



HAL
open science

What is Old is New again: PIE Secondary Roots with Fossilised Preverbs

Romain Garnier, Philippe Hattat, Benoît Sagot

► **To cite this version:**

Romain Garnier, Philippe Hattat, Benoît Sagot. What is Old is New again: PIE Secondary Roots with Fossilised Preverbs. 2019. hal-04631151

HAL Id: hal-04631151

<https://hal.science/hal-04631151>

Submitted on 1 Jul 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



What is Old is New again: PIE Secondary Roots with Fossilised Preverbs

Romain Garnier (Université de Limoges)
Philippe Hattat (Independent researcher)
Benoît Sagot (Inria)

Leiden — 29th May 2019

Introduction

- Prefixal productivity
 - Attested in all Indo-European languages
 - Reconstructed in the proto-languages of all major IE languages families
 - Plays a key role for understanding the origin of many non-primary verbal roots in all these languages
- Only a handful of etymons involving prefixation have been reconstructed at the PIE level
- A systematic study of this word formation process in PIE remains to be carried out
 - It could result in a better understanding of the origin of a number of PIE roots
 - especially complex roots with a limited attestation
 - It could help explain attested words in daughter languages that need a convincing etymology

Starting point

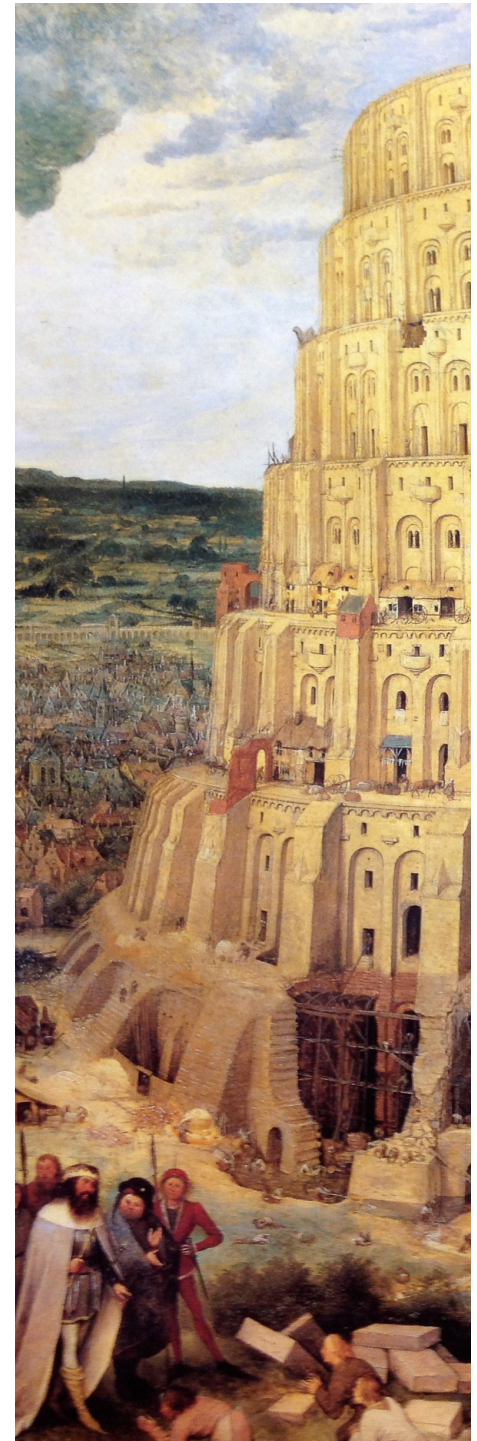
- We want to show how a better understanding of the role of prefixes in (secondary) verbal root formation can result in new etymological insights
- Such analyses have already been proposed for several examples
 - with the compensatory lengthening $*Ce=HC-$ > $*C\bar{V}C-$, Weiss (1993) analyses Lat. *pālārī* ‘to wander’ as reflecting $*pe=h_2lh_2-ó-$ > $*pālH-āje/o-$
 - Arm. *p’law* < $*p’ulaw$ < $*pōlH-to$ based on $*pe=h_3lh_1-$, as also P.-Germ. $*fall-an-$ ‘to fall’ < $*pǒlle/o-$ (with Osthoff’s shortening) < $*pōlle/o-$ < $*pōlH-é/ó-$ (Praust 2005; Neri 2007; Kroonen 2013: 125–6; Dunkel 2014 II: 82)
 - PIE $*pro=h_1ed-$ ‘to devour’ > P.-Germ. $*fr(a)-et-an-$, (Scheungraber 2016: §4)
 - PIE $*kom=pro=h_1ŋk-$ ‘to bring’ > P.-Germ. $*brenġ-an-$ (Kroonen 2013: 77)
 - PIE $*°ko^m=h_1ep-$ ‘to give’ > P.-Germ. $*geb-an-$ (Kortlandt 1992) and $*pe=h_2rk^{(‘)}-$ > Lat. *parcō* (Weiss 1993; cf. Hitt. *pē=ḫark-* ‘to hold off’).

Outline of the talk

1. “Fossilised” preverbation with well attested primary roots
2. “Fossilised” preverbation with unattested primary roots
3. Reanalyses
4. Denominative verbs

Conclusion

1. “Fossilised”
preverbation with well
attested primary roots



PIE **drep-* ‘to pluck’ (Gr. δρέπω ‘id.’) (1/2)

Ultimately from **dōr-p-s* > **drōp-s*, hence *°*drép-s* as 2nd member of a compound

- **ko=drep-* ‘to pick, pluck’ (compound **ko=drép-s*) // Gr. κλώψ vs. βοῦκλεψ
- **ko=h₁rep-* (Kortlandt effect) cf. Hom. ἐρέπτομαι* (< **h₁rep-* < PIE **V.drep-*)
 - **ni=sdó*-class **ko=h₁rp-ó-* /κοῖαρπό-/ ‘plucking’ > Post-IE **korp-ó-* (P-Germ. **charbā-* > Oic. *harfr* [m.], *herfi* [n.] ‘harrow’).
 - OHG *herbist*, OE *hærfest* ‘autumn’ < *‘best time for reaping’ (< **charb-ista-*).
 - Lith. *kerpù*, *kĩrpti* ‘to chop, cut’, from *o*-grade **kaĩpas*
 - Latv. *cĩrpt* ‘to shave’, OCS *počřěti* ‘to scoop, draw’
 - Hit. *karp(ije/a)-zi* ‘to take (away), lift, pluck’
- “new” zero grade **káh₁rp-je/o-* /κάῖαρπ-/ > **kárp-je/o-*
 - P.-It. **kárp-je/o-* ‘to pluck, gather’ (de Vaan (2008:95) “Latin -a- is problematic”)
 - sound change PIE **ke-* > Lat. *ca-* with a *Reinvelar* (Schrijver 1991:429f.), Latin *-ar-* < PIE **k₁rp-* in front of another consonant (Schrijver 1991:495f.)
// Phonetics: PIE **ket-* ‘be angry’ (Gr. κοτέω; P.-Celt. **katu-* ‘battle’ < PIE **kát-ú-* ‘fury’)
 - Gr. καρπός m. ‘fruit’ (Van Beek, Diss.:37f.) ± Mys. *ka-po-e-[ra-]wa* (rather **kāpos* ‘plantation’)

