

37 V. Pisani 'Rund um Lith. āmas' in FS Knobloch, p. 307, and Fraenkel *LEW*, p. 1162. Cf. also āmiena 'fresh raw meat'.
the final labio-velar: Latin *voveo* 'I vow', Umbr. *vufru* 'votive', *vufetes*
'consecrated'.

D. Absence of root of the shape *Ceugy*-

Another piece of evidence pointing to the validity of this rule is the
common occurrence of velars after *u*, e.g. *leuk*- 'shine' (Skt. *racayati*
'he kindles', Greek λευκός 'bright'), *jugom*yoke' (Skt *yugám*, Grk. ξυγόν),
*heu* *eug*- 'shine' (Alb. *agim* 'dawn', Grk. ἀυγή 'light of the sun'),
*dhugh₂* *tēr* 'daughter' (Skt. *duhitē*, GAves. *dugədō* Grk. ἄνατην).

Examples can be multiplied at will. It is quite possible that some of these
velars were originally labiopelar, though this will probably always remain
unprovable.

38I also find Petersson's suggestion (*PBB* 38, 1912, pp. 322-323) that
OE *wōgian* 'to woo' is from *yōg₂* *heh₂je-* rather plausible. The co-
ocurrence of a verb formed with lengthened *ō* grade root and the suffix -
*eh₂je-* besides an *o* grade iterative with the suffix -*eje-* seen in Latin
*voveo* is paralleled by Grk ποτέομαι 'I fly about' vs. ποτέομαι 'I fly
hither and thither.' Yet his proposal that *g₂* < PIE *gʰ* *h* lost its labiality before
a Germanic *ō*, seems rather unlikely. *h₂* < PIE *k₂* was clearly
retained before *ō*. Cf. e.g. OE *hwōsta*, OHG *huvosta* 'cough' <
*k₂* *eh₃* - Skt. *kēsate* 'he coughs' and with no convincing etymology
Gothic *hvota* 'threat'. Instead, I would suggest that the labio-velar was
regularly lost in, for example, the root aorist *h₁* *eugh*-to (G. Aves.
aogədā, Ep. Greek *cówto*) and in Germanic the delabialized form was
generalized to the entire verbal paradigm. As for the semantics, one might
note the Latin idiom Ov. *Met.* 14.35: *ut tua sim voveo* 'I vow to be
yours'.
There seems to be no serious objection to supposing that PIE \(^*\text{h}_2\text{j}u\text{-}g\text{i}-\text{h}_3\text{-s}\) would have regularly become Late PIE \(^*\text{h}_2\text{j}u\text{-}gl(h_3)\text{-s}\). But \(^*\text{h}_2\text{j}u\text{-}gl(h_3)\text{-s}\) has not survived anywhere entirely intact. In each language where reflexes are attested they have been to some extent renewed.

1. Latin \(l\text{u}g\text{is}\)

In Latin, PIE \(^*\text{h}_2\text{j}u\text{-}gl(h_3)\text{-s}\) would have regularly become \(^*\text{iug}i\text{g}is\) with a short first syllable. There are a number of conceivable explanations for the long vowel. For example, one could assume that \(^*(h_2)\text{j}u\text{-}\) has been replaced at some point in the pre-history of Latin by \(^*(h_2)\text{jeu}\text{-}\) on the basis of the comparative and superlative \(^*(h_2)\text{jeu}\text{-j}\text{ö}s\) and \(^*(h_2)\text{jeu}\text{-ist}\text{o}\)\text{-}\)\text{-}.\text{39}\) It is also possible to imagine that already in PIE the first member of \(^*\text{h}_2\text{j}u\text{-}gl(h_3)\text{-s}\) was replace by a directive \(^*\text{h}_2\text{j}u\text{u}a\text{-}\). \(^*\text{h}_2\text{j}u\text{u}a\text{-}gl(h_3)\text{-s}\) would have yielded \(^*\text{iu}u\text{ag}is\) and then by syncope \(l\text{u}g\text{is}\) (cf. \text{crudus <} \(^*\text{kru}u\text{ido}\text{-}\)). Further scenarios could be imagined.

