On converse lability and its decline from Vedic to Epic Sanskrit: The verb juş- 'to enjoy' and 'to please'

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Abstract

In the Early Vedic language, we encounter two different systems of active vs. middle voice and valency oppositions. The emergence of many thematic Vedic transitive active forms (e.g. *īráya-^{ti}* 'to raise sth. or so.') is obviously innovative and secondary when compared to labile, and formally more archaic athematic active forms (e.g. *ivar*-^{ti} ~ ivár-ii 'to rise, to raise sth. or so.'). On this basis, it has been claimed that the original voice distinction was mainly driven by agency (i.e., volition, control, responsibility and animacy), whereas the secondary voice opposition was driven by transitivity distinctions and direct and indirect reflexive middle semantics (Pooth 2012, 2014). In this article, another verb in question, namely the psych verb jus- 'to enjoy, to please', will be examined as a parallel case to further discuss the general developments in the Vedic verb system, which are part of the general decline of lability and the increase of verb forms specified for transitive vs. intransitive behavior within Vedic (Kulikov 2014, 2012, 2006). This article will show that the Sanskrit psych verb jus- 'to enjoy' and 'to please' exhibits converse lability in Early Vedic Sanskrit, whereas it does not behave like this in Epic Sanskrit. The syntactic and semantic behavior of forms of jus- in both periods of Sanskrit will thus be compared.

Keywords: Converse lability of psych verbs; Indo-European middle polysemy; decline of lability in Sanskrit; Indo-European middle to active shift.

0. Introduction

The major aim of this paper is to show that the Sanskrit psych verb¹ *juṣ*- 'to enjoy' and 'to please' exhibits *converse lability* in Early Vedic Sanskrit, whereas it does not behave like this in Epic Sanskrit any longer. For the defining features of *converse lability* see Letuchiy (2009). The phenomenon under investigation

¹ The meaning of a psych verb typically includes the roles of experiencer and stimulus.

will be defined, described, and examined here in detail. Although this type of polysemy 'to enjoy' and 'to please' was noticed earlier by Monier-Williams (1899: 424 s.v.), the meaning 'to please' is often not taken into account in recent translations of the Vedic texts. It was obviously overlooked by Werba (1997: 187). Moreover, it has not been taken into account within the field of Indo-European etymology (see LIV s.v. *geus-). For instance, Mayrhofer (1992: 599) does not mention it. The entry in Monier-Williams (1899 s.v.) has been copied on various occasions, which is why the meaning 'to please' is also mentioned, e.g., on the TITUS homepage.

The major aim of this paper is to show that, when compared to English semantics and syntax, the verb in question (jus-) is polyconstructional in the sense that it occurs in ten different constructions without any change in voice and valency morphology, both with middle and active forms (e.g. middle *jusánta*, or active jósati), which do not mark any functional distinctions in the paradigm of this verb in the early Vedic language (Pooth 2014). At that stage, the verb occurs in multiple constructions that modify the verb meaning with regard to what valency morphology usually does, whereas we cannot find converse lability and most of the earlier constructions in the later Epic Sanskrit period, and there is no such modification of the verb meaning any longer – except for the one that is generally initiated by the regular causative derivation (Lubotsky 1989; Jamison 1983). Thus, the goal here is to show that this verb shows colexification (as defined by François 2008)² of 'to enjoy' and 'to please' and concomitant converse lability in the early language but is narrowed down to a normal transitive verb 'to enjoy sth. or so.' in later stages so that colexification is no longer existent. The verb's converse lability is illustrated in Figure 1. Its lexical meaning involves two semantic roles, experiencer and stimulus. The arrows symbolize the direction of the causation chain. The event itself is taken as starting with its cause (sc. the causation caused by the stimulus), then going over to the one who is affected by the cause.

The large bulk and focus of this paper is empirical and philological. It is nevertheless meant to be a contribution to the synchronic and diachronic typology of crosslinguistic patterns of multiple constructions and the typology of lability and its diachrony in general (Barðdal 2006, 2008; Bauer 2001; Beavers 2006; Croft 2001; Dowty 1991; Goldberg 1995; Härtl 1999; Jacobs 1994, 2009;

² This type of polysemy can roughly be defined as a type of semantic underspecification. It involves a superordinate lexical meaning with subordinate contextual meanings, e.g. when a language has only one superordinate verb with both meanings 'to kiss, to sniff' instead of the two more specific verbs 'to kiss' vs. 'to sniff' in English.

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\begin{array}{ccccc} \textit{the gods} & \textit{enjoy} & \textit{the offering} \\ \text{experiencer} & \leftarrow & \text{stimulus (a subordinate role of the cause role)} \\ \textit{the songs} & \textit{please} & \textit{you} \\ \text{stimulus ($\sim$ cause)} & \rightarrow & \text{experiencer} \\ \end{array}
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Figure 1.

Kutscher 2009; Rappaport & Levin 2005). The main body of this article will thus be a synchronic description of the semantic and syntactic behavior of the psych verb *juṣ*- in Early Vedic. I will then compare the situation of the early language with the one that is attested in Epic Sanskrit in the second part. This section is meant to illustrate the decline of polysemy and lability from Early Vedic to later periods on the general example of *juṣ*-. Thus, finally, I will give an outline of the diachronic development of this verb from the earlier period to Epic Sanskrit from this perspective with a brief focus on textual frequency.

I follow the chronology of the Vedic texts put forward by Witzel (1989: 124–127, 1997), Kümmel (2000: 5ff.), Dahl (2010), among others. Early Vedic is generally considered as being the language of the Rgveda-Samhitā (RV), especially the one of the family books, Oldenberg's (1888, 1912) extended core RV 1.51-191, 2-7, 8.1-66, and presumably several parts of RV 9 as well, since RV 9 is a special collection (of hymns to Soma). I make use of the philological text sigla, cover-symbols, abbreviations, and the usual linguistic glosses that are conveniently agreed on in Vedic philology and linguistics (e.g. RV, AV etc.). The term "Late Early Vedic" may be used to refer to the language of RV 1.1-50, 8.67-103, RV 10, and presumably some parts of RV 9. These parts constitute an intermediate period between the Early Vedic period and what may be termed "Early Old Vedic". Old Vedic is the language of the subsequent Mantra period, datable to around 1150 BCE with the beginning of the iron age, see Witzel (1997: 280).³ The Mantra period includes the following Vedic texts: RV-Khila (Scheftelowitz 1906), SV, AV, YV (MS, KS, TS, KpS, VSm) (Witzel 1997: 268; Kümmel 2000: 5ff.). "Early Old Vedic" may be an appropriate term for the language of the oldest sections of these texts, including AVS 1-5, AVP 1-15, which is very close to "Late Early Vedic", if not even the same language. Early and

 $^{^3}$ "Content and structure of AV and PS led to the assumption that AVŚ 1-5 / PS 1-15 are the oldest part of the collection. However, even the second part, AVŚ 8-12 / PS 16-17 can now be shown to be of considerable age: The mentioning of iron at AVŚ 13.3.7 = PS 16.53.12 and AVŚ 9.5.4 = PS 16.97.3 would indicate a date *ad quem* for these hymns" (Witzel 1997: 280).

Old Vedic taken together can thus be dated to the period between the 14th century and 1000 BC(E), ⁴ whereas Late Vedic is the term for the language of the subsequent period from around 1000 to ca. 500 BCE. The time-line for our purposes is thus from around somewhat before 1000 BCE to around 400 BCE, where Epic Sanskrit was in use, which is the Sanskrit from around the Classical literary period, thus mainly the language of the *Mahābhārata* and the *Rāmāyaṇa* and the subsequent body of Classical Sanskrit literature.

1. Synchronic behavior in the early language

The following list provides a preliminary overview of the constructions found with the psych verb jus- in the Early and Old Vedic period (RV, AV etc.). I make use of S as an abbreviation for subject indexing. As a rule, the nominative subject is indexed by inflectional portmanteau suffixation to an aspect and mood verb stem (e.g. the aorist stem $jus \acute{a}$ -), which thus specifies the respective person, number, voice, tense, aspect, and mood category.

1	juṣasva s yajñám _{ACC}	'enjoy the offering!'
2	juṣantas tanúas _{ACC}	'they enjoy (their) bodies (sc. themselves)'
3	jujuṣāṇás _{NOM} ándhasas _{GEN}	'enjoying (a portion) of herb'
4	$juṣasva$ s $stómam$ ACC $tanú\bar{a}_{INS}$	'enjoy the praise with thy body!'
5	juṣasva s tanúam _{ACC}	'enjoy or please (your own) body'
6	yajñás _{NOM} joṣati s tvé _{LOC}	'the offering will please you'
7	juṣāṇás _{NOM} arkaíṣ _{INS}	'pleased by the songs'
8	té _{NOM} juşántām s mā _{ACC} páyasā _{INS}	'let them give & please me with cream-milk'
9	rtavas _{NOM} nas _{ACC} juṣantām s	'the seasons shall please us (with something)'
10	odanas _{NOM} juṣate _S devān _{ACC}	'gruel is given to & pleases gods'

Figure 2.

⁴ This dating is indicated by the personal name *Subándhu*- (attested in RV 10.59–60) and the compound *tveṣá-ratha*- (RV 5.61.13). The same personal names *Šu-ba-an-du*, *Tu-iš-e-rat-ta*, *Tu-uš-rat-ta* are attested in Hittite-Mitanni documents (around 1400 BCE).