Excursus: other possible PIE compounds in **ko-*

- PIE **ko=h₁rb^h-ó-* → **kə=h₁rb^h-ó-* [adj.] ‘darkened’ (P.-It. **karβo-* [adj.] ‘dark’)
 - Lat. *carbō, -ōnis* [m.] ‘coal’; Dialectal PN *Carfānius* vs. “stadtrömisch” *Carbōnius*
 - Base-Root: PIE **h₁erb^h-* ‘to be red brown’ (Kölligan 2016)
- PIE **ko=H₁rd-ón-* → **kə=H₁rd-ón-* [adj.] ‘rotating’ (P.-It. **kard-on-* > Lat. *cardō, -inis* [m.] ‘pivot, axe’)
 - de Vaan (2008:92) tentatively compares Gr. *κόρδαξ* [m.] ‘a licentious dance’, which may reflect **ko=H₁rd-éh₂* [f.] ‘action of shaking’ (secondary derivative **kord-ā-k-*)
 - PIE **Herd-* (LIV²:223 ‘in Schwanken geraten’, Ved. causative *ardáyat* RV 1.187.2 ‘shook’)
- PIE **ko=h₂p-éh₂* ‘seizing firmly’ > Gr. *κώπη* [f.] ‘grip’ (**koh₂p-éh₂* → present **kh₂p-je/o-*)
- PIE **ko=g^hr-/*kə=g^hr-* > “pseudo-root” **kog^h-/*kag^h-* ‘to enclose’
 - via reanalysis of **ko=g^hr-ó-* [adj.] ‘enclosing’/collective stem **kə=g^hr-éh₂* ‘enclosure’ as **kog^h-ró-/*kag^h-réh₂* from a root **kog^h-/*kag^h-*
 - → P.-Sab. **√kaχ-* ‘to enclose’ > Oscan **kahad** ‘takes’ (de Vaan, 1999:5), cf. Lat. *cohors* < PIE **kó=g^hr-ti-* [f.] ‘enclosure’
 - P.-Celt. **kagro-* [m.] ‘enclosure’ > W *caer* ‘town’ MBret. *ker* ‘town, house’ (Matasović 2009:184). Crossing between **kagro-* and **kagrā-*. Reanalysis as **kag-ro-*
 - Permutation of suffixes: P.-Celt. **kag-yo-* ‘enclosure’, P.-Germ. **χag-ja-* and **χag-an-* ‘id.’ (Kroonen 2013:198)

PIE **drep-* ‘to pluck’ (Gr. δρέπω ‘id.’) (2/2)

- **se=drep-* ‘to prune’ (compound **se=drép-s* ‘pruner, sickle’)
- **se=h₁rép-* (Kortlandt’s effect)
 - Cf. Lat. *solūtus* < PIE **se=luH-to-* ‘loosen’ (with velar *l*)
- **se=h₁₆rp-éh₂* > **serp-éh₂* > P.-Celt. **serrā* [f.] ‘sickle’ (Mlr. *serr*, OW *serr*) (Matasović 2009:330–1)
- **sáh₁₆rp-je/o-* /*sáʔarp-*/ (cf. *Sab-īnī* < P.-It. **saβ-* < PIE **sab^h-*)
 - Lat. *sarp(i)ō*, *-ere* ‘to prune (a vine)’, *sarmentum* [n.] ‘cut twigs, brushwood’ (Pl.+)
 - Gr. ἄρπη [f.] ‘sickle’, Latv. *sirpis*, OCS *srъpъ*, Ru. *serpъ* ‘sickle’
 - According to de Vaan (2008:540), “The *-a-* in the verb may stem from preconsonantal position” (cf. ppp *sarptus* ‘pruned’ < PIE **sṛp-tó-*) “or be analogical to *sarriō*.”
 - According to Van Beek (2013:288), “ἄρπη ‘sickle’ contains the regular, unrestored vocalization of **ʔ* in Ionic-Attic”

PIE *d^heh₁- ‘to put’

- *s_ue=d^héh₁- [f.] ‘status of being on his own’
 - → *s_ue=d^hh₁-és [loc.] ‘being on his own’
 - → *s_ué=d^hh₁-e/os- [n.] (Gr. ἔθος [n.] ‘custom’)
 - // *_ue=séd- [f.] ‘reserved place, ritual place (for gods), altar’
 - → *_ue=sd-és [loc.] ‘at the altar’ → *_ue=sd-és- (Av. *vazdah-*, Ved. *vedhás-* ‘expert [in ritual]’)
 - Cf. Ved. *védi-* [f.] ‘altar’ (Pinault 2017:104, fn. 63)
- *h₁u_i=d^hh₁-ú- [adj.] ‘apart, separated’ (P.-Germ. **widu-* ‘forest’)
- *me=d^hh₁-ú- [adj.] ‘put between, mixed with’ (whence “nuclear” IE **méd^h-u-* [n.] ‘hydromel’)
- *en=d^hh₁-ú- [adj.] ‘put inside’ (Lat. *imbūtus* ‘infectus’ < **en=d^huh₁-to-*, cf. Weiss 2010:198)
 - → Post-IE **en=d^hu-kó-*, Pre-P.-Germ. **d^huk-nã-* > P.-Germ. **dukkō-/dugan-* ‘to duck’, whence a strong verb **dūkan-* ‘to duck, dive’ (Kroonen 2013:107)
 - → Post-IE **en=d^hu-b^h-ó-*, whence a Pre-P.-Germ. causative *(*en=*)*d^hub^h-nã-* [adj.] ‘deep’, **duppō-/dubō-* ‘to dip’ (Kroonen 2013:109), on which a strong verb **dūban-* ‘to dive’ was built (Kroonen 2013:105–6)

PIE $*g^u e h_2-$ ‘to make a step’

