

# **5<sup>th</sup> Indo-European Research Colloquium**

**Leiden, March 21–22**

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**Definitive Programme + Abstracts**



## **Methodology/language change**

(chair: Aljoša Šorgo)

- 15:00 – **Stefan Dedio** [“Why dodos matter: Assessing the value of unsuccessful exploratory constructions for the study of language change”](#)  
15:30 (Universität Zürich)
- 15:30 – **Robert Tegethoff** [“What and where is language change? Assessing the historical linguist’s tool box”](#)  
16:00 (Universität zu Köln)
- 16:00 – **Ulrich Geupel** [“Derivational properties of Ancient Greek denominal abstracts – a corpus-based approach on affix ordering”](#)  
16:30 (Philipps-Universität Marburg)

16:30 – 17:00: Tea break

## **Ancient Greek**

(chair: Stefan Norbruis)

- 17:00 – **Iván Andrés-Alba** [“Die ἄθλα und das Ergebnis der Kontraktion von /a/+ /e/ in den dorischen Dialekten”](#)  
17:30 (Universidad Autónoma de Madrid)
- 17:30 – **Andrew Merritt** [“κέλυφος and καλύπτω”](#)  
18:00 (Cornell University)
- 18:00 – **Juan E. Briceño-Villalobos** [“\(Negative\) indefinites and polarity in Homeric Greek”](#)  
18:30 (Universidad Complutense de Madrid)

18:30: Dinner

**IERC 2019**

**Day 2: Friday March 22<sup>nd</sup>**

**Location: Lipsius building, room 147**

**PIE culture and migration**

(chair: Xander Vertegaal)

- 10:00 – **Rasmus Nielsen** [“Barley and other grains in PIE”](#)  
10:30 (Universiteit Leiden)
- 10:30 – **Andrew Wigman** [“The Migration of the Proto-Tocharians”](#)  
11:00 (Universiteit Leiden)
- 11:00 – **Gabriele Roccella** [“He who nourishes/protects: an Indo-European  
god? Considerations on Pūsan, Pan and  
Hermes.”](#)  
11:30 (University of Calgary)

11:30 – 12:00: Coffee break

**Anatolian II**

(chair: Stefan Norbruis)

- 12:00 – **Tomoki Kitazumi** [“Syntax meets the layout – some traces of  
language reflection in the Hittite texts”](#)  
12:30 (Freie Universität Berlin)
- 12:30 – **Rostislav Oreshko** [“Basic nominal lexicon of Lydian in Anatolian  
and Indo-European perspective”](#)  
13:00 (Universiteit Leiden;  
Harvard University Center for  
Hellenic Studies)

13:00 – 15:00: Lunch

## **Celtic, Balto-Slavic, Indo-Iranian**

(chair: Federico Dragoni)

- 15:00 – **Tim Felix Aufderheide**      [“What to Do with a Bothersome Phrase? The Case of R̥gvedic \*súre duhitá\* Reconsidered”](#)  
15:30      (Universität Zürich)
- 15:30 – **Lukas Kahl**      [“The Caland System in Continental Celtic”](#)  
16:00      (Harvard University)
- 16:00 – **Marek Majer**      [“Pseudo-\*vrddhi\*: the Indo-European background of Lith. \*leñgvas\* ‘light’ and \*tévas\* ‘thin’”](#)  
16:30      (Uniwersytet Łódzki)

16:30 – 17:00: Tea break

## **PIE morphosyntax**

(chair: Aljoša Šorgo)

- 17:00 – **Stefan Höfler**      [“\*Story of O\*: On a peculiar substantivization type in PIE”](#)  
17:30      (Harvard University)
- 17:30 – **Maciej Jaszczyński**      [“Absolute constructions in Indo-European languages”](#)  
18:00      (École Pratique des Hautes Études, Paris)
- 18:00 – **Saverio Dalpedri**      [“The early adjectival \*\\*-tó-\* formations: verbal adjectives, participles, or neither of them?”](#)  
18:30      (Georg-August-Universität Göttingen)

18:30: Closing and dinner

### “Die ἄθλα und das Ergebnis der Kontraktion von /a/+e/ in den dorischen Dialekten”

Die dorischen Dialekte verhalten sich hinsichtlich der vokalischen Kontraktionen gewissermaßen anders als die sonstigen griechischen Dialekte. Die Ergebnisse der Kontraktion aus ehemaligem Hiat von /a/ und /e/ sind einer der auffälligsten Unterschiede zwischen dem Dorischen und dem Jonisch-Attischen: Der Hiat wurde in allen dorischen Dialekten regelmäßig zu langem offenem /ε:/ kontrahiert – im Jonisch-Attischen aber zu langem /a:/. Vgl. korinthisch ὄρη gegenüber attisch ὄρα (aus \*ὄραγε „schau!“) und rhodisch θοινῆται gegenüber attisch θοινᾶται (aus \*θοινάjetαι „schlemmt“).

Nichtsdestotrotz zitiert Bechtel (1923: 172) einige Belege des Wortes ἄθλον (mit langem /a:/ aus \*aue-) in manchen dorischen Dialekten, die wie das Jonisch-Attische die Kontraktion zu /a:/ aufweisen. Das würde implizieren, dass derselbe Hiat in der Tat zwei verschiedene Entwicklungen hat: Eine frühere, bei der die aus \*-ase- und \*-aje- entstandenen Hiäte zu /ε:/ kontrahiert wurden, und eine spätere, die zur Kontraktion der Hiäte aus ehemaligem \*-aue- zu /a:/ führte. Für Ruijgh (1993: 243) wird das dadurch erklärt, dass die spätere Kontraktion tatsächlich viel jünger als die zu /ε:/ ist. Er lehnt auf diese Weise die Vermutung von Martín-Vázquez (1988: 451) ab, dass die rhodischen Formen mit /a:/ als Koineismen gelten sollen.

Meines Erachtens ist es zwar möglich, dass derselbe Hiat je nach Epoche verschiedenen Tendenzen folgt, aber, dass er sogar bei der vokalischen Qualität abweicht, scheint mir eher unplausibel. Das Wort ἄθλον und seine Komposita sind darüber hinaus die einzigen sicheren Belege und, obwohl sie in fast allen Dialekten zu finden sind, stammen die meisten aus hellenistischen Inschriften, die sehr oft Merkmale der Koiné aufweisen. Ich schlage also vor, dass die Kontraktion zu /a:/ eigentlich nicht dorisch, sondern dem jonisch-attischen Einfluss zuzuschreiben ist: Die ἄθλα stellten ein wichtiges soziopolitisches panhellenisches Phänomen dar und die wichtigsten davon fanden auf dorischem Boden (Olympia, Delphi, Argos, Korinth, usw.) statt. Der Kontakt mit dem Jonisch-Attischen führte also zur Annahme der fremden Kontraktion.

