# Book of Abstracts

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Organizers:

Erica Fratellini Riccardo Ginevra Elena Langella Elisa Migliaretti

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# **Comparing valency patterns: a case study on perception verbs in Early Vedic and Hindi**

# Erica Biagetti & Lucrezia Carnesale

(University of Pavia, University of Pavia / University of Bergamo)

In this paper, we analyze valency patterns and alternations of perception verbs in two languages belonging to the Indo-Aryan (IA) family: Early Vedic (EV), the earliest attestation of IA, and Modern Hindi, the largest language in New IA. Perception verbs are a subclass of experiential verbs and refer to the senses through which living beings perceive the external reality: sight, hearing, touch, taste, and smell. Following previous studies on experiential constructions (Verhoeven 2007, Luraghi 2020), we regard experiential (perceptive) situations as usually entailing two participants: the Experiencer, the human participant who perceives the experience, and the Stimulus, the element that triggers the perceptive event. The semantic core of an experiential situation is called Expertum, and it is typically lexicalized in the predicate. The semantic properties of the perceptive events are subject to much variation: the experiencer, for example, can exert some degree of control on the situation and show a higher or lower degree of agentivity (Viberg 1994, Usoniene 1999). The variability of the semantic properties of perceptive situations correlates with the cross-linguistic variability of constructions used to encode this class of experiential verbs.

The class of experiential predicates has received much attention in typology, in historical linguistics, and in South Asian linguistics (see Viberg 1984, Verma and Mohanan 1994, Verbeke, Kulikov and Willems 2015). Concerning Vedic, scholars have focused on the encoding of Experiencer and Stimulus (e.g. Hettrich 2006, Dahl 2014) and have dealt with perception verbs in studies on verbal morphology (e.g. Jamison 1983, Kümmel 1996, Kulikov 2013) as well as on valency changing operations (e.g. Kulikov 2011). Hindi perception verbs have

been studied within the topic of non-canonical experiential subjects and previous works have mostly focused on the morphosyntax of the Experiencer alone (Verma and Mohanan 1990, Mohanan 1994, Montaut 2004); for this reason, an analysis of the argument structure associated to experiential verbs on the whole is still lacking. Moreover, these phenomena have not been treated together in a general picture of how valency pattern and alternations work in the two languages nor in a broader picture of diachronic changes affecting valency phenomena in IA.

We aim to fill this gap by proposing a first effort towards the study of IA valency patterns in diachronic perspective: as EV and Hindi belong to two stages of IA that are very far apart in time (Old and New IA respectively), the addition of other stages will be necessary in the future. In our study, we apply the Pavia Verb Database (PaVeDa; Zanchi et al. 2022) methodology to EV and Hindi: PaVeDa is an open access resource for the analysis of argument structures of verbs and their alternations created at the University of Pavia and inspired by the Valency Patterns Leipzig project (ValPal; Hartmann et al 2013).

Following PaVeDa's methodological guidelines, we adopt a corpus-based, quantitative approach in the selection of verbs as well as in the distinction between regular and marginal alternations of their basic valency patterns. For EV, we extract data from a syntactically annotated version of the Rgveda and Atharvaveda (Śaunakīya recension), as contained in the Vedic Treebank (Hellwig et al. 2020). For Hindi we use a corpus, collected specifically for this purpose, consisting of literary texts of the 20th century.

We describe the extracted data focusing on language-specific valency patterns and alternations. We distinguish between (i.) coded alternations, which receive explicit marking (cf. EV passives (1)a and Hindi anticausatives (2)ab), and (ii.) uncoded alternations, for which this condition does not apply (cf. EV genitive second arguments (1)a). Furthermore, we describe generalizations on alternations by employing comparative concepts introduced in PaVeDa's crosslinguistic layer. EV is a nominative-accusative language with a strong tendency to select a nominative accusative pattern for most semantic verb classes, including experiential verbs, whereas Hindi is a split-ergative language with a high frequency of non-nominative subject constructions and a tendency to use a dative pattern for the encoding of experiential verbs. The main goal of our study is to shed light on the consequences that this massive change affecting IA alignment system had on valency patterns of perception verbs. The contrastive study involving EV and Hindi will show the advantages of using the same set of comparative concepts in the analysis of both languages; furthermore, the addition of examples taken from grammars and articles on intermediate stages of IA will show the potential of such an approach for diachronic studies.

## Examples

- (1) Vedic: *śru* "hear", "listen to" (1 hears/listens to 2)
- a. <u>1-nom stat/passV.subj[1]</u>

(agentless passive/anticausative alternation; see Kulikov 2011)

*kásminn adyá jáne mitró ná śrūyate* which.LOC today people.LOC friend.NOM as hear.PRS.PASS.3SG 'In which community is he (Indra) famous (lit. heard) today as a friend?' (RV 10.22.1ab)

b. <u>1-nom V.subj[1] 2-gen</u>

(genitive second argument; see Hettrich 2006, Dahl 2009)śyāvāśvasyasunvatástáthāśŗņuŚ.GENpress.PTCP.PRS.GENsohear.IMPV.PRS.2SG'In this way, listen to Śyāvāśva as he presses (soma).' (RV 8.36.7)

#### (2) Hindi: *dekhnā* "see/look at" (1 looks at/sees 2)

a. 2 - nom > antcV'.subj[2]

(anticausative alternation)

kisī		nipuņ	prabandhak	ke	hastakauśal	aur				
INDF.O	В	skilfull	manger	GEN	handicraft	and				
surūci	ke	cinh	dikhte	the.						
flair GEN sign.[M.PL.NOM] appear.IMPRF.M.PL										
'There were (lit. appeared) signs of the handicraft and flair of a skillful										
manager										

b. 1-dat > 2-nom > antcV'.subj[2]

(dative first argument, nominative second argument)

meht $\bar{a}$ =kous=memdevatvak $\bar{i}$ Mehta=DAT3SG=LOCdeityGEN $\bar{a}bh\bar{a}$ **dikh-\bar{i}**.splendor.NOM.F.SGappear-PRF.F.SG

'Mehta saw in her the splendor of a deity.'

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# The accentuation of the Luwic *a*-stems

**Oscar Billing** 

(Uppsala University)

Accentological study of the Indo-European languages has a history almost as long as the discipline of Indo-European linguistics itself. With the discovery of the Anatolian language family, the study of Hittite word accent provided an additional source of evidence in this pursuit (see Kloekhorst 2014: 13–18 with further references). In recent years, our understanding of the Luwic languages, a separate Anatolian branch defined here as comprising minimally Luwian, Lycian, and Lydian, has increased significantly. Accordingly, Luwic accentology has also become a viable topic of research.

The main challenge in Luwic accentology is that the place of the accent is indicated in different ways in each language. Cuneiform scribes writing Luwian employed the practice of plene-spelling, generally understood to denote vowel length, in turn likely correlated with word accent. Hieroglyphic texts are accentologically largely useless, barring a few cases of non-space-filling plene writing also indicating vowel length (Vertegaal 2017; Vertegaal 2018). Lycian never indicates word accent directly in its alphabetic script, but has undergone widespread syncope. This results in a negative heuristic; a prehistoric vowel is unlikely to have been accented if it was affected by syncope. However, the most useful language is Lydian — the Lydian alphabetic script employs certain vowel signs which only occur in accented syllables (Eichner 1986).

This presentation focuses on the accentuation of the Luwic *a*-stems, i.e. the Luwian common gender non-mutated nominal stems and the Lycian and Lydian common gender *a*-stems. This class continues the Proto-Indo-European  $*eh_2$ -stems and enjoys some level of productivity in all Luwic languages. The Lydian evidence makes it apparent that *a*-stems may be either oxytone or barytone (cf.

e.g. *tada*- 'father' with NOM.SG. *taadas* vs. *qaša*- 'fee' with NOM.SG. *qašaas*, (aa) indicating an accented vowel). Lycian also indirectly attests to this, cf. e.g. the syncopated vowels in oxytone \**zxxa*- 'fight' < \**tioh*<sub>2</sub>-*éh*<sub>2</sub>- underlying the denominal verb *zxxa*-<sup>*ti*</sup> 'to fight' (Sasseville 2021: 59) vs. barytone *laθθi* 'brother-in-law' < \**ládahi*, GEN-ADJ. of *lada*- 'wife' (Melchert 2004: 35). These observations imply that Proto-Luwic knew both barytone and oxytone *a*-stems, the distribution of which has hitherto remained understudied.

The main accentual types of Proto-Luwic *a*-stems seem to be oxytone abstracts/verbal nouns and collectives versus barytone individuated, mostly animate, a-stems. Examples of abstracts/verbal nouns include Lyc. za- 'allotment'  $< *d^h h_1$ -skéh<sub>2</sub>- and Lyd. *qašá*- 'fee', some of which originate in stems belonging to the Indo-European  $\tau_{0\mu}$ , type (e.g. Lyc. \**zxxa*- 'fight' < \**tioh*<sub>2</sub>-*éh*<sub>2</sub>-). Pertinent collectives include Lyd. kastá- 'bones' and Lyc. \*xba- 'waters (vel sim.)' < PLuw. habá- (cf. the barytone i-mutated stems Luw. hapi- 'river' and Lyd. kof(i)- 'water' < PLuw. \*hábi- and see Hajnal (1995: 172 n. 227)). Individuating a-stems are exemplified by Lydian kinship terms (e.g. táda- 'father', *ena-* 'mother'), most of which are secondary (some Luwic cognates being *i*-mutated) and overtly barytone. Likewise, the operation of Čop's law (C > CC /  $\acute{e}$  ) in the Luwian agentive *alla*-stems suggests an originally barytone accentuation with presuffixal accent (i.e. \*-é-leh2-, see Sasseville (2014)), corroborated by the general lack of syncope of this vowel in Lycian (barring some counterexamples, e.g. esenemla-'distributor, lord'). However, some language-particular secondary developments can also be observed. For example, Lydian la- and  $\tau a$ -stems are oxytone, which is likely the result of an accent shift unique to Lydian.

A systematic account of the accentuation of the Luwic *a*-stems may contribute to an improved understanding of the state of affairs in Proto-Indo-European. For example, the existence of  $\tau o \mu \eta$ -type verbal nouns in Anatolian strongly suggests that this type of derivation existed in the earliest reconstructable Proto-Indo-European.

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# Ed sgaidon: a tailor-made etymology

Matteo De Franco & Andrea Ghirarduzzi (University of Bergamo, University of Parma)

Our research intends to carry out an in-depth linguistic study concerning the adverbial syntagm *ed sgaidon* which is currently used in the Italo-Romance dialect of Parma and which has several meanings, such as 'obliquely/crosswise', 'on the bias' and 'deviously/crookedly'.

Although this syntagm is still widely used by dialect-speakers around the area of Parma and it has also been adopted in the regional variety of Italian spoken in Parma, as shown by some usages of the expression *di sgaido(ne)* in articles published by online local newspapers (see examples n. 1 and 2), *ed sgaidon* has not been lemmatized in the most important dictionaries of the dialect of Parma (Peschieri 1828; Malaspina 1856-59; Carpi-Pavarini 1966; and Capacchi 1993). Moreover, its etymology and semantics have not been properly investigated by scholars yet.

Using the theorical frameworks provided by Historical Linguistics and Cognitive Linguistics, this contribution aims at filling a gap in this academic field by suggesting a whole new etymological proposal for *ed sgaidon*.

Our hypothesis consists of linking this adverbial syntagm *ed sgaidon* < \**ed sgaidoni* to the Italian verb *sgaidare* 'to cut on the bias' (Premoli 1913; see example n. 3). This verb is attested as a sartorial technicism in a printed source from Northern Italy dated back to 1942 (Ginocchio 1942; see example n. 4) and it can be considered as one of the many results of the Langobardic word *gaida* 'arrowhead' (cf. Old English  $g\bar{a}d$  'point, sting, prick, goad'), a lexeme which is attested in the *Edictum Rothari* (Bluhme 1868; see example n. 5) and it continues in Medieval Latin even with the meaning of 'wedge-shaped strip of land' and in Old Italian with the meaning of 'gore/wedge-shaped piece of cloth' and 'hem'

(TLIO). The proof of the plausibility of the semantic shift '(wedge-shaped) arrowhead' > 'wedged-shaped piece of cloth' is mainly offered by the Italian noun *gherone* 'gore', which is well-accepted to come from Langobardic *gairo* '(wedge-shaped) spearhead', a noun attested as the first member of compounds such as *gaire-thinx* 'spear assembly' (cf. Old Norse *geirr* 'spear', Old English *gār* 'dard, javelin, spear' and Old Frisian, Old Saxon and Old High German *gēr* 'spear').