2. Germanic \(^*\text{ajuki}\text{-}\)

In Germanic \(^*\text{h}_2\text{j}u\text{-}gl(h_3)\text{-}\) would have regularly become \(^*\text{iuki}\text{-}\). One cannot, however, simply say that Germanic has replaced the reduced

\text{39}For evidence that these forms survived into Proto-Italic see the chapter on \(^*\text{h}_2\text{o}j\text{u}\).
compounding form *h₂jū- with a simplex *aju- < *h₂oju-, since intervocalic j was lost in all positions in Proto-Germanic. Instead, As Guðrún Pórhalldóttir has suggested (p.c.), aju- may be from aiwu- with generalization of the pre-vocalic allomorph *aiw-V- < *h₂aaju-V- to all cases including the nominative-accusative. A similar generalization of the pre-vocalic stem form of a -u- stem is responsible for the geminate nasal of ON þunnr, OE þynne 'thin'. Cf. Skt, tanū- 'thin'. *Aiwu- then became *aju- with loss of w before u (cf. Goth. jūgs 'young' < *juwungaz), but this new intervocalic j arose too late for the Proto-Germanic j deletion rule.

3. Avestan yauuaēji-

In the case of Avestan yauuaēji-40 'having eternal life' one may say, descriptively, that the first member of an expected *yu-ji- < *h₂jū-gih₂-s has been replaced by the dative of the noun ᶿiīu, yaoš.41 One may

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40yauuaēji-occurs once in the Yasna Hāptaŋhāiti 39.3 a mešeng yauuaējišiŋ yauuaēsųuŋ ‘immortal, having eternal life, having eternal advantage’ and two more times (Y.4.4., Yt. 19.11) in Y.Av. in passages derived from the YH locus. See Narten YH, p. 260.

41It is clear that yauuaē is synchronically a dative since it occurs repeatedly modified by an unambiguous dative in the phrase Gothic vispāi yauuē ‘for all time’ Y.28.8, 40.2, 41.2 etc. On the other hand, nothing rules out the possibility that yauuaē was originally a directive*h₂jeu-a(i) ‘unto eternity’. The reconstruction of the directive ending as *-ai has no theoretical content. It merely reflects my uncertainty as to whether the correct reconstruction should be *-h₂a(i) or *-ah₂(i)
venture to suppose that the second member of the compound *yu-ʃī-
would have been recognizable as identical with the root -ʃī-, still quite
clearly preserved in e.g., ʃī-ʃī- 'life'. The first member, on the other hand,
would have been difficult to relate to the paradigm of ʔiiu, ʔaoš,
especially since neither the nom. acc. nor the genitive occurs in the
meaning 'eternity', but only in the sense 'life, lifetime'. But the meaning of
the compound clearly called for a first member 'eternal'. Therefore the
compound was renewed by replacing the semi-obscure first member with
dative form ʔauuaē. Since ʔauuaē occurred stereotypically in the
phrase vispāi ʔauuaē 'for all time', it had precisely the right flavor. The
same replacement of the stem of the noun ʔiiu, ʔaoš by the dative is
seen in the abstract ʔauuaētāt- 'eternity'.\footnote{Yauuaētāt survives in Pahl. ja vēdān 'eternally, > Arm. LW yavēt
'immer', yavitean'in Ewigkeit' (Hübschmann, I, p. 198) and Modern
Persian jāvēd 'eternal' (Horn, p. 93). It must therefore be considered
sprachwirklich. I know of no other traces of the compound ʔauuaēʃī- in
other or later branches of Iranian, although the family of *ʔju does
survive, e.g. Oss. aṃbaj 'person of the same age' < *hamāyu-, Sogd.
'yh 'age,' Khoresm. 'y 'life, existence' etc. See Abaev, p. 134. At first
glance one is tempted to compare Khotanese Saka oṣkāṃjsī (where
<js> = /dʒ/) 'eternal' a derivative of oṣku 'always.' <*ʔyuškam.(Bailey,
DKS, p. 49.) But oṣkāṃjsī can have nothing to do with the compound
ʔauuaēʃī-. Proto-Iranian *ʃ before a front vowel regularly becomes KS
ʃ <ʃ /dʒl e.g. juv- 'live' < *ʃiʃ- < *ʃiʃ- and final long and short -i- stems
merge in the so-called -i- declension, the nom. sg. of which ends in <ā>.
In fact, oṣkāṃjsī cannot be separated from a series of temporal}
4. Greek Ἰύγις