### Literaturangaben (Auswahl)

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**“What to Do with a Bothersome Phrase? The Case of Ṛgvedic *sūre duhitā* Reconsidered”**

Although the Ṛgveda belongs to the texts central to Indo-European studies, there are words, phrases, and even whole passages that remain poorly understood. Of those puzzles from the Ṛgveda, the case of *sūre duhitā* is one of the most interesting because it is very different from all the others: though only attested once in a hymn to the Aśvins (RV 1.34.5d) this phrase presents no difficulties to the interpreter since its meaning emerges quite naturally from the context and is further corroborated by numerous parallels: *sūre duhitā* means ‘daughter of the sun’ as translators of the Ṛgveda have commonly agreed upon.

Given the fact that we are so certain of the meaning of *sūre duhitā*, the following question arises of course: what is actually the problem with this phrase? It is the form of *sūre*, we are still in doubt whether it belongs to *svàr-* or *sūra-* since both roughly mean ‘sun’ in Vedic Sanskrit. Therefore, we are unsure as to what case form we are looking at: dative, genitive, and locative are arguably possible from a morphological point of view...

In order to approach this bothersome phrase, I reassess not only *sūre duhitā* itself but also the closely connected problem of phrasal Sandhi in the Ṛgveda. First of all, we take a look at the context of its attestation and the variants found elsewhere in Vedic literature. After giving a short overview of previous approaches I review the assumptions underlying them. In doing so, we touch upon a number of topics in Old Indo-Aryan linguistics that continue to be under debate: the phonology of compounds, the treatment of /as/ before voiced segments in Sandhi, and the adnominal use of case. Since the question that revolves around the case form of *sūre* is not settled I focus on the last of the aforementioned topics in my talk. Therefore, I revisit each of the readings proposed for *sūre* against the background of native grammar since Pāṇini dedicates a couple of Sūtras (Pāṇ. 2.3 passim) on the adnominal use of case.

On the basis of this reassessment, I put forward an explanation for *sūre duhitā* that complies with morphosyntax and phonology alike. This explanation also sheds new light upon the few remaining instances of the phrasal Sandhi /as/ > e in the Ṛgveda and eventually casts doubt on its very existence. Furthermore, I am confident that my approach which combines modern linguistics with native grammar can be employed to tackle a number of other problems in Old Indo-Aryan grammar.

### “The Accusative of Respect between Typology and Language Contact”

The accusative of respect, also known as *accusativus graecus*, is found in our earliest attestations of Greek: not only in Homer (e.g. πόδας ὠκύς Ἀχιλλεύς ‘Achilles swift with respect of his feet’), but also in a Mycenaean tablet (PY Ta 641.1: ke-ka-u-me-no ke-re-a<sub>2</sub> lit. ‘burnt with respect to (its) legs’). Other Indo-European branches (Anatolian, Indo-Iranian, Italic, Germanic) show the same structure, but some languages (e.g. Latin, Gothic) may have acquired it from Greek models. Outside the Indo-European language family, a relatively similar construction is attested in some Semitic languages of the Ancient Near East, namely Akkadian and Eblaite (HUEHNERGARD 2011, HUEHNERGARD - WOODS 2008) and might belong, on a more general level, to all Semitic languages (WASSERMANN 2003).

While previous studies are mainly focussed on a language-internal synchronic investigation (e.g. JACQUINOD 2006 and ROMAGNO 2017 on Greek), the present research will first offer the results of a comparative analysis of the occurrences and usage of the accusative of respect in the languages mentioned above, with a particular focus on Greek and the Anatolian languages; secondly, I will assess the plausibility of the hypothesis - which has been advanced (HÖGEMANN 2003, HAJNAL 2018), but never fully developed - of the accusative of respect in Greek as a feature derived from contact with the Anatolian languages, which in turn may have acquired it from the so-called *tamyiz* constructions of Semitic languages. If the near-Eastern ascendancy of this Greek construction were proved, another piece would be added to the puzzle of those Greco-Anatolian contacts which - according to several scholars (e.g. WATKINS 2001) - might have occurred between the second and first millennia BCE.

### References

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### “(Negative) indefinites and polarity in Homeric Greek”

Crosslinguistically, it seems that indefinites in their different forms, i.e. pronouns, adverbs, and determiners, have a special connection with polarity. Homeric Greek is no exception in this regard. The use of indefinites in both the *Iliad* and the *Odyssey* is very prolific and, interestingly, most occurrences of indefinites are found within non-veridical contexts.<sup>1</sup> This means that not only negation elicits indefinites as ‘negative’ polarity items (NPI), but also other non-veridical contexts that entail weaker polarity contexts. It is known that indefinites such as the pronoun *τις/τι*, enclitic and unaccented by nature, conveys a meaning close to both *somebody* and *anybody* with no formal difference (Horrocks 2014: 45).

Moreover, ‘negative’ indefinites such as *οὐ τις* or *οὐ ποτε* are not grammaticalized. On the other hand, the presence of *οὐδέεις* (*οὐδέ* + *εἷς*) in the Homeric texts implies an early grammaticalization of this negative indefinite so as to allegedly express an emphatic negation with a fully adverbial use (cf. Denizot 2014). I will demonstrate that a special type of negative spread (the multiple presence of negative pronouns, in the case of Homeric Greek, several indefinites within the scope of a single negative marker) is underway and it is an important factor for the preference of the inherited indefinite *τις/τι* in the scope of negation. With the almost total disappearance of *οὐ τις* and with a far more frequent use of *οὐδέεις*, Classical Greek would eventually become a negative concord (NC) language, where the multiple occurrences of negation and indefinite pronouns -that appear to be negative- express a single negation (de Swart 2010: 20-21). Negative concord structures can be traced back to Homeric Greek where *οὐδέ* works as a scalar negative marker (Willmott 2011) and whose position after a negation must be understood as a negative focus particle over a phrasal element, not adding an extra negative meaning to the sentence (Gianollo 2018), i.e. no double negation reading.

Thus, the objective of this paper is to present the study of indefinites within the broader context of polarity and to show that the two different patterns unevenly attested in Homer for expressing negative indefinite pronouns, i.e. *οὐ τις* and *οὐδέεις*, are better explained as the result of two opposite forces: first, multifunctionality (within nonveridicality) and the consequent specialization of indefinites (*οὐδέεις* reflecting the morphological direct negation function on its own right) and, secondly, wide negative spread that blocks the use of *οὐδέεις* as better fit form for conveying a neg-indefinite series and makes possible to deliver multiple indefinites within the scope of a single negation. I will take as a language sample for this study the first six books of the *Iliad* and the first six books of the *Odyssey*.

### References

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<sup>1</sup> I consider negative polarity contexts, as explained by Haspelmath (1997), and non-assertive contexts, as explained by Jäger (2010), within the broader framework of non-veridicality as put forward by Giannakidou (1998). Non-veridical contexts are conditionals, future sentences, irrealis, *before*-sentences, standard comparison, interrogatives, etc.

