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Vedic preverbs as markers of valency-changing derivations

Transitivity and objecthood in Indo-European (Evidence from Old Indo-Aryan)

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The present paper offers an analysis of the transitivizing and intransitivizing preverbs (semi-bound verbal prefixes) in Vedic Sanskrit. I will argue that the (in)transitivizing force of these morphemes is weak: the passivization test shows that transitivizing preverbs only exceptionally make fundamentally intransitive verbs true transitives, whilst the only intransitivizing preverb *ví* has but a rather limited valency-changing capacity.

Keywords: Vedic, Sanskrit, Indo-European, preverb, tmesis, transitivity, direct object, objecthood, transitivizer, intransitivizer, applicative, passive, passivization test, reciprocal

1. Introductory remarks

The present paper deals with the transitivizing and intransitivizing functions of some semi-autonomous verbal morphemes (prefixes) in Vedic Sanskrit, traditionally called preverbs: *ádhi* ‘above, over, on’, *ánu* ‘along, after’, *abhí* ‘to(wards), over, against’, *á* ‘to(wards), at’, *úpa* ‘to, near’, *pári* ‘(a)round, about’, *ví* ‘apart, asunder’ and some others.¹ It should be noted that, while the diathesis opposition “active/middle” and the system of the verbal suffixes denoting valency-changing processes (causative, passive, reflexive) in Vedic and other ancient Indo-European languages is well-studied (see, for instance, Gonda 1979; Hock 1981), and the role of transitivity in Indo-Aryan and other South Asian languages has repeatedly been the subject of discussion (see, in particular, Masica 1976, Bickel 1995, among many others), little research has been done on the contribution of the verbal prefixes (preverbs) to the marking of transitivity alternations. Yet it is often tacitly assumed

that many or even most preverbal morphemes can transitivize intransitive verbs, thus operating much in the same way as, for instance, the German applicative prefix *be-* in *be-arbeiten* ‘work on’ ← *arbeiten* ‘work’ (see, for instance, Michaelis and Ruppenhofer 2001). In this paper, I will subject this traditional view to critical analysis. I will argue that at least for some Indo-European languages, such as Vedic Sanskrit, this assumption is essentially incorrect, since such prefixed (compounded) verbs do not actually reach the status of ‘true transitives’.

In Section 2, I will provide a short overview of the relevant grammatical information about the Vedic language, and its verb and syntax in particular, on the syntax of preverbs and their status in the linguistic system. In Section 3, I will discuss transitivity and objecthood criteria that can be used cross-linguistically in order to distinguish true direct objects from other accusative nouns, focusing on those which are most appropriate for ancient Indo-European languages (in particular for Old Indo-Aryan) — and foremost on the passivization test. Section 4 deals with preverbs traditionally considered to be ‘transitivizing’: on the basis of the passivization criterion, I will argue that such alleged transitives should be taken as intransitives constructed with accusatives rather than as true transitives. In Section 5, I will discuss the only preverb associated with an intransitivizing (reciprocal) derivation, *vi-*. Section 6 summarizes the results of the study, offering a few generalizations on the weak (in)transitivizing force of Vedic preverbs.

2. Vedic Sanskrit: Preliminaries

2.1 Chronology of Old Indo-Aryan

Vedic Sanskrit is the earliest attested language of the Indo-Aryan group of the Indo-European language family and one of the most ancient attested Indo-European languages. Chronologically, Vedic can be divided into two main periods: early Vedic (also known as the ‘mantra language’, i.e. the language of the hymns addressed to the Vedic gods, mantras, and magic spells), and middle/late Vedic (also called ‘the language of the Vedic prose’). The oldest layer of Vedic is attested in the language of the *R̥gveda* (RV), which can be dated approximately to the second half of the second millennium BC. Within the RV, we can distinguish between the early RV (‘family books’ or *maṇḍalas*, which include books II–VII), and the late RV (encompassing, above all, *maṇḍalas* I and X, as well as a part of book VIII, *Vālakhilya*). The language of the second most ancient text, the *Atharvaveda* (AV), resembles in many respects — and is essentially synchronic with — the language of the late RV. Early Vedic is followed by middle Vedic (which probably starts after 800 BC) and late Vedic, attested in the *Brāhmaṇas*, *Āraṇyakas*, the oldest

Upaniṣads, and Sūtras. The post-Vedic period includes the younger Upaniṣads and Sūtras, as well as Epic and Classical Sanskrit.