Moreover, a quite convincing semantic parallelism which can prove that Italian verb *sgaidare* comes from Old Italian *gaida* 'gore' could be found among the Germanic languages: the verbs English *to gore* 'to cut in a triangular form' and German *gehren* 'to cut obliquely' are etymologically related to the nouns, respectively, English *gore* and German *Gehren*, both meaning 'wedge-shaped piece of cloth (or of land)' and coming from Old English *gāra* 'angular point of land' and Old High German *gēro* 'angular strip of land', cognates of Old Norse *geiri* 'gore/triangular strip' and Old Frisian *gāra* 'triangular piece (of land)' (Orel 2003).

Finally, even if *sgaidare* does not seem to be currently used in the dialect of Parma (\**sgaider*), a cogent *datum* is that its equivalent form is well-attested in some Italo-Romance dialects (cf. dialect of Turin *sgaidà* and dialect of Pavia *sgaidà*).

In addition, the hypothesis that *ed sgaidon < \*ed sgaidoni* could originate from the verb *sgaidare* seems to be also confirmed by a significant semantic parallelism found in the dialect spoken in the area of Piacenza (Foresti 1882): in this Italo-Romance variety, the adverbial syntagm *ad taion* meaning 'obliquely/crosswise' could be traced back to *\*ad taioni* and linked to the verb *taià*, which means 'to cut' (cf. Italian *tagliare* 'id.').

## Examples

(1) «La Juventus passa in vantaggio quasi per caso anche se la posizione di Ronaldo era particolarmente propizia per tirare comodamente. Il lusitano scivola e, nel mentre, colpisce la palla un po' di sgaido, il difensore più vicino, Iacoponi, ci mette timidamente la gamba che alza la traiettoria del tiro impedendo a Sepe una probabile parata a terra.»

Source: <u>https://www.stadiotardini.it/2019/02/linsostenibile-</u> leggerezza-del-pallone-luca-tegoni-profumo-magia-parma-vince-torino-lajuve-3-3.html (last visit: 02/14/2023)

- (2) «La foto che mi è capitato di scattare in questi giorni al Centro Torri è solo la cartina di tornasole: due auto, quattro posti occupati. Un abbinamento di parcheggi "di sgaidone", come in dialetto una volta si diceva di certi colpi obliqui a calcio: due prepotenze affiancate, che bisognava quasi mettersi d'accordo per riuscirci anche se l'ipotesi più probabile è che il risultato sia frutto di due azioni isolate seppur propiziate dalla medesima "cultura".» Source: <u>http://pidieffe.eu/non-ci-son-piu-le-mezze-ragioni/</u> (last visit: 02/14/2023)
- (3) «[*veste*] *sgheronata*, fatta a gheroni: sgaidata, tagliata a sghimbescio o a schisa, in tralice, larga di sotto e stretta di sopra». (Premoli 1913:*s.v.* 'veste ~ secondo la forma, la confezione, il modo col quale sta indosso')
- (4) «[...] l'incrunare, l'orlare, lo sbiasciare, lo scucire punto a punto, lo sfilacciare, lo sgaidare, ossia tutto quel minuto d'un lavorare che si ingrana con il tic-tac del pendolo invecchiato anch'esso nell'ombra di un angolo.» (Ginocchio 1942:15)

Source:<u>https://www.google.it/books/edition/Atesia\_Augusta\_rassegna\_men</u> sile\_dell\_Alt/IWRVWfiRMz0C?hl=it&gbpv=1&bsq=sgaidare&dq=sgaidar e&printsec=frontcover (last visit: 02/14/2023)

(5) «Et ipse quartus ducat in quadrubium, et thingit in gaida et gisil, et sic dicat» (*Edictum Rothari* 224).

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TLIO = Tesoro della Lingua Italiana delle Origini [online]. URL: http://tlio.ovi.cnr.it/TLIO/.

# Semantic Changes in the Lexikon der indogermanischen Verben

Jonas Döll

(Philipps-Universität Marburg)

Although  $LIV^2$  is the product of a continuous process of correction and further development on the field of morphology and phonology, the field of semantics is treated less intensively. The accusation of neglecting semantics, voiced especially by Seebold (1999:287f., 293-95), is countered with the justification that there was not enough time in the correction process (LIV<sup>2</sup>:35). The addenda and corrigenda of  $LIV^2$  also do not address this criticism. This list continues the tradition by using fuzzy phrases such as "[es] bleiben semantische Schwierigkeiten" or "semantisch schwierig". The object of this paper is therefore to identify semantic changes in the  $LIV^2$  and describe them using modern linguistic methods.

The semantic databases CLICS<sup>3</sup> and CSSh will be used to

a) examine the contribution that nominal formations can make to root semantics

b) plausibly explain some semantic changes that are marked as "unklar" in the  $LIV^2$ .

c) discuss the semantic proximity of some roots cited as homonymous in  $LIV^2$ 

d) examine root extensions with  $*d^h$  and their unextended counterpart regarding their semantics.

## Examples

- (1) The seemingly homonymous roots 1.\*b<sup>h</sup>eh<sub>2</sub>- 'glänzen, leuchten, scheinen' and 2.\*b<sup>h</sup>eh<sub>2</sub>- 'sprechen, sagen' can be unified to one root directly (cf. the semantic change OHG *hell* 'lauttönend' → NHG *hell* ,hell, glänzend'). The series of semantic changes 'leuchten' → \*'hell machen' → \*'klar machen' → 'sagen' is not necessary.
- (2) \**sperd*<sup>*h*</sup> 'weglaufen' and 2. \*(*s*)*per* 'fliegen' can be connected as a lightverb-construction *sper-d*<sup>*h*</sup> $h_{l}$ - (vgl. Kölligan 2017).

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# On Hittite collective nouns for animals in *-eššar*: new insights into Indo-European nominal classification

# Virna Fagiolo

(Universidad Complutense de Madrid / Sapienza Università di Roma)

This paper aims to conduct an analysis of the derivational process in Hittite of collective nouns for animals characterized by the suffix *-eššar*, which is one of the Hittite heteroclitic suffixes in *-r/-n-* together with *-(\bar{a})tar*, *-war* e *-mar* (cf. Kammenhuber 1954: 44ff., 245ff.; Kronasser 1966: 287ff.; Rieken 1999: 290ff.; Zeilfelder 2001: 250ff.). As pointed out in *HG*: 58, besides deriving action and abstract nouns from verbs and adjectives, this suffix seems to originate also «a few collectives from nouns». In particular, I chose to take into consideration the three collective formations *lalakueššar* 'colony of ants, anthill' *< lalakueša-* 'ant', *šuppaleššar* 'livestock, animal fence' *< šuppal(a)-* 'animal' and the uncertain *ellueššar < illu-*, usually presented in relationship with the etymology of Hitt. *illuyanka-* (e.g., Katz 1998, Oettinger 2010, Fagiolo 2022) and for which a renewed interpretation is offered. The choice of this topic is dictated by the fact that, as Gardelle 2019: 75 ff. notes, collective nouns for animals are mentioned very rarely in linguistic research.

As a matter of fact, the purpose of the analysis is, on one hand, investigating how these collective formations in *-eššar* fit the framework of collective nouns offered by the other Indo-European languages. Indeed, the Indo-European collective has been the focus of much research since the beginning of the Indo-European studies (e.g., Schmidt 1889). In relation to this, the main theme is the bond between the categories of feminine, abstract, collective and neuter plural (cf. Eichner 1985; Luraghi 2009; Melchert 2011; Dedè 2013). Moreover, the discussion of the Indo-European collective has been also crucial with regard to the question of the nominal number (cf. Belardi 1950).

On the other hand, the aim of the analysis is also outlining the features of these derivatives in *-eššar* in comparison with other morphological mechanism for the formation of collective nouns in Hittite.

Finally, a last section of the research is dedicated to the relationship between collective and place nouns – always according to a comparative approach – since these collective formations in *-eššar* seem to develop a locative meaning as well.

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# Morphology, meaning and phraseology of the Arcadian βουσοι

# Erica Fratellini

(Università per Stranieri di Siena)

The dative singular  $\beta$ oυσοι is found three times (ll. 15 and 18: ιν ται  $\beta$ ουσοι; l. 23: ται  $\beta$ ουσοι) in an Arcadian inscription (published for the first time by Plassart 1915, pp. 53-97) concerning a delimitation of boundaries between cities. Although problematic in its morphology, the meaning of this compound appears to be clear and is also supported by many phraseological parallels. The aim of this talk is to focus on the morphology, meaning and phraseology of this Arcadian *hapax*.

Morphologically, it goes back to  $*g^{w}ou-kjou-os$ , from which derives  $\beta ov(\sigma)\sigma \delta o \varsigma$ , attested in the Hellenistic period. The first element of this compound is  $\beta ov^{\circ}$  (the same root as  $\beta o \tilde{v} \varsigma$ ), while the second one has been connected with the root of the verb  $\sigma \varepsilon \delta \omega$  (< \*kjeu-, 'get in motion'), which, in composition, is used as  $^{\circ}(\sigma)\sigma \delta \circ \varsigma$  and gives the compound the value of *nomen agentis* (cf.  $\lambda \alpha \circ \sigma \circ \delta \circ \varsigma$ , 'that excites people'). While the oscillation between  $-\sigma$ - and  $-\sigma \sigma$ - is quite common, the most serious problem concerns the ending -o- instead of - $\delta \circ \circ$ .

Buck 1955, followed by Dubois 1988, tried to justify this reduction with the phenomenon of hypheresis, which consists in the suppression of a vowel found in a group of three, keeping the qualities and quantities of the other vowels unchanged.

Viredaz 1992 tried to reconstruct a verb  $*\sigma\sigma_F \hat{\omega}$ , causative of  $\sigma_E \hat{\omega}$ , reconstructed on the basis of the  $\sigma \hat{\omega}$  of Bacch., *Dith.*, XVII, 90: thus, from a  $*\beta \sigma \sigma \hat{\omega}$  generated by hypheresis ( $< *\beta \sigma \sigma \hat{\omega} < *\beta \sigma \sigma \sigma \hat{\omega}$ ) we would have the reduced form  $*\beta \sigma \sigma \hat{\omega}$ . Within the Arcadian dialect, however, *verba vocalia* are usually athematic: the expected form should thus have been  $\dagger\beta \sigma \sigma \sigma \mu$ . Viredaz's reconstruction is not accepted by Bettarini 2003, followed by Alonso Déniz 2012, both for chronological reasons and because the hypheresis is not attested in Arcadia, where we have, instead, the anthroponym Bo $\alpha\theta$ oo $\zeta$  in an inscription in Mantinea. His more cautious proposal consists in not reconstructing the entire declension of a supposed \* $\beta$ ουσό $\zeta$ , but in considering only the dative singular \* $\beta$ ουσο-οι >  $\beta$ ουσοι 'by hypheresis', relying on the fact that in the case of hiatus between ε+ει, o+οι, ε+οι, o+ει, it is common to have the absorption (and not the contraction) of the first vowel in the following diphthong (cf. Lejeune 1972).

Concerning the meaning of  $\beta$ ουσοι, it can be observed from the context that we have to consider a semantic shift in a metaphorical sense. The adjective  $\beta$ ου(σ)σόος (etymologically: 'who pushes the oxen') primarily designates a shepherd of oxen, but it was used as an adjective of μύωψ, 'gadfly', by Callimachus, *fr*. 301 Pf.: βουσόον ὄν τε μύωπα βοῶν καλέουσιν ἀμορβοί, intentional echo of Aesch., *Suppl.*, 307: βοηλάτην μύωπα κινητήριον. Aeschylus' βοηλάτης (βοῦς + ἐλαύνω) can therefore be considered equivalent to the later βου(σ)σόος.

In our occurrence this adjective may have been metaphorically applied to a path: ἰν τᾶι βουσοι (ὑδῷ), a solution which would also explain the presence of the feminine gender. The idea of a road that carries someone or something is recognizable in the Homeric λαοφόρος ὑδός 'main road, which carries the people' (II., XV, 681) and in the expression ἁμαξιτὸς ὁδός, 'carriage-road', which is also found as the simple adjective ἁμαξιτός (ἅμαξα + εἶμι), in the feminine gender, with the same meaning.

The root of the verb σεύω is linked to contexts involving streets in two glosses of Hesychius: σοῦς· ἡ πόρευσις (Hesych. σ 1360 Hansen) and μηλοσόη· ὑδός, δι' ἦς <τὰ> πρόβατα ἐλαύνεται. Ῥόδιοι (Hesych. μ 1197 Latte). To corroborate the equivalence °σόα = ὑδός, we point out the interpretation given by

García Ramón 1999 of the Thessalian διεξόα as  $\delta_1 \alpha + \epsilon_{\kappa}(\sigma) + \sigma_0 \alpha$ , '(road) leading to the outside', 'exit', with analogous meaning to the Ionic-Attic διέξοδος.