Judging from what is in the Early Vedic texts and contexts it is not evident that the semantics of the verb *juṣ*- includes an experiencer that is likewise an agent and thus agentive. Migron (1990) made such a claim by translating this verb with 'to favour something or someone, to choose something or someone' which implies volition and control of an agent role. His suggestion has already been dismissed by the LIV (page 166), who themselves erroneously allege that <code>juṣ-would</code> only mean "Gefallen finden an (jemandem oder etwas)" corresponding to English 'to take pleasure in something or someone'. However, as the examples given below will demonstrate, such assumptions are insufficient. This also holds for the usual etymology of <code>juṣ-</code> and the reconstructed lexical meaning of the corresponding Proto-Indo-European verb *<code>ģeus-</code> "etwas kosten" (LIV: 166), which is likewise insufficient. The meaning of <code>juṣ-</code> is not necessarily restricted to agentive meaning and can involve a semantically inanimate masculine cause in the nominative case, e.g. <code>yajñas</code> 'offering', as confirmed by the construction with locative of experiencer in the examples that will be discussed further below.

It is relevant to address the descriptive fact that no construction among the many constructions in Early Vedic can be regarded as a straightforward "underlying" construction without serious definitory contradictions and evidentiary problems. Although the construction with accusative of stimulus, which is labeled "construction 1" here, is much more frequently attested than any other, this finding does not necessarily or automatically entail that it must have the status of an "underlying" construction, if the encoding is not structurally different from the other constructions; and this is a quite general claim (also put forward in Pooth 2014). Although Early Vedic is a language with nominative and accusative alignment, there is no basis other than simple token frequency for considering the nominative and accusative construction the "underlying" transitive construction; and there is no basis for any "transformation" rules on the syntactic level by which other constructions are "formally derived" from a syntactically "formally basic" construction. 5 However, simple token frequency cannot be a sufficient indication that a specific construction represents that kind of "primacy" over other constructions. We definitively need additional formal and struc-

⁵ This is a descriptive point. The most frequent construction in Vedic can be defined as "basic" only if defined as "most frequent" BUT NOT if defined as "including less morphological or syntactic overt markers". English *he pleased her* → *she was pleased (by him)* is "asymmetrically marked" because the passive form *was please-d* involves more overt morphological markers: it contains an auxiliary, the root, a suffix, whereas the active form *please-d* only contains the root and a suffix. Different from English, the Vedic constructions 1, 2, 3, 5, 6, 7, 9, 10 can be described as "symmetrically marked" because the number of overt morphological and syntactic markers is equal.

tural criteria, e.g. structural differences in the number of additional markers; e.g. in the case of the English passive derivation she was please-d by his presence, which contains additional morphological material (was, by) when compared to its basic construction his presence please-d her. However, as the case forms and the verb forms of the Early Vedic constructions 1, 2, 3, 5, 6, 7, 9, 10 show, there is not a single sign of any marker in Early Vedic that can be indicative of their status as "formally derived or transformed" constructions. Exceptions might be constructions that show a reflexive marker tanú-'body' or 'own body'. However, since this marker is a regular feminine content noun in the accusative case, these constructions may also be taken for instances of the regular nominative and accusative construction 1. Opposed to verbs that are underspecified as to the exact number of participant roles, such as standard labile verbs like to break in English, Early Vedic *jus*-had a minimum of two participants and was perhaps obligatorily constructed with a form of the mentioned noun $tan\dot{u}$ - 'body, one's body' to indicate the direct reflexive reading. However, any proof of such a restriction must be left to others (on reflexivity in Vedic see Orqueda 2019; Kulikov 2007).6

We might as well use the term "non-directional" to classify psych verbs like jus- that show converse lability. This notion implies that the causation force of the event lacks any lexically fixed *direction* from (\leftarrow) or towards (\rightarrow) the participant coded by the nominative form. This phenomenon is just another view on converse lability (Letuchiy 2009). It should be kept in mind that the linguistic term "conversion" is used to refer to a very different phenomenon and may easily be confused with "conversity", whereas a term transitivity direction is already in use by other linguistic traditions (e.g. in Algonquian linguistics). In any case, since the term *labile* is used to classify verbs whose verb forms can be used in different syntactic constructions (and is typically used for verbs whose verb forms can occur both in transitive and intransitive constructions) without any additional valency-changing morphology, this term is quite appropriate for the phenomenon in question. Thus, we might as well term converse lability nondirectional lability. The gist of this phenomenon is a general underspecification of the nominative and other cases with regard to a lexically fixed linking of roles to case forms that occur in constructions of the given verb forms, thus re-

⁶ I am indebted to Verónica Orqueda (Pontificia Universidad Católica de Chile) for sharing her data on *juş*- with me and for our discussion on this matter.

⁷ Lexically "fixed" in the sense that the nominative subject can only be the experiencer or stimulus in the "basic" transitive construction (as in English, whereas this is not the case in Vedic).

alizing their arguments. This phenomenon can be illustrated by the schemes given in Figures 3 and 4 below.

NOM	direction	ACC
the gods	enjoy	the offering
experiencer	←	cause (stimulus)
the songs	please	you
stimulus	\rightarrow	experiencer

Figure 3.

NOM	direction	oblique
devā́sas	jușánta	yajñám (ACC)
experiencer	←	cause (stimulus)
gíraḥ	jușánta	tvé (LOC)
stimulus	\rightarrow	experiencer

Figure 4.

It is a well-known fact that psych verbs like German jemandem (dative) gefallen 'to please someone' often display a lexically fixed direction, although the direction itself can considerably vary among languages (Härtl 1999; Kutscher 2009). Such verbs are termed *directional* psych verbs here. Such verbs are well-known – just compare English to enjoy something with experiencer subject to to please someone, where the subject can only indicate the stimulus and the object can only indicate the experiencer, as illustrated (see Figure 3). Whereas English makes use of two different verbs, Early Vedic thus simply makes use of only one underspecified verb *jus*- and specifies the subordinate meanings by means of various syntactic constructions, as illustrated. It follows from this that there is no need for a passive derivation for this verb in Early Vedic, which conforms to the lack of a passive stem in the Vedic texts (Kulikov 2012). Suffice it to say, finally, that contrary to labile transitive and intransitive verbs, Early Vedic jusdoes not display any intransitive meaning because minimally two participant roles (i.e. experiencer and stimulus) are lexically fixed in the verb semantics. Thus, if lability was only defined as referring to verbs with both a transitive and intransitive meaning, the verb jus- could not be labeled labile in this sense,

simply because it has no such polysemy. The difference between the two English psych verbs and the Vedic verb can be summarized as follows.

non-directional experiencer	\leftrightarrow	stimulus verb	Vedic juș-
directional NOM experiencer	\leftarrow	(from) stimulus verb	English to enjoy
directional NOM stimulus	\rightarrow	(to) experiencer verb	English to please

Figure 5.

For further clarification, it is important to recall that Early Vedic is a language that allows pro-dropping and omission of the core arguments in all their case forms and all other case forms, if pragmatically possible. In other words, there seems to be no such thing as *necessary complementation* in Early Vedic, and all syntactic argument slots can be left unoccupied/zero. This claim has recently received a brief investigation (Pooth 2014), but we do not need to go deeper into this matter here, and this remark should suffice the present purpose.

Finite verb forms and participle forms of the verb *juṣ*- occur in the ten constructions given below. They are numbered 1 to 10 (see the overview above). The relevant constructions will be illustrated in more detail throughout the following sections. Construction 1 with NOM experiencer and ACC stimulus is the most frequently attested.

I use the standard glosses NOM for nominative, ACC for accusative, LOC for locative, GEN for genitive, and INS for instrumental. Only the relevant glosses will be indicated in order to save space, and the irrelevant forms in the examples will only be translated.

1.1. Construction 1: NOM enjoy ACC

Construction 1 is found often in the Vedic texts. Examples are:

(1) RV 6.16.8

táva prá yakṣi saṃdṛśam utá krátuṃ sudānavaḥ | your forth sacrifice overview:ACC and.also resolve:ACC well:giving:NOM

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víśve juṣanta kāmínaḥ || all:NOM enjoy:3PL.AOR.MID loving:NOM
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'Sacrifice forth! As for your overview and your intellectual resolve (ACC) as well, all the well-giving ones enjoy it, the loving ones.'

(2) RV 9.102.5

asyá vraté sajóṣaso his commandment:LOC one:accord:NOM víśve deváso adrúhaḥ |

all:NOM gods:NOM without:deceit:NOM

spārhā bhavanti rántayo [Ø_{ACC}] juṣánta yát || desirable:NOM become pleasures:NOM enjoy:3PL.AOR.MID when

'Under his (sc. Somas) commandment are all the gods of one accord and without deceit. Desirable become (his) pleasures when they enjoy (him or them).'

- (3) RV 10.81.7c sá no víśvāni hávanāni joṣad (= sandhi for *joṣat*) he.NOM of.us all:ACC oblations:ACC enjoy:3SG.AOR.SUBJ "He will take pleasure in every oblation of ours" (Jamison & Brereton 2013: 1515).
- (4) RV 7.59.9(a)b hávir ' márutas táj jujuṣṭana | libation:ACC Maruts:NOM this:ACC enjoy:3PL:PERF 'The Maruts (sc. storms-gods) have enjoyed this pouring oblation.'

1.2. NOM enjoy ACC (own body)

Construction 2 is corresponding to direct reflexive constructions in other languages. In Vedic, the construction involves the use of a noun 'body, own body' (for strategies to encode reflexivity in Vedic and a discussion of this construction see Orqueda 2019: 118; 175; Pooth 2014; Kulikov 2007). Although 'to enjoy one's own body' is still a proper translation of this construction and the noun is still a full feminine content noun, "a supplementary reflexive sense cannot be ruled out" (Orqueda 2019: 160). According to Kulikov (2007), this can be a case where the 'body' word $tan\dot{u}$ - would additionally work as an intensifier that highlights the co-reference of the referents in the nominative and the accusative. This is not the place to go into any discussion about any more detailed function of the 'body' word here (but see Orqueda & Pooth forthc.).