- $*ni=g^u h_2-ú-$ [adj.] ‘going down’ (Kölligan, 2008:139): Ved. *nigút-* m. ‘foe’ adj. $*ni-g-ú-$ ‘lurking’, whence ‘evildoer, foe’
 - PIE root $*neǵh_2-$ ‘to wash’ (νίζω, νίπτω) may rely on a univerbation (cf. Ved. *né-nek-ti* [intensive] ‘to wash’ < $*to$ plunge repeatedly’)
 - P.-Germ. $*nik-wōz$, $*nik-was-un$, $*nik-uz-ez$ [m.] ‘water monster’
< PIE $*ni=g^u h_2-ǵós$, $*ni=g^u h_2-ǵós-m_ǵ$, $*ni=g^u h_2-us-és$.
Secondary derivative $*nik-wás-jō$ ‘female water spirit’, MoG. *Nixe* (Kroonen 2013:390).
 - // Gr. $*κατα-βύς$ [adj.] ‘deep’ → adv. $*κατάβυθι$ ‘at the bottom’ (type ἔγγυθι [adv.] ‘close’), denom. $καταβυθίζω$ → back-form. βύθος [n.].
(Phonetics: P.-Gr. $*-γύς/*-γῶρες > -βεῖς$ → $-βύς$ by analogical refection)
 - $*ko=nig^u-n-éu-$ ‘to make go down’ (// Hitt. *tep-n-u-zi* ‘to diminish’ vs. *tēpu-* ‘little’) Kloekhorst (2008:869)
 - “new” zero grade $*k=nig^u-néu-/*-nu-$ > P.-Germ. $*χnikkeu-$, infinitive $*χnig^u-an-$
 - → causative $*χnaig-jan-$ ‘to humble’ (< $*χnaig^w-jan-$) with regular delabialisation (Kroonen 2013: 233) vs. strong present $*χneiw-an-$ (Go. *hneiwān* ‘to bow’) (< $*χneig^w-an-$)
 - Cf. also PIE $*ni=b^h h_2-ó-$ [adj.] ‘inferior’ → Pre-P.-Germ. $*k(o)=nib^h-nu-$ ‘to be downcast’ > P.-Germ. $*χnippō-$ [intr.], whence $*χnipō-$ ‘to be downcast’ (Kroonen 2013:135) (cf. Lith. *knìb-ti* ‘to collapse, sink down’) > “European” root $*kneib^h-$ of anomalous structure

PIE $*g^ueh_2-$ ‘to make a step’

- **$*be=g^uh_2-ú-$ [adj.] ‘going away’** (‘loslaufen’ Dunkel 2014 II:118)
 - PIE $*ob^hó-$, loc. $*b^he(r)$ [distal] ‘far, away’ (OLat. *-ber*, Av. *bairišta-*, Hom. φέριστος)
 - The name for ‘birch’ $*b^he-h_2rǵ-ó-$ ‘far-shining’
 - $> *b^ha(H)rǵ-ó- > *b^harg-ó-$ (Lat. **fargus, farnus*), Alb. *bardhë* $< *b^harg-ó-$ ‘bright’
 - Zero-grade $*b^hah_2rǵ-ó- \rightarrow *b^hrh_2ǵ-ó-$ with sonorant metathesis (Garnier & Sagot forthcoming), reflected by Skr. *bhūrjā-*
 - \rightarrow “new” full-grade $*b^herh_2ǵ-ó-$ (P.-Sl. **bèrza* [f.], SCr. *brèza* cf. Derksen 2008:38)
- **Collocation $*h_2éh_1=*g^uh_2-m-én > *h_2éh_1=*g^u(h_2)-m-én$ [adv.] ‘walking towards, arriving’**
 - Built on $*g^uéh_2-om-$ [AK] ‘walk’, locative 1 $*g^uh_2-ém(i)$, locative 2 $*g^uh_2-m-én$ ‘by foot, walking’
 - \rightarrow external derivation $*h_2éh_1-g^u-m-en-t-$ ‘arrived’ (Ved. *ã-gm-ant-*)
 - \rightarrow internal derivation $*h_2éh_1-g^u-m-on-$ ‘arrived’ \pm P.Germ. **at-k^wum-ōn*, **at-k^wum-an-un* ‘advena’ [with restoration of **at=*]
 - Fossilised distribution PIE $*h_2éd.V: *h_2éh_1.C$ (Garnier 2014:144-8) (cf. OE *cuma, cuman* ‘guest, Ankömmling’)

PIE $*h_1eu_2-$ ‘to see’

- Hitt. $\bar{u}h_2hi$, u_2anzi < $*h_1\acute{o}u_2-h_2ej_2$, $*h_1u_2\acute{e}nti$
 - *o*-grade present $u-u_2h_2hi$, $a-ut-ti$, $a-u\check{s}-zi$ (Kümmel, 2010:101)
- **$*pro=h_1u_2-ís$ [adv.] and $*pro=h_1u_2-ó-$ [adj.] ‘looking forward, previous, early’**
 - Gr. $*\pi\rho\omega\acute{\iota}(\sigma)\text{-}\tau\epsilon\rho\omicron\nu$ ‘earlier’, Gr. $\pi\rho\omega\acute{\iota}$ ‘early’, OCS $prav\check{z}$ (Le Feuvre 2010)
[ultimately from PIE $*pro=du_2-ís$ > $*pro=h_1u_2-ís$] (cf. Lat. *dis-cernere*)
- **$*h_2o=h_1u_2-ís$ [adv.]** Ved. $\bar{a}n\acute{i}ṣ$ [adv.] ‘evidently’
- **$*ko=h_1ú-t-$ [adj.]** ‘watching continuously, observing’ (the ritual)
 - action noun $*ka=h_1u-ti-$ [f.] > $*kuh_1-tí-$ (Ved. $\check{a}-k\bar{u}-ti-$)
 - Iterative $*kou_2h_1-éj-e/o-$ (Lat. *cauēre*); Gr. $\theta\upsilon\omicron\sigma\kappa\acute{o}(\phi)\omicron\varsigma$; Lyd. *kawés* ‘priest’

PIE $*h_2eh_1$ - ‘to be hot’