Last but not least is the parallel with the Laconic  $\beta o \upsilon \delta \alpha$  attested in the *Etymologicum Genuinum*. If we restore the original form  $\beta o \upsilon \delta \alpha = \beta o \upsilon h \delta \alpha < \beta o \upsilon \sigma \delta \alpha$ , it looks like a compound formed by  $\beta o \widetilde{\upsilon} \zeta + \sigma \varepsilon \upsilon \omega$ , exactly like the Arcadian  $\beta o \upsilon \sigma \upsilon$ . Unfortunately, the meaning of the Laconic term is not clear, since the part of the text relating to it is irreparably corrupt; therefore, it is impossible to prove the identity of the meaning of these compounds.

Phraseologically, the verb σεύω offers few parallels, but its synonym έλαύνω testifies the great diffusion of the syntagms [PUSH - ANIMALS], recognizable very frequently already in the epic texts. At the end of this presentation I will show the most significant occurrences of the verbs meaning 'to push' with the noun βοῦς, but also, for the sake of completeness, with μῆλον, ἡμίονος, πρόβατον, οἶς, αἴξ and ἀγέλη (instead, the numerous occurrences with ἵππος have been omitted).

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# The Ionic Iterative-Preterits: Some Questions about Their Epic Development

Greta Galeotti

(Harvard University)

In most discussions of characterised present stems in Greek (e.g., Schwyzer Debrunner 1939, Rix 1976, Chantraine 1991), it is customary to find an appendix to the familiar Greek presents in  $-\sigma\kappa\omega$ , like  $\pi\dot{\alpha}\sigma\gamma\omega$  or  $\varepsilon\dot{\nu}\rho\dot{\kappa}\omega$ , that mentions the presence of eccentric forms that the literature has dubbed "Ionic iterativepreterits." Forms like φέρεσκε, στάσκον etc. appear chiefly in epic poetry, and already their elaborate name suggests some of their peculiarities. Among them, we can count the specific semantic value that the suffix displays in these verbs, their almost universal lack of augment, their restriction to the preterit through the exclusive use of secondary endings, and the fact that they are not, in fact, exclusively built on present stems, as their position in the discussions mentioned above would suggest, but they are also formed to aorists. Additionally, they are overwhelmingly found in Homer, to a lesser extent in the rest of epic, and in prose almost exclusively in Herodotus (where their iterative value appears most clear, thanks to association with iterative modifiers, Rijksbaron 1994:15). They are thus also found in the margin of epic language compendia (e.g., Chantraine 1986, Risch 1974, Shipp 1972).

This paper offers a discussion of the development of this verbal class. In line with most literature, it starts with a classification of the Ionic iterativepreterits collected from both Homeric and non-Homeric epic, as well as Herodotus. It thus avoids the practice of relying on previous lists (e.g., that of Risch 1974) and instead defines a clear corpus, investigated through the TLG. It includes the epic of Apollonius of Rhodes as a source for additional evidence, which has been neglected in the discussion of these verbs. As the primary aim is to elucidate the different categories of Ionic iterative-preterits and their development, this paper builds especially on the morphological contributions in the literature (e.g., Brugmann 1903, Whatelet 1973), while still considering the semantic-oriented ones (e.g., Zerdin 2002, Kimball 2014). It also seeks to bring in considerations that pertain more the internal word-building processes of the epic diction, as the area where most of the evidence is found.

In general, the paper will examine the six categories of Ionic iterativepreterits, identified according to their underlying stem (present thematic and from contract verbs, present athematic, aorist thematic, aorist sigmatic, aorist athematic), in order to investigate how the class develops as a whole and how much of it can be ascribed to epic itself (cf. the suggestion that the aorist signatic forms may be entirely artificial, Whatelet 1973). The paper will also deal with more specific issues highlighted in the literature, that concern forms that problematize the categorization offered above. The first concerns the contract verbs, which appear as both  $\varphi_i\lambda$   $\hat{\epsilon}$   $\sigma_k$   $\hat{\epsilon}$  but also as  $\pi\omega\lambda$   $\hat{\epsilon}\sigma_k$   $\hat{\epsilon}\tau_0$ . This paper claims that this different treatment is due to meter, as theorized in the literature, but specifically warranted by the existence in the Homeric Kunstsprache of parallel forms built to athematic verbs (e.g., στάσκον). This is not ascribed to historical morphology (as, for example, Whatelet 1973:387), but rather to the artificial creativity that the oral poets exploited to increase the flexibility of their language. Another issue concerns the "irregular" iterative-preterit forms, or rather "constitués de façon particulièrement libre" (Chantraine 1986:323), like ίσάσκετο, most recently discussed by Kimball 2014. The paper offers a new analysis of these forms based on comparative evidence from Apollonius of Rhodes to claim that they are not, in fact irregular, nor necessarily analogical (with potentially the exception of κρύπτασκε). The appearance of Ionic iterative preterits in the prose of Herodotus is also briefly taken into consideration in the assessment of how much of this class can be ascribed to the spoken vs. the poetic language.

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# Iterative periphrases in Indo-Iranian: the case of Sanskrit *sthā*- 'stand' and Avestan *stā*- 'stand'

Beatrice Grieco

(Università per Stranieri di Siena)

Traditional grammars of Sanskrit address (briefly) the periphrastic use of the verbs *i*- 'go', *car*- 'move',  $\bar{a}s$ - 'sit' and *sthā*- 'stand' plus participle or gerund, which convey the meaning 'to be continually x' (x = participle or gerund), but these iterative periphrases are still mostly unexplored. The paper addresses the periphrasis formed by the postural verb *sthā*- 'stand', investigating its diachronic development from the *Rigveda* to the Late Vedic period, here represented by *Brāhmaņas* prose texts, until Epic Sanskrit (i.e., *Mahābhārata*).

In particular, following Ronzitti (2017), I will show that the *Rigveda* does not provide clear evidence in favor of a periphrastic interpretation, but all cases of *sthā*- plus participle or gerund have a twofold interpretation: auxiliary construction or lexical verb (1).

On the other hand, in Late Vedic a different situation is found. In numerous passages,  $sth\bar{a}$ - is totally bleached and functions as an iterative auxiliary. In fact, *i*. there are no subjects controlling the action of standing up (2); *ii*. the selected participles or gerunds are semantically incompatible with a postural event reading (3); *iii*. the periphrasis co-occurs with contextual cues of iteravity, such as iterative compounds (4).

In Epic Sanskrit, the *sthā*- periphrasis spreads, especially with gerunds. This "new" periphrasis continues, indeed, in the later stages of the language and is attested even in Middle Indo-Aryan (Bubenik 1997).

Finally, the collected data will be compared with the Avestan  $st\bar{a}$ -periphrasis, showing that the two periphrases follow a common grammaticalization path. By examining the Vedic and the Avestan data, I argue

that there exists a close relationship between iterative periphrases and the socalled intensive category (a verbal category that exhibits formal reduplication and iterative meaning, cf. Schaefer 1994).

## Examples

- (1) ucchváñcamānā prthiví sú tiṣṭhatu sahásram míta úpa hí śráyantām
  'Let the earth stay arching up. For let a thousand (house)posts be fixed in (her)' (RV 10.18.12.a)
- (2) tā etāḥ paryūḍhā rtuśo varṣantīs tiṣṭhanti
  'These enclosed waters keep raining in due season' (JB 1.237.9)
- (3) tád asyāśvínāvādāyotkrámyātisthatām
  - 'that part of him the two Aśvins took and **kept going away** from him' (SB 8.2.1.11b)
- (4) sa ha ṣaṇ māso 'nyataram-anyataraṃ pādam udgrāhaṃ tiṣṭhati
  'During six months, he (Prajāpati) keps standing with the one or the other foot rasing' (JB 1.167.2)

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# Toch. B *sauke* 'long', Toch. A *sok* 'slowly' and the PIE root \**seug*<sup>(')</sup>- 'be(come) slow, sluggish'

Giulio Imberciadori

(Ludwig-Maximilians-Universität München)

The Tocharian B adjective *sauke* is attested four times. Its exact semantics has been convincingly identified by Peyrot, Pinault & Wilkens (2019: 67-68, 73-74) in their edition of the Tocharian B-Old Uyghur bilingual U 5208, where the nominative plural feminine B *saukana* corresponds to the Old Uyghur adjective *uzun* 'long, wide; long lasting'. For a further occurrence of B *sauke* with the meaning 'long' (i.e., B 429 a5 [Sängim / late]) see example (1) below.

As for A *sok*, only two attestations are known. Most recently, Itkin & Malyshev (2021: 72) tentatively proposed to interpret A *sok* as an adverb with the semantics 'slowly'. Indeed, the latter meaning fits well with the attestation context of A *sok* in YQ III.11 b8 (*Maitreyasamitināțaka*), as per example (2) below. Moreover, the translation 'slowly' is supported by the correspondence between A *sok* and the Sanskrit adverb *śanais* 'quietly, softly' in A 462 b1 (Itkin & Malyshev 2021: 72).

The aim of the present paper is threefold.

First, I propose that the Tocharian A adverb *sok* 'slowly' presupposes an unattested adjective A \**sok* 'slow', which I regard as etymologically related to the Tocharian B adjective *sauke* 'long'. Although these Tocharian lexemes have never been associated before, they can be regularly traced back to a common ancestor PToch. \**sœwkæ* 'slow, long lasting, long', continuing an adjective Pre-PToch. \**souKo*-.

Second, I claim the Tocharian items to be cognate with the word family of PGerm. \**seuk-a-* 'weak, ill' (> Goth. *siuks* 'id.', ON *sjúkr* 'id.', etc.) and OIr. *socht* m. 'silence, quite; gloom'. B *sauke* 'long' and A \**sok* 'slow' shed new light

on the semantics on the underlying root PIE  $*seug^{(\prime)}$ -. Although the latter is usually glossed as 'be(come) ill, sad' (cf., e.g., *EWAhd* 7, 1275), the Tocharian forms rather point to an original meaning 'be(come) slow, sluggish', which explains straightforwardly the semantics of all the attested derivatives:

- (i) Within Tocharian, the meaning 'slow' is still preserved by A *sok*\*, whereas it developed to 'long' in Tocharian B, likely through an intermediate stage 'long lasting' cf. OHG \**seim(i)* 'slow' (> MHG *seim* 'id.') → compound *lang-seim(i)* 'long lasting, long', lit. 'long-slow' (*EWAhd* 5, 1021, 1023).
- (ii) Within Celtic, the substantive Pre-PCelt. \*súg-to- (> OIr. socht) underwent a semantic development 'sluggish state' ⇒ 'silence, quite (⇒ gloom)', for which cf., e.g., Lith. lénas 'lazy, slow' ~ 'quiet, silent' and Lett. lens 'id.' beside the cognates ORu. lenŭ 'lazy, slow', Lat. lenis 'soft, mild', etc. (LEW 1, 355).
- (iii)Within Germanic, the primary meaning 'slow, sluggish' developed first to 'weak' and then further to 'weak, ill', whereby the latter step of the development is supported by several parallels: cf. Gr. ἄρ-ρωστος 'weak' ~ 'ill' (← ῥώννῦμι 'have strength') > NGr. άρρωστος 'ill'; Lat. *in-firmus* 'weak' ~ 'ill' (← *firmus* 'strong') > It. *infermo* 'ill', Sp. *enfermo* 'id.', etc. (Buck 1949: 302). In contrast, regarding the meaning 'ill' as original would be less appealing, since for a semantic development 'ill' ⇒ 'weak, sluggish, slow' no parallels are known (cf. Buck 1949: 315-316, 970-971).

Finally, I trace back B *sauke* 'long' and A \**sok* 'slow' to Pre-Proto-Tocharian \**soug*<sup>( $\prime$ )</sup>- $\dot{o}$ - 'slow, long lasting', an adjective belonging to the type *tomós* (cf. Nussbaum 2017). From a morphological point of view, the latter form correlates well with the adjective \**seug*<sup>( $\prime$ )</sup>- $\dot{o}$ - 'slow, sluggish', which is presupposed by PGerm. \**seuk-a*- 'weak, ill' and in turn belongs to the type *temós* (cf. Nussbaum 2017, esp. 243-250).

### Examples

(1) B 429 a5 (Sängim / late)

/// (*pyā*)*pyai śaskastottärntaṣṣai piñña saukeṃ walāneṃ* "he braided the flower of the *śaska* praises into extended garlands" (Peyrot, Pinault & Wilkens 2019: 74, with fn. 17).

(2) YQ III.11 b8

/// ymām särmär wärsmām sto semā sok sik tāsmām : mokoneyo yo ///
"going, breathing heavily, with the support of a stick, slowly taking steps, by old age ..." (after Itkin & Malyshev 2021: 72).