(5) RV 10.8.3cd

ásya pátmann áruṣīr áśvabudhnā his flight:LOC reddish:NOM horse.bottom:INS

rtásya yónau tanvò juṣanta || order:GEN womb:LOC bodies:ACC enjoy:3PL.AOR.MID

'In his (Agni's) flight, with a horse-bottom (sc. with horses at the bottom), the reddish ones (sc. flames) **enjoy (their) bodies** in the womb of the (ritual and cosmic) order.'

For more examples of this construction see, e.g., Orqueda (2019: 57, 117).

1.3. NOM enjoy or please ACC (own body)

Construction 3 may be an instance of construction 2. However, it is separated here because it is still possible that there be a slight meaning difference in agency of the subject participant. The subject of construction 3 can be a more causing agent (stimulus) than the the subject of construction 2 above:

(6) RV 3.1.1d

agne tanvàm juṣasva ||

Agni:VOC body:ACC enjoy/please:2SG.AOR.MID.IMP

'O Agni, enjoy (or please) thy body!'

According to Orqueda (2019: 118) the lexical value of the 'body' word is never entirely lost. If the body itself can be regarded as the stimulus causing pleasure, a translation with 'enjoy thy body' will be adequate. Orqueda argues that that the most typical source of pleasure here is not the body, but a rite element. However, it is still possible, in my view, that Agni is a causing agent that stimulates his own body here.

1.4. NOM enjoy ACC with INS (own body)

Construction 4 is an extension of construction 1:

(7) RV 3.15.2

jánma iva nítyam tánayam juṣasva | birth:ACC like innate:ACC offspring:ACC enjoy:2SG.AOR.MID.IMP stómam me agne tanvà sujāta || praise:ACC my Agni:VOC body:INS well:born:VOC

'Like (your) birth (and your) innate offspring enjoy my praise with (or through) thy body, o well-born Agni.'

The more recent translation takes the instrumental singular form $tanv\grave{a}$ as belonging to the vocative "o well-born in your body" (Jamsion & Brereton: "Take pleasure in my praise song as (you would) in your own birth, as in your own lineage, o Agni, well born in your own body"), but this is problematic because the expectation is that this form be in the locative case rather than the instrumental. This translation is not necessarily the only correct one, as the 'body' can also indicate the pathway the pleasure takes through the body of Agni here. The passage is thus also understood by Geldner (RV): "Agni, freue dich am eigenen Leibe über mein Loblied wie über die Geburt des leiblichen Sohnes, du Edelgeborener." Since Early Vedic noun phrases can be discontinuous, the case is actually undecidable here. This is why this construction has to be listed as a separate construction here. Construction 4 is an extension of construction 1 with additional instrumental case form of the own body. It is separated here because it involves an additional case form

1.5. NOM enjoy GEN (partitive)

Construction 5 has genitive instead of accusative:

(8) RV 2.36.3c

áthā mandasva jujuṣāṇó ándhasas and.now intoxicate:2SG.PRS.IMP enjoy:PERF:PART:NOM herb:GEN 'And now intoxicate yourself, having enjoyed (from) the herb!'

Construction 5 is confirmed by additional attestations in in RVKh (Scheftelowitz 1906) and AV. The passage AVP 2.50.1 is quoted below. It is conclusive

that the construction with genitive was in full use by Early and Old Vedic speakers. The following example has no glosses because it is meant as a quotation

(9) AVP 2.50.1

agnim vayam trātāram havāmahe ' ya imam trāyātā asmād yakṣmād asmād āmayataḥ juṣāṇo agnir ājyasya ' trātā trāyatām svāhā

"Agni rufen wir als Beschützer an, welcher ihn hier beschützen wird vor dieser Auszehrung hier, vor dem, was da weh tut; am Opferschmalz Gefallen findend soll Agni (ihn) als Beschützer beschützen; "svāhā"" (Zehnder 1999: 117, bold type mine).

1.6. NOM please LOC

1.6.1. On RV 10.105.8

A detailed discussion of construction 6 is important for our purpose here. The following examples confirm that the meaning of jus- is not necessarily restricted to agentive meaning and can involve a semantically inanimate masculine cause, e.g. yajña- m. 'offering'. The issue was mentioned above. Recall that the form jósati was regarded as a locative singular masculine form of the participle by Oldenberg (1912), but the active participle is not attested elsewhere, and the context of RV 10.105.8c clearly shows that it must be a finite verb form. It corresponds to the active subjunctive form given in example (3) above and confirms that the active forms behave exactly like the middle forms. As illustrated in examples (10) and (11) below, the same behavior holds for the perfect active forms. In other words, there is only a formal, but not a functional, voice distinction found in the paradigm of this verb. I will come back to this interesting matter immediately after the discussion of the example. I will not gloss the active voice of *jóṣati* here because active forms are only found in stems of the thematic type (jósa-) and in the perfect stem for the prehistorical reasons given below. The following example is given in full. Pāda (= half-verse) d has full glossing because it is so outstanding.

(10) RV 10.105.8cd áva no vrjiná šišīhy rcá vanemanýcah | nábrahma vajňá ŕdhag jósati tvé ||

Glossing of pāda c:

ná á-brahmā **yajñás** NEG PRIVATIVE-brahma: NOM SG M sacrifice: NOM SG M

jóṣati tvé juṣ:3SG.AOR.SUBJ 2SG.LOC

'Grind down the crooked ones from/for us. By verse we want to vanquish the verse-less, (because) without Brahma(s) the offering will not particularly please you.'

Note that *ábrahmā* is the masculine form of the adjective *ábrahman*- 'being without brahma(s)' and agrees with the noun yajñá- in gender, case, and number. Contrary to Migron's proposal (1990), the stimulus yajñás (= nominative form of the stem *vajñá*-) is neither volitional nor controlling, nor permitting. Therefore, *juṣ*- is not agentive. It is obvious that the 3sg subjunctive active form jósati does not mean 'the subject will favour something, or choose sth. (deliberately, willingly)' here. Furthermore, it is a bit difficult to decide on whether the experiencer (sc. Indra) is volitional, controlling, or permitting or not. The translation of RV 10.105.8c nábrahmā yajñá ýdhag jósati tvé as "not without sacred formulations is our individual sacrifice, while you are taking pleasure in it" by Jamison & Brereton (2014: 1568) suffers from two shortcomings. Firstly, the meaning 'enjoy something' typically comes with nominative of experiencer otherwise, as all examples below can confirm. Secondly, their translation of *yajñás* rdhag "our individual sacrifice" cannot be the correct translation of the passage because *rdhak* is used in the Vedic language only as an adverb or as a predicative adjective with zero copula, with the verb as- in the meaning 'to be separate, special' or with kr- 'to make separate, separated, special'. It has the general meaning 'separate, separately, offside, special, especially, particularly' and is thus always part of the predicate, then combined with a verb form, or modifying a verb form – but it is never used as an attributive adjective modifying a noun. (The quoted passages are from the RV, see Lubotsky 1997; I only translate the parts given in bold type.)

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7.61.3d
           rdhag vató ánimisam ráksamānā || 'going separately' (adverb)
8.18.11c
           rdhag dvésah krnuta visvavedasah || 'make (2pl) separated!' (with
           rdhag itthå sá mártyah 'separately' or 'in a special way' (adverb)
8.101.1a
9.64.30a
           rdhak soma svastáye 'separately (sc. unmixed)' (adverb)
10.49.7d
           r'dhag krse dasam krtvyam hathaih || 'I make separated' (with kr-)
           gúhā śiro nihitam ridhag akṣī 'offside (are) the eyes' (predicative,
10.79.2a
            zero copula)
10.93.8d
            rdhag yajñó ná mắnuṣaḥ || 'is special like the offering' (predica-
            tive, ditto)8
10.105.8c nábrahmā yajñá rídhag jósati tvé || must be an adverb
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Therefore, the correct translation of nábrahmā yajñá ráhag cannot be 'not without sacred formulations is our individual sacrifice', since ráhak is not part of the predicate in such a translation. However, Jamison & Brereton (2014: 1567) correctly state that the hymn "appears to be jocular in places". An ironical translation of ná ... yajñá ráhag jóṣati tvé as 'the offering will not particularly (especially) please you' is much better because it conforms to the jocular style and to the grammatical function of the adverb or predicative adjective.

It is noteworthy that middle forms of the imperfective (usually called "present") stem *juṣá-te* are substituted by active forms *juṣa-ti* in Epic Sanskrit (Monier-Williams 1899: 424; Oberlies 2003: 433):

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"pr. juṣati [...], Mbh 3,184.13, 13,27.100
sec. caus. joṣayati, Mbh 6,25.26" (Oberlies 2003: 433, bold type mine)
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According to the internal chronology of Vedic and Epic Sanskrit, it is the active forms, not the middle forms, that must be seen as younger innovations. These substitutions must be considered as being the final consequence of a general di-

⁸ Cf. RV 10.93.8cd *duṣṭáraṃ yásya sắma cid' ṛdhag yajñó ná mắnuṣah* || 'of him whose melody is ever hardly surpassable (sc. of him who does honor), (whose melody is) special like the human offering.' Again, Jamison & Brereton's translation of *ṛdhag* ("of the one whose melody is also difficult to surpass, (whose) separate sacrifice is like (a sacrifice) stemming from Manu" does not match its function as part of the predicate '(is) special'.

achronic development which has recently been termed the "post-Proto-Indo-European great voice shift" (Pooth 2014). The first part or initial step or phase of this "great voice shift" must be dated back to Proto-Indo-European, presumably to the period when it broke apart (its ultimate motivation has been outlined by Pooth et al. 2019). It has been a major finding of internal reconstruction within Indo-European studies that Indo-European singular perfect active forms must go back to Proto-Indo-European "protomiddle" forms (Watkins 1969; Jasanoff 1998, 2003 with further referrences). Such a protomiddle prehistory of the Vedic perfect active forms neatly corresponds to the descriptive fact that the Vedic root aorist stem and the thematic aorist stem are middle/media tantum and thus also go back to "protomiddle" voice forms:

- a. juṣāṇá- middle tantum, goes back to a "protomiddle" form
- b. *juṣá-ta* middle tantum, goes back to a "protomiddle" form
- c. *jujóṣ-a* perfect active, goes back to a "protomiddle" form
- d. $jos \dot{a}ya^{-te}$ RV middle tantum \rightarrow new Epic active $jos \dot{a}yati$
- e. $ju\dot{s}\dot{a}^{-te}$ Old Vedic middle tantum \rightarrow new Epic active *juṣati*

These inner-paradigmatic correlations suggest to assume the same "protomiddle" origin for corresponding Early Vedic active forms of the subjunctive stem $j \acute{o} s a^{-ii}$ and those of the perfect subjunctive stem $j \acute{u} j o s a^{-i}$. It is plausible, if not inner-paradigmatically evident, that we can generalize the given development. Drawing the inference that the remaining stems of the paradigm of $j u s^{-}$ all go back to former "protomiddle" forms is reasonable and sound. This is confirmed by the descriptive fact that there is no functional difference between the 3sg perfect subjunctive middle form $j \acute{u} j o s a t e$ (RV 9.103.1d) and its corresponding active form $j \acute{u} j o s a t e$ (RV 8.62.1b), as illustrated below.