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**“The early adjectival \*-tó- formations: verbal adjectives, participles, or neither of them?”**

It is well known that the PIE suffix \*-tó- attached to a number of bases to build various formations: ordinal numbers (cf. Gr. πεμπτός), relational or possessive adjectives (cf. Lat. *barbātus*, Gr. θαυματός) and, when attached to a verb root usually in the zero-grade, verbal adjectives (cf. Gr. στατός ‘still, standing’) or participles (cf. Lat. *dictus*, OInd. *sthitá-*). My study is limited to the latter type of formations in the earliest attested stages of Greek (Mycenaean and Homeric Gr.) and Old Indian (Ṛgveda).

These forms posit a series of problems, ranging from categorial assignment (degree of integration into the verbal system) to diathesis selection and participant orientation, from their inherent temporal value to the relationship with perfect (middle) participles, along with matters concerning composition and accent. Before tackling these issues from a diachronic perspective, a thorough synchronic analysis is essential. In my presentation, I will investigate the aforementioned questions synchronically.

While the -tá- formations, possibly since Middle Vedic times, form a periphrastic tense not reminiscent of the Latin passive *perfectum*, their behaviour in the Ṛgveda is consistently compositional and non-periphrastic. In addition to active bases, they can attach to a subset of intransitive roots, making up a diagnostic for unaccusativity. As a consequence, it cannot be claimed that they are passive formations, nor that they are underspecified as for their diathesis: they are in fact patient-oriented resultative constructions, which may reflect a secondary and rare alignment system, i.e. the active-stative. Moreover, their degree of integration into the verbal system can only be determined if one abandons a discrete stance on parts of speech.

Adjectival formations in -τος in Mycenaean and Homeric Greek are even less verbal than in Old Indian. They seem to attach to any verbal base, have at times active meaning and developed an epistemic value which is unknown in the other branches (with the possible exception of negated formations in Old Indian). The path to this semantic extension is well known and undisputable. What is still in need of explanation are some aberrant forms which contradict the regularities observed by the grammarians, especially pertaining accentuation and *movierte* feminines in the case of compounded adjectives. An accurate philological analysis can try to make some order in the welter of the attested usages.

**“Why dodos matter: Assessing the value of unsuccessful exploratory constructions for the study of language change”**

The study of linguistic change usually focusses on larger shifts with an end point that is significantly different from the starting point of the linguistic change event. Examples of these types of changes include, among others, sound laws, the loss of case distinctions seen in all branches of Indo-European, changes in productivity of certain morphological markers (such as plural -s in the history of English), and shifts in word order patterns (e.g. the emergence of verb-first orders in Insular Celtic).

In addition to these, a large amount of phenomena emerge, stay in marginal use for a couple of decades or centuries, and then vanish again without leaving discernible traces in the language. While these are usually deemed to be of philological interest only, I argue that, as in other areas of the cultural sphere (O’Dwyer and Kandler 2017), these unsuccessful structures (and the comparison with more successful related phenomena) can give interesting insights into the nature of language change.

As a case study, I will examine the case of incipient structures of object coindexing on the verb that can be found in almost all branches of Indo-European. While some varieties developed and lost it rapidly (e.g. Middle Welsh, (1a)), others kept this kind of head marking and expanded on it eventually (obligatory with indirect objects, optional with direct objects in Albanian, s. ex. (1a)). By contrasting the circumstances in which emerging coindexing went extinct with those in which it flourished, I try to detect factors that favour this development.

- (1) a. *Mi<sub>i</sub> a-e<sub>i</sub>-dywed-af<sub>j</sub> itt yr ystyr<sub>i</sub>*  
1SG AFF-3-tell-NPST.1SG to.2SG ART reason  
‘I will tell the reason to you.’ (Middle Welsh; Richards 1948: 4, 29)
- b. *Çdo punë<sub>j</sub> ty<sub>i</sub> t<sub>i</sub>-a<sub>j</sub>-ka-në<sub>k</sub>*  
all work.ACC.SG 2SG.DAT 2SG.-3SG.ACC-have-PRS.3PL  
*bërë të-tjerët<sub>k</sub>*  
make.NONFIN NOM.PL-other.NOM.PL  
‘The others did all the work for you.’ (Albanian; Buchholz and Fiedler 1987: 442)

**References**

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### “Indo-Hittite and the sigmatic aorist”

Equipped with an acrostatic accent, \*é/é-*ablaut* and a non-*ablauting* suffix \*-s-, the sigmatic aorist is a solid element in the traditional reconstruction of classical Proto-Indo-European (PIE). While evidence is bountiful in many daughter branches, its presence in Anatolian and Tocharian is quite uncertain, suggesting the possibility that the *s*-aorist could be an innovation of Core-Indo-European (CIE). Numerous scholars have discussed this matter during the past century, some arguing that Anatolian and Tocharian simply lost the sigmatic aorist respectively (Eichner 1975; Oettinger 1979; Kortlandt 1994; Kloekhorst 2008; Peyrot 2013), while others suggest that these languages actually show a precursor to this classical formation (Watkins 1962; Jasanoff 2003).

In this talk, I will present the findings of my MA thesis, in which I examined the linguistic foundations of these two approaches, i.e. whether we find relics of the *s*-aorist in Hittite, and if not, whether the *s*-aorist was an innovation that occurred after the split of Anatolian. I will attempt to show that there is no convincing evidence for this verbal formation in Hittite and that we should look for other ways to explain the sigmatic elements in the verbal morphology. I will discuss the so-called telic *s*-extensions as a possible source (cf. Cohen 2017) and present a tentative suggestion for a “partly sigmatic” perfect formation as a contender for the precursor of the sigmatic aorist.

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**“Derivational properties of Ancient Greek denominal abstracts – a corpus-based approach on affix ordering”**

Within old Indo-European languages and its well-known complex derivational chains, there are strong restrictions on the ordering of affixes if more than one apply to a base and of all conceivable combinations, only a few exist. The question for the nature of these restrictions has found broad cross-linguistic research and some tendencies as well as a variety of factors involved have been established.

As described by Hay / Plag (2004), various affixes in a given language can be ordered along a hierarchy of morphological complexity – more precisely along a line of strength of the newly created morphological boundary, where the strength of a certain boundary results from its relative suitability for parsing. The main idea is that more separable affixes that produce stronger boundaries can attach outside less separable affixes with weaker boundaries and thus appear closer to the base, but not vice-versa.

The goal of this paper is to test the predictions arising from this model through an investigation of a set of Ancient Greek suffix combinations while using statistical methods and computation of morphological productivity as introduced into IE studies by Sandell (2015).