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# A chronicle of suggested Indo-European heritages in Hittite texts (and why I do not believe some of them)

Tomoki Kitazumi

(Freie Universität Berlin)

In contrast to the other ancient Indo-European languages such as Greek or Indo-Iranian, a study of the Indo-European heritage in Hittite texts on the level of language (poetry and formulae, or so-called *indogermanische Dichtersprache*) or culture started relatively late. Hittitologists like Heinrich Otten (1964, 22), Hans M. Kümmel (1967, 197) or Hans G. Güterbock (1978, 248f.) took the position that the Indo-European elements in Hittite literature (in a wider sense) are exceedingly rare, but they do not give any specific example of this "rare" component. And conversely, Calvert Watkins (1979, 269) notes that there is no mention of Hittite in the pioneering work "Dichtung und Dichtersprache in indogermanischer Zeit" (1967) by Rüdiger Schmitt, nor in the collection of articles "Indogermanische Dichtersprache" (1968) edited by the same author. Watkins seems to be the scholar who made the first attempt to identify the Indo-European heritage in the Hittite texts (1967, 192–194).

Now 55 years have passed. Is there any progress regarding an Indo-European heritage within Hittite texts? It is indeed remarkable to note that Watkins's masterpiece "How to Kill a Dragon" (1995) has an extensive discussion on Hittite Illuyanka myths across many pages, on the other hand the likewise much-admired work of Martin West "Indo-European Poetry and Myth" (2007) mentions rather sporadically some passages from the Hittite texts, for example funerary ritual, only on 2 pages. The marked difference is that Watkins is very analytic and deductive in his method, but on contrary West is rather conservative as a connoisseur of Mesopotamian literature and operates rather inductively. This second point, consolidating with Mesopotamian (cf. García Ramón 2011), or rather non-Indo-European materials including the Hattic tradition (cf. Oettinger 2005), is indeed worth considering. As already noted by Forrer (1919 and 1922), the language situation is indeed complicated in the Hittite Empire, and accordingly cultural multilayering(?) is definitely to be assumed: Hattic, Akkadian, Hurrian, even Sumerian, or Indo-European after all? (cf. conveniently Goedegebuure 2017)

The aim of the presentation is therefore twofold: The first historiographical part consists of an overview of the research attempts to identify Indo-European poetry and culture in Hittite literature, and a classification thereof will be made. Then, a short selection of passages will be presented as exemplary cases and philologically commented to locate the origin of their *Überlieferung*. This second philological part focuses on the methodological difficulties and inherent problems which arise when we try to identify the Indo-European heritage in Hittite literature. With regard to recent previous literature (Oettinger 2006, Hajnal 2008, Calin 2014, Dardano 2010 and 2018 among others), some points for the limitation of the reconstruction of Indo-European culture will be reconsidered as a conclusion.

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# Proto-Indo-European \*-*l*-stems revisited

## Véronique Kremmer

(École Pratique des Hautes Études, Paris Sciences et Lettres; *HisTochText* Project)

In this paper, I propose to have another critical look at a still unresolved sore spot in Indo-European nominal morphology: the possibility that Indo-European had an ablauting class of athematic \*-*l*-stems in addition to other consonant stems. The most compelling evidence for the existence of such a class comes from Anatolian and Tocharian, the two branches believed to have split off first.

At the Proto-Indo-European level, evidence for such archaic \*-*l*-stems or heteroclitic \*-*l*-/-*n*- (or even \*-*µel-/µen-*), other than the infamous "sun"-word \**séh*<sub>2</sub>-*ul* (*vel sim*, see Pinault 2017) is scarce. This scarcity is due to a few reasons. The first and most obvious reason is that most language families seem to have eliminated strictly athematic \*-*l*-stems by further suffixation or thematization. Thus, their existence in the proto-language can merely be inferred through the comparative method. Nevertheless, they are often used as "crutches" by scholars working on nominal derivation to explain surface forms in the languages: see recently Van Beek's (2018) etymology of Gk.  $\pi \epsilon \delta i \lambda ov$  "sandal" from \**ped-sih*<sub>2</sub>-*l*-*o*-, where \**sih*<sub>2</sub>-*l*- would be the weak stem of an athematic action noun derived from \**sh*<sub>2</sub>*ej*- 'bind', cf. Hittite *išhial* (n.) 'binding' (< \**sh*<sub>2</sub>*i*-*ól*- according to Van Beek 2018:336).

With all necessary caveats, athematic \*-*l*-stems have been reconstructed with all ablaut patterns known in the framework of the Erlangen Model, namely, to provide a small sample:

 (1) proterokinetic neuter action nouns, e.g., \*h2ég-l / \*h2g-él- 'announcement' as the base of the Tocharian verb ākl- 'teach' (Hackstein 2003:60);

- (2) hysterokinetic animate action nouns, e.g., \*d<sup>h</sup>uh<sub>2</sub>-ēl / \*d<sup>h</sup>uh<sub>2</sub>-él- /
  \*d<sup>h</sup>uh<sub>2</sub>-l-x´ 'smoking' as the base of the different stems observed in Hom.
  θυηλή, Ion. θυαλήματα and Att. θūλήματα 'burnt offering' (Vine 2008:15);
- (3) amphikinetic action nouns, possibly derived from the hysterokinetic type,
  e.g., g<sup>h</sup>éb<sup>h</sup>h<sub>2</sub>-ōl, g<sup>h</sup>b<sup>h</sup>-l-x 'head', as the base of Proto-Germanic \*gebla
  'top', Gk. κεφαλή 'head' and Toch. A śpāl 'id.' (NIL s.v.);
- (4) acrostatic neuter abstract nouns, e.g.,  $h_1 \acute{o}n \acute{k} \cdot l / h_1 n \acute{k} \cdot l \cdot \dot{x}$  'takenness' >

Toch. A and B enkäl 'passion' (Rieken 1999:428)

However, the viability of these reconstructions has been called into question in recent years. Indeed, the strongest evidence for these stems, thought to come from Anatolian, has been consistently dismantled. Hittite stems ending in *-Cal* have been explained by Melchert (1993:110f) as thematic stems which lost their thematic vowel through a law of finals (\*-*Clos/m* > \*-*Cols/m* > *-Cal*), those ending in  $-\bar{e}l$ ,  $-\bar{i}l$  and  $-\bar{u}l$  have, according to Rieken (2008:251f) undergone a similar apocope conditioned by accent (from endings in \*-*élo-*, \*-*ilo-*, \*-*ulo-*), and the same can be assumed for those ending in  $-\bar{a}l$  (now understood to be from \*-*ó-lo-*, Melchert p.c. *apud* Sasseville 2016:118).

With the Anatolian evidence having lost some of its strength, it is important to reexamine our overall inventory of Proto-Indo-European consonant stem classes. If hardly any athematic consonantal \*-*l*-stems can be securely reconstructed, where does that leave the Tocharian *l*-abstracts, which have been thought to directly continue archaic \*-*l*-stems, alongside the supposed Anatolian ones (Rieken 1999:426)? With this paper, which builds on my ongoing PhD research and expands on an earlier paper I gave at the East Coast Indo-European Conference in 2021 (ECIEC XL), I attempt to provide an answer to this question. I will reexamine the evidence for athematic \*-*l*-stems provided from various branches such as Italic, Greek and Indo-Iranian, and offer a closer look at the Tocharian data, which is still in want of an explanation.

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## **Two new Latin sound-laws**

## Tore Rovs Kristoffersen

This paper presents evidence for two new sound-laws: 1) Latin  $a\underline{u} > \overline{o}$  before labials, and 2) PIE  $*o\underline{u} > \text{Latin } a\underline{u}$  after *r*.

In his article on Thurneysen-Havet's law, Vine (2006) convincingly argues that Latin  $\bar{o}pili\bar{o}$  'shepherd' reflects \**aupilio*, syncopated from \**aui-p*°, reflecting \**oui-p*° (ultimately <\**h*<sub>2</sub>*oui-polh*<sub>2</sub>-); the unexpected initial  $\bar{o}$ - is explained as reflecting a "rustic" treatment of \**au*-. The latter point, however, entails the difficulty that forms with "rustic"  $\bar{o}$  are usually found only as mere variants of better attested forms with "urban" *au* (e.g. *Clodius* beside *Claudius*), whereas no variant \**aupilio* is attested. This problem may be solved by assuming a sound-law through which \**au* became  $\bar{o}$  in all varieties of Latin, conditioned by the following labial *p*.

As shown by Hyllested & Cohen (2007) and Kristoffersen (2019), a similarly conditioned sound-law is found in Greek. Hyllested & Cohen (2007) also note that clearly inherited  $V\mu P$ -sequences in Latin are lacking: *aufero* 'carry away' reflects \**ab-fero*, *baubor* 'bark gently' is onomatopoeic, while *caupōna* 'tavern, inn' is of uncertain origin. The one possibly inherited form noted by Hyllested & Cohen (2007) is *pauper* 'poor', supposedly reflecting \**pau-paro*-'acquiring little'. It is equally probable, however, that *pauper* represents a relatively recent compound; if the first element was *parvus* (\**parµo-paro-* > \**paru-paro* > *pauper* by dissimilation of *r*), it is likely that the secondary *auP*-sequence would have escaped monophthongization.

Further examples are:

*ōmentum* 'fatty membrane of caul covering the intestines' < \*aumentum <</li>
 \*h₂eu‑-mŋ‑to‑ ← \*h₂eu‑-mŋ to the root \*h₂eu‑- 'to put on (clothing)' (cf. Arm. aganim 'put on (clothing)', Lith. aũti 'put on (shoes)', OCS ob‑uti 'put on

(shoes)', Lat. *ind-uo*, *ex-uo* 'put on/take off (clothing)', Toch. B *ewe* 'skin'). The Latin formation is paralleled by Greek  $\dot{\nu}\mu\dot{\nu}\nu$  'thin skin, film, membrane', reflecting \**h*<sub>2</sub>*oµ-men*- or \**h*<sub>2</sub>*µ-men*- or \**aµ-men*-, either of which would yield  $\dot{\nu}\mu\dot{\nu}\nu$  by regular monophthongization of  $V\mu > v$  before labials (Kristoffersen 2019: 22-24).

- $\bar{o}men$  'omen, augury' < \*aumen < \* $h_2e\mu$ - $m_n$  to the root \* $h_2e\mu$  'to see, perceive' (cf. Hitt.  $au^{-i} / u$ - 'to see, look', Skt.  $\bar{a}vis$  'evidently, before the eyes', Lat. *audio* 'hear', Greek  $\alpha i\sigma \theta \dot{\alpha} vo\mu \alpha i$  'perceive' < \* $h_2e\mu is$ - $d^hh_1$ -). In meaning, this formation would be close to the semantically attractive analysis of  $\bar{o}men$  as \* $h_3ek^w$ -s- $m_n$  'a sighting' (root  $h_3ek^w$ - 'to see'; cf. de Vaan 2008: 427-28), which, however, would be formally isolated. In contrast, \* $h_2e\mu$ - $m_n$  would mirror a formation found in Balto-Slavic, reflected in the family of Lith.  $aumu\tilde{o}$ , OCS umb 'mind' < \* $h_2e/o\mu$ -men-.
- vōmer / vōmis 'ploughshare' < \*μαμmi- < \*μομmi- < \*μοg<sup>wh</sup>-mi- for \*μοg<sup>wh</sup>-ni- (cf. Greek ὀφνίς, OPr. wagnis 'coulter'). The unexpected vō- < \*μομ- is explained by de Vaan (2008: 690) as resulting from a phonological constraint against \*μū-. However, this seems unlikely, as there is no corresponding constraint against μu- (cf. vult 's/he will'). A phonetically straightforward development would be \*μομ(\$)- > \*μαμ(\$)-, with a dissimilatory unrounding of the vowel between labials.

Two examples are fed by a conditioned sound-law PIE \*ou > Latin au after r (cf. below).

 rōbus 'kind of red' < \*raubo- < \*roubos < \*h1roudh-o- (cf. Lith. raudas, Latv. rauds 'reddish brown', Ru. dial. rúdyj 'blood-red', Go. raubs 'red'). The proposed sound-laws would allow rōbus to regularly continue the inherited thematic o-grade, removing the need to assume a dialect loan. The vocalism of rōbus would have been analogically introduced in rōbur/-oris 'oak-tree, strength' for expected \*\*rūbur < \*h1reudh-os.</li> Rōma 'Rome' < \*rauma < \*rouma < \*Hrou(H)-meh<sub>2</sub> 'the Spacious'. As argued by de Vaan (2008: 273), the name Rōma seems to be the only exception to a sound-change -ōm- > -ūm- before non-front vowels (cf. hūmānus < \*hōm°, grūmus < \*grōm°). Therefore, the ō in Rōma must be secondary. I posit a pre-form \*Hrou(H)-meh<sub>2</sub> which would correspond closely to PGmc \*rūma- 'roomy, spacious' < \*HruH-mo-.</li>

According to the communis opinio, PIE \**eų* and \**oų* merges as *oų* (>  $\bar{u}$ ) in Latin. While many examples of PIE \**eų* > Latin *oų* may be cited, there are, on the other hand, remarkably few cases where Latin *oų* unambiguously reflects PIE \**oų*, one clear example being *lūcus* 'sacred grove, wood' < \**loųk-o-* 'light place' (cf. Lith. *laũkas* 'field, land', Latv. *laũks* 'clearing in the woods', OHG *lōh* 'clearing'). I propose here a conditioned sound-law \**oų* > Latin *aų* after *r*, for which there are no counter-examples; such a rule would, beside *rōbus*, *Rōma*, explain *fraus/-udis* 'harm, danger; deceit' < \**d<sup>h</sup>roųd-* (extension of the root \**d<sup>h</sup>reų-* 'deceive'), *raudus/-eris* 'rough piece, lump; bronze coin' < \**g<sup>h</sup>roųd*° (vs. *rudis* 'unwrought, uncultivated, crude' < \**g<sup>h</sup>rud*°, *rūdus/-eris* 'broken stones, rubble' < \**g<sup>h</sup>reųd*°), and *scrautum* 'skin used for storing arrows' < \**skroųt-o-* (vs. *scrūta* [n.pl.] 'discarded goods' < \**skreųt*°).