(11) RV 9.103.1c

bhṛtíṃ ná bharā matíbhir **jújoṣate** || present:ACC like I shall bear thoughts:INS jus:3SG.PERF.SUBJ.MID

'I shall bear (the upraised speech) like a present, along with (my) thoughts. He will (soon) have enjoyed it.'

(12) RV 8.62.1ab

pró asmā úpastutim bháratā yáj forth:now to him praise.invocation:ACC carry so.that

jújosati |

jus:3SG.PERF.SUBJ.ACT

'Now carry a praise invocation to him so that he will soon have enjoyed that!'

Within the paradigm of the Early Vedic "perfect subjunctive" stem, jújosate can thus be considered an inflectional relic of the archaic overall "protomiddle" voice inflection of this verb, continued as middle voice marking, while the active inflection of jújosati should be younger and innovative compared with the middle inflection. 9 This case, among all other cases, can further strengthen the archaic nature of middle inflection within the paradigm of jus-. Based on what we find from Vedic Sanskrit to Epic Sanskrit, we can draw the inference that the active inflection (-a-ti) simply replaced the older middle inflection (-a-te) in all the attested active verb forms of this verb in the periods before the Vedic texts, if it not simply continues the old "protomiddle" voice marking (e.g. in the case of the perfect endings). It is thus conclusive that the PIE "great voice shift", even if it already began when PIE broke apart, was still an ongoing morphological process from Vedic (jusá-te) to Epic Sanskrit (jusa-ti) – initially beginning with the protomiddle to active shift (or reanalysis, see Pooth 2019a) of the later IE perfect active forms by the time when PIE broke apart, then finally affecting the old middle/media tantum verbs from Vedic to Epic Sanskrit. As mentioned, this shift can be identified as a very general shift tendency from "protomiddle" or middle to active inflection; and the comparative evidence supports the inference that it must have begun quite early in the Proto-Indo-European language in the period before Proto-Anatolian split off or separated from the rest of the Indo-European family. In any case, it is evident that this tendency subsequently continued thoughout Proto-Indo-Iranic and within Early, Old, and Late Vedic, thus ultimately yielding active inflection of *jus*- in the Epic Sanskrit period.

It is further possible to draw an inference that is implied in our findings. This will be relevant for Indo-European studies quite generally. It runs as follows: When we encounter active inflection of any given Indo-European cognate

⁹ For the original non-tensed anterior-imperfective function of the "perfect subjunctive" ($p\bar{p}\dot{q}ya$ -type) and its "protomiddle" origin see Pooth (2019b).

of this verb *juṣ*- in a period comparable to the period in between 400 BC and 400 AD, it is possible to generalize the Vedic tendency to other Indo-European branches by assuming that such a substitution happened in other IE branches the same way as it did in the post-Proto-Indo-European to Vedic and Epic Sanskrit period (e.g., we can draw the inference that the Greek active forms γεύω etc. continue previous "protomiddle" forms). This general inference is of importance for the etymology of the Indo-European cognates of Vedic *juṣ*-, which only continue the meaning 'to enjoy something' or the similar meaning 'to taste (of) something' etc., whereas the meaning 'to please someone' is not attested. Thus, we can say that the "great voice shift" more generally affected the original Proto-Indo-European lability or polysemy in general by reducing it in other Indo-European branches as well. This general inference is utterly important for the reconstruction of the voice system of Proto-Indo-European. These big questions, however, must remain open questions for thus being solved only in the future (but see Pooth 2014 for a plausible scenario).

1.6.2. Ambiguity with zero

The meaning of the verb form when arguments are dropped and zero must be inferred from the context and depends on the context. Without knowledge of the context and event frame, one does not have exact knowledge of the meaning difference between 'to enjoy' vs. 'to please'. The context is NOM *viśve deváso* and *giraḥ* in the preceding utterance unit. Their role in the context triggers the interpretation of zero as locative in the following examples.

¹⁰ The first anonymous reviewer made the claim that "this sort of reasoning is [...] projecting the Vedic facts [...] to PIE without evaluation of the comparative evidence". However, this is not true. In this case, the comparative evidence is evaluated as *lacking significance for the question of whether the Vedic meaning is archaic or not*. It is more reasonable to draw the inference that the Vedic polysemy is archaic than to vote for the opposite because there is no internal evidence for the assumption that the Vedic usage 'to please someone' with locative of experiencer is innovative. The internal evidence rather strengthens the opposite. Comparing the comparative evidence with the internal Vedic evidence, the comparison can be evaluated in the sense that the internal Vedic evidence is more significant. I contend that it is more likely that all other IE languages – except for Vedic – gave up the original converse lability and generalized the meaning 'to enjoy something' or 'to choose, taste someone/something' vel sim. (cf. LIV s.v.).

(13) RV 8.13.6 with context

stotá yát te vícarṣaṇir atipraśardháyad **gíraḥ** | praiser:NOM when for you wandering all-around makes bold songs:ACC

'When the praiser, wandering all-around, makes bold the songs for you ...'

vay \acute{a} iva ánu rohate \mathcal{O}_{LOC} juṣánta yát \parallel branch:NOM like after he grows (you) please:3PL.AOR.MID when

'Like a branch he grows after (you), when they (sc. the songs) please (you).'

(14a) RV 7.61.6abc: this is the context preceding d in (14b) (not glossed)

sám u vāṃ yajñám mahayaṃ námobhir ' huvé vām mitrāvaruṇā sabấdhaḥ | prá vām mánmāny rcáse návāni '

'Then I make the sacrifice great for you two by obeisances. I call you two, Mitra and Varuṇa, bending (my knees) together. Forth to you two new thoughts to chant praise.'

(14b) RV 7.61.6d

kṛtấni bráhma jujuṣann Ø_{LOC} imấni || made:NOM brahmas.NOM please:3PL.ACT these.NOM

'These made brahmas have already pleased (you two before 11).'

Translating this last pāda d with "die hier bereiteten Gedichte sollen sie gern haben" (Kümmel 2000: 201) is problematic. The context in 6ab confirms that it is Mitra and Varuṇa who are invoked in this hymn. If these two gods were in the nominative case, the number (sc. dual) congruency would have to trigger a 2dual verb form, whereas it is evident that the attested form *jujuṣan* is a 3pl form. Within such a translation of this verb as "sollen sie gern haben" the subject would have to refer to all the people involved in the offering. This, however, is unlikely in the given context. It is more likely that Mitra and Varuṇa are the experiencing addressees of the Brahmas that were made for them. We can conclude that *kṛtāni brāhma* ... *imāni* must be rendered nominative plural neuter forms and subject of *jujuṣan*, as also seen like this by Geldner (RV).

¹¹ For the original function of 3pl forms of the *ápīpyan* type see Pooth (2019b).

1.6.3. The stem joṣáya-te shows the same behavior

At this point we can discuss the behavior of the so-called "causative-iterative" stem in Early Vedic that will become relevant in a subsequent section. In the oldest stage, only middle forms of this stem are attested and show the same converse labile behavior. The 2sg subjunctive middle form <code>joṣáyāse</code> in the following passage has a "non-causative" meaning 'you shall enjoy (our songs)' (the passage lacks glosses for saving space; <code>puroļāśam</code> and <code>giras</code> are the relevant ACC forms here):

(15) RV 3.52.3-4

puroļāśaṃ ca no gháso **joṣáyāse** gíraś_{ACC} ca naḥ | vadhūyúr iva yóṣaṇām || puroļāśam̈_{ACC} sanaśruta prātaḥsāvé **juṣasva** naḥ | índra krátur hí te bṛhán ||

'Our offering cake you shall eat, and **you shall enjoy** our songs_{ACC}, as a bride-seeking man does a maiden.

Enjoy our offering cake_{ACC}, o old-famed, at the Morning Pressing. O Indra, lofty indeed is your resolve.'

Compare the translation given by Jamison & Brereton (2014: 535f.) which is almost identical to mine.

The converse labile counterpart 'to please someone' occurs in construction 6 in the following passage, but the locative is dropped (sc. non-overt) here. This instance of *joṣayete* 'both please (him)' directly follows RV 1.95.5 *siṃhám práti joṣayete* 'both are pleasing/enjoying the lion' with overt accusative. In this context, *bhadrá*- 'auspicious' can be understood as meaning 'satisfying'.

(16) RV 1.95.6a

ubhé bhadré \emptyset_{LOC} **joṣayete** ná méne both.NOM satisfying (verb) like two co-wives 'Both please (him) like two satisfying co-wives.'