2.2 Vedic verbal syntax: Some relevant grammatical features

Finite verbal forms in Vedic do not normally bear independent accents, unless employed (i) at the beginning of a sentence and/or pāda (= minimal metrical unit), or (ii) in a subordinate clause.² Non-finite forms (participles, converbs, infinitives) are always accented. Preverbs/prefixes immediately preceding accented verbal forms bear no accent and are written in one word with the verbal form (cf. *pari-yānn* ‘going through’ and *ā-bhāsi* ‘[you] shine upon’ in (5–6)); otherwise they are accented.³ There is no uniform tradition of writing compounds consisting of accented preverbs immediately followed by unaccented verbal forms. Generally, they are written separately (in two words) in the editions of early Vedic texts, i.e., the R̥gveda and Atharvaveda. By contrast, for middle and late Vedic texts, where the autonomy of preverbs is constantly decreasing and tmesis (i.e. separation of preverbs from verbal forms) becomes rare, most editions write compounds in one word.

Word order is free, but the preferred (neutral) order is SOV, especially in prose texts.

2.3 Vedic voice and valency-changing categories

2.3.1 *The middle and its functions*

The range of the functions rendered by the middle type of inflexion (= middle diathesis) is typical of the ancient Indo-European linguistic type as attested in such languages as Ancient Greek. This includes the self-beneficent meaning with no valence change (‘to do smth. for oneself’, as in the handbook example *yājati* ‘sacrifices’ ~ *yājate* ‘sacrifices for oneself’) as well as a number of intransitivizing derivations, such as passive, reflexive, and anticausative (decausative). The choice of the function(s) idiosyncratically depends on the base verb. However, in the language of the earliest text, the RV, we already observe the loss of several grammatical functions of the ancient Indo-European middle, and the intransitivizing functions are largely taken over by special productive markers, such as the passive suffix *-yá-* and the reflexive pronouns *tanú-* and *ātmán-* (for details, see Kulikov 2009).

2.3.2 *Passive*

There are several verbal formations in Vedic which can be employed in passive constructions. These include present passives with the suffix *-yá-*, or ‘*-yá-passives*’ for short (e.g. *yuj* ‘yoke, join’: 3sg. *yuyjáte* ‘is (being) yoked, joined’, 3pl. *yuyjánte*

‘are (being) yoked, joined’), medio-passive *i*-aorists (with defective paradigm: only 3sg. in *-i* and 3pl. in *-ran/-ram*: *yuj*: 3sg. *áyoji*, 3pl. *ayujran*), statives (also with defective paradigm: 3sg. in *-e* and 3pl. in *-re*; e.g. *hi* ‘impel’: 3sg. *hinvé* ‘(it) is/has been impelled’, 3pl. *hinviré* ‘(they) are/have been impelled’).⁴

The *-yá*-passives are built on the stem derived from the root by means of the suffix *-y(á)-*, which can only take middle endings (e.g. *han* ‘kill’: 1sg. *han-yé*, 2sg. *han-yá-se*, 3sg. *han-yá-te*, etc.). Passives with active endings do not occur before late (post-Vedic) Sanskrit. Since there is no morphological opposition of middle and active forms with the suffix *-yá-* (i.e. 3sg.med. *han-yá-te* is not opposed to 3sg. act. **han-yá-ti*, etc.), the morpheme *-yá-* alone can be regarded as the marker of the (present) passive proper, the middle inflection being automatically selected by the *-yá*-stem.

In addition, there are several non-finite forms used in passive constructions: resultative (perfect) participles with the suffix *-tá/-ná-*; and gerundives, or future passive participles, with the suffixes *-ya-*, *-tavyà-*, and *-aníya-*.

2.3.3 Causative oppositions

The most regular and productive causative marker in the present system is the suffix *-(p)áya-*, cf. *vr̥dh* ‘grow, increase’ — *vardháyati* ‘makes grow, increases’, *cit* ‘appear, perceive’ — *cetáyati* ‘shows (= makes appear), makes perceive’ (~ *citáyati* ‘appears’). In addition to *-(p)áya*-causatives, in early Vedic we find a few other (non-productive) formal types of present causative oppositions.