- Pal. $hāri$ < PIE $*h_2éh_1-ori$
- **$*de=h_2(h_1)-ú$ - ‘ignited’**
 - pres. $*déh_2-u$ - (Gr. δαίω ‘to kindle’)
 - $*duh_2-nó$ - (Ved. [AV+] $dū-ná$ -),
 - **$*duh_2-ént$ -, $*duh_2-ŋt-ós$**
 - Proto-Germ. $*tuwund̥$ - > $*tund$ - (→ $*tund-ija$ - ‘zünden, to kindle’)
- **$*ko=h_2(h_1)-ú$ - ‘ignited’**
 - pres. $*kéh_2-u$ - (Gr. καίω ‘to kindle’), cf. Lith. $kūléti$ ‘to be burning’
- **$*pe=h_2(h_1)-ú$ - ‘id.’**
 - $*pe=h_2(h_1)-u-ér/-én$ ‘in flames’ → nom./acc. $*pé=h_2(h_1)-u-ŋ$ nt. ‘fire’

PIE **keh₃-* ‘to sharpen’ (1/2)

- Ved. *śísāti* < PIE **ki-kéh₃-ti*
- ****h₂é=keh₃-* ‘to sharpen with a whet-stone’**
 - compound **h₂e=kéh₃-* ‘sharpening’, **h₂e=k(h₃)-s-én* [loc.] ‘with sharpness’
 - → “new” root **h₂ék-* ‘to be sharp’; **h₂ék-mṇ* [n.] ‘(sharpening) groove’
 - → collective stem **h₂ék-mōn* (< PIE **-monn#* < **-mon-h₂#*) ‘grooves, *polissoir*’



Grooves in a fan-shaped pattern and with one crossing, Gotland, Sweden

PIE **keh₃-* ‘to sharpen’ (2/2)

- **h₂e=ǵ(h₃)-ú-* ‘sharpened’, with regular voicing (P.-Germ. **akus-/*akwezī* [f.] ‘axe’)
- > **h₂eǵ-ú-* adj. ‘sharp’/**h₂eǵ-ǵ* nt. ‘weapon’ (cf. P.-Celt. **agro-* ‘carnage, battle’ < **agrāye/o-*)
 - → *2*h₂eǵ-* ‘to sting, to ache’ (PIE **h₂oǵ-í-* [f.] ‘ache’, P.-Germ. **aki-*, Av. *āzi-*)
 - **pe=h₂ǵ-ú-* [adj.] ‘fixed’/**pe=h₂ǵ-ró-* > **pa(h₂)ǵ-ró-* > Ved. *pajrá-* ‘solid’ (Lubotsky 1981:133)
 - **ue=h₂ǵ-ú-* [adj.] ‘splitting’/**ue=h₂ǵ-ró-* > **ua(h₂)ǵ-ró-* > Ved. *vájra-* ‘Indra’s thunderbolt’ (Lubotsky 1981:135); (Hitt. *wāki* ‘ab-beißen’)
- **ṛd^hi=h₂ǵ-ú-* [adj.] ‘fixed (in the ground)’
 - → reanalysis as **ṛ=d^hih₂ǵ-ú-* ‘fixed (in)’ [of a pole] → “new” base-form **d^hih₂ǵ-ú-* [adj.] ‘fixed (in the ground)’ → characterising suffix: **d^hih₂ǵ-ṛ-ón-* [m.] ‘post’ (‘the one fixed in the ground’)
 - Lat. **fīuō* ‘post’, abl. pl. *fīnibus* ‘confines, boundaries’ (< **fīuin-ibus*); pace de Vaan (2008:222, s.v. *fīnis*), not an *i*-stem: note abl. *fīne*!
 - Lith. *díegti* ‘to plant’ (full grade + velar), Lith. *díežti* and *dýžti* ‘to beat, flog’, colloquial for Derksen (2015:134)
 - Back-formation *díegti* from *díežti/dýžti* with restoration of the velar, following the pattern of “expressive doublets” of the kind Lith. *gnáibyti* vs. *žnáibyti/žnýbti* ‘to pinch’ (Stang 1966:93)

PIE **leh₁-* ‘to let’

- Hitt. GA *lāttat* “he let the milk flow” = “he milked” (KBo 3.8 III 30-31)
- ****pe=leh₁-* ‘to let go, to let flow’**
 - **pe=lh₁-ú-* [adj.] ‘abundans’ → **pélh₁-u-*, **p̥lh₁-éu-* [PK adj.] ‘many’
 - **pélh₁-m̥n̥* [n.] ‘abundantia’ → **p̥lh₁-(m)n-ó-* ‘plēnus’ (Ved. *pūrṇá-*, P.-Germ. **fulna^z*)
 - // **még-h₂-m̥n̥* [n.] → **m̥g-h₂-(m)n-ó-*; **plét-h₂-m̥n̥* [n.] → **p̥lt-h₂-(m)n-ó-*
 - Simplification **-C.mn-* > **-C.n-* (Pinault 2014:198–9)

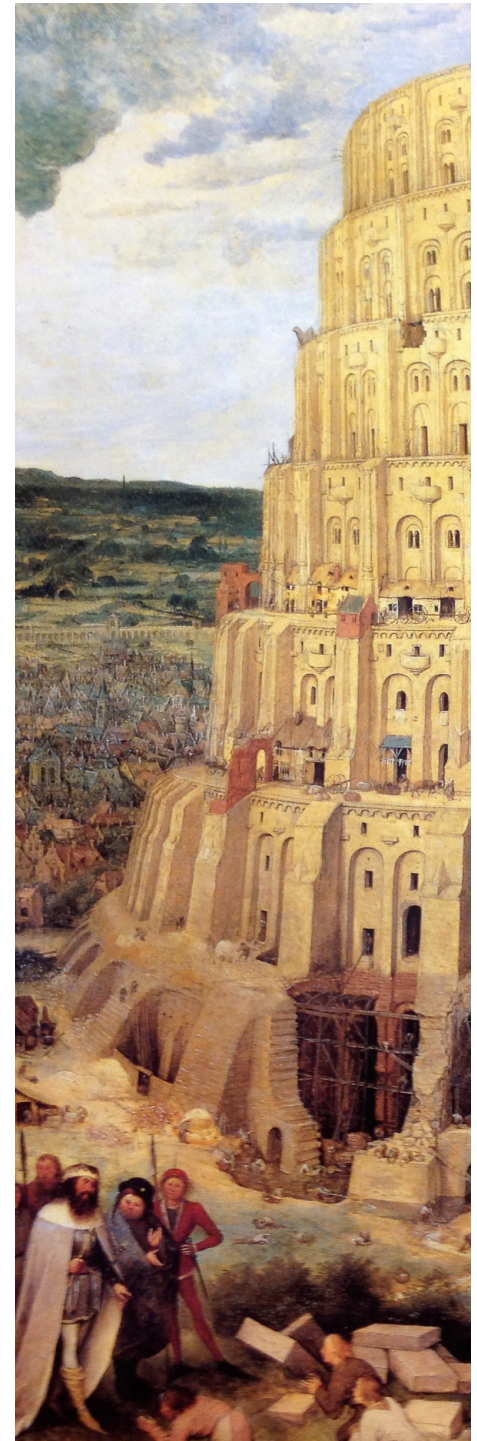
PIE *g^heh₁- ‘to go’ (1/2)