(17) RV 1.95.5d

pratīcī siṃhám práti joṣayete || facing.NOM lion:ACC towards (verb)

'Facing towards the lion, the two are (then finally) pleasing (?)/enjoying him.'

The passage is repeated with its context below:

(18) RV 1.95.5

āvíṣṭyo vardhate cấrur āsu jihmấnām ūrdhváḥ sváyaśā upásthe | ubhé tváṣṭur bibhyatur jấyamānāt pratīcī simhám práti josayete ||

'The beloved one (sc. Agni), manifest, grows strong among them (sc. the two fire-sticks and likewise the two world-halves, see Jamison & Brereton ad loc.);

in the lap of the aslant (is) upright the self-glorious one.

Both (world-halves and fire-sticks) are afraid of him, the one being born of Tvaştar.

Facing towards the lion, the two are (then finally) pleasing (?)/enjoying him.'12

The context around RV 1.95.6 indicates that *joṣayete* must be translated as 'the two (i.e. the two fire sticks and the two world-halves, heaven and earth) please him (= the fire-god) like two pleasant co-wives (please a man)'. Gotō's (1988) translation "die beiden lassen sich gegenseitig genießen, wie zwei glückliche, Kebse und Partner (?)" is close to incomprehensible in this context. Such a translation blurs the understanding of the kindling of Agni that is described by this hymn: In the beginning of the hymn, it we hear that the two *virūpe* ('the two worlds, i.e. heaven and earth, day and night') attend upon Agni, the firegod, when he is kindled, and Agni is the main topic of the hymn, who is then faced by the two world-halves. He is the one referred to by the accusative 'lion' in RV 1.95.5d. Therefore, Agni must be the experiencer in RV 1.95.6a and a causative-reciprocal meaning does not make contextual sense.

The given minimal pair can thus correspond to the other minimal pairs by showing the same the non-directional semantic behavior. The given passages confirm the converse lability of $jos\acute{a}ya^{-te}$. In Early Vedic, the middle tantum stem $jos\acute{a}ya^{-te}$ is thus **not a causative** stem, but a simple labile imperfective

¹² The reading 'the two are enjoying him' cannot be excluded and even makes sense here. The hymn seems to describe how the two fire-sticks and the two world-halves are reacting on the presence of the fire (sc. Agni, the lion). In the beginning, they are afraid of the fire because of its negative and dangerous properties, but then they finally *enjoy* it because of its positive properties.

("present") stem. We will see later that this is very different from the younger period of the Sanskrit language.

1.7. NOM pleased by INS

The following construction 7 is a passive-like middle construction with instrumental case marking of the instrument role:

(19) RV 10.6.4a with context b

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śūṣśbhir vṛdhó juṣāṇó arkaír sounds:INS grown.strong:PART:NOM PART:NOM songs:INS 'The one grown strong by the sounds, pleased (made enjoy) with (= by help of) the songs ...'
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devām áchā raghupátvā jigāti | '... to the gods quickly flying he goes.'
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This construction 7 confirms that the middle participle <code>juṣāṇá-</code> is polysemous: ¹³ it can generally have a non-passive-like meaning 'enjoying something or someone' (agentive or not) and a passive-like meaning '(being) pleased by something or someone' depending on the context and on the given construction; compare example (8) above. This construction is also found in AVP 1.92.1 (AVP only). I am indebted to Thomas Zehnder, who made an unpublished preliminary text, translation and commentary of AVP 1 available for me. This passage confirms the Early and Old Vedic linguistic reality of the mentioned polysemy. Again, it is meant to be a quotation:

(20) AVP 1.92.1

āganmemām samitim viśvarūpām ' yasyām pūrvam avadad deva ekaḥ sā naḥ **sūktair jujuṣāṇā** samīcy ' asmān vṛṇītām sumanasyamānā

[11-11 syllables]

[11-11 syllables]

¹³ The middle participle juṣāṇá- is likely to mean 'since you are pleased'when being pleased' in RV 5.75.3abcd á no ratnāni bíbhratātv 'áśvinā gachatam yuvám | rúdrā híranyavartanī 'juṣāṇā vājinīvasū ' ... "Bringing treasures to us, Aśvins, come here, both of you, o Rudras with golden tracks, whose goods are prizewinners, since you are pleased" (Jamison & Brereton), although the meanings 'pleasing (us)', 'being enjoyable (for us)' or even 'when being enjoyed (by us)' cannot be excluded.

'We have come to this omniform meeting, in which earlier spoke the one god.

This (*samiti*-, meeting) – **having been pleased/delighted** by our hymns – is in concord.

It is us that the two (gods, sc. Mitra & Varuṇa) please want to choose/ would choose when being well-minded.'

Notice that $vr\bar{n}t\bar{t}am$ (AVP 1.92.1d) and $avr\bar{n}tam$ (RV 1.180.4b) are dual forms with irregular active personal endings. They belong to a paradigm that is otherwise fully middle. Independent evidence for a shift from middle to active function of endings is thus provided by 2dual and 3dual "active" endings in $a-vr\bar{n}-tam$, 3dual $vr\bar{n}-t\bar{a}m$, and likewise $j\dot{a}nis-t\bar{a}m$ (RV 10.46.9) because these stems are otherwise middle/media tantum. The 3dual $-t\bar{a}m$ in $adh\bar{u}t\bar{a}m$ (RV 10.4.6) might even be a relic of its middle function (Pooth 2011: 477f.). The protomiddle to active shift is the best explanation for such mysterious asymmetries (Pooth 2011). The otherwise active (and thus "neoactive") endings 2du -tam and 3du $-t\bar{a}m$ thus reveal their "protomiddle" origin. Such forms are more pieces of evidence for the "great protomiddle to active voice shift", as outlined by Pooth (2011, 2019a) and Pooth et al. (2019).

1.8. NOM please & supply ACC with INS

An instance of construction 8 is found at AVŚ 3.15.2. The instrumental case forms *páyasā ghṛténa* indicate two substances that are transferred and dislocated. They indicate the theme role.

(21) AVŚ 3.15.2c

té mā juṣantām páyasā ghṛténa
they.NOM 1SG.ACC juṣ:3PL:IMP milk:INS ghee:INS

'Let them (sc. these roads) please (and supply) me with milk and ghee!'

Whitney translates AVŚ 3.15.2 differently as "let them enjoy me with milk, with ghee". But notice his commentary: "The comm. ... renders juṣantām in c by sevantām, as if it were causative" (bold emphasis mine). Taking the commentary seriously here suggests that this verb form has a meaning in between 'to make someone pleased with something' and 'to attend upon somebody'. The commentary thus speaks in favour of a recipient-implementing or goal-imple-

menting component 'to please someone by providing him (recipient or goal) with something (INS)'. Therefore, the verb's subject 'they' ('these roads') contains a role that is both stimulus and donator (sc. giver) here. The nominative case indicates the agent-donator, i.e., the one that transfers or indirectly provides a recipient with the theme by 'making him pleased by providing him with something'. In German, one could understand what is going on here by maybe using an (otherwise ungrammatical) ad hoc applicative derivative *jemanden mit etwas befreuen* (with applicative prefix *be-*). The overall meaning in this construction is thus similar to a recipient-implementing applicative construction without actually being a derived applicative construction. Compare the Vedic two patterns of many transitive verbs:

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(22a) RV 8.98.9 (excerpt)
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yuñjánti hárī ... ráthe yoke:3PL.PRS.IND.ACT fallow:ACC ... chariot:LOC

'they yoke two fallow horses to the chariot (LOC of goal)'

(22b) RV 7.23.3 (excerpt)

yujé rátham ... háribhyām yoking:DAT chariot:ACC ... fallow:INS

'for yoking the chariot ... with two fallow horses'

1.9. NOM please & supply ACC

Construction 9 is construction 8 without instrumental (INS). An instance of it is at AVP 1.106.3b. Note that $var \ \bar{s}as$ ($var \ \bar{s}as$ - m. 'raining, rain') must be a nominative plural form (of a masculine a-stem), as indicated by the adjective madhumantas (madhumantas), which should be nominative plural (masculine). The conjecture was made by Renou (Zehnder, manuscript). The manuscripts Ja1, Ma1, V\(\bar{a}\), K correspond by showing madhumanta (I owe this commentary to Thomas Zehnder, manuscript).

¹⁴ To be clear, I am not saying that construction 9 is innovative with respect to construction 8 (this was a question of the first anonymous reviewer).

(23) AVP 1.106.3ab

vasanto grīṣmo ⁺madhumanto varṣāḥ ' śaraddhemanta 'Spring, summer, the ones full of sweetness, rains, harvest-time, winter:'

rtavo no **juṣantām** | [11-11 syllables] seasons:NOM us:ACC juṣ:3PL.IMP.MID 'the seasons **shall please** us!'

The linguistic reality of the meaning 'they (sc. the seasons) shall please us' (but not 'they shall enjoy us') and the experiencer and beneficiary role of the pronominal clitic *nas* 'us' is confirmed by the corresponding meaning 'they shall set us in welfare' in AVŚ 6.55.2b, where *nas* is likewise experiencer and beneficiary. Notice that *su-ité* is a purposive dative form of *su-ití-* 'well-going'. Whitney's (AV, page 322) translation: "Hot season, winter, cool season, spring, autumn, rains – do ye set us in welfare (*svitá-*)."

(24) AVŚ 6.55.2ab grīṣmó hemantáḥ śíśiro vasantáḥ śarád varṣấḥ svité no dadhāta | 'Summer, freezy winter, spring, autumn, (and) the rains shall set us to (= provide us with) well-going!'

For the construction *svité nas dadhāta* see Selva (2014). Another difficult passage is the following. Notably, Whitney (commentary) expects rather a 2sg imperative form of the Classical Sanskrit causative present *joṣaya*- here. In order to save space, I leave away the glossing here as well; the relevant forms are given in bold type.