2.4 Vedic preverbs vs. adpositions: Two possible analyses

The majority of morphemes that will be in the spotlight of this paper, i.e. preverbs, can also be used as adpositions (= pre- or postpositions). Exceptions include, in particular, *úd* ‘up’, *ní* ‘down’, *pārā* ‘away’, and *ví* ‘apart, asunder’ (the latter of which will be the subject of a special discussion in Section 5). For early Vedic, when the preverbs still exhibit considerable autonomy, the distinction between these two usages (adpositions vs. preverbs) cannot be drawn with accuracy in many cases. For the sake of brevity, I will use the cover term ‘preverb’ for both types of usages.

The fact that it is, in many cases, nearly impossible to draw a clear-cut boundary between verbal compounds with preverbs and simplex verbs constructed with adpositional (pre- or postpositional) phrases has been repeatedly noticed in Vedic and Indo-European scholarship (for Vedic, see, e.g., Renou 1952:316; Whitney 1889:414; cf. also Sizova 1980 for Gothic; Penney 1989:62ff. for Tocharian; and Lehmann 1983 for Latin, among many others).⁵ In (4), for instance, two analyses of *yónim á asadat* ‘(he) has sat upon the lap’ are possible, (i) as a compound constructed with an adpositionless (postpositionless) accusative ([*yónim*] [*á-asadat*]),

and (ii) as a simplex verb constructed with a postpositional phrase ([*yónim á*] [*asadat*]). Clearly, the neutral SOV word order does not help to solve this dilemma.

Apparently, in early Vedic, where preverbs mostly behave as free morphemes, it is often virtually impossible to choose between the '[Noun Adposition] Verb' and 'Noun [Preverb Verb]' analyses. In later periods, when tmesis becomes rarer, the preverb drifts towards a bound morpheme (= verbal prefix), which of course favours the latter ('Noun [Preverb Verb]') analysis.

There are also some specific types of preverb placement that favour one of the two analyses. For example, in the case of the 'Verb + Noun + Preverb' order, as in (1), where the preverb *á* immediately follows the noun phrase, it is typically treated as a postposition (see, e.g., Grassmann 1873: Sp. 169):

- (1) (RV 9.64.17)
índavaḥ | ágmann rtásya yónim á
 drop:NOM.PL come:AOR:3PL.ACT order:GEN.SG lap:ACC.SG to
 'The drops have come upon the lap of the (cosmic) Order.'

By contrast, in the case of the 'Preverb + Noun + Verb' order, as in (2), the same morpheme is usually taken as a preverb (see, e.g., Grassmann 1873: Sp. 1455f.):

- (2) (RV 9.97.45c)
á yónim ványam asadat
 to lap:ACC.SG wooden:ACC.SG sit.down:AOR:3SG.ACT
punānāḥ
 purify:PRES:PART. MED:NOM.SG.M
 'He (sc. Soma) has sat down upon the wooden lap, being purified.'

2.5 Vedic preverbs as transitivizing morphemes

It is a commonplace in Sanskrit scholarship that intransitive verbs typically become transitive after certain spatial (directional and locational) preverbs, such as *ánu* 'along, after', *áti* 'over', *abhi* 'towards, over, against', *úpa* 'to, near', and some others,⁶ which add an accusative object to the syntactic arguments of the verb and thus function as transitivizing, or applicative, markers.⁷ Consider a few examples:

- (3) (RV 7.1.14a)
sá⁸ íd agnir agníṃr át_y as-t_uv
 this:NOM.SG.M only fire:NOM.SG fire:ACC.PL over be:PRES-3SG.IMPV.ACT
anyān
 other:ACC.PL.M
 'Let this fire be bigger than (lit. be over) other fires.'