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# The weird Indo-European \*s-modals

## Jan-Niklas Linnemeier

(University of Würzburg)

Though the origins of the individual constructions have been disputed time and again, it is today quite clear that Proto-Indo-European must have had a number of primary desiderative/future formations unified by the peculiar morph -\*s-, which appeared as -\*h<sub>1</sub>s- after resonants.

At least four of these formations can be reconstructed confidently. (Villanueva Svensson 2010: 218 and Hill 2014: 43ff. with lit., also McCone 1991: 137f. for an older overview of suggested formations)

1. full-grade -\*(h1)s-

(Italic future, East Baltic future)

2. full-grade -\*(h1)se/o-

(Greek future, Insular Celtic subjunctive)

3. reduplicated zero-grade -\*(h1)se/o-

(Indo-Iranian desiderative, Insular Celtic future)

4. full-grade -\*(h1)sye/o-

(Indo-Iranian future, East Baltic future, Continental Celtic)

As Hill (ibid) points out, the formations' distributions in the daughter languages strongly suggest that they differed in semantics rather than solely morphology. (Contrary to e.g. the PIE aorist types, which likely stood in an allomorphic relationship to each other.)

Starting from the diverse modal and temporal outcomes in the daughter languages and taking into account typological considerations, this paper will investigate the possible relationships within the system of -\*(h<sub>1</sub>)s- formations. Several theories will be expounded and discussed, among them:

- Formation (2) synchronically being a subjunctive of formation (1)
- Possible aspectual differences, such as Dahl (2011: 288f.) postulating formation (3) to be progressive/conative
- The meaning of the remarkable affinity of (4) for active and (2) for medial inflection (a possible parallel to Schrijver 1999)
- The role of speaker-oriented vs. agent-oriented modality (Bybee et al. 1994: 177ff.)

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# Innovation and tradition: -εις adjectives in epic poetry

Irène Maréchal

(Université Toulouse 2 Jean Jaurès, PLH)

The suffix -εις was used in Ancient Greek to create adjectives with a possessive meaning (Buck 1921; Chantraine 1933: 270ff.). It goes back to an Indo-european suffix \*-*uent*- that is also attested in Indo-iranian languages (Meier-Brügger 1992: vol.2, 22-23; Chantraine 1991: 104ff.). The suffix -εις could be added to any noun, abstract or concrete. For example, the adjective  $\dot{\alpha}\mu\pi\epsilon\lambda\delta\epsilon\iota\varsigma$  "rich in vines" is based on the noun  $\ddot{\alpha}\mu\pi\epsilon\lambda\varsigma\varsigma$  "vine". This type of adjectives was used mainly in poetry, except for two adjectives, χαρίεις "gracious, graceful" and φωνήεντα "vowels", the nominalized form of φωνήεις "endowed with speech".

The epic poems contain 79 - $\varepsilon_{L\zeta}$  adjectives, out of a total amount of about 400 adjectives in all Greek literature (Risch 1974: 152ff.). The aim of this paper is to analyse how - $\varepsilon_{L\zeta}$  adjectives were used by epic poets to renew their expression. First, I present a survey of - $\varepsilon_{L\zeta}$  adjectives in the *epos*, and especially in epic formulas. Then I study how a morphological element such as the suffix - $\varepsilon_{L\zeta}$  could be used to renew the poetical language. Finally, I present some examples of formulaic derivation with - $\varepsilon_{L\zeta}$  adjectives.

To begin with, I give a precise and quantified overview of the presence of  $-\varepsilon_{L\zeta}$  adjectives in the *Iliad* and the *Odyssey*. In the first part of the paper, I focus especially on the use of  $-\varepsilon_{L\zeta}$  adjectives in formulas as they were described by Milman Parry in these terms: "une expression qui est régulièrement employée, dans les mêmes conditions métriques, pour exprimer une certaine idée essentielle" (Parry 1928: 16). Some  $-\varepsilon_{L\zeta}$  adjectives are used mainly in formulas that can be very frequent, like  $\xi\pi\varepsilon\alpha$   $\pi\tau\varepsilon\rho$  $\delta\varepsilon\nu\tau\alpha$  "winged words". Out of 130 occurrences of the adjective  $\pi \tau \epsilon \rho \delta \epsilon \iota \varsigma$  "winged" in the *Iliad* and the *Odyssey*, it is used 114 times in this formula.

Some formulas present slight variations. We can cite the formula which contains the substantive  $\pi \acute{o} v \tau \circ \varsigma$  "sea" and the adjective  $i\chi \theta \upsilon \acute{o} \varepsilon \iota \varsigma$  "full of fish, fishy". It is used six times after the trihemimeral ceasura. In six other cases, we find the formula  $\pi \acute{o} v \tau \circ \imath \acute{e} \pi$ '  $i\chi \theta \upsilon \acute{o} \varepsilon v \tau \alpha$  "on the fishy sea" before the trochaic caesura (*Il.* 19.378; *Od.* 4.516, 5.420, 9.83, 23.317). However, we can also find in one verse a variation with this formula, since the adjective  $i\chi \theta \upsilon \acute{o} \varepsilon \iota \varsigma$  is used to qualify the river "Y $\lambda\lambda \circ \varsigma$  (*Il.* 20.392).

New -εις adjectives were created by epic poets. Some of these creations could present peculiarities. We can cite the case of the presuffixal vowel; indeed, to create a new possessive adjective, the poet added the suffix -εις to a nominal base; for example, from the noun φάρμακον "drug, medicine" was created the adjective φαρμακόεις "poisonous". Likewise, from a noun ending with the vowel -η, an adjective in -ήεις was created. However, we find some irregularities; for instance, we find derived from the noun σκιά "shade" the adjective σκιόεις "giving shade" or "shady, dark". These irregularities have been explained diversely; C. Le Feuvre suggests that "la distribution est fonction du mètre et ne dépend pas de la forme de la base" (Le Feuvre 2017: 508). On the other hand, A. Blanc states that "La morphologie ne crée pas des aberrations, mais toujours des formes éminemment régulières" (Blanc 2021: 235).

Poets could also create  $-\varepsilon_{L\zeta}$  adjectives adding the suffix to an adjectival base, which produced doublets that had the same meaning; for instance, we find in the Homeric poems the adjective  $\varphi\alpha(\delta\mu\rho\varsigma)$  "bright". We also find in the *Iliad* the form  $\varphi\alpha\iota\delta\mu\phi\varepsilon\iota\varsigma$ , which have the same meaning. This means that the suffix - $\varepsilon\iota\varsigma$  can be used to create new adjectives, probably for metrical purposes; but in this case, the suffix has no longer a possessive meaning. We give in this paper a complete survey of the metrical arrangements allowed by - $\varepsilon\iota\varsigma$  adjectives. Finally, we would like to focus on formulaic derivation, from the point of view of -εις adjectives. Scholars have noticed examples of this process, for instance in the case of the adjective φοινήεις "blood-red" (Le Feuvre 2016: 163), attested in the *Iliad* in two similar verses (*Il.* 12.202, 220). φοινήεις was a recent creation and not a form used in ancient and fixed epic formulas, in opposition to τελήεις "perfect, complete" for example, that was used without exceptions in the formula τεληέσσας ἑκατόμβας "perfect hecatombs". This study follows in the footsteps of previous works regarding the renewal of epic formulas (Hoekstra 1965, Hainsworth 1968), but proposes a new analysis based on the -εις adjectives in epic poetry in order to understand better how the *aoidoi* used and renewed the epic formulas.

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# The *ápa-* $\sqrt{yaj}$ -construction in Graeco-Aryan: the case of \* $h_2 \acute{e} po/h_2 p \acute{o}$

Thiago M. Venturott

(University of Würzburg)

There exists a special category of particle verbs in some ancient Indo-European (IE) languages which has hitherto gone mostly unnoticed. Particle verbs falling under this category are characterised by two main features:

- they select an object which cannot be selected by the corresponding simplex;
- they express an indirectly effected change of place or state of the object.

The verbs in question usually express that the object is removed from or brought to the speaker's domain, created or destroyed, as a result of the action denoted by the simplex. The phenomenon falls under what Goldberg and Jackendoff (2004) call the 'unselected resultative' construction and is licit in modern Germanic languages, such as German, e.g. (1) and (2). In these examples, the removal of the particle would needs entail the ungrammaticality of the construction, since the simplex cannot select the object selected by the particle-verb construction.

The non-triviality of the unselected resultative particle-verb construction is evident from the typological evidence, insofar as it is only possible in languages that exhibit a certain independence of autosemantic verb particles and thus ilicit, e.g., in modern Semitic and Romance languages (Goldberg 1995: 60–6; Talmy 1985: 62–72, 1991: 495ff., 2000: 237–88). It should be noted that the nontriviality of the construction arises precisely from the feature of unselectedness: modern Romance, for instance, exhibits — especially in highly specialised contexts such as cooking instructions (Métairy 2022, with lit.) — a partial productivity of unprototypical resultatives, but only of *selected* ones. The presence of their unselected counterpart in a given language (family) is thus of more general importance and in need of investigation.

In the field of ancient IE languages, the existence of particle-verb constructions of this sort has been recognised in Indo-Iranian (IIr.) by Forssman (2000), who chooses as the *Paradebeispiel* common IIr. ved.  $\dot{a}pa-\sqrt{yaj}=av. ap\bar{a}-\sqrt{yaz}$  'to sacrifice away' (i.e., 'to remove / extinguish by sacrifice'), e.g. (3) and (4), and suggests the construction be called thereafter. Several other instances are to be found in the Rgvedic corpus, not uncommonly in serial constructions, e.g. (5), where Agni is asked to *blaze* the bad *away* (:  $\dot{a}pa-\sqrt{\dot{s}uc}$ ) and *blaze* wealth *hither* (:  $\dot{a}-\sqrt{\dot{s}uc}$ ), i.e., to by means of his blazing extinguish the bad and provide wealth to the singer.

Similarly, the construction is far from uncommon in ancient Greek, though its existence has, to my knowledge, only been treated by Wackernagel (<sup>2</sup>1926 II: 180f. = 2009: 624), and this but cursorily: Wackernagel points out the rather odd syntax of the Herodotean passage in (6), where Hippocleides is said to have *danced away* his marriage — i.e., to have lost, due to his shameful dancing, any prospect of marrying Cleisthenes' daughter. The construction is arguably present already in Homer, e.g. (7), but it is only with Herodotus that it seems to have become productive in Greek.

The talk aims at outlining a representative subfamily of unselected resultative particle-verb constructions well attested in both Greek and Indo-Iranian, namely those with  $h_2 \dot{e} po/h_2 p \dot{o}$  (: ved.  $\dot{a} p a$ , av.  $a p \bar{a}$ , gr.  $\dot{a} \pi \dot{o}$ ). By means of a representative sample, problems of definitional nature will be discussed, and an adequate synchronic description of the phenomenon will be worked out. Subsequently, the talk will examine the Graeco-Aryan evidence as to its type of occurrence (viz. whether the examples occur alone or in series, in what sort of text, what pragmatic function they fulfil etc.), and culminate in a comparison with the evidence in other ancient IE language branches.

## Examples

- (1) Der Tagesspiegel, 04.01.2002
   Der Mann hatte <u>das Geld</u> halb vertrunken.
   \*Der Mann hatte das Geld halb getrunken.
- (2) Der Tagesspiegel, 16.01.2002
   Bald darauf hatte er sich <u>den Ruf des Party-Meisters</u> ertanzt.
   \*Bald darauf hatte er sich den Ruf des Party-Meisters getanzt.
- **(3)** PS 19.23.5

ye te <u>pāśā ekaśatam</u> mṛtyo martyāya hantave | <u>tāms</u> te yajñasya māyayā sarvām **apa yajāmasi** || "<u>The 101 fetters</u> that bring death to the mortal for you, O Death — <u>these</u> all we **sacrifice away** from you through the magic of the sacrifice." (after Forssman 2000)

(4) Y 33.4

yō. θβaţ. mazdā. <u>asruštīm. akəmcā. manō.</u> yazāi. apā.
"I who will worship away from you, O Mazda, <u>disobedience and bad</u> <u>thought</u>." (after avestan.org)

(5) RV 1.97.1

ápa naḥ śóśucad aghámágne śuśugdhí 着 rayím |ápa naḥ śóśucad aghám ||"Blazing away the bad for us, blaze wealth here, o Agni, — blazing awaythe bad for us." (Jamison and Brereton 2014)

(6) Hdt. 6.129.4 (Cleisthenes to Hippocleides)
 ῶ παῖ Τισάνδρου, ἀπορχήσαό γε μὲν τὸν γάμον.
 "Son of Tisandrus, you have danced away your marriage."