(25) AVŚ 18.3.4 prajānaty àghnye jīvalokám devā́nām pánthām anusamcárantī | ayám te gópatis **tám juṣasva** svargám lokám ádhi rohayainam ||

Whitney's translation is: "Foreknowing, O inviolable one, the world of the living, moving together [with him] upon the road of the gods – this is thy herdsman (gópati); enjoy him; make him ascend to the heavenly (svargá) world." In his commentary, he says that there "is no difficulty in understanding this of the anustaranī cow, with the sūtras and commentaries, although we should expect rather pitrlokám in a and joṣaya in c" (Whitney 849, emphasis mine). According to Whitney (referring to Kauśīka Sūtra 81.25), the dead man's face was cov-

ered with the omentum of the *anustaraṇī* cow on the pile and the omentum was to be pierced with seven holes. It is clearly the cow that is addressed here by *ayáṃ te gópatis* 'this is thy herdsman'. In the funeral hymns of the AV, however, this is a metaphor for the widow, which is also called Yuvati in the passages before (AVP 18.69.1 = AVŚ 18.3.3). There is a 2sg causative present imperative active *rohaya* 'make (him) ascend (i.e. the dead man)'. It is thus possible that this passage must be translated as 'please him (sc. the dead person)' rather than 'enjoy him'. According to Bhattacharya's AVP edition (Bhattacharya 2011), the two parallel passages run as follows: AVP 18.69.2 *prajānanty aghnye jīvalokaṃ bhavanti* (form unclear) ' *devānāṃ panthām anusaṃcarantī* | *eṣa te gopatis taṃ juṣasva* ' *svargaṃ lokam adhi rohayainam* and AVŚ 18.3.4 *prajānaty àghnye jīvalokáṃ ' devānāṃ pánthām anusaṃcárantī* | *ayáṃ te gópatis táṃ juṣasva* ' *svargáṃ lokám ádhi rohayainam* ||.

Construction 9 with NOM of stimulus and ACC of experiencer is a partial mirror-image of construction 1 with NOM of experiencer and ACC of stimulus, although construction 9 has an ACC that encodes the experiencer and recipient role, whereas construction 1 only has an ACC that indicates the experiencer role.

1.10. NOM is given to ACC_i with pleasing ACC_i

Taking the last two constructions as being linguistically real in Old Vedic (and, as I believe, also in Early Vedic) can help to understand the final construction 10, which is otherwise identical with construction 8, but lack the instrumental case. In AVP 5.14.8b, a 3sg imperfective present indicative middle form *juṣate* is attested in a rather difficult context. This passage seems to belong to the oldest part of the Atharvaveda. Cf. Witzel (1997: 280): "Content and structure of AV and PS led to the assumption that AVŚ 1-5 / PS 1-15 are the oldest part of the collection".

(26) AVP 5.14.8 (AVP only)

dvayā devā upa no yajñam āgur '
'The gods of two kinds have come to our sacrifice ...'

yān odano juṣate REL:ACC gruel:NOM juṣ:3SG.PRS:IND:MID

"... to whom (RELativizer) the gruel is given & who are thus pleased / whom the gruel pleases ..."

The subsequent context:

yāṃś ca pṛṣṭaḥ | 'and to whom (the gruel is given) as the one that is (or was) asked for.' ādityā aṅgirasaḥ svargam imaṃ prāśnantv rtubhir niṣadya || 'Let the Ādityas and Aṅgirases eat this heavenly (gruel), after they have taken place in accordance with the seasons.'

The passage has been translated as follows: "The gods of two kinds, about whom the gruel is pleased and by whom it is sought for, have come to our sacrifice: Let Ādityas and Angirases eat this heavenly [gruel], after they have taken place in accordance with the seasons." (Lubotsky 2002). Notice Lubotsky's commentary: "For odana- svarga- cf. AVŚ 4.34.8 imám odanám ní dadhe brāhmaņéşu viştāriņam lokajitam svargám." But the translation of yān odano *jusate* as "about whom the gruel is pleased" is less comprehensible in my view. As indicated by the context, the accusative plural masculine form $y\bar{a}n$ is coreferential with the nominative plural masculine subject dvayās devās 'gods of two kinds' (i.e. ādityās and angirasas). Besides the accusative, there is a nominative singular masculine subject odanas 'rice-gruel, gruel'. This must designate the stimulus (for the gods) because it is by far more natural in Vedic mythology to understand that the rice-gruel is offered to the gods, whereas gods are never offered to the rice-gruel (this is self-speaking). The accusative should thus be rendered a goal accusative, and it is likely to be a recipient accusative as well. It may also simply be translated by 'whom the gruel pleases', as an instance of construction 8 with accusative of experiencer (and presumably recipient). Construction 10 thus corresponds to construction 8 except that the latter has the instrumental case. The role encoded by the instrumental case, which indicates the transferred substance and dislocated theme in construction 8, corresponds to the nominative case of construction 10. This, of course, is simple middle syntax. Other Early and Old Vedic middle forms clearly confirm that the nominative case within a construction with middle verb form is not fixed to the agent role, but can also indicate the dislocated theme role without any morphological changes.

1.11. Frequency

When we straightforwardly compare the frequency of all the given constructions, we find that construction 1 with NOM of experiencer and ACC of stimulus is by far the construction that is most frequently attested in the Early to Late Vedic texts, whereas construction 6 with LOC of experiencer and NOM of stimulus is actually attested, but only minimally and sporadically. It is conclusive that this construction is unproductive from Early and Old Vedic to later stages. It is a fact that the meaning 'to enjoy someone or something, to find pleasure in someone or something' is the most frequent meaning of forms of juṣ- in the Vedic texts, whereas the meaning 'to please' is much less frequently used in the texts. This meaning – and the given converse lability – can hardly be an innovation because it cannot be motivated as innovation from within Vedic in any possible and plausible way. It must be a relic and an archaism. We must take the converse lability as a valuable relic. When we weigh the lability against the remaining Indo-European comparative evidence (see the appendix attached below), the archaic lability cannot be explained as secondary innovation. Within a plausible reconstruction of the Proto-Indo-European verb semantics, the lability must be taken into account.

2. The diachronic perspective

This leads us to the diachronic section and my consequent hypothesis. As we have seen in the preceding sections, Early Vedic exhibits the following diachronic tendency: Earlier, the verb *juṣ*- was used in a wider array of case constructions. Combined with our verb these had meanings corresponding to more specific English verbs. I can make the simple claim now that in later stages of the Vedic languages, the meaning was overall narrowed to a lower degree of polysemy and a lower number of possible case constructions, and the converse lability was finally given up.¹⁵

2.1. A Late Vedic different verb *prá roca-te* 'to please'

We can see in later stages of the Vedic language (Late Vedic) that the meaning 'to please' is substituted by a different verb:

 $^{^{15}}$ In other words, one of the usages of $ju\varsigma$ - ('to please someone') was taken over by another verb ($pr\acute{a}$ roca-), and the meaning was narrowed to 'to enjoy something/someone', middle inflection was substituted by active inflection, and the former polyconstructionality was given up.

(27) ŚB 1.6.2.4 (Late Vedic)
táta ebhyo yajñáḥ prárocata
then them.DAT sacrifice.NOM please:3SG.IMPERFECT.IND.MID
'Then to them the sacrifice was pleasant / the sacrifice pleased them'.

This construction with dative of experiencer (*ebhyas*) is almost a copy of the Early Vedic construction 6 with earlier locative of experiencer – with the difference that the position of the dative is earlier in the clause, see example (10) above (repeated below).

yajñás jóṣati tvé NOM stimulus (verb) LOC experiencer 'The sacrifice will please you'.

Notice that this example is of relevance in the discussion of the origins of Indo-European oblique subject constructions (Pooth et al. 2019). However, this alignment matter is not of our concern here. Also, it is not feasible to give a list of all the attestations of the verb *juṣ*- in all the Vedic and Sanskrit texts. The given samples must suffice the present purpose.

2.2. The synchronic situation in Epic Sanskrit

We can move over to the period that is the next in our present focus, namely Epic Sanskrit. Here we find that the original middle tantum inflection of the verb stem *juṣá-te* (AV) has been substituted by active forms *juṣa-ti*, see the quote from Oberlies (2003: 433) above. We find the following constructions.

2.3.1. NOM enjoy ACC

For obvious reasons, I can only give the context and a minimum of interlinear glosses of the Epic Sanskrit text passages here:

(28) Mbh 3,184.13
[saras uvāca]
na cāśucir nāpy anirņiktapāņir; nābrahmavij juhuyān nāvipaścit bubhukṣavaḥ śuci kāmā hi devā;
nāśraddadhānād dhi havir **jusanti**

'And an impure man, one with unwashed hands, not knowing Brahmas, nor wise, would not offer. For the gods when they hunger demand one be clean; because from the unbeliever they do not enjoy an oblation.'

Thus, without sandhi and with a minimal glossing:

```
na a-śraddadhānāt

NEG PRIVATIVE-believer:ABL

hi havir juṣanti
because offering:ACC jus:3PL:PRS:IND:ACT
```

'Because from the unbeliever they do not enjoy an oblation.'

Another passage with this construction is the following (I use *italics* to mark the part that is glossed here):

(29) Mbh 13,27.100
tava mama ca guṇair mahānubhāvā;
juṣatu matiṃ satataṃ svadharmayuktaiḥ
abhigata janavatsalā hi gaṅgā;
bhajati yunakti sukhaiś ca bhaktimantam

The relevant passage given in italics above can be glossed as follows:

```
juṣatu matiṃ
juṣ:3SG:PRS:IMP mind/spirit:ACC
satataṃ svadharmayuktaiḥ
constant:ACC Svadharmayukta:INS.PL
```

'She (sc. Gangā) shall enjoy a spirit constantly with Svadharmayukta-s'.