- (4) (RV 9.19.3)
vṛṣā [...] *yónim* *á* *asadat*
 bull:NOM.SG lap:ACC.SG to sit.down:AOR:3SG.ACT
 ‘The bull [...] **has sat down upon** the lap.’
- (5) (RV 10.122.3a)
saptá dhāmāni *pari-yánn* *ámart.yo* ...
 seven form:ACC.PL around-go:PRES:PART.ACT:NOM.SG.M immortal:NOM.SG.M
 ‘The immortal one, **going around/through** the seven forms/places ...’
- (6) (RV 1.49.4ab)
v.yuchántī *hí* *raśmibhir*
 light.up:PRES:PART.ACT:NOM.SG.F since ray:INS.PL
víśvam *ā-bhási* *rocanám*
 whole:ACC.SG.N to-shine:PRES:2SG.ACT bright.space:ACC.SG
 ‘... since, lighting up, you **shine** with [your] rays **upon** the whole bright space.’
- (7) (ŚB 1.7.2.12)
vṛṣā *yóṣām* *ádhi dravati*
 bull:NOM.SG female.cow:ACC.SG over run:PRES:3SG.ACT
 ‘The bull **covers** (impregnates, lit. runs over) the female cow.’

In order to decide if such compounded verbs can be considered transitives or not, we have to elucidate the transitivity criteria that can be applied for Vedic.

3. Transitivity criteria: Defining the direct object

3.1 Direct object and objecthood criteria: Introductory remarks

The standard (syntactic) definition of a transitive construction refers to the presence of a direct object (DO). That is, the presence of a DO is considered a feature equivalent to transitivity (see Lazard 1998; Plungian & Raxilina 1998; Kittilä 2002; Kittilä 201; Næss 2007, among many others). Accordingly, transitive constructions can be determined as those, and only those, that require a direct object. Thus, verifying transitivity of a clause amounts to the verification of the objecthood of those nouns which can be considered potential candidates for direct objects.

It is well-known that the further we go down the hierarchy of grammatical relations (Subject > Direct Object > Indirect object > Oblique), the more limited sets of criteria are available for establishing X-hood (Subjecthood, DO-hood, etc.). Thus, Subjecthood can be checked against a large number of various tests, such as control of reflexivization, deletion of coreferential nouns, control of reference of non-finite forms (in particular, converbs); for a discussion of such operational

subject criteria, see, among many others, Aikhenvald et al. (eds.) 2001. By contrast, we have at our disposal only few criteria for verifying DO-hood that can be considered to be (nearly) universal. Of particular importance are those syntactic features (operational criteria) that can distinguish direct objects from other (indirect or oblique) objects. The basic DO-criteria elucidated both in typological literature and in grammars of individual languages¹⁰ include: (i) word order (direct object is normally closer to the verbal form than all other, indirect and oblique, objects); (ii) cliticization and/or pronominalization (in many languages, only direct objects can be replaced by (clitic) pronouns, while other objects cannot); and (iii) passivization (only direct objects can be promoted to the subject position in passive constructions).

3.1.1 *Word order criterion*

Among the three criteria listed above, (i) is obviously quite limited in its applicability. First, it is of little (if any) relevance for languages with free word order. Second, it can only help to decide which of two (or more) candidates for direct objects is more likely to be treated as a DO; but it does not help us to make any conclusions in cases where only one candidate for DO is present in a construction. In other words, constructions with a direct object only and constructions with an indirect object only (but no DO) may, in some cases, be classified identically with regard to this criterion.

3.1.2 *Cliticization criterion*

The cliticization and/or pronominalization criterion (ii) appears to be more relevant cross-linguistically. It is successfully applied for many Bantu languages, for example, where clustering of several objects is very common; for a detailed discussion of the cliticization test in Bantu, see Morolong & Hyman 1977. Yet, this criterion appears to be of lesser relevance for many other languages, particularly for those that exhibit weaker constraints on pronominalization/cliticization. In Vedic, as in several other ancient Indo-European languages, a special set of DO-clitics only exists for 1st and 2nd persons (cf. *mā* 'me', *tvā* 'you'), while the clitic forms of the 3rd person/demonstrative pronouns are represented by archaic and/or isolated forms such as *īm/ī* (with the variant *ī* mainly employed if the preceding word ends in *-m*), which is no longer productive even in the earliest form of Old Indo-Aryan, the language of the Ṛgveda. Moreover, there are some reasons to believe that the application of the *īm*-cliticization criterion will yield wrong results in some cases, as it may substitute for non-direct objects. We indeed find at least one example of *īm* substituting for the accusative of relation (or, in traditional terminology, 'content accusative'):