For this aim, the results of a corpus based study on the denominal abstract markers -οσύνη, -ότης and -εσ- will be presented and it will be demonstrated exemplarily by analyzing two-suffix-combinations of the type δικαιο-ότης, ‘justice’ (from δίκαιο-ιός, ‘just’) and θαρσαλε-ότης ‘confidence’ (from θαρσα-αλέος ‘confident’) which factors play a key role in establishing the attested combinations of adjectival base suffix and individual abstract forming suffix. Among the possible factors, parsing constraints are of special importance and the syllable-phonological behavior at the boundary can be well studied even in a corpus language, cf. Allen (1973). Thus it can be plausibly explained why especially the two competing highly productive suffixes -οσύνη and -ότης show very different behavior concerning the base suffixes they can attach to, why no derivations from -οσύνη or -ότης are possible, etc.

Finally, by investigating different strata of the Greek corpus, diachronic change in the behavior of these mechanisms can be demonstrated.

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**“Story of *O*. On a peculiar substantivization type in PIE”**

Except for a laconic mention in a footnote by Jochem Schindler, not much ink has been spilled over a PIE derivational process that Schindler casually named “Substantivierung durch *o*-stufige *V̥ddhi*” (Schindler 1980:390 fn. 17). His example was Gk. ὄμβρος m. ‘rain(s)’ (*Il.*+), a substantivization of the adjective *\*h<sub>2</sub>bh-ró-* that underlies Ved. *abhrá-* n. ‘cloud’ (*RV*+), Gk. ἀφρός m. ‘foam’ (*Il.*+).

The aim of this paper will be to collect and adduce more examples from selected IE daughter languages and discuss the status of this word-formation process in PIE. A focus will be on potentially archaic PIE examples taken from the author’s thesis on possessive adjectives derived from neuter *s*-stems (e.g. *\*k<sub>2</sub>élh<sub>1</sub>-os* n. ‘a turning’ → *\*k<sub>2</sub>el<sub>1</sub>-s-ó-* ‘turning’ → *\*k<sub>2</sub>ól(h<sub>1</sub>)so-* ‘the turner’ > Lat. *collus* m., PGmc. *\*halsa-* m. ‘neck’; cf. Neri 2013:198), on the apparent productivity of the process in a precursor of Germanic and Balto-Slavic (e.g. *\*kréip-os* n. ‘a turn, a twist’ → *\*krip-s-ó-* ‘having a turn, twisted’ [Middle Welsh *crych* ‘curly, wrinkled’, Lat. *crispus* ‘curly, crimped’] → *\*kroipso-* m. ‘a turning’ > OCS *krěsč* m. ‘summer solstice’; and many others), and lastly on a number of potential examples from Greek, where the “*o*-stufige *V̥ddhi*” was sometimes inserted in a very odd place: either prothetically (as in ὄμβρος ‘rain(s)’, ὄγκος ‘bulk, mass’, ὄτλος ‘suffering’), or between the root and the adjective-forming suffix (as arguably in χρόνος ‘time’, κλόνος ‘turmoil’, θρόνος ‘throne’). Two possible, not mutually incompatible explanations for this caprice will be investigated, one being the speakers’ drive to use substantivization methods as “marked” (i.e. dissimilar to the underlying adjective) as possible, the other one being pure and simple analogy.

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### “Phonetics of Indo-Iranian \*a and the Uralic loanwords”

This presentation offers new solution to the problem of the substitution of Indo-Iranian \*a in the early loanwords into Proto-Uralic (PU)/Proto-Finno-Ugric, contributing to the study of phonetics of Proto-Indo-Iranian (PIIr) and Proto-Iranian (PIr) vowels and to the stratigraphy of early contacts between Indo-European and Uralic.

Due to the simple vowel-system of PIIr, the phoneme \*a was substituted in at least 3 different ways (by PU \*a, \*j and \*o in unclear environments) in loanwords into PU which had much richer vowel-system. Also, PU \*a and \*o appear as substitutes of PIIr \*ā, which was probably more open than the short \*a (Lubotsky 2018: 1875).

A further problem is that when Uralic shows \*o in place of PIIr \*a, it is often difficult to determine whether this reflects earlier IE \*o or a substitution of PIIr \*a. Earlier sources (eg. Rédei 1986; Koivulehto 2016) present contradictory views on the problem of o-vocalism. As there are known cases of early “Pre-Indo-Iranian” loanwords showing PIE \*e vocalism (for example PU \*mekši > Mordvin mekš ‘bee’ ← Pre-IIr \*mekš- > Vedic makṣ- ‘bee, fly’), it is natural to suppose that some “\*o-loans” reflect the retained PIE \*o, but other loanwords where Indo-Iranian \*a is from PIE \*e force us to consider PU \*o as substitute of \*a in some cases (for example PU/West-Uralic \*počaw ‘reindeer’ ← PIr \*pacu- ‘cattle’, Koivulehto 2016).

Based on critical assessment of all convincing Indo-Iranian etymologies for Uralic words, this presentation determines the environments for \*a, \*o and \*j from PIIr \*a, making it possible to distinguish substitutions of retained \*o from later PIIr \*a. Also possible chronological differences in the substitution of \*a in PIIr and later Iranian loans into Proto-Uralic and its daughter-languages will be commented.

Also the attempt (Kümmel 2018) to approach the vocalism of the loanwords from the alternative PU reconstruction of Tálós (1987) will be critically reviewed.

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### “The Hittite middle voice: a diachronic perspective”

Hittite features a two-fold voice opposition between the active and middle voice (Hoffner & Melchert 2008: 302-303). The middle voice is synchronically associated with different functions (Neu 1968a, 1968b). Middle verbs belong to two main groups: *media tantum* and oppositional middles. The former are verbs that inflect in the middle voice only, e.g. *ki-tta(ri)* ‘lie’, and mostly encode uncontrolled change-of-state events (Luraghi 2012). Oppositional middles stand in a functional opposition to transitive active counterparts and encode valency reducing operations such as anticausative (1), passive (2), reflexive (3), and reciprocal (4). Less attention has been paid to the diachrony of the Hittite middle voice. This paper aims at partly fulfilling this gap.

The first goal of the paper is to explore the development of the middle voice in historical times. Advances in the dating of Hittite texts allow us to explore the distribution of middle verbs in a corpus of Old (OH), Middle (MH), and New Hittite (NH) original texts. Corpus data reveals that the distribution of middle verbs changes over time (Table 1): in OH most middle verbs belong to the *media tantum*, and oppositional ones take over from MH onwards. Moreover, the oppositional functions are not uniformly distributed, with the passive expanding from OH to NH (Table 2).

The second goal is to investigate the emergence of the individual functions and their historical relationship. The scenario that best accounts for the Hittite data is the following. At the onset, verbal voice was lexically determined: based on their semantics, verbs displayed either active or middle inflection only. Among *media tantum*, verbs that denote spontaneous change-of-state events were liable to be opposed to active transitive counterparts, thereby giving rise to the anticausative alternation. The anticausative function served as the starting point for the rise of the other oppositional functions. To explain this shift, I highlight the bridging contexts that triggered the reanalysis of anticausatives into passives, reflexives, and reciprocals, following well-known paths of semantic extension (Heine & Kuteva 2002), and argue that the process can be described in terms of ‘secondary’ grammaticalization (cf. Himmelmann 2004, Traugott 2010, Breban 2014).