The tripartite compound *sva-dharma-yukta-* means 'righteously engaged in one's Dharma' and is best left untranslated because of its nature as a religious term.

2.3.1. NOM makes ACC_i enjoy ACC_j

In section 1.6.3 above, we have seen that the Early Vedic verb stem *joṣáya*-does not behave like a causative derivative in the early language, but rather like a

normal imperfective ("present") stem in parallel with all the other verb stems. Also, this stem exhibits the same converse lability as all the other verb stems in that period. We have further seen that its inflection is middle tantum in Early and Old Vedic. This is different from what we can find in Epic Sanskrit. Here, the corresponding stem is a regular causative derivative of its underlying basic verb *juṣati* 'to enjoy':

(30) Mbh 6,25.26 (= Bhagavadgītā 3.26)

na buddhibhedam janayed ajñānām karmasanginām **joṣayet** sarvakarmāṇi vidvān yuktaḥ samācaran

'The knowing $(vidv\bar{a}n)$ should not evoke buddhi-bheda- (discord in the awakenness) of the unknowing who are karmasangina- (attached to fruitive actions).

As *yukta-* 'righteously engaged one' he would make them enjoy all *karmāṇi* ('deeds' ACC plural neuter), practising (them).'

(Since an overall glossing of this passage is very space-consuming, I will reduce it to the relevant minimum here:)

joṣayet sarva-karmāṇi vidvān juṣ:3SG:CAUS.PRS:OPT:ACT all-deeds:ACC knowing:NOM.SG.M 'The knowing one would make (them_i: pro-dropped) enjoy all-deeds_i.'

We can conclude that this causative, that is, valency-increasing syntactic behavior is an innovation, simply because it is not attested with this verb in the early period.

2.3. Epic vs. Vedic Sanskrit compared

When we compare the behavior of our verb of concern in Epic Sanskrit and Vedic Sanskrit, we must conclude that it can only mean 'NOM enjoy ACC' in Epic Sanskrit. Moreover, Epic Sanskrit *joṣayati* — very different from Early Vedic *joṣayate* — is a typical causative present stem whose use increases the number of participants from 2 to 3 ('x makes y enjoy z'). The valency-increasing causative use of this stem is non-existing in the earlier language. We must conclude that this is an innovative function (at least with this verb) — or a functional narrowing if the stem was also sometimes used with an indirect causative meaning

(which is true for many middle forms in the Early language, see Pooth 2014). We can see that Early Vedic verb *juṣ*- corresponds to two English verbs, whereas Epic Sanskrit verb *juṣa-ti* can be translated by using only one single English verb. We see that the Vedic converse lability and the respective polysemy was given up before Epic Sanskrit. We can also draw the inference from the role of frequency in diachronic semantics that the 'NOM pleases LOC' construction already lost ground in Early Vedic, whereas the 'NOM enjoys ACC' construction was dominant. It is evident that it is only the most frequent construction that is continued in Epic Sanskrit, whereas infrequent constructions of the earlier language are not continued. In addition, we find that, in Late Vedic, the former 'NOM pleases LOC' construction of *juṣ*- is substituted by a different verb and a similar, but different, experiencer construction with DAT + *prá roca-te* + NOM.

3. Conclusions

We can conclude that Vedic Sanskrit had a converse labile verb *juṣ*-. As outlined, it corresponded to two verbs in English but had some additional (applicative-like) meanings. This type of lability was given up from Vedic to Epic Sanskrit by loss of the more infrequently used constructions with the respective meanings. This loss of the older converse lability seems to correspond to the tendency of a more general decline of lability (Kulikov 2014). Last but not least, the narrowing of *juṣ*- to a non-labile transitive verb and the narrowing of the active forms of the stem *joṣaya-ti* to a regular causative stem can be considered as being part of a greater process, that is, the emergence of a secondary voice opposition that was then dominantly driven by transitivity, whereas it was more dominantly driven by agency before Vedic (Pooth 2012, 2014).

Thus, an additional hypothesis that I can put forward at the very end of this article is that the multiple constructions of our verb of concern in Early and Old Vedic were actually inherited from Proto-Indo-European in one way or another (with different case categories depending on the case and alignment system, Pooth et al. 2019). My final hypothesis is that the Proto-Indo-European psych verb *ģeus- was a "protomiddle" tantum verb, exhibited converse lability (as its continuant juṣ- does in Vedic), and thus had a meaning that was likewise polysemous: 'to enjoy something or someone', 'to taste (of) something (GEN)' (or at least very similarly), and 'to please / give pleasure to someone (LOC)'. I can finally claim that it had multiple case constructions in Proto-Indo-European and that the meaning of the respective protomiddle forms was polysemous in the

outlined sense with no need for additional voice and valency-changing morphology at that stage. Therefore, the meaning of the entry in the *Lexikon der indogermanischen Verben* (= LIV) on page 166f. (M.K.) "[etwas] kosten" is insufficient and must be revised in accordance with the converse lability and polysemy that needs to be reconstructed for such Proto-Indo-European verbs.

Appendix

Cognates of this verb in other Indo-European languages are: Hittite KUB 10.99 i 29 $kuku\check{s}zi$ (tr.) 'tastes sth.'; Young Avestan \bar{a} - $z\bar{u}zu\check{s}te$ 'likes, enjoys sth.'; Old Norse kaus 'chose sth.', Gothic kaus '3sg tried, checked something'; kausjan 'to taste, get to know sth.' = Vedic $jos\acute{a}ya$ -; Albanian deshi 'loved, desired, wished sth.'; Greek pres. $ge\acute{u}o/e$ - ($\gamma \varepsilon\acute{u}o\mu\alpha\iota$) is likewise middle 'to taste, make proof of, examine, enjoy', with GEN corresponding to Vedic $jujus\ddot{a}n\acute{a}$ - $\acute{a}ndhasas$ (GEN); Gothic kiusan (:: pret. kaus) = ON $kj\acute{o}sa$ (:: pret. kaus) = Vedic $j\acute{o}sa$ -t(i), $j\acute{o}s\ddot{a}$ (RV 10.158.2a).

Greek also has active forms: pres. γεύω 'to give a taste of GEN to someone ACC'; fut. γεύσω Anaxipp.; aor. ἔγευσα Hdt., Eur.; but the rest is middle: γεύομαι (vide supra), fut. γεύσομαι Hom., Plat.; aor. ἐγευσάμην Od., Hdt., Att.; Hom. subj. γεύσεται, γευσόμεθα; perf. γέγευμαι Aesch., etc.; γεύμεθα Theocr. 14.51; plupf. ἐγεγευντο Thuc. In line with our observations we can draw the inference that the active forms (γεύω etc.) continue previous "protomiddle" forms (see further Pooth 2019a for the original Proto-Indo-European antipassive construction and the most plausible syntactic motivation of the "protomiddle" to "neoactive" shift).

References

Barðdal, J. 2006. Predicting the productivity of argument structure constructions. *BLS* 32(1). (Published by the Berkeley Linguistics Society and the Linguistic Society of America.)

Barðdal, J. 2008. *Productivity. Evidence from case and argument structure in Icelandic.* Amsterdam: Benjamins.

Bauer, L. 2001. *Morphological productivity*. Cambridge: Cambridge University Press. Baum, D. 2006. The imperative in the Rigveda. (PhD dissertation, Leiden University.) Beavers, J.T. 2006. Argument/oblique alternations and the structure of lexical meaning. (PhD dissertation, Stanford University.)

- Bhattacharya, D. 2011. Paippalāda-Saṃhitā of the Atharvaveda. ... Volume Three. Consisting of the seventeenth and eightteenth kāndas. Kolkata: The Asiatic Society.
- Bloomfield, M. 1897. Hymns of the Atharvaveda, together with extracts from the ritual books and the commentaries... Oxford.
- Bloomfield, M. 1899. The Atharvaveda and the Gopatha-Brahmana. Strassburg.
- Croft, W. 2001. Radical construction grammar: Syntactic theory in typological perspective. Oxford University Press
- Dahl, E. 2005. Polymorphic thematic root presents in Vedic and the origin of the thematic conjugation. In D. Haug & E. Welo (eds.), *Haptacahaptaitis*. *Festschrift for Frederik Thordarson on the occasion of his 77th birthday*, 57–72. Oslo.
- Dahl, E. 2010. Time, tense and aspect in Early Vedic grammar. Leiden: Brill.
- Dowty, D. 1991. Thematic proto-roles and argument selection. Language 67. 547–619.
- François, A. 2008. Semantic maps and the typology of colexification: intertwining polysemous networks across languages. In M. Vanhove (ed.), *From polysemy to semantic change*, 163–215. Amsterdam: Benjamins.
- Geldner RV = Karl Friedrich Geldner (1853–1929). *Der Rig-Veda*. Cambridge & London
- Goldberg, A.E. 1995. Constructions: A construction grammar approach to argument structure. Chicago: University of Chicago Press.
- Gotō, T. 1987. Die "I. Präsensklasse" im Vedischen. Wien: ÖAW.
- Gotō, T. 1988. "Rev. of Jamison [1983]". Indo-Iranian-Journal 31. 303-316.
- Griffith, A. 2009. The Paippalādasaṃhitā of the Atharvaveda. Kāṇḍas 6 and 7. A new edition with translation and commentary. Groningen.
- Grimm, S.M. 2005. The lattice of case and agentivity. (MSc thesis, University of Amsterdam.)
- Härtl, H. 1999. "Fürchten vs. ängstigen: Thematische Rollen und Ereignisstrukturen psychischer Verben in einem Modell der Sprachproduktion". In I. Wachsmuth & B. Jung (eds.), *Proceedings der 4. Fachatgung der Gesellschaft für Kognitionswissenschaft, Bielefeld, 28. September 1. Oktober 1999*, 189–194. St. Augustin.
- Hettrich, H. 2007. Materialen zu einer Kasussyntax des Rgveda. (Manuscript.) Jacobs, J. 1994. *Kontra Valenz*. Trier.
- Jacobs, J. 2009. "Valenzbindung oder Konstruktionsbindung? Eine Grundfrage der Grammatiktheorie". Zeitschrift für germanistische Linguistik 37. 490–513.
- Jamison, St.W. 1983. Function and form in the -áya-formations of the Rig Veda and Atharva Veda. Göttingen: Vandenhoeck & Ruprecht.
- Jamison, S.W. & J.P. Brereton 2014. Rigveda translation. Oxford: Oxford University Press.
- Jasanoff, J.H. 1998. The thematic conjugation revisited. In. J.H. Jasanoff, H.G. Melchert & L. Oliver (eds.), Mir Curad. Studies in honor of Calvert Watkins, 301–316. Innsbruck.
- Jasanoff, J.H. 2003. Hittite and the Indo-European verb. Oxford University Press.
- Kim, J.-S. 2017a. Kāṇḍa 16 der Paippalādasaṃhitā des Atharvaveda. Eine verbesserte Version mit den Parallelstellen der Śaunakasaṃhitā. Mit einem Glückwunsch zum 70. Geburtstag von Heinrich Hettrich. Stand: September 2017. (Manuscript.) https://www.phil.uni-wuerzburg.de/fileadmin/04080400/Kanda_16_Neu.pdf