(8) (RV 1.103.1)

tát ta indriyám paramám parācaír
 that:NOM.SG.N your Indra's:NOM.SG.N highest:NOM.SG.N away
ādhārayanta kavāyaḥ purā idám
 establish:IMPF:3PL.MED sage:NOM.PL of.old here
kṣamā idám anyád divy
 earth:LOC.SG this.here:NOM.SG.N other:NOM.SG.N heaven:LOC.SG
anyád asya
 other:NOM.SG.N his
sám ī prcyate samanā iva ketúḥ
 together it mix:PRES.PASS:3SG together like light:NOM.SG

I have argued elsewhere (2005) that the traditional interpretation of the form *ī* in (8) as a nominative¹¹ makes this example entirely isolated and should be revised. *ī* must represent an accusative of relation (content accusative) here, which does not promote to the subject in passive constructions, retaining its accusative marking. A tentative translation of the passage in (8) is as follows:

‘This is your [possession] [as] Indra’s highest [essence] far away. The sages (Vedic poets) established this here of old. On Earth is this one here, in Heaven is his other [essence (?)]. [This = the two aspects, the earthen and the heavenly ones] is mixed to it (= is mixed, yielding it), as light is mixed to the whole.’¹²

3.1.3 Passivization criterion

The remaining DO criterion, the passivization test (also referred to by some authors as ‘subjectivization’), appears to be the most, if not the only, reliable criterion, even in spite of the fact that some languages lack a passive. This also holds for Vedic as well as several other ancient Indo-European languages. For Indo-European, where we mostly find the nominative-accusative type of alignment, and passive constructions are present, this is undoubtedly the most widely applied and the most reliable objecthood test, even in spite of its shortcomings (see Jamison 1979: 197ff.; Jamison 1983: 30ff.). It is also worth mentioning that some traditional grammars and general linguistic introductions even take this criterion as a part of the definition of transitivity.¹³

3.2 Transitivity and passivization criterion in Vedic

It is beyond dispute that constructions with preverbs/adpositions governing the accusative case, such as those briefly discussed above, have served as one of the major sources for new (secondary) transitives in the Vedic lexicon. The exact syntactic status of such verbs and, in particular, their position as compared to primary

transitives requires closer examination, however. The main theoretical issue raised by such prefixed verbs (traditionally called ‘compounds’) is: should these verbs be considered true transitives or, rather, intransitives constructed with accusative nouns which do not have the status of direct objects?

In order to answer this question, we need to check evidence available from Vedic against the main transitivity criterion relevant for Vedic syntax, i.e. against the passivization test.¹⁴ As I argued above, it can be successfully used to distinguish direct objects from other types of accusative nouns: constructions with canonical direct objects (i.e., canonical transitives) can readily be passivized, while constructions with accusatives of other types can be passivized only rarely, exceptionally, or never.¹⁵

As mentioned in 2.3.2, there are several verbal formations in Vedic that can be employed in passive constructions. The non-finite forms (perfect participles and gerundives) can be derived from both transitive and intransitive verbs and thus are of little value for distinguishing transitive verbs from intransitives. In other words, the existence of such forms as, for instance, *úpa-sanna-* ‘(having) set, sit near/upon’ or *gatá-* ‘gone’ (subject resultatives of *úpa-sad* ‘sit near/upon’ and *gam* ‘go’), does not point to the transitivity of these verbs. The same holds true for statives and ‘medio-passive’ *i*-aorists: they can be derived not only from transitives but also from intransitive verbs, such as *śī* ‘lies’ (stative *śáye* ‘lies, has lain’) or *ruc* ‘shine’ (medio-passive aorist *ároci* ‘has shone’). Besides, statives are already not productive in the earliest Vedic text, the R̥gveda, and entirely disappear in later texts, while *i*-aorists have limited productivity (see Kümmel 1996). The *-yá*-presents are the only passive formation that is increasingly productive throughout the history of Old Indo-Aryan and, most importantly, can only be derived from transitives: only transitive verbs can form *-yá*-passives in Vedic, while intransitive verbs cannot¹⁶ (see Kulikov 2012, where this claim is corroborated). In other words, only those accusative nouns that can be promoted to the subjects of *-yá*-passives can be taken as true direct objects. This criterion readily distinguishes direct objects from other accusative nouns, such as accusatives of time and ‘content accusatives’ (*figura etymologica*).¹⁷