The etymological dictionaries, following De Saussure, agree in deriving Greek Ἰύγις 'healthy, sound' from *ḫ₂su-*ḏḥ₂ ḥē, a compound of the adverb *ḫ₂su- 'well' and an -s- stem built to the root *ḏḥ₂.⁴³ The compound is supposed originally to have meant 'having a life which is good'. Yet this etymology is not unproblematical.

First, one may note that the Greek idiom ὑπὸ ζῶσιν which would have to be a descendent of the underlying syntagm from which Ἰύγις was supposedly derived does not mean 'to be healthy' but rather 'to be well-off', 'to live in high fashion'. Consider e.g., Od.19.78-79 = 17.422-3:

ἲσιν δὲ δημώς μέλα μυρίοι, ἐλλα τε πολλὰ /

οἴσιν τ᾽ ὑπὸ ζῶσιν καὶ ἀφυγοὶ καλέονται

There were many thousands of slaves and a lot of other things /

adjectives in -āṃjśī, e.g. padāṃjśī 'first', uṣtamāṃjśī 'future', hatādārāṃjśī 'past', paśāṃjśī 'autumnal', thyaautanāṃjśī 'former', vaysāṃjśī 'present'. In view of these facts it becomes clear that -āṃjśī must be compared to Skt. -āṅc, Aves. -āś, cf. especially AV adharāṅc 'nach unten gewandt, nach Suden', Aves. aśās 'nach hinten, rückwärts gewendet' (W-D II, 2 p. 135). For the voicing of Plt. *č after a nasal, cf. pāṃṣa 'five' < *pañča. The final ū probably comes from *-ika- (Emmerick SGS, p. 314) which perhaps was added too late to have a palatalizing effect.

⁴³Chantraine DELG s.v., Frisk GEW s.v. and de Saussure MSL, 7, 1892, pp. 89-90.
among which they live in high fashion and are considered rich.

and Hom. *H. Apoll. 529-30:

οὗτος τον ψυχόφρονον ἦδε γάρ ἐπήρατος οὐτ' εὐλαξίμων

ὡς τ' ἐπὶ τ' ἑδὶ ζώσειν

Nor is this lovely (land) corn-bearing or well-meadowed /

so that one could live well from it.

and Hom. *H.Aphr. 105-106 where Anchises requests:

δηρὰν ἐν ζώσειν καὶ ὅρᾶν φῶς ἠλλιοιο

ὄλβιον ἐν λαοῖς καὶ γῆρας σύννοι ικέσθαι

to live well for a long time and to see the light of the sun /

and to reach the threshold of old age.

Second, PIE *h₁su- regularly gives Greek εὖ- e.g. εὖ-μετής 'well-disposed' = Skt. su-manəs < PIE *h₁su-menəs 'well-minded'. Although

the failure of the initial laryngeal to vocalize can be justified,⁴⁴ one may

⁴⁴ Peters, *Die Sprache*, 32, 2, 1986, pp. 365-382, has proposed an ingenious and convincing way to eliminate the problematic initial laryngeal in end-accented compounds. One can hardly deny that such a phenomenon did exist. But as an aside, one might quibble with the example ἄκαρπος (EtM) < *h₁p₂-kr₂h₂ós, since the reconstruction with an initial laryngeal is not certain. First of all, even granting the validity of the Benvenistean root structure hypothesis, it is by no means clear that it applies to particles. One might cite such apparent violations as *pe/o 'away' (Hittite pē, Slavic po ), *de 'towards' (Grk. -δὲ, Aves. -da) etc. It is therefore not necessary on theoretical grounds to reconstruct *h₁(e)n. In fact, as Alan Nussbaum has pointed out to me, an initial laryngeal would seem to be ruled out for this word by forms like Vedic jman 'on earth' <
wonder why ὁγιτις alone escaped analogical restoration.