- ***dlom=g^hh₁-ó-** ‘going far’ (PIE ***dléh₁-om-** [AK f.] ‘distance’)
- ***kom=g^hh₁-ó-** ‘going bravely’ with “intensive” ***kom-**
 - P.-Germ. ***fra=ganga-** (virtual ***pro=kom=g^hh₁-ó-**). Non ablauting *vgang-*
 - P.-Germ. ***χanga-** ‘trot’ → ***χang-ista-** [m.] ‘stallion’ (MoG. *Hengst*)
 - // P.-Celt. ***keng-e/o-** ‘to go (bravely)’ → agent noun ***keng-eto-** [m.] ‘warrior’
 - MW *ry.gyng* ‘amble’ (< P.-Celt. ***φro-kong-o-** [m.], gen. sgl. ***-ī**)
 - Zero grade ***kang-** in ***kanχ-smān** [n.] ‘way, path’; ***kanχ-sto-** [m.] ‘trotter’ reflected by a secondary derivative ***kanχst-ikā** [f.] ‘she belonging to the stallion’ (OBret. *casec* ‘equa’)
 - Possibility of a Germanic loanword at a very early stage (Matasović 2009:200)

PIE *g^heh₁- ‘to go’ (2/2)

- **Compound *g^hh₂-om=g^hh₁-ó- ‘striding’** (PIE *g^héh₂-om- [AK f.] ‘gap; stride’)
 - (// Lat. *passus*, -ūs [m.] ‘step; pace’ from *pateō* ‘to gape’, *pandō* ‘to spread’)
 - Lith. *žengiù*, *žeñgti* ‘to walk’, *pažangà* [f.] ‘stride’, *žangùs* [adj.] ‘fleet-footed, quick, swift’
<< *g^hh₂-om=g^hh₁-ó- ‘striding’
 - I.-Ir. *j^hamg^h-á- [adj.] ‘striding; spreading’ → *j^hamg^h-ā [f.] ‘jarret, shank’ (of the ankle or the knee)
 - Ved. *jáṅghā* [f.] ‘shank’ (RV 1, 116, 15c – to the Aśvins),
carítram hí vér ivāchedi parṇám ājā khelásya páritakmyāyām |
sadyó jáṅghām āyasīm viśpālāyai dhāne hité sártave práty adhattam ||
“Because her foot was cut away like the wing of a bird, in the contest of Khela, at the decisive turn, right away you [dual] inserted a metal shank (*jáṅghām āyasīm*) for Viśpalā to run, when the stake had been set.”
(Transl. Jamison & Brereton 2014:270)
 - Skr. *jaṅghā-kara-* [adj.] ‘active with the shank, running quickly; [m.] runner, courier’
 - Pāṇ. iii, 2, 21 // *divā-kará-* ‘sun’ (not ‘day-maker’, but rather from PIE *^ok^uolh₁-ó-); AV. *zanga-* ‘ankle’
(< I.-Ir. *j^hámg^h-a- [m.] ‘id.’)
 - Note that PIE *g^héh₂-om- [AK f.] ‘gap; gaping mouth’ (cf. Gr. χάσμα [n.]), loc. *g^hh₂-ém(i) could be reflected by P.-It. *χami > Lat. *famě [dial.], on which was built a secondary derivative *famēlis, extended in *famēlicus* ‘starving’ (Plaut.+), starting point of a stem *famē-: nom. *famēs*, abl. *famē*, later *famě* with iambic shortening (cf. de Vaan, 2008:200; a bit differently, Vine 2012: §101 poses PIE *g^héh₂-u-ōm ‘gap’)

2. “Fossilised” preverbation with unattested primary roots



PIE **ked-/ *keh₁-* (<**ked.C*) ‘shake, stir, move’ (1/3)

- ****sked-* ‘scatter, shatter, disperse’**
 - LIV² 550-1 **(s)kedh₂-* ‘zersplittern, zerstreuen’
 - present **(s)k^əd-néh₂-ti*
 - Gr. σκίδναμαι ~ σκίδνημι and σκεδάννυμι ‘scatter, disperse, burst’
 - Toch. A *knāṣ* ‘scatters’, B *kātnā-* ‘scatter; sew’
 - Germ. iterative formation **skattōn-* ~ **skadōn-* (with Kluge’s law) and with secondary zero-grade **skut(t)ōn-* ww. ‘to rush, to shoot’ >> new strong verb **skeutan* ‘to shoot, to dash’ (Kroonen 2013:445)
 - adj. **skod-ró-* (Eng. *scatter* and *shatter* < **skatrōjan-* ?; Latv. *skadrs* ‘easy to split’)
 - → ****dis=ked-* ‘disperse by shaking’**; // Lat. *dis-sīpārē* ~ *dis-sūpārē* ‘dissipate, disperse’ < *dis=* + **sup-* (< **seyp-* ~ **sɣep-* ‘shake, swing’).

PIE **ked-/ *keh₁-* (<**ked.C*) ‘shake, stir, move’ (2/3)

- **Formations with Kortlandt effect**

- LIV² 551 **skeHt-* ‘hervorspringen’: Lat. *scātō*, *-ērē* and *scātēō*, *-ērē* ‘spring, gush’, Lith. *skantù skàsti* ‘jump’; also Arm. *c’ayem* ‘rinse’ — not **sket-* as per Schrijver (1991:432) and de Vaan (2008:543)
 - adj. **skh₁-tó-* < **skd-tó-*; Arm. requires **skh₁-tí-* ‘spray, sprinkle’; → **ud-s=ked-* ‘move upwards, move outwards’
- **keh₁-u-*, adj. **kuh₁-tó-* ‘stirred, shaken’ > *√*keuh₁-* ~ **kueh₁-* (Garnier 2017:67–8)
 - iterative **(s)kuh₁-teh₂-ié/ó-* ‘shake, hurry’
 - coll. **kuh₁-éh₂* ‘shock, jolt’ > **(s)kuh₁-eh₂-ié/ó-* ‘shake’: Gr. **έπι-κ^w-ᾶω* (dor. *έπιτιῆν* ‘shake’, Hom. *έπιπάσσω* ‘scatter, sprinkle’)
 - secondary formation **k^wā-ti-* f. ‘threshing’ in P.-Celt. (**k^wā-ti-* ‘chaff, husk’, Matasović 2009:175) and Ital. (Lat. *quātiō* ‘shake, throw, hurry’)
- **keh₁-i-*, adj. **kih₁-tó-* ‘stirred, shaken, moved’ > *√*keih₁-* ‘shake; move’
 - Gr. *κινέω* ‘move, set in movement, stir up’ and *κίω* ‘set in movement’
 - coll. **kih₁-éh₂* ‘shake’ > Gr. **δια-κ^w-ᾶω*: Att. *διαττάω* ‘strain, sieve’, Ion. 3.pl. *σῶσι*; also *σήθω* ‘sieve’
 - Hitt. *kināe-zi* ‘strain, separate’ is a denominative (Kloekhorst 2008:477), but from **kih₁-no-*
 - Gr. **κᾶ-λός* ‘shaken’ > *σάλος* ‘turbulent movement of the sea’ and *σάλαξ* ‘large sieve’, etc. → not a substrate word!