(7) A 124-5 (Achilles to Agamemnon)
οὐδέ τί που ἴδμεν ξυνήϊα κείμενα πολλά·
ἀλλὰ τὰ μὲν πολίων ἐξεπράθομεν, τὰ δέδασται.
"We know nothing of a hoard of wealth in common store; but <u>whatever</u> we took by pillage from the cities, that has been apportioned." (after perseus.tufts.edu)

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# Hom. πρόσσω καί ἀπίσσω: the Knowledge of the Wise

## Elisa Migliaretti

(University of California, Los Angeles)

In three Homeric passages (Hom. Il. 1.343, 3.109, 18.250; Od. 24.452), a character is described as wise by saying that he sees or knows  $\pi\rho\delta\sigma\sigma\omega$  kai όπίσσω. With some exceptions (Leaf 1900, Edwards 1991, Rutherford 2019), ancient and modern scholars (Eustathius and scolia ad loc.; inter alia, Murray 1924, Cerri 2010, Heubeck 2007) assign the phrase πρόσσω και ἀπίσσω the meaning 'in the past and in the future', where  $\pi \rho \delta \sigma \sigma \omega$  means both 'forwards' and 'in the past', while  $\partial \pi i \sigma \sigma \omega$  means both 'backwards' and 'in the future'. In the phrase πρόσσω καὶ ὀπίσσω, then, the past is located ahead and the future behind. Although at first glance it could seem counterintuitive, this conceptualization of time is perfectly regular and frequently attested in all natural languages alongside with its opposite (the past is behind, the future ahead), as shown in various studies from different fields (Traugott 1978, Lakoff – Johnson 1980, Haspelmath 1997, Bettini 1986, Luraghi 2003, Dunkel 1982/83). However, the interpretation of πρόσσω as 'in the past' is regarded as problematic, since Hom. πρόσσω is believed to be a dialectal variant of Gk.  $\pi\rho\delta\sigma\omega$ , which always means 'in the future, when given temporal meaning (LSJ s.v.  $\pi\rho\delta\sigma\omega$ ,  $\pi\rho\delta\sigma\sigma\omega$ ).

The aim of this paper is twofold. First, I argue that Gk.  $\pi\rho\delta\sigma\omega \sim \pi\delta\rho\sigma\omega$ 'forwards, in the future' < PIE. \* $p(o)rs\bar{o}(d)$  (ablative, as in Gk.  $\pi\delta\rho\rho\omega$ , cf. EDG s.v.  $\pi\delta\rho\sigma\omega$ ) is different from Hom.  $\pi\rho\delta\sigma\sigma\omega$ , 'forwards, in the past' < PIE. \* $pro-t i - oh_1$  (instrumental, cf. Dunkel 1982/83, García Ramón 1997), which is only found in Homer as a counterpart of  $\delta\pi\delta\sigma\omega$ . Due to the morphological similarity (or identity, considering the Attic outcome of PIE.  $pro-t i - oh_1$  > Att. Gk.  $\pi\rho\delta\sigma\omega$ ) and the overlap of the spatial meaning 'forwards', I believe that the two adverbs merged in the post-Homeric  $\pi\rho\delta\sigma\omega$ , losing the semantic nuance of Hom.  $\pi\rho\delta\sigma\sigma\omega$ , 'forwards, in the past'.

Second, I argue that the phrase  $\pi\rho \dot{\sigma}\sigma \omega \kappa \alpha \dot{\sigma} \dot{\sigma}\pi \dot{\sigma}\sigma \omega$ , formed by the constituents [FORWARDS ( $\pi\rho \dot{\sigma}\sigma \omega$ )] + [BACKWARDS ( $\dot{\sigma}\pi \dot{\sigma}\sigma \omega$ )], creates a merism (Watkins 1995: 46) meaning [EVERYWHERE]. As showed by West (2007: 103-104), the union of past and future is a common Indo-European idiom of universality, which can be especially connected with divine or vatic knowledge. Indeed, the merism [FORWARDS ( $\pi\rho \dot{\sigma}\sigma \omega$ )] + [BACKWARDS ( $\dot{\sigma}\pi \dot{\sigma}\sigma \omega$ )] is part of the larger collocation [TO SEE/KNOW – FORWARDS AND BACKWARDS] = [TO HAVE COMPLETE KNOWLEDGE], used for categories of typically wise people (old men, prophets). In the above-mentioned Homeric passages, the verb at the first member of this collocation can be variously realized as both [TO SEE ( $\dot{\sigma}\rho \dot{\alpha}\omega, \lambda\epsilon \dot{\sigma}\sigma \omega$ )] and [TO KNOW (vo $\dot{\epsilon}\omega$ )] which are semantic equivalents in this context (as in West 2007: 171-3).

This collocation appears in other Indo-European languages, as well. In Epic Sanskrit, it is reflexed in the compounds *parāvaradṛś-* (*MB.* 12.316.51a), 'who sees both past and future' and *parāvarajña-*, 'who knows both past and future' (*MB.* 3.202.13c, 5.33.95a+), preserving both the alternatives [TO SEE ( $\sqrt{drs}$ )] and [TO KNOW ( $\sqrt{jna}$ )] for the first member. At the same time, the dvandva compound *parāvara*, 'distant and near, before and after' realizes the merism [FORWARDS (*para*)] + [BACKWARDS (*avara*)]. These compounds always refer to people who have achieved the highest knowledge humanly possible and have become omniscient.

In Umbrian, the collocation is found in the first Iguvine Table, which prescribes that a sacrifice be made 'after having observed the birds in front and behind' (Tab. Ig. Ia 1: **aves: anzeriates:** [...] **pernaies: pusnaes**). The specific augural context requires the collocation to be reshaped as [TO SEE (**anzeriates**) – BIRDS FORWARDS AND BACKWARDS (**aves, pernaies: pusnaes**)]. This adaptation causes the adverbs to be replaced by their adjectival derivatives, preserving the merism [FORWARDS (**pernaies**)] + [BACKWARDS (**pusnaes**)] nonetheless.

The existence of these parallels strengthens the idea that the phrase πρόσσω καὶ ὀπίσσω was inherited as a single unit, thus favoring the possibility that Hom.  $\pi p \circ \sigma \sigma \omega < PIE$ . \**pro-ti-oh*<sub>1</sub>, being tied to a formulaic context and to its counterpart ὀπίσσω, was inherited independently from Gk.  $\pi p \circ \sigma \omega < PIE$ . \**p*(*o*)*rs* $\bar{o}(d)$ .

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# The etymology of the Germanic 'dream': a possible solution for an ancient problem

Edoardo Nardi

(Università degli Studi 'Guglielmo Marconi')

The attested derivatives of PGmc \**draumaz* exhibit a certain semantic plurality: Old Norse *draumr*, Old Frisian *drām* and Old High German *troum* mean 'dream'; Old English *drēam* means 'noise, music, joy' and alike nuances; Old Saxon *drōm* roughly accumulates all these meanings, in addition to the peculiar semantic nuance of, approximately, 'sleep' (on which see Dick 1973). This plurality is generally addressed in the literature by assuming two original forms \**draumaz*, formally identical, but semantically different: \**draumaz* 'dream' vs. \**draumaz* 'noise, music, joy'. According to the traditional and generally-accepted etymology (Pokorny 1959; Kluge and Mitzka 1967; Lehmann 1986; Kroonen 2013), PGmc \**draumaz* 'dream' (from an older \**draugmaz*, with the regular loss of -*g*- between long vowel and /m/: see Hirt 1931: 127) continues Indo-European \**d<sup>h</sup>roug<sup>h</sup>-mo-s* 'illusion' (from the root \**d<sup>h</sup>reug<sup>h</sup>-* 'to deceive'); the dream, then, is argued to be conceived as an illusion. The other form \**draumaz* 'noise, music, joy, etc.' is generally claimed to originate from the Indo-European root \**d<sup>h</sup>er-* 'to rumble' (Pokorny 1959; Kluge and Mitzka 1967).

In general, the assumption of two homophonous words is acceptable only if a reasonable semantic link between the two is not found; otherwise, one can think that a single polysemic word is being addressed. In particular, exactly for semantic reasons, the etymology of \**draumaz* 'dream' is controversial, because regarding the dream as an illusion neatly contrasts with the old Germanic oneiric conception, according to which dreams were tightly related to the real waking world and represented truthful revelations of future events. Therefore, as also observed by Ehrensperger (1931), an attempt should be made to unify all the attested derivatives from \**draumaz* by means of a shared semantic connection.

In this paper, the traditional etymology is further discussed and an alternative proposal is put forth; in the wake of Ehrensperger's claim, the new hypothesis consists of a unitary reconstruction, in the attempt to account for the observed semantic plurality.

As for the traditional etymology, it might be possible that the conception of dreams as illusions belonged to the Indo-European heritage: the word may have been formed in the unitary Indo-European phase, perhaps when dreams were actually conceived as illusions; later, in the common Germanic culture, the dream conception changed, but the word might have been preserved to denote dreams. However, an investigation into the literature of ancient Indo-European languages shows that, although the oneiric conception shows variability, conceiving dreams as tightly related to reality appears to be the most common attitude.

The new proposal of etymology follows the perspective suggested by Dick (1973), who regards as crucial the mutual relation and resemblance of the concepts of 'ecstasy' and 'dream'. I propose that an original Indo-European form  $*d^{h}rou-mo-s$  'noise, rumble, sound' (from the Indo-European root  $*d^{h}reu-$  'to cry aloud, to proclaim', plausibly related to  $*d^{h}er-$  'to rumble, to make noise'; see Pokorny 1959; Rix 2001) should be assumed, which regularly develops into PGmc \*draumaz. From the original meaning of 'noise', attested in Old English  $dr\bar{e}am$ , I suggest that the word may have undergone a unique semantic development, such that all the meanings attested in the old Germanic languages can be accounted for in a consistent and organic way, as different stages of the same developmental path. A crucial role in this etymological history is played by Old Saxon  $dr\bar{o}m$ , which roughly accumulates the various meanings attested in all the other languages and represents the joining link between the primitive phase and the innovative one.

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# How Intensive Meanings Appear from Locative Semantics: An Introduction to PIE Adverbs

Santiago Real Besteiro

(University of Santiago de Compostela)

This talk will introduce a semantic approach on those PIE adverbs which present an original spatial meaning, such as 'place where, from, to, in' (Dunkel 2014). Locative meanings can be argued to be the first ones to emerge in a language, due to their referential nature.

However, meanings have evolved from Proto-Indo-European to historical languages (Luraghi 2000). Through this whole conference we will analyze some "locative adverbs" and we will debate whether they maintain or change their original meanings. Specifically, adverbs which evolve from "locative" to "intensive" meanings will be fully analyzed. Although this tendency can be perceived in almost any Indo-European language, this investigation is focused on Latin and on Greek, as well as some examples from Sanskrit. Nevertheless, intensive meanings do not always appear the same way.

- 1.1. On the one hand, it may be said that adverbs which originally meant 'place upon', 'over', 'above' develop intensive semantics, as it happens in Greek ὑπερνικάω 'prevail completely over' (< \*upér 'over') or Latin superadultus 'fully mature' (< \*upér 'over').</li>
- 1.2. On the other hand, there are adverbs which originally involved a movement from one place to another, such as \**dis* 'trough' or \**pér* 'trough, over', but also present intensive developments. This idea may be explained as an evolution which involves "figurative" meanings ('through' > 'from one place to another' > 'totally' > 'a lot') and can be observed in Greek  $\delta\iota\alpha\kappa\alpha\theta\alphai\rho\omega$  'purge thoroughly' or Latin *discupio* 'to desire greatly', as well as in Aeolian Greek ζα- (Le Feuvre 2017). Another examples may be Latin

prefix *per-* (< \**pér*, as in *pěraestĭmo* 'to estimate a lot') or *re-* (<\**ré* 'back, backwards', as in *rěcognosco* 'investigate').