4. ‘Transitivizing’ preverbs and their contribution to transitivization

4.1 *-yá*-passivization and compounded verbs in Vedic

As mentioned above, the ability of a verb to form a *-yá*-passive (‘*-yá*-passivization’ criterion for short) can be used as the only reliable test distinguishing transitives from other syntactic classes of verbs in Vedic. In particular, this criterion clearly

shows that compounds such as *ā-bhāsi* ‘(you) shine upon’ (as in (6)), *ādhi-dravati* ‘runs over’ (as in (7)), etc., should be taken as intransitives constructed with accusatives (‘extended intransitives’), rather than as true transitives. It turns out that only a few fundamentally intransitive verbs form *-yá*-passives when compounded (i.e. when employed with preverbs) in Vedic. It is important to note that such passives are virtually unattested in early Vedic: we find no attestation of such *-yá*-passives in the RV and only one in the Atharvaveda (*adhigamyáte* at AV 7.101.1; see (13)); they remain rare in middle and late Vedic (i.e. in Vedic prose). These *-yá*-passives are derived only for a dozen intransitives with preverbs (for all verbs, I quote 3sg. indicative forms in the list below):

<i>i</i> ‘go’	<i>-īyate</i> with <i>úpa</i> - ‘to, near’: ‘sexually approach, copulate’ YV+ ¹⁸ with <i>prati</i> - ‘against, back, in return’: ‘admit, recognize’ ŚrSū.+
<i>gam</i> ‘go’	<i>-gamyáte</i> with <i>ādhi</i> - ‘above, over, on’: ‘find, know, understand’ AV+ with <i>abhi</i> - ‘to(wards), over, against’: ‘gain, obtain’ ŚB
<i>jīv</i> ‘live’	<i>-jīvyáte</i> with <i>úpa</i> - ‘to, near’: ‘live upon’ ŚB 7.5.2.34
<i>dhr̥ṣ</i> ‘dare’	<i>-dhr̥ṣyate</i> with <i>pra</i> - ‘forward, in front’: ‘overpower’ ĀśŚS 2.11.18
<i>bhū</i> ‘become’	<i>-bhūyate</i> with <i>abhi</i> - ‘to(wards), over, against’: ‘overcome’ Maitrāyaṇa-Upaniṣad
<i>viṣ</i> ‘be active’	<i>-viṣyate</i> PB+ with <i>pari</i> - ‘(a)round, about’: (i) ‘serve’ PB 15.7.3, Chandogya-Upaniṣad 4.3.4 (ii) ‘surround (with a halo)’ Ṣadviṃśa-Brāhmaṇa 5.10.2
<i>vr̥ṣ</i> ‘rain’	<i>-vr̥ṣyate</i> with <i>abhi</i> - ‘to(wards), over, against’: ‘rain on’ ŚrSū.
<i>sthā</i> ‘stand’	<i>-sthiyate</i> YV+ with <i>adhi</i> - ‘above, over, on’: ‘stand upon’ KS 13.3:182.1 with <i>upa</i> - ‘to, near’: ‘attend, serve, worship’ KS–KpS

The collection of examples (12–19) below is nearly exhaustive:

- (12) (MS 2.2.7:21.4–6 ~ KS 11.3:147.1–3): *úpa-i* ‘(sexually) approach, impregnate’
prajāpatir vái sómāya rājñe duhitṛ
 Prajāpati:NOM.SG PTCL Soma:DAT.SG king:DAT.SG daughter:ACC.PL
adadān nākṣatrāṇi sá rohiṇyām
 give:IMPF:3SG.ACT nakṣatra:ACC.PL he:NOM.SG Rohiṇī:LOC.SG

evá ∪ *avasan*, *ná* ∪ *ítarāsu*.

only live:IMPF:3SG.ACT not other:LOC.PL.F

tá *án-upe-ya-mānāḥ* *púnar agachan*

she:NOM.PL not-near.go-PRES.PASS-PART:NOM.PL.F back go:IMPF:3PL.ACT

‘Prajāpati gave [his] daughters, the nakṣatras (= constellations), to the king Soma. He (sc. Soma) sexually united with Rohiṇī, [but] not with the others. They [= the other daughters], not **being (sexually) approached**, went back.’