PIE **ked-/*keh₁-* (<**ked.C*) ‘shake, stir, move’ (3/3)

- **Formation with “fossilised” preverb:** **ni=keh₁-* ‘to make fall by shaking’ > ‘to winnow’
 - P.-Celt. **nixto-* ‘winnow’ and **uφo-nixto-* ‘winnowed’ > ‘wheat’ (Matasović 2009:291)
 - Lith. *niekóti* ‘winnow’
 - Greek: complex case! Zero-grade verb **ni=kh₁-e/o-* whence a “pseudo root” **nik-*
 - derivative **ni=k-mōn*, inherited denominative verb **ni=k-(m)n-eh₂-jé/ó-*
 - Gr. **νίκμων* [m.] ‘fan, winnowing-shovel’
 - archaic denominative **νικνάω* ‘to winnow’ (cf. Gr. *γεννάω* < **(m)n-eh₂-jé/ó-*) which dissimilates in **λικν-* (*λίκνον* ‘van’) or **νικλ-* (*νίκλον· τὸ λίκνον*)
 - on **νίκμων*, “regular” denominative **νικμαίνω*, and secondarily (with suffix permutation *-άω/-αίνω*) **νικμάω* ‘winnow’; crossed with **λικν-* > *λικμάω* ‘winnow; disperse, destroy’
 - variant without initial consonant *ικμᾶν· λικμᾶν, σῆτον καθαίρειν* (by haplology of *άνανικμώμενα* > *άνικμώμενα* ‘winnowed’)
 - secondary variant without suffix: *νικᾶ· λικμᾶ*

PIE $*k^ueh_1$ - ‘to appear; (with preverbs) to perceive’)

- Lipp (LIV²:377) reconstructs a root $*k^uej$ - with an acrostatic present $*k^uej$ - (Ved. *cāyati* ‘perceives’)
- Problem 1: “Narten-presents” are rather athematic
- Problem 2: As pointed out by Derksen (2008:78), the acute intonation of P.-Sl. $*čàjati$ ‘to expect’ (SCr. *čàjati* ‘to wait’) reflects a laryngeal.
 - Consequently, we must assume a PIE present $*k^ueh_1-j-e/o$ - ‘to observe’ (Ved. *ápācāyati* ‘to respect highly, esteem, honour’)
- Gr. *τηρός* m. ‘guardian’ is possibly a back-formation of *τηρέω* (Beekes 2010:1480)
- **$*se=k^uh_1$ - ‘to see’**
- **$*de=k^uh_1$ - ‘to appear’**, heteroclitic locative stem $*de=k^u(h_1)-s-én$
- **$*h_2o=k^uh_1$ - ‘to appear’**, heteroclitic locative stem $*h_2o=k^u(h_1)-s-én$
- I.-Ir. $*pratijakšan$, $*abhijakšan$ → $*vijakš$ - ‘to appear’ (“nur indoiranisch” LIV²:312)

PIE **leh₂-* ‘to cut (stones)’ (Nikolaev 2010)

- **kó=lh₂-e/o-* ‘to beat’ (Lith. *kalù, kálti*) LIV²:350
- **de=lh₂-e/o-* ‘to split’ (Lat. *dolēre* is a *ē*-stative from P.-It. **dolo-* ‘cut, pain’); Lith. *dalìs* ‘portion’
- **pé=lh₂-e/o-* ‘to remove the flesh from the skin with a racloir, to scrap the skin’
 - **pe=lh₂=mṇ* [n.] ‘scraping’ > **pel(h₂)-mn-í-*
 - According to van Beek (2011), Gr. *στέρνον* [n.] ‘chest’ < PIE **stér(h₃)-no-* shows that the loss of the laryngeal is directly triggered by the phonetic environment **-VLHNV-* (where **L* stands for **l* or **r* and **N* for **n* or **m*).
 - → **pel-(m)n-í-* > Lat. *pellis* [f.] ‘skin’ (P.-Germ. **fella-* ‘skin’)
- **ṷe/o=leh₂-ti* **ṷe/o=lh₂-enti* ‘to tear apart (the wool)’, Lat. *uellere*
 - (// PIE **ṷe/o=tkʷ-* ‘to jump out of, to flee’ ?). Discussion *apud* Kloekhorst (2008:989-900)
 - PA **wláx-*, **wáx-ánti* → Hitt. *ṷalah-ši* [2 sgl.], *ṷalḫanzi* ‘to hit, to strike’
 - Differently, Kloekhorst (2008:946) reconstructs PIE **ṷélh₃-ti*, **ṷlḫ₃-énti* (> ***ṷalzī*, ***ulḫanzi*)
 - Gr. *ἀλῶναι* ‘to be killed’ may be accounted for as a “new” athematic aorist from PPP *ἀν-άλ-ωτος* (cf. *ἀναλίσκω*). Maybe P.-Gr. **ṷ-φαλ-ος* ‘unkilled’ → **ṷ-φάλ-ωτος* ‘not being made killed’, decasuative from PIE instrumental **-oh₁*, cf. *δηλωτός* ‘being made clear’ (< **-oh₁-τό-*, Lat. *ægrōtus*)
(see further Nussbaum 1996; de Vaan, 2008:26, *ægrōtus* < PIE **h₂ǵig-roh₁-τό-* ‘with sickness’)