Finally, Hittite data shed new light on the origin of the Proto-Indo-European middle voice and supports the hypothesis that voice in PIE was lexically determined and that it became increasingly integrated in the verbal paradigm and associated with grammatical functions in the individual daughter languages (cf. Luraghi forthc.).

### Examples

(1) [kui]tman=ma	<i>gimmanza</i>	<i>nāwi</i>	<b>zinna-t[tat]</b>
until=PTC	winter.NOM	not.yet	finish-PRS.3SG.MID

“And before winter is over.” (KBo 2.5 iv 11, NH/NS)

(2) <i>nu=wa</i>	KUR	<sup>URU</sup> <i>Hatti</i>	<i>hinganaz</i>	<i>arumma</i>	<i>mek[ki]</i>
CONN=QUOT	land	<i>H.</i>	plague.ABL	very	much

#### **tamas-tat**

oppress-PST.3SG.MID

“And the land of Hatti was severely oppressed by the plague.” (KUB 14.10 i 7, NH/NS)

(3) LUGAL-us=za            **suppiyahh-ati**  
king.nom=refl            purify-prs.3sg.mid

“The king has purified himself.” (KBo 25.112 ii 14, OH/OS)

(4) takku LÚ<sup>MEŠ</sup>            **zahh-anda**  
if        man(PL)            hit-PRS.3PL.MID

“If (two) men strike each other (and one of them dies).” (KBo 6.26 ii 16, OH/OS)

## Tables

Table 1: Diachronic distribution of media tantum and oppositional middle verbs

	Media tantum	Oppositional middles
OH	27 (79%)	7 (21%)
MH	15 (42%)	21 (58%)
NH	14 (30%)	32 (70%)

Table 2: Diachronic distribution of the functions of oppositional middles

	Anticausative	Passive	Anticausative/Passive	Reciprocal	Reflexive
OH	3	2	0	1	1
MH	6	7	6	0	1
NH	9	13	8	0	0

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### “Absolute constructions in Indo-European languages”

The syntax of participles traditionally called absolute has occupied the attention of multiple scholars for more than a century. The absolute constructions consist of a noun (or a pronoun) and an agreeing participle which together are grammatically separate from the main clause and usually have temporal semantics. The most famous examples are Latin ablative absolute, Greek genitive absolute and Sanskrit locative absolute. Although numerous articles and monographs devoted to these forms have been published, some basic issues of this subjects have not yet been decisively resolved, especially in the attempts to reconstruct the absolute constructions in Proto-Indo-European.

The question which draws the most attention is the choice of the case. There is no straightforward way to reconcile Sanskrit locative, Latin ablative, Greek genitive, and to that one can add Gothic, Slavic and Baltic dative. The problem is even more complex due to the fact that in almost all languages we can find less canonical, but nevertheless grammatical examples of absolute construction in other cases, like the Greek accusative absolute, which in fact can be interpreted more as a nominative absolute. While different scholars propose different cases for the Proto-Indo-European reconstruction (e.g. see Holland - nominative, Ruppel - locative), I am trying to explore is whether in face of such a diversity of data it is justifiable at all to reconstruct a single case for a grammaticalized absolute construction in the proto-language.

Another problem which I am going to discuss is the issue of the composition of absolute constructions. Latin regularly shows absolute constructions without participles, but with a pronoun and and noun (e.g. *C. Licinio praetore...* - "When C. Licinius was a praetor...") or a noun/pronoun and an adjective (e.g. *me vivo* - while I am alive). In relation to the possibility of both adjectival and participial absolute constructions I would like to raise important questions about the semantics of participles in Proto-Indo-European and their status on the verb-adjective continuum: whether it is closer to the Hittite situation, where even the \*-nt- participles are passive, or the Greek system, where the participles are generally speaking much closer to the verbal end of the spectrum.

Finally, we have to keep in mind multiple instances of so-called "one member absolute constructions" described in details by Rosén (1988), where the participle stands alone without a head, often to describe impersonal action (eg. Sanskrit participle *várṣati* - "when it is raining") and how to integrate them in our system of absolute constructions.

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### “The Caland System in Continental Celtic”

The Caland System is the name given to a pattern of suffix substitution and deradical derivation reconstructed for Proto-Indo-European and preserved to various degrees in older daughter languages. Since the seminal NUSSBAUM 1976, numerous articles and monographs (most notably RAU 2009 and DELL’ORO 2015) have been dedicated to the Caland System, focusing on the relatively rich Indo-Iranian, Greek, and Latin data. It remains understudied in most other branches of Indo-European (now with the notable exception of Balto-Slavic in MAJER 2017). So also with Celtic. HÖFLER 2016 constitutes the main survey of primarily Irish evidence so far, while the standard works in comparative-historical Celtic grammar (PEDERSEN 1913 and LEWIS & PEDERSEN 1974) predate both the surge of interest in Caland matters and momentous advances in our knowledge of Continental Celtic.

As a step towards filling that gap, my contribution will review Celtiberian and especially Gaulish data, drawing on WODTKO 2000 and DELAMARRE<sup>2</sup> 2003. Due to the nature of the corpus, being poor in verbal forms, the focus will be on the nominal subset of Caland morphology, as constituted mainly by property-concept adjectives with suffixes \*-ro-, \*-u-, \*-o-, \*-o/ent-, \*-i-, \*-mo-, \*-no-, \*-to-, \*-lo-; primary comparatives and superlatives; s-stem adjective-abstracts; and special compound formations (most notable with roots appearing as *i-* or *u-* stems when appearing as the first member of a compound, but as *s-* stems when appearing as the second). I will present the evidence for these forms and discuss overlap with and divergence from the Insular Celtic data, with the ultimate aim of establishing pan-Celtic trends as regards retention, re-structuring, or excision of the various elements of Caland nominal morphology.

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### “Syntax meets the layout – some traces of language reflection in the Hittite texts”

One of the recent trends among Hittitologists is the study of scribal habits and conventions observable in the texts from the Hittite empire. Just to mention a few: Sumerogram and Akkadogram writing in Hittite texts by Cajnko, the recently completed dissertation by Kudrinski on heterogrammatic units, the soon-to-be-published volume on phonetic complements by Busse, and last but not least this year's Indo-European conference in Brussels with the title “Schreibkonventionen in pragmatischer Perspektive”. To date much work has been done rather on word and phrasal level.

My contribution aims to look for larger linguistic units of language, namely on the level of clauses and sentences. Backed up with the research on diplomatics by Waal and a general typographic work by Bringhurst, it will shed some light on the problem of the correlation between syntax and layout on clay tablets from a linguistic point of view. For instance, the use of KI.MIN “ditto” (ex. KUB 17.10+ IV 32–33) or writing one clause per one line on the tablet (ex. KBo 6.6 I 12–18) clearly show the scribes' ability to cut down sentence(s) into smaller units with certain length. Beyond that I would explore the possibility to trace language consciousness among the scribes in the(ir) way of reflecting the(ir) language.