Kim, J.-S. 2017b. Index Verborum des Atharvaveda der Paippalādasaṃhitā und der Śaunakasaṃhitā (eine vorläufige Version). Stand: November 2017.

https://www.phil.uni-wuerzburg.de/fileadmin/04080400/

Atharvaveda Index verborum 11.2017.pdf>

Kubisch, P. 2012. Paippalāda-Saṃhitā Kāṇḍa 20, Sūkta 1-30. Kritische Edition, Übersetzung, Kommentar. (PhD dissertation, Universität Bonn.)

Kulikov, L. 2007. The reflexive pronouns in Vedic: A diachronic and typological perspective. *Lingua* 117. 1412–1433.

Kulikov, L. 2012. *The Vedic -ya-presents: Passives and intransitivity in Old Indo-Aryan*. Amsterdam: Rodopi.

Kulikov, L. 2014. The decline of labile syntax in Old Indo-Aryan: A diachronic typological perspective. *Linguistics* 52(4). 1139–1165.

Kümmel, M.J. 1996. Stativ und Passivaorist im Vedischen. Göttingen.

Kümmel, M.J. 2000. Das Perfekt im Indoiranischen. Wiesbaden.

Kutscher, S. 2009. Kausalität und Argumentrealisierung. Zur Konstruktionsvarianz bei Psychverben in europäischen Sprachen. Tübingen: Niemeyer.

Lelli, D. 2015. The *Paippalādasamhitā* of the *Atharvaveda*. Kāṇḍa 15. A new edition with translation and commentary. (PhD dissertation, Leiden University.)

Letuchiy, A. 2009. Towards a typology of labile verbs: Lability vs. derivation. In A. Arkhipov & P. Epps (eds.), *New challenges in typology. Transcending the borders and refining the distinctions.* Berlin.

Levin, B. & M. Rappaport Hovav. 2005. *Argument realization*. Cambridge: Cambridge University Press.

LIV = Lexikon der indogermanischen Verben. 2. erweiterte und verbesserte Auflage bearbeitet von H. Rix & M. Kümmel. Heidelberg 2001.

López, C.A. 2010. Atharvaveda-Paippalāda Kāṇḍas thirteen and fourteen. Text, translation, commentary. Cambridge, MA.

Lubotsky, A. 1989. The Vedic -áya-formations. *Indo-Iranian Journal* 32(2). 89–113.

Lubotsky, A. 1997. A Rgvedic word concordance. (2 Volumes.) New Haven.

Lubotsky, A. 2002. Atharvaveda-Paippalāda *Kāṇḍa five. Text, translation, commentary.* Cambridge, MA.

Macdonell, A.A. 1910. Vedic grammar. Strassburg: Trübner.

Mayrhofer EWAia = Manfred M. (1986–1996–): Etymologisches Wörterbuch des Altindoarischen. (Vol. I, II, III.) Heidelberg.

Migron, S. 1988–1990. Rgvedic juṣ- and joṣṭṭṣ-, Old Persian dauštar-: A semantic investigation. Die Sprache 34(1). 124–134.

Monier-Williams 1899 (= SED). A Sanskrit–English dictionary. Oxford.

Oberlies, T. 2003. A grammar of Epic Sanskrit. Berlin & New York.

Oldenberg, H. 1888. Die Hymnen des Rigveda, Band I. Metrische und textgeschichtliche Prolegomena. Berlin.

Oldenberg, H. 1912. *Rgveda. Textkritische und exegetische Noten. Siebentes bis Zehntes Buch.* Berlin.

Orqueda, V. 2019. Reflexivity in Vedic. Leiden: Brill.

Orqueda, V. & R.A. Pooth. Forthc. Reflexive construction in Early Vedic. In K. Janić, N. Puddu and M. Haspelmath (eds.).

- Pooth, R.A. 2000. Stativ vs. Medium im Vedischen und Avestischen. *Historische Sprachforschung* 113. 88–116.
- Pooth, R.A. 2004: Zur Genese der späturidg. thematischen Konjugation aus frühuridg. Medialformen. *Indogermanische Forschungen* 109. 31–60.
- Pooth, R.A. 2011. Die 2. und 3. Person Dual und das Medium. In Th. Krisch & Th. Lindner (eds.), *Indogermanistik und Linguistik im Dialog. Akten der XIII. Fachtagung der Indogermanischen Gesellschaft ... in Salzburg*, 473–483. Wiesbaden.
- Pooth, R.A. 2012. Zum Aufkommen transitiver Verben in frühen Vedischen am Beispiel ¹r. In H. Craig Melchert (ed.), *The Indo-European verb. Proceedings of the Conference of the Society for Indo-European Studies, Los Angeles, 13–16 September 2010*, 267–284. Wiesbaden: Reichert.
- Pooth, R.A. 2014. Die Diathesen Aktiv vs. Medium und die Verbsemantik im Vedischen der Rgveda-Samhitā. (PhD dissertation. Leiden University.) https://leidenuniv.academia.edu/RolandPooth>
- Pooth, R.A. 2019a. On the origin of the Vedic subjunctive. (Manuscript.) https://leidenuniv.academia.edu/RolandPooth>
- Pooth, R.A. 2019b. The Vedic *pīpáya* stem: Synchronic and diachronic implications. On the prehistory of the Indo-European aspect system II. (Manuscript, submitted to *Indo-European Linguistics*.)
 - https://leidenuniv.academia.edu/RolandPooth>
- Pooth, R.A., P.A. Kerkhof, L. Kulikov & J. Barðdal 2019. The origin of non-canonical case marking of subjects in Proto-Indo-European. *Indogermanische Forschungen* 124, 245–263.
- Scheftelowitz, I. 1906. *Die Apokryphen des Rgveda*. Breslau. (Reprinted in Hildesheim 1966.)
- Selva, U. 2014. The *Paippalādasaṃhitā* of the *Atharvaveda* Kāṇḍa 17, First Anuvāka (PS 17.1-6) "To the Earth". A new critical edition with metrical analysis, translation and commentary. (MA thesis, Leiden University.)
- TITUS = Thesaurus Indogermanischer Text- und Sprachmaterialien. http://titus.uni-frankfurt.de/indexd.htm
- Wackernagel, J. 1907. Indisches und Italisches. KZ 41. 305–319.
- Watkins, C. 1969. *Indogermanische Grammatik III/1*. *Geschichte der indogermanischen Verbalflexion*. Heidelberg: Winter.
- Whitney AV = William D. Whitney & Charles R. Lanman. 1905. *Atharva-Veda Saṁhitā*. (2 Vol.). Cambridge, MA.
- Whitney, W.D. 1881. *Index Verborum to the published texts of the Atharva-Veda*. New Haven.
- Whitney, W.D. 1885. *The roots, verb-forms, and primary derivatives of the Sanskrit language*. Leipzig.
- Werba, C.H. 1997. Verba Indoarica. Wien: ÖAW.
- Witzel, M. 1987. On the localisation of Vedic texts and schools (Materials on Vedic Śakhas, 7), India and the Ancient world. History, Trade and Culture before A.D. 650. In G. Pollet (ed.), P.H.L. Eggermont jubilee volume, 173–213. Leuven.
- Witzel, M. 1989. Tracing the Vedic dialects. In C. Caillat (ed.), *Dialectes dans les litteratures indo-aryennes*, 97–264. Paris.

- Witzel, M. 1991. Notes on Vedic dialects, 1. Zinbun, Annals of the Institute for Research in Humanities (Kyoto University) 67. 31–70.
- Witzel, M. 1995a. Early Indian history: Linguistic and textual parameters. In G. Erdosy (ed.), *The Indo-Aryans of Ancient South Asia*, 85–125. Berlin & New York.
- Witzel, M. 1995b. Revedic history: Poets, chieftains and polities. In G. Erdosy (ed.), *The Indo-Aryans of Ancient South Asia*, 307–354. Berlin & New York.
- Witzel, M. 1997. The development of the Vedic Canon and its schools: The social and political milieu (Materials on Vedic Śakhas, 8). In M. Witzel (ed.), *Inside the texts, beyond the texts*. Cambridge, MA.
- Witzel, M. & T. Gotō (eds.). 2007. Rig-Veda. Das heilige Wissen. Erster und zweiter Liederkreis. Frankfurt a.M. & Leipzig.
- Zehnder, T 1999. Atharvaveda-Paippālada, Buch 2, Text, Übersetzung, Kommentar. Idstein.

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