There are also some adverbs that originally meant 'upon' or even 'under', as \*áno 'above' and \*kát 'under', that have also developed an intensive meaning because they implied a movement. Greek àvaytyv $\omega \sigma \omega$  'to certainly know; to read from the first word to the last' (< \*áno) or  $\kappa \alpha \tau \alpha \beta \lambda \dot{\alpha} \pi \tau \omega$  'hurt greatly' (< \*kát) can exemplify this third tendency: from an original locative sense appeared an idea of movement > 'from the top to the bottom' // 'from the bottom to the top' > 'fully, completely' > 'a lot'. From these ideas, we can propose a systematization of intensive semantics from some locative meanings, as well as a clear distinction between the different emergences of intensive meanings depending on the process of evolution.

2. At the same time, we may include one more point: "locative adverbs" have been regularly employed to re-intensify reduplicated presents that had previously lost their original meaning. For instance, Latin *re-sisto*, *in-sisto* or *per-bibo* may be useful to explain this point: *bibō* (\**pi-ph<sub>3</sub>-*) used to present that intensive idea but, once it lost its earliest meaning, the preverb operated as a re-intensifier. In this sense, PIE adverbs may have been employed to re-characterize an *Aktionsart* that has been previously lost.

Even though this evolutions from 'locative' to 'intensive' are somehow regular, it must be said that there are 'locative adverbs' which do not present this idea, as it happens, for instance, with \*só 'in; near', \*nér 'under' or  $\hat{g}^h oh_1$  'behind'. There are also other tendencies that may be taken in consideration. For instance, adverbs which originally meant 'out; from' (\* $\hat{e}\hat{g}^h$  or \* $\hat{a}p(o)$ ) tend to present a status change, as it is seen in Greek and Latin evolutions such as  $\dot{\alpha}\pi \circ \kappa \circ \lambda \circ \kappa \circ \tau \omega \sigma \varsigma$ 'transformation into a pumpkin'. Hence, this kind of adverbs may also be classified as re-interpretations of a former *Aktionsart*, which is parallel to what has been stated in 2. Therefore, the whole conference will be about Indo-European locative adverbs and their evolutions: at first, we will analyze those adverbs which develop an intensive meaning from a 'position over, upon'. Secondly, we will talk about adverbs which involved a spatial movement, from which also appeared an intensive meaning. Finally, we will consider how some adverbs have been added to reduplicated presents to re-intensify verbs whose reduplication would have originally presented an intensive meaning but have lost it and the adverb is utilized to get back their former *Aktionsart*. Hence, we will classify the evolution of PIE adverbs from locative to intensive in three main categories.

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# *Kenning* – A figure of Old Saxon poetic language?

## Leo Rennert

(University of Cologne)

While the definition of the term *kenning* has been the subject of discussion for a while (Marold 2010), according to Marold (2010: 436) there is general agreement on the following features of kenning:

- 1. A kenning is a substitute for a noun.
- 2. It consists of at least two parts.
- 3. It is the connection of a base word and a determiner, which adopts the grammatical function of the described word.
- 4. As such kenningar are usually compounds (e.g. OE *beowulf* 'beewolf' for 'bear') or genitive constructions (e.g. OE *heofones gim* 'heaven's gem' for 'sun').
- 5. A kenning has some form of semantic connection to the noun it paraphrases (e.g. a wolf and a bear are both predators; the sun is bright like a gem struck by light).

This will serve as the working definition for kenning.

Kenningar in Old Norse and Old English poetic literature have been extensively studied with attempts at categorising the findings (e.g. Bode (1886), Rankin (1909-1910), Meissner (1921), Fidjestøl (1997), Marold (1983), Fulk (2021)). So far, no systematic study of Old Saxon kenningar has been undertaken. The general assumption seems to be that there are few (if at all) kenningar to be found in the *Heliand*, the only surviving Old Saxon longer poetic text (beside the *Genesis* fragment) (Heusler 1922: 137; Krause 2014: 577; Gardner 1969: 110-111). The *Heliand* itself is a gospel harmony, recounting the life of Jesus Christ in the form of an epic poem. Similar to Old English poetry, the *Heliand* is composed of alliterative verse, which is a common feature of Old Germanic epic

poetry. Another prominent feature of the style of the *Heliand*, also found in Old English poetry, is variation: the paraphrasing of a given word or phrase in the onverse of the next line, as shown in example (1). Here the phrase OS *huand sô hue sô uuâpno nîð* 'for he who [practices] the hate of weapons' in the off-verse of 1. 4897 is paraphrased in the on-verse of the following line as *grimman gêrheti uuili gerno frummien* 'who gladly practices in grim spear-grudges'. OS *uuâpno nîð* 'hate of weapons' varies with OS *gêrheti* 'spear-grudges', both kenningar for 'battle' or 'strive'. It has been assumed, that kenningar arose because of the use of variation (cf. recently Fulk 2021). If so, the lack of kenningar in Old Saxon would be unexpected. This talk aims to shed light on the use of kenningar in Old Saxon poetic language and its position within Old Germanic poetic traditions.

## Examples

(1) Heliand (4896-4899):

[...] ni sculun ûs belgan uuiht, / uurêðean uuið iro geuuinne; huand sô hue sô **uuâpno nîð**, / grimman **gêrheti** uuili gerno frummien, / he suiltit imu eft suerdes eggiun, / dôit im bidrôregan: [...]

"[...] Nor shall we be angry, / nor rage 'gainst their strife; for he who doth practice the **hatred of weapons**, / who gladly partaketh in grim **speargrudges**, / he again is slain by the sword's edge, / doth die in his own blood." (Scott 1966: 168, highlighting by me)

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# Words meaning 'sword' in the Poetic Edda

## Gudrun M. J. Samberger

(Julius-Maximilian-Universität Würzburg)

Old Norse word formation has not been studied thoroughly since the middle of the 20th century (Torp 1909, Cleasby 1957) in contrast to several other Indo-European languages which have been the subject of recent studies (cf. de Bernardo Stempel 1999, Casaretto 2004, Olsen 1999, Rieken 1999). I will tackle this deficiency with my PhD thesis. My talk will offer a small investigation of Old Norse word formation using the words for 'sword' as an example as these words display various formations and can therefore serve as a micro study for Old Norse nominal word formation as a whole.

Within the Old Norse Poetic Edda, several words meaning 'sword' are attested: *brimir* m. (e. g. in (1)), *hjǫrr* m. (e. g. in (2)), *mækir* m. (e. g. in (3)), *sverð* n. (e. g. in (4)) and *tiorr* or *tyrr* m./f.? (spelling varies in the editions; hapax legomenon in (5)).

They apparently all have the same meaning and display various stem formations, including two *-ja*-stems (*brimir*, *mækir*), two *-va*-stems (*hjǫrr*, *tiǫrr/tyrr*) and one dental stem (*sverð*). This raises two questions:

- 1. Are these different words meaning 'sword' synonyms or can one find differences in their use and meaning?
- 2. Which common properties can be attributed to the different stem formations that yield words meaning 'sword'?

The goal of my talk is to describe the different words meaning 'sword' in their use and formation and examine their etymologies. Additionally, I will discuss the question whether the words for 'sword' display any group effects, e. g. whether the two -ja-formations came about independently or influenced one another.

To achieve a thorough investigation of the semantics, I will also include several words that do not mean 'sword' in the strict sense but either denote different types of weapons or parts of the sword or function as kenningar for 'sword', including among others: *sax* n. 'combat knife, short sword', *scálm* f. 'short sword', *brandr* m. 'blade of a sword', *broddr* m. 'tip (of a sword, spear or fleat)', *egg* f. 'edge of the sword' pl. 'sword', *hialt* n. or f. 'pommel of a sword' pl. 'hilt' and as kenningar *róg-þórn* m. 'fight-thorn', *sár-scíð* n. 'wound-log'. This will offer a survey of the semantic field 'sword' within the Old Norse Poetic Edda.

**Examples** (All quotations are following the edition of Neckel/Kuhn (1962))

- (1) *busti blóð á brimis eggjar* (HH 10,4)
  'Blood streamed onto the edges of the sword.'
- (2) hǫfomk hjǫrr komið hjarta iþ næsta (HHv 40,4)
  'A sword has come too close to my heart.'
- (3) sá er mér, fránn mækir, æ fiarri borinn (Vkv 18,4)'It is taken from me, the sparkling sword, forever.'
- (4) *tenn hánum teygiask, er hánom er téð sverð* (Vkv 17,1)'He shows his teeth when the sword is shown to him.'
- (5) *Tveir vóro þeir tyrvir giarnir* [app. *tjǫrvar gorvir* or *tírar giarnir*] (Hild 2,1)
  'Two swords have been made.'

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# Tracking the Indo-Iranic split in the mountains of Pakistan

Robert Tegethoff

(University of Jena)

Despite representing more than half of all extant Indo-European languages, the Indic branch has received perhaps the least attention from historical linguists. This is all the more surprising because many languages directly impinge on our reconstruction of Proto-Indo-Iranic. Comparative work in South Asia is admittedly hampered by considerable difficulties, among them near-universal multilingualism and polyglossia and the fact that most languages exist on a remarkably fluid dialect continuum.

The diverse and archaic languages of the Hindu Kush, Karakoram, and Western Himalayas lend themselves most easily to historical study. Languages of this mountainous area exclusively retain many Old Indic phonological, morphological, and syntactic features, such as a wide variety of consonant clusters, the verbal augment, and accusative alignment, as well as many lexical items lost elsewhere (a recent overview is Bashir 2003; Liljegren 2021 is a cutting-edge typological investigation). However, data remains very limited, mostly due to a simple lack of research interest shown by scholars worldwide. The only dedicated historical-comparative study that is not catastrophically out of date is Turner 1966, a work nevertheless beset with difficulties.

Some morphological examples from the particularly conservative languages Kalasha and Khowar of Chitral, Pakistan, might serve to illustrate the claims above (all exx. from Morgenstierne 1947 and 1965). Augmented preterite forms such as Kalasha *a-páš-an* 'they saw' (cf. present *páš-im* 'I see') or Khowar *o-šoi* 'it was' (< *aśayat*) are unique within Indic. All other languages have replaced the finite preterite, recruiting Old Indic participles with added nominal

agreement suffixes and split ergative alignment such as Urdu *ga-ī* 'went' (fem.sg.), transposed to Old Indic perhaps \*\**gātā-ikā*. The Kalasha proximal demonstrative forms nom.sg. *se*, gen.sg. *tas*, obl.sg. *to*, nom.pl. *te* continue Old Indic masculine *sa*, *tasya*, *tam*, and *te* with only minimal changes, whereas Urdu has fully replaced the old s/t series and reduced the case distinction to absolutive/oblique. Also, compare the numerals Kalasha *tre*, *şo*, *aşt* with their Urdu counterparts *tīn*, *čhē*, *āt<sup>h</sup>*, with major alternations viz-à-viz Old Indic *trayaḥ*, *sat*, *asţau*. Khowar evidently continues Old Indic nominal inflection elements in gen.pl. -an (< -ānām), abl.sg. -ar (< -ātaḥ), and instr.sg. -en (< -ēna). Compare for r < t/V\_V also 3PS ind.pres. -r (< -ti), 2PP ipv.pres. -r (< -(a)ta) and lexical elements like por- 'to fall' < pata- and note a < ā, but o < ǎ, also above. Though late Sanskrit elements are present here and some morphological adaptations have occurred over the millennia, including loss of final syllables shared with Urdu, much of the Old Indic inflectional system remains intact, though many details still require investigation.

We can perhaps go even further: Indo-Europeanists will recall that studies of *inter alia* contemporary Germanic, Balto-Slavic and Armenian dialects routinely uncover inherited vocabulary that is not attested in the restricted literary and epigraphical material of ancient times. Given the remarkably archaic features already identified in the mountainous area sometimes known as Peristan (see Cacopardo & Cacopardo 2001 for an exhaustive anthropological delimitation of the term), it stands to reason that pre- and para-Vedic characteristics can be found also.

A long-identified innovation of Vedic viz-à-viz the ancestors of Middle and Modern Indic is the merging of voiced and voiceless "thorn" clusters into voiceless ks—even modern Urdu is, in this respect, more archaic than Vedic. But teasing apart inherited Indic features and loans from Iranic is a key difficulty. The first step must be to establish robust historical phonologies. Lexical coverage remains uneven, but has increased significantly for several key languages, as has our understanding of the respective phonological systems. The most efficient method to improve our data is of course to go into the field: but while historical linguists all around the world routinely engage in fieldwork, Indo-Europeanists are currently lagging behind in a major way.

In this talk, I will present ongoing work on improving the historical phonologies of Kalasha, Khowar, and the Shinaic languages and investigating loan relations in detail, along with establishing diachronically meaningful subgroupings. I will also demonstrate the challenges and opportunities of (historical) linguistic fieldwork and identify the languages and research areas most urgently in need of attention from the scholarly community. As funding opportunities increase and digital tools and strategies become more powerful, I want to encourage historical linguistic research in South Asia, not least in order to keep pace with archaeological and genetic advances. Researchers of the Global North have the opportunity to envision long-term, sustainable projects that involve empowering South Asian scholars and contributing to local language policy efforts, which are substantial in northern Pakistan and even in Afghanistan.