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“Pseudo-*vṛddhi*: the Indo-European background of Lith. *leñgvas* ‘light’ and *tėvas* ‘thin’”

§1. Lith. *leñgvas* ‘light’ (Latv. *liegs*) and *tėvas* ‘thin’ (Latv. *tiēvs*) are clearly derived from the roots *\*h<sub>1</sub>leng<sup>wh</sup>-* and *\*tenh<sub>2</sub>-*, but in an unexpected manner – as though from *\*h<sub>1</sub>leng<sup>wh</sup>-wo-* and *\*tenh<sub>2</sub>-wo-*. Since there is plenty of evidence for the existence in PIE of the *u*-stem adjectives *\*h<sub>1</sub>lŋg<sup>wh</sup>-u-* (Gr. ἐλαχύς, Ved. *raghú-*) and *\*tŋh<sub>2</sub>-u-* (Gr. τανύ- in compounds, Ved. *tanú-*), it seems natural to assume that the Balt. adjectives are related to the *u*-stems somehow.

§2. Mere secondary thematization does not work, however. Adjectives in *\*-u-* are enormously productive in Baltic, so that such thematization is unmotivated and therefore never found. Besides, this would not explain the R(*e*).

§3. An instrument capable of explaining both the R(*e*) and the unexpected thematicized stem formation here is, of course, PIE *vṛddhi* (thus e.g. SMO CZYŃSKI SEJL: s.vv.). However, even if one accepts the notion of one adjective being *vṛddhi*-derived from another,<sup>2</sup> we would have to invoke the original PIE *vṛddhi* model R(∅) → R(*e*) to obtain *\*h<sub>1</sub>lŋg<sup>wh</sup>-u-* → *\*h<sub>1</sub>leng<sup>wh</sup>-wo-* > Lith. *leñgvas* (AP 4). In fact, the only sufficiently productive kind of root *vṛddhi* (already in Vedic, but also in the remains of *vṛddhi* found in the less archaic languages<sup>3</sup> is the type yielding R(*e*); see DARMS 1978: 348–443. In this case, however, we would expect *\*h<sub>1</sub>lŋg<sup>wh</sup>-u-* → *\*\*h<sub>1</sub>lēng<sup>wh</sup>-wo-* > Lith. *\*\*léngvas*, with acute (AP 3).<sup>4</sup> Thus, the *vṛddhi* solution is cumbersome both semantically and formally.

§4. An alternative approach is available, however (as first briefly mentioned in MAJER 2016 and developed in MAJER 2017). Namely, Lith. *leñgvas* can be explained as a possessive derivative from an abstract noun *\*h<sub>1</sub>lóng<sup>wh</sup>-u-/\*h<sub>1</sub>léng<sup>wh</sup>-u-* ‘lightness’ (of the type *\*h<sub>1</sub>ós-u-/\*h<sub>1</sub>és-u-* ‘good, property’; *\*pólh<sub>1</sub>-u-/\*pélh<sub>1</sub>-u-* ‘muchness, greatness’; *\*h<sub>2</sub>wep-* ‘strew’ → Hitt. *uappu-* ‘bank’; etc.; RAU 2009: 182). This corresponds to a typical abstr. → adj. renewal processes (*\*h<sub>1</sub>leng<sup>wh</sup>-u-* ‘lightness’ → *\*h<sub>1</sub>leng<sup>wh</sup>-w-o-* ‘having lightness, characterized by lightness’ > ‘light’). In effect, then, *\*h<sub>1</sub>léng<sup>wh</sup>-w-o-* > *leñgvas* would be a sister form of *\*h<sub>1</sub>lŋg<sup>wh</sup>-ú-* and not its secondary modification: both *\*h<sub>1</sub>léng<sup>wh</sup>-w-o-* and *\*h<sub>1</sub>lŋg<sup>wh</sup>-ú-* would be derivatives – internal and external, respectively – of the underlying abstract *\*h<sub>1</sub>ló/éng<sup>wh</sup>-u-*.

§5. The same explanation obtains for *tėvas* < *\*ténh<sub>2</sub>-w-o-* ← abstr. *\*tó/énh<sub>2</sub>-u-*. This has to be distinguished carefully from the form *\*tŋh<sub>2</sub>-ew-o-* (Gr. ταναός ‘outstretched’, OIr. *танае* ‘thin’), displaying suffixal *vṛddhi* from *\*tŋh<sub>2</sub>-u-* (NUSSBAUM 2009) and in no way supporting a purported root *vṛddhi* process that would be required for a *\*\*tenh<sub>2</sub>-w-o-* ← *\*tŋh<sub>2</sub>-u-*.

§6. The distinction among the three derivational types referenced above has significant consequences for word-formation not just in BSl., but in IE in general. Possibly, parallels for the Balt. development can be found in other branches as well; see e.g. the discussion on the thematic Osc. **bravús** ACC.PL.M (‘gravīs’?) and **uruvú** NOM.SG.F (‘wide’) in WEISS 2009: 315.

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<sup>2</sup> Perhaps as a renewal of the inherited adjective from a diminutive or more generally ‘genitival’ sense; cf. the *vṛddhi*-ed adjective → adjective derivatives mentioned in NUSSBAUM 2009.

<sup>3</sup> Including BSl.; cf. LOMA 2003: 269–274, GOŁĄB 1967, etc.

<sup>4</sup> In the accentological framework assumed here, in which non-laryngeal PIE *\*V* > BSl. acute *\*V̄*; cf. e.g. VILLANUEVA- SVENSSON 2011, JASANOFF 2017: 74–103, etc. (For the alternative view, in which non-laryngeal PIE *\*V* > BSl. non-acute *\*V*, cf. KORTLANDT 1985 etc.) On the acuteness associated with BSl. *vṛddhi* see MATASOVIĆ 2016, though differing on many crucial points.

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### “κέλυφος and καλύπτω”

Despite Beekes' claim of substrate origin, the etymology of καλύπτω 'cover, conceal' is best understood if, as in Chantraine and Frisk, a relationship with the widely attested *aniṭ* root \**kel-* is maintained (e.g. \**kēl-* > Lat. *cēlō* 'cover up'; \**kel-* > *oc-culō* 'conceal', OIr. *ceilid* 'hide', OHG *helan*; \**k̑l-* > Goth. *huljan*, etc.). While καλύπτω's association with \**kel-* is certain, the nature of the following -υφ- has always been cause for perplexity (cf. περικαλ-υφ-ή 'wrapping' Pl. Lg. 942d). The investigation necessarily begins with κέλυφος, -εος (Ar., Arist. +) 'sheath, case, husk, pod, etc.', about which Frisk and Chantraine concur in connection to καλύπτω. There are at least three reasons for associating the two. First, κελ- may reflect the *e*-grade of \**kel-*. Secondly, the possibility that the ancestor of κέλυφος was restricted to 'biological covering' is completely straightforward (cf. OE *hulu* 'hull, husk' < \**k̑l-* 'cover'). Thirdly and doubtless without coincidence, κέλυφος displays the almost identical sequence -υφ-. Since isolation of a root καλ-/κελ- is possible, it follows that καλύπτω and κέλυφος were at some stage derived from nominals whose stems were formed with the ancestors of -υφ- and -ῦφ- respectively. Among nominal derivatives of \**kel-* (e.g. Ved. *śárman-* 'protection', Lat. *color*, etc.), there is evidence for an acrostatic *u*-stem abstract \**kól-u-/kél-u-* 'covering' (e.g. Epic and Attic κολεόν 'sheath' < \**kól-εῦ-ό-* 'covering thing').