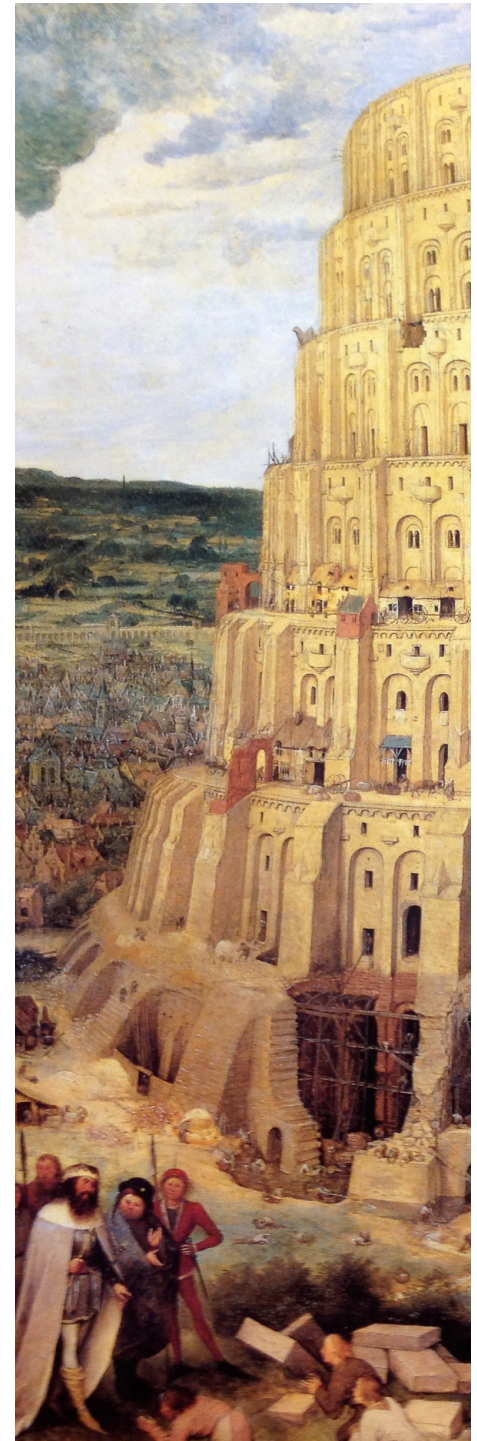
PIE **lek-* ‘to tear, lacerate’

- **am=lak-* **αὐλαξ** ‘**furrow**’ vs. simple **λώξ* (< PIE root-noun **lók-*)
 - Hom. **κατὰ λῶκα* (reshaped as *κατὰ ῶκα* “through the furrow” N 707).
 - Beekes (2010:73) duly points out that Schindler’s **ἄφολκα* is doubtful
 - Doric ῶλαξ, compound ὀμ-ώλακες (→ ὄλαξ)
 - // ὄνουξ: μώνυχες; Χ: ὀμώλακες :: Χ = ὄλαξ) with “pseudo-Wackernagel” lengthening!
- **se=lk-ó-* → **selk-ó-* (λευκός-class) → **solkós* (Lat. *sulcus*, Gr. ὀλκός)
- **ue=lk-ó-* → **uelk-ó-* (λευκός-class) → root-present **uélk-e/o-*

PIE *ǵʰel- ‘to be cold’

- ***ǵʰél-h₂, *ǵʰl-éh₂-s** [f. PK] ‘coldness’
 - *ǵʰél-h₂-d- ‘ice’, *ǵʰléh₂-d-e/o- in Ved. *HRĀD-a-te* ‘to be refreshed’ (Lubotsky 1981:134)
 - *ǵʰél-h₂-d-ih₂, *ǵʰl-h₂-d-ǵʰéh₂-s [f.] ‘possessing ice, hail’
 - → Post-IE *ǵʰl-h₂-d-ih₂ > Gr. χάλαζα [f.] ‘hail’
 - Sl. *zèldi-(ca) < *ǵʰél-h₂-d-ih₂ (first palatalization) vs. gen. sgl. *žlǫdǫǰe < *ǵʰl-h₂-d-ǵʰéh₂-s (depalatalized velar, followed by a syllabic resonant)
 - → *žèldi-ca (OCS žlědica), cf. Derksen 2008:566
- ***h₁eǵʰ-s=kʰol(h₂)-dʰ-éje/o-** with *lex-Sieb*
 - → back-formation Pre-P.-Sl. *ksôldъ > P.-Sl. *xôldъ ‘cold’ (Matasović 2011)
 - // Pre-P.-Germ. *(s-)kald-jan- > adj. *kaldaz ‘cold’
- Lat. *con-gelāre* ‘to congeal’ is probably older than *gelāre*, with regular sonorization of Proto-It. *xel- in *kon-γel-āye/o-
- ***ko=ǵʰl-ó-** adj. ‘congelātus’, subst. m. ‘hailstone’, coll. *kə=ǵʰl-éh₂ ‘hail’ >> Germ. *hagla- ‘hail’
 - Singulative Gr. *κάχλα̅-κ-εϛ/κόχλα̅-κ-εϛ (LXX) ‘small stones in a river bed’ (Cf. de Vaan 1999:5-6)