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# The Alpha and the Eta in 6th Century BCE Doric, Ionic and Attic Greek – an OT Analysis

Witold Tokarski

(Georg-August-Universität Göttingen)

My study is an attempt at a synchronic depiction of the phonological phenomena related to the phonemes represented (in later times) by the alpha and eta graphemes in three representative, ca. 6th century BCE Ancient Greek dialects, namely Laconic Doric, East Ionic and Attic using as framework the classical Optimality Theory (OT) model as postulated by Prince and Smolensky (2004). Each of the dialects differs in their surface representation of the Common Greek long /ä/, as Laconic Doric retains the Common Greek long /ä/ fully, East Ionic fronts it to /æ:/ in all instances, and in Attic in most instances long /ä/ is fronted to /æ:/ just like in East Ionic, but, as is well known, in Attic a rule traditionally posited as "long /ä/ is present after  $\varepsilon$ ,  $\tau$  and  $\rho$ " is observed. The rule is highly controversial as it is very difficult to explain in articulatory terms, especially since these phonemes do not constitute any sort of natural class – whether this is a retention of the ancestral long /ä/ or a reversion from the fronted /æ:/ is a subject of discussion.

Three representative words in their appropriate dialectal forms are used to portray an accurate OT evaluation –  $\tau \dot{\nu} \chi \alpha / \tau \dot{\nu} \chi \eta$  (/tukhä:/-/tykhæ:/),  $\theta \epsilon \dot{\alpha} / \theta \epsilon \dot{\eta}$ (/theä:/-/theæ:/) and  $\kappa \rho \dot{\alpha} \nu \alpha / \kappa \rho \dot{\eta} \nu \eta$  (/krä:nä:/-/krɛ:næ:/). The most complex example is  $\kappa \rho \dot{\eta} \nu \eta$  as orthographic convention and doricisations in authors such as Bacchylides indicate that even though both etas stem from Common Greek /ä:/, they do not represent the same phonemes as the first eta is not subject to the " $\epsilon$ ,  $\iota$ ,  $\rho$ " rule and therefore represents most likely not /æ:/, but / $\epsilon$ :/, which would be exempt from this rule. It is shown that in the cases of Laconic Doric and East Ionic classical OT is easily able to correctly evaluate the candidate outputs as the phoneme distribution in these dialects is perfectly transparent – in Laconic Doric the dominating constraints are those demanding faithfulness to the input, Identity-IO (Back) (found among others in Rubach (2000)) and Identity-IO (Low) (both found among others in Kager (2004, p. 128 and 260)); in East Ionic the key constraint is a markedness constraint here called ä-Fronting, based on Orgun's No [a] constraint (1996), opting against non-front low vowels. In Attic however classical OT is unable to correctly evaluate these three examples due to the Attic  $\mu$ ,  $\epsilon$ ,  $\iota$ ,  $\rho$ " rule, expressed in my study by constraints of Front Vowel Dissimilation (accounting for the "ε ι" part) and Rhotic Backing, based on Rhotic Lowering proposed by Samuels (2006) – Backing here is a better choice as  $/\infty$ :/ is treated as an already low, but front vowel (an approach found among others in Messing (1976; p. 3), Bubeník (1983, p. 49) and Bartoněk (1966; p. 105); its functioning is in any case identical as  $\frac{\pi}{2}$  after a rho is prohibited. These two constraints, while separate, are treated as one (abbreviated FVD/RB) as their functioning is in a sense complementary and there is no evidence of either acting without the other, i.e. there is no such situation in which Rhotic Backing would be violable in Attic and Front Vowel Dissimilation would not or vice versa, and their internal ranking is not discernible. An additional constraint, called here Anticipatory Height Dissimilation, is necessary for the correct evaluation of the κρήνη form opting against a candidate such as /kræ:næ:/. In Attic therefore a variant of OT is employed - Stratal Optimality Theory, which is shown to be particularly effective in this case as it not only correctly evaluates all three representative words, the harmony of two candidates (/tykhæ:/ and /krɛ:næ:/) being actually higher than in the Classical OT evaluation, but also allows us to propose a solution of the matter of retention/reversion of long  $/\ddot{a}$ / by combining them into one – the reversion was not a diachronic event but only a synchronic, evaluation-internal process occurring between the OT strata, and thus from a diachronic point of view can be seen as retention. Stratal Optimality Theory also correctly evaluates the data from Laconic Doric and East Ionic with harmony higher than that achieved by the candidates in classical OT.

This study serves as a starting point and an element of my PhD thesis, the aim of which is to create a comprehensive and consistent OT account of the vocalic systems of all Greek dialects of this late archaic period, before front vowels begin to shift and merge, eventually reaching /i/.

## Examples

/t <sup>h</sup> eä:/	ä-Fronting	Ident(Back)	Ident(Low)	FVD/RB
[t <sup>h</sup> eäː]	*!			
[t <sup>h</sup> eæ:]=		*		*
[t <sup>h</sup> eɛ:]		*	*!   *!	

(1) Evaluation of the underlying form  $\theta \varepsilon \dot{\alpha}$  in East Ionic

(2) Evaluation of the underlying form  $\theta \epsilon \dot{\alpha}$  in Laconic Doric

/t <sup>h</sup> eä:/	Ident(Low)	Ident(Back)	ä-Fronting	FVD/RB
[t <sup>h</sup> eäː]≋			*	
[t <sup>h</sup> eæ:]		*!		*
[t <sup>h</sup> eɛː]	*!	*		

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# **Balto-Slavic reflexes of Proto-Indo-European**

## present roots:

## **Structures and patterns**

Sander van Hes

(Adam Mickiewicz University)

Recent research (cf. in particular Villanueva Svensson 2022, building on previous studies) has identified two general trends in the development of Proto-Indo-European (PIE) present roots into the Baltic and Slavic daughter languages: (i) acquisition of "*a zero-grade*  $\bar{a}$ -*aorist*" by the full-grade present stem and (ii) "*massive thematization*" of presents, through \*-*e/o-* or \*-*je/o-* (or more rarely through nasal presents, \*-*ske/o-*, etc; *idem*: 296). These tendencies must be attributed to the common Proto-Balto-Slavic (PBS) stage, as they can be shown to have preceded several branch-specific developments in the individual verbal systems, such as generalizations of various ablaut patterns and the reorganization of the preterit system in Baltic. To illustrate all of this, I provide some examples from the paradigms of three verbs below, with forms given as 1sg. (Slavic) or 3sg./pl. (Baltic) present, preterit and infinitive (cf. Villanueva Svensson 2022: 380, 387, Derksen 2008, 2015 and *LIV*):

(1) Lith. sùka, sùko, sùkti 'twist, turn'

OCS sučǫ, sъkaxъ, sъkati 'wring, twist'

→ PBS \**seuk-(i)e/a-* (\**a* < PIE \**o*), \**suk-ā-*, \**suk-tī* (no PIE etymology) (2) Latv. *dzęn*, *dzina*, *dzit* 'chase, drive'

OCS ženǫ, gъnaxъ, gъnati 'chase, persecute'

→ PBS \*gen-e/a-, \*gi/un-ā-, \*gi/un-tī

→ PIE \*g<sup>wh</sup>en-, ?\*g<sup>wh</sup>e-g<sup>wh</sup>n-e- (~ YAv. jainti, -jaynat 'strike, kill')

(3) Lith. véja, véjo, véti 'blow (of wind)'
OCS vějǫ, vějaxъ, vějati 'blow (of wind)'
→ PBS \*µē-ie/a-, \*µē-(i)ā-, \*µē-tī
→ PIE \*h₂µeh₁- (present only; ~ Gk. ἄημι 'blow')

Nevertheless, there is still room for improvement and further specification of these general tends. Concerning point (i), the question may be raised how the other aorist formations of (Balto-)Slavic, i.e. the root and sigmatic aorists, fit into the picture. While Baltic is uninformative on this point, the Slavic data show us that at least the sigmatic aorist was productive at some point (perhaps already in late-PIE?): aorists such as OCS 3pl. *těšę* 'ran' (prs. *tekq*, inf. *tešti*) and 1sg. *-mrěxъ* 'died' (prs. *-mьr(j)q*, inf. *mrěti*) lack an *s*-aorist cognate in any of the other branches (cf. e.g. Ackermann 2014: 245ff. on the expansion of the *s*-aorist). It will thus be essential to always take into consideration not just the root present itself, but also its aorist stem, both in Slavic and in PIE.

A question relating to point (ii) is whether there is any distribution behind the assignment of a PIE root present to any of the Baltic and Slavic present types. One can easily imagine that root structure or semantics played a role in this distribution, as is the case for the preterit systems of both branches (cf. Schmid 1966, 1967 for Baltic and Reinhart 1992: 370ff. for Slavic). The Baltic present, for instance, is famously organized according to transitivity, with *je/o*-presents being transitive and nasal- and *sta*-presents intransitive (cf. Stang 1966: 356). While this strict distribution obscures the older morphological developments, it may still be possible to identify patterns within PBS with the aid of the Slavic material.

The goal of this study is, then, to get a better understanding of the PBS state of affairs concerning PIE root presents of any root type by looking into their development into the Baltic and Slavic languages, hence from a top-down perspective. This method of 'reconstructing forward' from PIE into Balto-Slavic allows us to confront our reconstructions with the attested material. The talk will feature a discussion of this material and will sketch some broad lines of development concerning the ablaut, stem formations and corresponding aorist stem of these root presents in PBS.

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# The pre-history of Greek $-\alpha\delta$ -: A look at the evidence from the Anatolian suffix *-ad(i)*

Elia Weber

(Freie Universität Berlin)

Determining the Indo-European pre-history of the Greek suffix  $-\alpha\delta$ - constitutes a long-standing problem of Greek and Indo-European historical morphology. Several formal issues hinder its derivation from a clear PIE source: the multiple possible sources for the  $\check{a}$ -vocalism, the uncertainties surrounding the obscure PIE suffix \*-*d*-, and the lack of exact comparative evidence from other Indo-European languages. Additionally, the varying semantic values of the Greek formations in - $\alpha\delta$ - make it difficult to determine the primary meaning of words containing the suffix.

Jeremy Rau has recently proposed a derivation of  $-\alpha\delta$ - from PIE formations in \*-*eh*<sub>2</sub> with a dental enlargement \*-*d*-. The Greek suffix, he argues, developed from the weak stem \*-*h*<sub>2</sub>*e*-*d*- of thematic adjectives derived from stems in \*-*eh*<sub>2</sub> (Rau 2004: 163–166, 168–169). The present paper attempts to provide new evidence in favour of this hypothesis by discussing the Anatolian material with a primary nominal suffix -*ad(i)*, such as Cuneiform Luwian *hapāt(i)*- 'river land' and *handawāt(i)*- 'king, ruler'. I thus derive the suffix -*ad(i)* from a Proto-Anatolian reconstruct \*-*áH*-*d*- through a more archaic derivational chain, in which the PIE dental enlargement \*-*d*- was directly attached to stems in \*-*eh*<sub>2</sub> (*pace* Melchert 1999: 370, who derives some -*ad(i)*-formations from \*-*to*-).

Independent support for my hypothesis may be seen in the Armenian suffix -*at* (e.g. in *helelat* 'stream (bed), chasm, place of a stream' from *helel* 'stream, flood). Should its connection with Greek - $\alpha\delta$ - and Anatolian -*ad(i)* be accepted, the derivation of Greek - $\alpha\delta$ - from PIE \*- $\dot{\eta}t$ - > \*- $\dot{\eta}d$ - via a sound change conditioned by the accent, as first described by Olsen (1989: 235–238) and later

van Beek for all occlusives (2017), cannot be maintained. The validity of this proposed sound change, however, cannot be excluded for other nominal or verbal formations. As an alternative, I argue that the three suffixes – Greek - $\alpha\delta$ -, Anatolian -*ad(i)* and Armenian -*at* – have originated from the PIE suffix conglomerate \*-*(e)h<sub>2</sub>-t/d*-, as they appear to be similar in form, derivation and function. An explanation for the oscillation between PIE \*-*d*- and \*-*t*- is left open, but is supported by evidence independent of the suffixes treated here (cf. Vine 1981: 197–200).

If correct, this analysis provides further evidence for the "individualizing" suffix \*- $eh_2$  in Anatolian, adding to recent discoveries in the field of Anatolian studies (Melchert 2014; Sasseville 2018; the possibility of "individualizing" stems in \*- $eh_2$  with dental enlargements was suggested to me by Matilde Serangeli). The primary exocentric semantics of the Greek and Anatolian derivations should also be assumed for the reconstructed suffix conglomerate. This function is possibly attributable to PIE \*-d-, which is to be regarded as a dental extension of the "individualizing" \*- $eh_2$ .

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