I argue that this abstract was used as a predicative instrumental in the (anti-)causative periphrasis familiar from Latin's *cale-faciō/fiō* type, *-b-* tense morphemes, and the *cvi*-construction of Old Indic (e.g. Ved. *gúhā bhū-* 'become hidden', Jasanoff 1978, 2002–3, and Balles 2006). On this construction were based two verbal governing compounds reflecting different forms of the nominal predicate. While καλυ- continues an analogically maintained Lindeman variant \**k̑l-u-* of a neo-proterokinetic \**kól-u-/k̑l-έῦ-* (cf. \**dór-u/dr-έῦ-*), κελῦ- reflects a paradigmatically isolated compositionally eligible indeclinable adjective preserving the original acrostatic instrumental \**kél-u-h<sub>1</sub>* (cf. Ved. *sacā-bhū-* 'being along with'). The de-thematic second member of \**kéluh<sub>1</sub>-b<sup>h</sup>uh<sub>x</sub>-o/es-* 'covering', after development to \**-b<sup>h</sup>uo-* by the νεογνός rule, dissimilated to \**-b<sup>h</sup>o/es-* (cf. Ved. *vr̥ṣa-bhá-* 'bullock, *vr̥ṣan*-born' and Gk. ξρι-φος 'kid, born of (adult goat)', Jasanoff 1997). Accordingly, καλύπτω would reflect an ordinary \**-je/o-* denominative to an adjectival compound bearing a levelled athematic stem (i.e. \**k̑llub<sup>h</sup>-je/o-* 'have *x* covered' ← \**k̑llu-b<sup>h</sup>-* 'covered', with \**-b<sup>h</sup>-* extracted from, e.g., gen. sg. \**-b<sup>h</sup>-ós* < \**-b<sup>h</sup>u-ós* corresponding to nom. \*/-b<sup>h</sup>-s/ << \**-b<sup>h</sup>uh<sub>x</sub>-s*, cf. opposite direction in Ved. *-bhūh*, *-bhúvah*, *-bhúve*, etc.).

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**“Basic nominal lexicon of Lydian in Anatolian and Indo-European perspective”**

As it is the case with almost everything in Lydian, our knowledge of Lydian nominal stems is extremely fragmentary. One can hardly list more than two dozens of nouns and adjectives whose meaning can be established with fair certainty and a part of them represent more or less technical terms associated with the burial practice, which makes the assessment of the Lydian core vocabulary in a comparative perspective not an easy task. There are, however, enough indications in this respect Lydian takes a unique position, rather significantly differing both from Hittite and the Luwic languages. A rather modest number of clear correspondences, as Lyd. *pira-* ‘house’ vs. Hitt. and Luw. *per-/parn-*, Lyd. *ēna-* ‘mother’ and *taada-* ‘father’ vs. Hitt. and Luw. *anna-* and Luw. *tāda-* (Hitt. *atta-*) or Lyd. *ciw-* ‘god’ vs. Hitt. *šiu(n)-*, is contrasted with substantial number of discrepancies, most obvious in the cases when the meaning of the Lycian word is unequivocally defined either by context or by rendering in Greek or Aramaic. To these cases belong, for instance, Lyd. *kłida-* ‘earth’ vs. Hitt. *tēkan-/takn-* and Luw. *tiyammi-* (< PIE \**d<sup>h</sup>éǵ<sup>h</sup>-m*), Luw. *tas(a)kwira-*; Lyd. *kofu-* ‘water’ vs. Hit. *wādar-/widēn-* (< PIE \**uód-r*) and Luw. *wār-*; Lyd. *ora-* ‘month’ vs. Hitt. and Luw. *arma-* ‘moon, month’; Lyd. *porli-* (*forli-*) and *prwā-* ‘year’ vs. Hitt. *witt-* and Luw. *usa/i-* (< PIE \**uēt-*); Lyd. *tawsa-* ‘great’ vs. Hitt. *šalli-* and Luw. *ura/i-*. The aim of the present contribution is twofold. In the first part I will present a survey of the evidence concerning basic nominal lexicon of Lydian, both revisiting the interpretation of some important words (e.g. *kofu-*, *ora-*, *qira-*, *qela-*, *aara-* etc.) and arguing for some new identifications (e.g., the Lydian word for ‘sun’). In the second part, I will analyze the connections of the Lydian nominal roots in the areal and comparative perspectives and discuss the scenario of the linguistic evolution of Lydian which may best account for the observed picture – which is far from being compatible with the usual definition of Lydian as an ordinary Anatolian language.

**“He who nourishes/protects: an Indo-European god? Considerations on Pūṣan, Pan and Hermes.”**

My research aims primarily at analyzing the figure of Pan from a comparative perspective. This Ancient Arcadian/Greek god Pan has long since been compared with the Vedic god Pūṣan, to whom he makes an impressively close match, in part because both gods show prominent associations with goats. Whereas Pan is well known, let it be remembered that Pūṣan is a very ancient Indian solar deity, belonging to the oldest *stratum* of the *ṚgVeda* (Dass 1984); he is a guardian of cattle (especially goats and cows) and thus regarded as regulator of fertility and giver of wealth. He was a knower of paths and boundaries (relevant aspects of pastoral life) and, by extension, he was also a god crossing the different planes of existence and a guide to afterlife for the souls of the departed. Previous scholarship has interpreted both as derived from one antecedent, Indo-European pastoral god Indo-European: a deity with a name that served as the common basis for the development of both the names of these gods. However, there are two distinct levels to the comparison, as it has been usefully pointed out by Françoise Bader (1989): a morphological/etymological one and a functional one.

On the first level, I will first reassess the *status quaestionis* of the etymological problem, which has recently seen two opposing solutions: IE *\*péh<sub>2</sub>usō(n)* (Bader 1989) or a somewhat more cautious “Greco-Indic (/IE?) *\*Páhusō(n)*, G[enitive] *\*Pushnés*” (Calin 2017). Each form presents minor problems, which I will address. On the second level, most previous scholars have, to some degree, dealt with the Pan / Pūṣan equation by bringing in the figure of Hermes as well. Pan and Hermes constitute a *de facto* unity because of the stress on their parental relationship as justification for their joint addressing in the comparison (as Puhvel 1986 and Oettinger 1998 do). While elaborating on the function and possible origins of this particular constructed familial tie in Greek Mythology to further the legitimacy of Hermes’ inclusion in the comparison, this research will introduce a few elements of novelty: namely, a few attributes that, to my knowledge, have not been previously analyzed. Most notably, Pūṣan’s role as protector from the wolf, the double-faced enemy (Kramrisch 1961, paraphrasing *ṚgVeda* I.42, 2-4), which I believe has a resonance, if not a direct parallel, in Hermes’ slaying of Argos.