It seems worthwhile then, to explore the possibilities of de Saussure's second proposed explanation of ὁγιτις. No one these days seems to read past the first paragraph of De Saussure's note. If anyone did (s)he would see that de Saussure also suggested that ὁγιτις could be compared with Aves. yavaēfi-. It is not surprising that this suggestion has never been taken seriously, since De Saussure did not spell out the details. One might fill in the gaps as follows:

In Greek, PIE *h₂jµ-gl(h₂)- 'having a life which is with, of vitality' would regularly have become ὁγι-⁴⁵ But it seems that Greek sometimes extended root nouns in the second member of compounds with a hysterokinetic -s- stem suffix -ις and thus *ὁγι- became ὁγιτις. For a parallel to the replacement of a root-noun by a hysterokinetic -s- stem as

*dhghm-en. If *(e)n had begun with a laryngeal one would have expected *kṣaman < *dhghm-h₂,en. See now Helmut Rix's discussion of ἀκαφίς which reaches similar conclusions (N ochmals griech. νησανα/νηβαμα/νανα' KZ, 104, 1991, pp. 193-194).

⁴⁵Initial *h₂j- became /h/ in Greek, as is shown by the example of ὅγιος 'holy' < *h₂jαγ-ιος ~ Skt. yaj- 'worship', but 1 s. perf. mid. ijjē where the long vowel is the result *h₂j-i-h₂g, as Schindler Princeton ECIEC 1986 has shown. Cf. also Peters Sprache,22, 1976, pp. 157-161 on Attic ἐπιμ. What has not been hitherto clear is which initial laryngeals plus j became /h/. If de Saussure's second etymology of ὁγιτις is accepted, it becomes clear that at least *h₂j- became /h/.
the second member of a compound, one may compare the various compounds in ἰφυής, e.g. εὐφυής 'broad-growing (epithet of barley) (Od. 4.604); ὑπερφυής 'monstrous', 'extraordinary' (Hdt.+) ~ Lat. superbus 'haughty'; διφυής 'of a double nature' (Hdt.+). Since there is no Greek simplex *φύος 'being' or any trace of such an -s- stem formation anywhere in PIE, these compounds can only be Greek replacements of PIE compounds with second member in *-bhuh₅s, i.e. the root noun of the root *bhuh₅- 'be', become'. Cf. e.g. Skt. prabhūs 'excellent' < PIE *pro-bhuh₅- and also Latin probus 'excellent in quality' < *pro-bhū₂-o-.

As for the semantic development, 'healthy' seems, to my mind, to be a natural development from an original sense 'having a life which vitality (to it)'. Furthermore, if the original meaning of the compound was 'having a life which is vital', one could understand how the meaning could easily develop to 'vital, young'. And, in fact, this meaning is attested by the Hesychian gloss ὑγία·σῶον τεμένων Κρήτης 'safe; young in Cretan'. The development of this meaning from *h₁su-gʰi₃h₂̣s, although conceivable, seems somewhat more difficult. For these reasons, then, de Saussure's second alternative seems to be preferable to the standardly accepted derivation of ὑγιής from *h₁su-gʰi₃h₂̣s.
Another archaic piece of evidence for the collocation of $h_2\circ e\mu$ and $g^U h_3$- may be found in the famous Cypriot expression ἡλίας κου ζω <u-wa-i-se /za ne>.

The meaning of this expression is not really in doubt. It is to be translated approximately 'forever and ever'. The first member of this phrase was correctly taken by Watkins from $h_2\, j\mu\nu\eta i + *s$.

Since Watkins has not himself given a detailed account of his opinion, it is unclear what exact morphological analysis he is proposing. Presumably, he takes $h_2\, j\mu\nu\eta i$ as the directive of $h_2\circ e\mu$. For the zero-grade root and suffix, one may compare Grk. γῆματ 'to the ground, on the ground' < *dhēγμa-ai.

The -s could be explained as a so-called adverbial -s. More particularly, one might note the frequent occurrence of an added -s in directive adverbs, e.g. Syrac. πάντα 'whither' (Sophron 75), νῆς 'as far as' (SIG, 1, Abu-Simbel). On the other hand, if one chooses to vocalize the final syllabogram <se> as /se/ with a real rather than a dummy vowel,

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46As suggested already by de Saussure in the same MSL article mentioned in note 1..