- (13) (AV 7.101.1ab): *ádhi-gam* ‘find, know, understand’

yát svápne *ánnam* *aśnámi*

if dream:LOC.SG food:ACC.SG eat:PRES:1SG.ACT

ná prātár *adhi-gam-yá-te*

not in.the.morning over-go-PRES.PASS-3SG

‘If I eat food in my dream, [and it] is not **found** in the morning ...’

- (14) (KS 7.5:66.18–19 = KpS 5.4:53.14): *upa-sthā* ‘attend, serve, worship’

kasmai kam agnir upa-sthī-ya-te

what:DAT PTCL Agni:NOM.SG near-stand-PRES.PASS-3SG

‘For what [purpose] is Agni **worshipped** [with prayers]?’

- (15) (Maitrāyaṇa-Upaniṣad 3.2): *abhi-bhū* ‘overcome’

asti khalv anyo ’paro bhūtāt mākhyo yo

is indeed another different *bhūtātman*:called who:NOM.SG.M

’yaṃ sitāsitaiḥ karma-phalair

this:NOM.SG.M good.evil:INS.PL act-result:INS.PL

abhi-bhū-ya-mānaḥ *sad-asad-yonim*

over-become-PRES.PASS-PART:NOM.SG.M existing-non.existing-womb:ACC.SG

āpadyate

enter:PRES:3SG.MED

‘Indeed, there is another (ātman) called “*bhūtātman*”, which, **being overcome** by good and evil results of acts, enters upon higher and lower forms of existence...’

- (16) (ŚB 7.5.2.34): *upa-jīv* ‘live upon’

imé vái lokāḥ sarirám

this.here:NOM.PL.M indeed world:NOM.PL sea:NOM.SG

upa-jīv-yá-mānam *eśú lokéśu*

to-live-PRES.PASS-PART:NOM.SG.N this:LOC.PL.M world:LOC.PL

‘These worlds here are, indeed, the sea which is the source of life (lit. **being lived upon**) in those worlds.’

- (17) (Baudhāyana-Śrauta-Sūtra 14.1:152.15): *abhi-vṛṣ* ‘rain on’
 so *’bhi-vṛṣ-ya-māṇo* *japati*
 he:NOM.SG over-rain-PRES.PASS-PART:NOM.SG.M murmur:PRES:3SG.ACT
 ‘While being rained on (lit. being over-rained), he murmurs ...’
- (18) (Chandogya-Upaniṣad 4.3.4): *pari-viṣ* ‘serve’
atha ha śaunakam ca kāpeyam abhipratāriṇam ca
 now PTCL Śaunaka:ACC.SG and Kāpeya:ACC.SG Abhipratārin:ACC.SG and
kākṣasenim pari-viṣ-ya-māṇau
 Kākṣaseni:ACC.SG around-be.active-PRES.PASS-PART:NOM.DU.M
brahmacārī bibhikṣe
 student.of.Veda:NOM.SG beg:PF:3SG.MED
 ‘Now a student of Veda was begging unto Śaunaka Kāpeya and Abhipratārin
 Kākṣaseni, while they were being served with food.’
- (19) (Ṣaḍviṃśa-Brāhmaṇa 5.10.2): *pari-viṣ* ‘surround’
yadā ... vijale ca pari-viṣ-ya-te
 if non-rainy:LOC.SG and around-be.active-PRES.PASS-3SG
 ‘... and if [the moon or sun] is surrounded [with a halo] during a non-rainy
 weather.’