“Luwian and Sanskrit Action Nouns in *\*-j-éh<sub>2</sub>-*”

Previous research on the nominal suffix *\*-eh<sub>2</sub>-* in Anatolian has demonstrated its strong character as a marker of agency especially in suffix conglomerates, e.g. *\*-tjeh<sub>2</sub>-*, *\*-é-leh<sub>2</sub>-*, *\*-Vsieh<sub>2</sub>-* (Sasseville 2018 with further literature). At the same time, it was argued that the Luwian nominal class of non-mutated common gender *a*-stems reflects Proto-Indo-European stems in *\*-eh<sub>2</sub>-*. Nevertheless, the Luwian nominal class of *a*-stems has not been explored to its full extent. Starke (1990: 584) notices in Cuneiform Luwian a number of formations in *-a-* c. derived from verbs in *-i(ya)-* (< *\*-je/o-*), e.g. CLuw. *tūmmanti*-(<sup>ti</sup>) ‘to hear, to listen’ → *tūmmantiya-* c. ‘obedience’, *lappi*-(<sup>ti</sup>) ‘to make glow (*vel sim.*)’ → *lappiya-* c. ‘heat (?)’, *\*zarši(ya)-* ‘to behave (?)’ → *zaršiya-* c. ‘self-conduct’. A larger analysis of all examples including a survey of Hieroglyphic Luwian is still missing in the literature, but it is our goal in the present paper to fill this gap. Following the Luwian survey of this nominal formation, we will compare it with a similar type found in Sanskrit, e.g. *apasyá-* ‘to be active’ → *apasyá-* f. ‘activity’, *mṛgáya-* ‘to hunt’ → *mṛgayá-* f. ‘hunt’, *vacasyá-* ‘to be audible’ → *vacasyá-* f. ‘eloquence’ (AiGr. II, 2: 243–244). As a consequence, the comparative evidence between Luwian and Sanskrit will shed more light on the semantics of the suffix *\*-eh<sub>2</sub>-* in Anatolian.

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**“What and where is language change? Assessing the historical linguist’s tool box”**

With very few exceptions, Indo-European linguistics is a diachronic endeavor and thus inextricably bound to the study of language change. If we are to make informed statements in diachronic linguistics, we need to be certain about the processes and factors at work. In short, we need to be in control not only of our data, but also of our tool box: which processes exist (beyond reasonable doubt), which may in fact be mislabellings or can be subsumed under other ones and which are simple truancies? The mechanisms of sound change, the first great hurdle of Indo-European studies and linguistics in general, have been well-established since the 1890s (another formulation might be: little progress has been made since the 1890s concerning the functioning of sound change), whereas morphological, syntactic and semantic change are still contentious fields. In this talk, I propose to critically reassess some particularly controversial elements of (principally morphological) language change found in historical linguistics handbooks and elsewhere, as well as addressing the question of whether different types of change progress incrementally or by leaps and bounds and whether certain changes are undeviating or can be aborted or reversed.

A further notion to be considered is that of explanation: what do we mean when we ‘explain’ a state of affairs or its change and are we even talking about the same thing when we use the term ‘explain’? I will present and analyze some instances of strong, weak and inadmissible explanations, highlighting investigations into the Proto-Indo-European stop system and recent contributions to the etymology of the Proto-Indo-European first person pronoun “I”, as well as putatively universal constraints in paradigmatic morphology and morphosyntactic alignment systems. Finally, I will try to isolate factors (primarily extralinguistic in nature) that complicate explanation in language change and what can be done to address them.

The goal of this talk is to encourage critical discussion about methodology and biases in Indo-European studies. Though this is bound to raise more questions than answers, I hope to show that, in some cases, answers are indeed within our grasp.

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### “Barley and other grains in PIE”

Without doubt, Proto-Indo-European (PIE) contained an agricultural vocabulary to some extent but when it comes to terms for specific crops, the meanings found across the IE languages often vary so much that we are forced resort to reconstruct unspecific meanings like ‘grain’. On the other hand, the number of words meaning ‘barley’ have been said to be extraordinarily high, Blažek (2017) reconstructing as many as 15. Since barley is one of the neolithic founder crops, domesticated as early as 12.000 years ago (Zohary, Hopf & Weiss 2012: 51 f.), it would be reasonable to assume that it was somehow known to the Proto-Indo-Europeans. Whether they also had several, specific terms for it is partly diagnostic with respect to the importance of farming and cereal produce in the PIE culture.

However, many of the barley words reconstructed by e.g. Mallory & Adams (1997: 51 f.) and Blažek (2017) are based on slim or inconsistent data. Here I review these reconstructions, focusing especially on what Mallory & Adams (l.c.) consider the oldest IE term for the crop, reflected in Latin *hordeum* etc. I argue that a common PIE reconstruction cannot sufficiently, or at least not economically, explain the forms found in the various IE languages. Instead, after the dissolution of PIE, this term was soon adopted independently from different, but probably related, languages as the speakers of the various IE dialects were adapting to an agricultural subsistence.

On the other hand, I hope to demonstrate that the forms of this etymon in Greek, Albanian, and Armenian can in fact be united under one reconstruction. It may thus represent an early shared innovation by borrowing, suggesting that these languages belong to the same IE subgroup. In this connection, I argue that shared innovations from borrowing are more significant than ones based on inherited lexical material where it is often difficult to distinguish innovations from retentions. Since many agricultural terms appear to have been borrowed shortly after the dissolution of PIE, they may often be useful in this connection.

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**“The Migration of the Proto-Tocharians”**

The Tocharian branch of Indo-European languages is attested for a small window of a few hundred years beginning around the sixth century CE. The texts, found in the Taklamakan desert of China, are written in two languages: Tocharian A and B. This suggests a much deeper linguistic history for the branch, despite its otherwise relatively recent and brief attestation. To understand how Tocharian arrived in western China, I will make a case for its very early split—just after the Anatolian branch—from the rest of the Indo-European languages. Linguistic evidence can also shed light on the path that the people who would eventually come to speak Tocharian took to reach the Taklamakan. I take this all along with the results of archaeological and genetic research to propose that Tocharian languages had reached western China in the second millennium BCE. The Tocharian branch split from the rest of the Indo-European family in the fourth millennium BCE and its migration to the East is captured in the Afanasievo Culture. The famous Tarim Basin mummies may indeed have been the ancestors of the Tocharians.