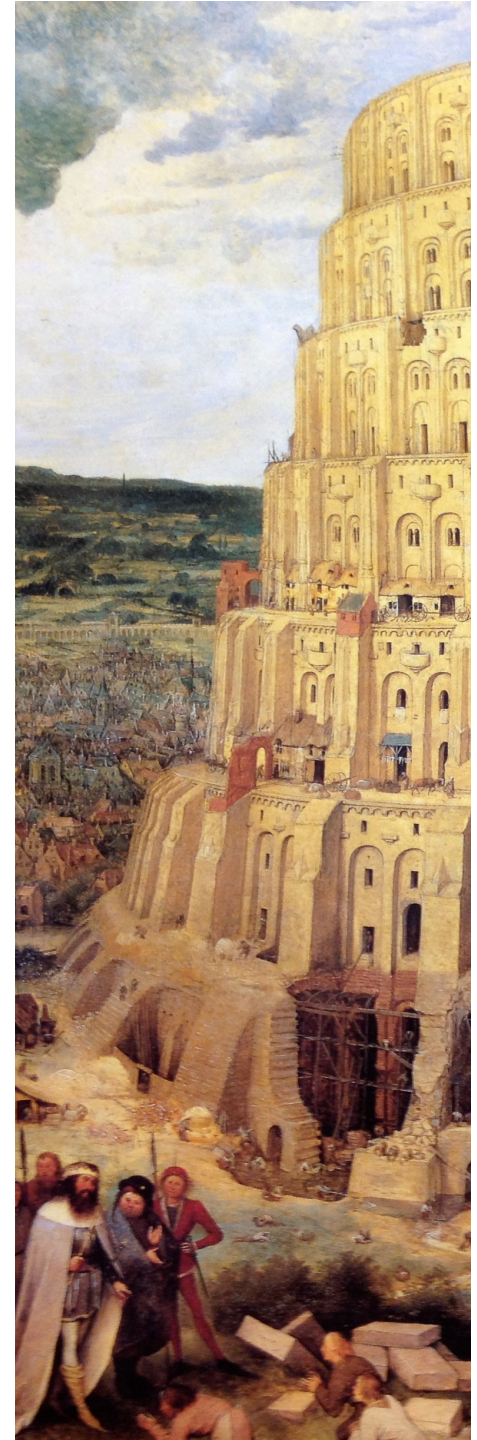
3. Reanalyses



Three reanalyses

- ***dis=lək-** → reanalysis ***dís=slək-ti-** [f.] ‘dīlacerātiō’ [virtual]
 - P.-Germ. **slaχ-tiz* [f.] ‘Schlacht’
- **PIE *posti=g^hh₁-ó-** (// ***dlom=g^hh₁-ó-**)
 - → **po=stig^h-*/**po=steig^h-* (OCS *po-stiže* ‘he reached’)
- **PIE *proti=g^uh₂-ú-** [adj.] ‘going forward’
 - → **pro=tig^u-*
 - → **apo=tig^u-* [semantic polarisation]
 - full grade **tjeg^u-* with the so-called “Schwebeablaut” in heavy syllables
 - Ved. *√TYAJ-* ‘to forsake’; Gr. *σέβομαι* ‘to honor, venerate (gods)’
[cf. PIE **h₂eug-* vs. **h₂ueg-s-* (Ozolins 2015:107 ff.)]
 - sigmatic aorist **tjé/ég^u-s-* (AVP *atyākṣam* ‘I have forsaken’); Gr. *σέψασθαι* (Hsch.)

4. Denominative verbs



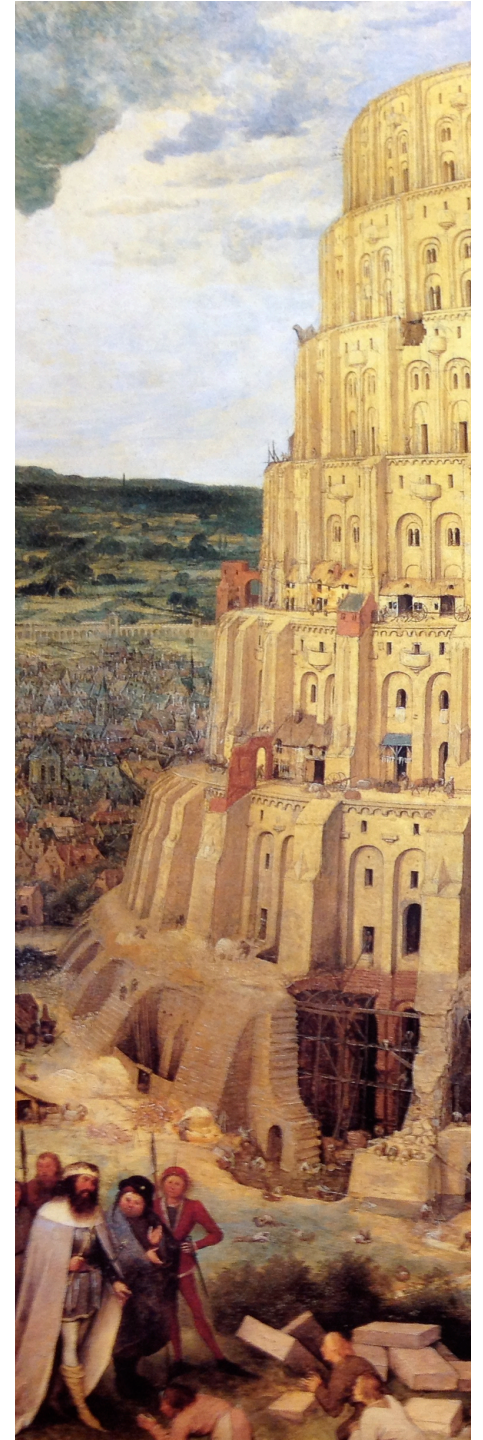
PIE **h₁ái-tr_o* [n.] ‘furnace’

- oblique stem **h₁ai̯-tn-*
- Gr. **αἰτνός* [adj.] (Αἴτνα)
- Pre-P.-Germ. **ko=aitn-āye/o-* > **χaittōjan-* [super heavy syllable] Kluge’s law
 - **χaitōjan-* → **χaitaz* [adj.] ‘hot’
 - Pre-P.-Germ. **ko=ayes-āye/o-* > P.-Germ. **χajizō-* ‘to light (a torch)’
 - > Go. **haizon* → dat. pl. *haizam* ‘λαμπάσι’
 - // Go. *hatis* [n.] ‘hate’, denominative *hatizon**

PIE **pro=*kr(*h*₁)-*eh*₂-*ié/ó-* ‘to grow’

- PIE *kerh*₁- ‘satiare’, *tudādi* present **krh*₁-*é/ó-* ‘to feed’
- Osc. **karanter** [subj.] ‘uescantur’ [3 pl. moy.] (< P.-It. **kar-e/o-* ‘to feed’)
- Lat. **car-ō*, -*ērĕ*, inchoative *accrēscō* ‘to grow’ (< **ac-cer-ēscō* < **ad-car-ēscō*), with syncope (// *adolēscō* « s’accroître » < **ad-al-ēscō*).
 - // semantics: *alēscō* ‘to grow’ vs. *alō* ‘to feed’
- P.-Germ. **fra=grōjan-* ‘to grow’ (< i.-e. **pro=*kr(*h*₁)-*eh*₂-*ié/ó-* [*lex-vegetation*])
 - Reanalysed as a root **vgrō-* (cf. **grō-pi-* [f.] ‘vegetation’, **grō-pu-* ‘growth’)
 - New “athematic” forms, of the type OHG *gām/gān* ‘I go’, *gās(t)* ‘you go’, *gāt* ‘he goes’;
 - OHG *tuon* ‘I do’, *tuos(t)* ‘you do’, *tuot* ‘he does’

Conclusion



Conclusion

- Verbal prevervation in PIE is by far more widespread than usually thought
- It explains several secondary roots that exhibit fossilised preverbs
 - It brings to unity sets of semantically similar roots
 - It results in novel etymologies for several difficult words
- These views may shed some light on the possibility that PIE may have been (once) a satellite-framed language
- One more thing: could fossilised preverbs explain at least some of the *s-mobile*?



Thank you