47An opinion reported O. Masson, BSL, 78/1, 1983. p.277, and Peters, p. 63. This explanation is far more satisfying than all previous attempts to explain u-wa-i-se as a preverb u and some form of $h_2\circ e\mu$ since the evidence for the preverb u in Greek was always shaky, and after Strunk's article 'Kyp. (c)ν für kτι: eine vox nihili?' in FS Risch, it can hardly be considered to exist anymore.

48One might also compare the directive syntax of Attic πασα δι (Aesch. +) 'forever'. 
one might compare the Attic-Ionic adverbial suffix -στ. This too has an appropriate directive meaning. Cf. e.g. ποστ 'whither' (Hom.); ἄλλοστ 'elsewhither' (Hom.+); ἑκτόστ 'thither' (Hom.+).

Yet I cannot follow Watkins in interpreting <za-ne> as γὰρ 'earth' acc. sg. Formally, there is no objection. The spelling <za> for <ga> is well attested on the Idalion bronze. But syntactically and phraseologically, there seem to me to be serious difficulties. Watkins offers the translation 'forever on earth.' Presumably this is based upon the modern English idiom 'never on earth' as in e.g. 'Never on earth have I seen such rudeness!' But the English idiom is not really comparable. 'On earth' seems to me to be a so-called 'negative polarity' item. It cannot occur except under the scope of a negative or a WH-word. The sentence "'Forever on earth I have see such rudeness!' meaning 'I have always seen such rudeness.' sounds to my ear distinctly ungrammatical. Furthermore, even if one grants that such an idiom could exist, one would have to ask how would it be expressed in the case syntax of Ancient Greek? One could expect either a locative dative, or a prepositional

49 It seems clear that <za-ne> cannot be integrated into the surrounding syntax. Strunk attempts to do this, and is forced to assume that <za-ne> is repeated two out of three times (l. 22-23 and l. 28) 'katachrestically'.

50 As in 'What on earth do you mean by that statement?!'
phrase ἐν + dative.\textsuperscript{51} But I fail to see how an accusative <za-ne> could mean anything other than 'throughout the earth' or 'everywhere.' A translation 'forever and everywhere' is clearly not wanted in this context.

One is left then with the old connection of <za-ne> with βίος 'life.' But this connection is somewhat more difficult to justify formally now than it was in pre-laryngeal days.\textsuperscript{52} The problem lies in the set\textsuperscript{1} nature of the root *\textsuperscript{52}g\textsuperscript{2}lh\textsubscript{2}-. One may suppose that Greek inherited besides *\textsuperscript{52}g\textsuperscript{2}lh\textsubscript{os} > βίος, a feminine *\textsuperscript{52}g\textsuperscript{2}lh\textsubscript{2}ēh\textsubscript{2}. Formally, these would be pair of the τόμος 'a slice' ~ τομή 'cutting' type, but since PIE had a tendency to avoid adding a thematic vowel to a sequence -e/oH, the zero-grade of the root was substituted for the expected o-grade.\textsuperscript{53} The existence of such a noun is supported by the Paeanian and Umbrian bia 'fountain' < originally 'the live one' Cf. Note 7.\textsuperscript{54} In most Greek dialects a pre-form *\textsuperscript{52}g\textsuperscript{2}lh\textsubscript{2}ēh\textsubscript{2}

\textsuperscript{51}Also conceivable is a locatival genitive, cf. ἰνα γῆς 'where in the world' (Eurip. Andr. 168).

\textsuperscript{52}Fraenkel, IF 60,2, 1950, pp. 142-144, for example supposed that <za-ne> was from *\textsuperscript{52}g\textsuperscript{2}lm-. Whereas acc. sg. βίον was from *\textsuperscript{52}lm with analogical replacement of a < *e . The problems with this are obvious to all who believe in three distinct vocalic reflexes (e,a,o) of the three laryngeals in Greek.

\textsuperscript{53}A phenomenon pointed out to me by Alan Nussbaum. For example, from *roth\textsubscript{2} 'wheel' (Latin rota) is derived by means of the possessive suffix -o- *roth\textsubscript{2}δ- 'having a wheel > *róth\textsubscript{2}o- 'chariot (Skt. ráthah), not *roth\textsubscript{2}-o-.

\textsuperscript{54}Possibly, also by Grk. βία 'bodily strength', Skt. jiya 'power.' I don't see why these must be from a separate root.
could only give *βιά. Yet it is not clear that this would necessarily have been the outcome in Cypriot. First of all, Cypriot sometimes syncopated sequences of CiłV. For example, *κρί'ια 'heart' seems to become /kordza/ to judge from the Hesychian gloss κρίζα (probably for κρία): κρίζα Πάφιο, 'heart, in Paphian dialect'. Another example may be seen in the Cypriote equivalent of πέδιον 'flat surface', πέσιον. Χωρίον Κύπριοι 'place, in the Cypriote dialect,' if οι is correctly interpreted as another attempt at spelling /dz/. This Cypriot syncope is highly reminiscent of the syncope of CijV- seen in Mycenaean, e.g. ka-ζο 'bronzen' < *kʰalkit-. There seems to be no objection to assuming that these two syncope are in fact one phenomenon dating back to a neighborly relationship between Mycenaean and Arcado-Cyprian. If this is the case, then the syncope of CijV- was before the development of labio-velars to labials, since in Mycenaean syncope is already attested, but the labio-velars are still unchanged. Therefore one would expect that a labio-velar before *i whether of PIE origin or from syncopated *iįV should have the same outcome in Cypriot, i.e. the labial element should be lost and the remaining velar should be palatalized. One would therefore expect *gʰi₃h₂ėh₂ to become *gʰi₄ā > *gʰi₅ā > *gᵢ₆ā > *d₇ā <za>.
It seems then that <za-ne> can be interpreted as the phonologically regular outcome of *gʰd_li âm in Cypriote. Syntactically, the whole phrase ʋfαις(ε) ζαυ can be interpreted as an asyndetic combination.55 ζαυ may be interpreted as an accusative of extent of time, 'throughout life, for a lifetime.' The whole phrase might be translated 'forever and a lifetime.' Compare the English idiom 'forever and a day.' Or 'for a lifetime' might have developed the sense 'forever.' The whole expression might then be translated 'forever and ever.' Cf. the biblical Hebrew idiom le'olam va'ed. 'forever and ever.' In either case the PIE compound *h₂i股权投资 lurks somewhere in the pre-history of the expression.56

55 As has been pointed out by Fraenkel IF 60,2, 1950, pp. 142-144, asyndeton is not uncommon in the Cypriot inscriptions. E.g. ξω σω 'I am alive and safe.' 56 I have been tempted, as was de Saussure, to see a further trace of the collocation of *h₂aιu and *gʰdιh₂ in the Epic adjective τιτησ 'vigorous, in the prime of life.' The meaning is quite appropriate. ζητος could be somehow or other from *-gʰdιγος, but I can think of no convincing way to derive αι- from any form of *h₂aιu. There is simply no easy way to eliminate the *-u-, and a root-noun *h₂ai 'life', though perhaps speciously attractive to Nostraticists, is unsupported by comparative evidence and would be typologically surprising, since none of the acrostatic neuter -u- stems occur beside root-nouns. Nevertheless, I still believe that this etymology of τιτησ may ultimately prove correct. Or could this *ai- somehow be compared to OE átor 'sharp', OHG aivar < *ai-bhro-?
Excursus II: Lengthened-grade preterites to Narten roots in Latin, Tocharian and Albanian

The ə aorist (> Alb. o) is quite common in Albanian. Mann lists 34 examples.¹ Needless to say, many of these are of problematic etymology. It is, however, worthwhile to note that several of these 'aorists' are built to roots with probable Narten characteristics. For example, *mjel, mola 'to milk' corresponds to Ved. márṣṭi 'wipe', PIE *h₂melɡ-; vjedh, vodha 'to steal' is from PIE *yeğh- 'to convey' which to judge from the probable lengthened grade of Skt. váḥas 'Darbringung', the certain lengthened grade of Gothic wēgs 'wave' and the unexpected full-grades of Aves. pf. mid. ptc. ɣaɣazānem was originally a Narten root. (J. Schindler lecture). One could imagine that as the original Narten present was replaced by a simple thematic formation the old imperfect was shunted off into the 'aorst' system. Albanian 'aorists' often seem to derive from PIE imperfects, e.g. prek, aor. prek-a 'touch, concern' = more or less Grk. πρέπω, ἐπρέπον 'am fitting'. Mann, p. 159

In Tocharian B there exists a class of preterites - mostly, but not exclusively, with causative meaning - characterized by the occurrence of a palatalizing ə in the root. For example, the root lāk- 'see' has a preterite

¹Mann, pp. 154-158,
lyška 'he saw' (henceforth = the lyška type). In some cases these TB preterites are clearly matched by TA imperfects e.g. lyška 'he saw' = TA lyšk 'he used to see'. D. Q. Adams has plausibly argued that the palatalizing ō of these forms is the outcome of PTch *ē (≼ PIE *ē) which was lowered when ē followed in the next syllable.² Given the possibility that the lyška type go back to pre-forms with lengthended ē-grade, it is particularly interesting that at least two verbs having lyška type preterite / imperfects clearly belong Narten roots: 1) läk-: TB lyška / TA lyšk itself, which Lane has plausibly compared with Latin lēgī.³ 2) nu-: TB nišwa 'roar' which corresponds to the Skt. Narten present nāuti.

Latin offers a number of parallel cases. Normally, of course, the Latin perfectum derives from the PIE aorist and perfect. But is interesting to note that some Latin lengthened grade perfects belong to roots with clear Narten characteristics. Thus, besides the already discussed lēgī, one may point to 1) (sur)régit in Livius Andronicus, the earliest Latin author apud Paul. Fest. p. 296M which obviously represents the most archaic

³G. Lane, Language, 24, 1948, p. 307. For the semantic connection between 'see' and 'collect', Lane cites Verg. Aen. 6.755: tumulum cepit unde omnis longo ordine posset adversos legere 'He took a position on a hill from where he could see all the enemies in a long line'.
perfect of *rego which was subsequently replaced by the -s- aorist form *rēxi. The Narten character of the root *h₃reǵ- is directly reflected by Ved. rāṣṭi 2) ēdl. The length is usually explained as the result of perfect reduplication. But this root clearly did not have a PIE perfect (there is no Vedic Perfect), and the Narten characteristics of this root are indubitable, e.g. Latin ēst, edim, Lithuanian úodas 'mosquito' AP 3 < *h₁ōdōs 'biter' etc. OCS jamv. 4) 2) sēdl. The Narten character of this root is established by Latin sēdēs 'seat', OIr. sáidim 'fix' < *sōde₂e-, OE. sot n. 'soot' < *sōta² 'that which sits', Lepontic siteš '(Grab-)Stätten' acc. pl. of a root noun *sēd-γs according to Lejeune, Lepontica, pp. 104ff. etc. 3) ēmī. ēmī is usually explained as the result of perfect reduplication, but if this is the case the the short e of Osc. pertemust 'inhibuerit' (Vetter. 2) would have to originated in some other tense - either the aorist or the present. The Narten character of this root is not otherwise established, but Lithuanian does have ēmē with a unexpected lengthened grade. Cf. Stang VGBS, p. 381: '[ēmē] ist der einzige Fall. wo man im Balt. Hochstufenvokalismus im Prt. gegenüber schwundstufige Präsens findet'. Slavic has clear traces of an original athematic preterite in

4Jay Jasanoff also suggests that the perfect of Germanic *etana "to eat", i.e. *ēt- (Gothic fr-et, English ate etc.) was originally the imperfect of the Narten present *h₁ēd-mi.
2,3 s. jēt- 'you, he took'. On (co)-ēpī see above note 2.

Given this correlation between lengthened grade perfects and Narten roots, it seems worthwhile to explore the hypothesis that these lengthened grade perfects originated as the imperfects of Narten presents. One could assume that when the athermatic Narten presents were replaced by simple thematic presents the Narten ablaut was maintained in the somewhat marginal category of the old PIE imperfect. With the development of a new periphrastic imperfect these form were shunted of into the perfectum system since they were sufficiently distinct from the innovated stem of the infectum.
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