Most importantly, all passivizable compounds listed above share a remarkable semantic feature: they show some idiomatic semantic changes of the root meaning, i.e. the meaning of the compounded verb cannot be deduced from that of the non-prefixed verb (simplex) and preverb. Thus, the meaning of *ádhi-sthā* ‘govern’ does not add up to ‘stand’ + ‘over’; *úpa-i* ‘sexually approach, impregnate’ ≠ ‘go’ + ‘to, near’; *pari-viṣ* ‘serve, surround (with a halo)’ ≠ ‘be active’ + ‘(a)round’; *úpa-sthā* ‘attend, serve, worship’ ≠ ‘stand’ + ‘to, near’, etc. Such idiomatic changes typically suggest a univerbation process. Apparently, in Vedic, this semantic shift was one of the main conditions for depriving the verbal compound of its regular (semantic) links with the intransitive simplex and, eventually, for making it a true transitive.

With the exception of the dozen prefixed verbs listed above, compounds with preverbs do not form *-yá*-passives. The non-passivizability of such pseudo-transitives implies, in particular, that the repeatedly noticed similarity between these compounds and, for instance, Germanic applicative verbs such as German *bearbeiten*, *bedrohen*, *bescheinen*, *überfliegen* etc., Danish *arbejde* ‘work’ — *bearbejde* ‘work up, adapt’, *glo* ‘stare’ — *beglo* ‘stare at’, etc. (see, for instance, Durst-Andersen and Herslund 1996:90ff.; Michaelis and Ruppenhofer 2001) concerns only the case-marking, not the objecthood of the accusative nouns. Thus, German and Danish *be-* make an intransitive into a transitive verb, which can be passivized (cf. *wird bearbeitet* etc.), whereas the corresponding Vedic preverbs (such as *abhi*, *úpa*, *ánu*, etc.) typically do not. Note, incidentally, that not all ancient Indo-European

languages are similar to Vedic in that respect. Thus, as Lehmann (1983: 156) pointed out, Latin transitives derived from intransitives by means of preverbs do form passives, as, for instance, in (20):

- (20) (Cicero, *Letters to and from Quintus* 1,2,15)
cum ne-que praetores diebus aliquot ad-iri
 when not-and praetor:NOM.PL day:ABL.PL several to-go:INF.PASS
possent
 can:IMPF.SUBJ.3.PL
 ‘... and when the praetors could not be approached for several days ...’

4.2 Compounded verbs and passivization test in post-Vedic Sanskrit

In later periods, in post-Vedic (Epic and Classical) Sanskrit, when the *-ya*-passives become still more productive, we find more examples of passives built with these secondary prefixal transitives. Such secondary transitives include, for instance, *ā-kram* ‘step to, tread upon; overcome’ (← *kram* ‘step, tread’), *ā-kruś* ‘shout at’ (← *kruś* ‘shout’), *adhi-vas* ‘inhabit’ (← *vas* ‘dwell, live’); cf. (21–24):

- (21) (Rāmāyaṇa 1.57.21)
daivam eva param manye pauruṣaṃ
 fate:NOM.SG PTCL supreme:NOM.SG.N think:PRES:1SG.MED human:NOM.SG.N
tu nirarthakam daivena ā-kram-ya-te sarvaṃ
 but useless:NOM.SG.N fate:INS.SG to-tread-PRES.PASS-3SG everything:NOM.SG
 ‘I think that fate alone is supreme and human [effort] is useless. Everything is overcome by fate.’
- (22) (Bhāgavata-Purāṇa 9.24.58)
asurair [...] bhuva ā-kram-ya-māṇāyāḥ
 Asura:INS.PL earth:GEN.SG to-tread-PRES.PASS-PART:GEN.SG.F
a-bhārāya
 un-burdening:DAT.SG
 ‘... for releasing the earth from the burden of the Asuras (demons)’ (lit. ‘... for unburdening the earth being trodden upon/overcome by the Asuras ...’)
- (23) (Mahābhārata 1.82.7 = 5.36.5 = 12.288.16)
ā-kruś-ya-māno na ā-krośet
 to-shout-PRES.PASS-PART:NOM.SG.M not to-shout:PRES:3SG.OPT.ACT
 ‘The one who is shouted at should not shout (himself).’

(24) (Arthaśāstra 8.1.31)

parvatāntardvīpāś ca durgā

mountain.in.island and fortress:NOM.PL

na^u adhy-uṣ-ya-nte janapadābhāvāt

not on-dwell-PRES.PASS-3PL countryside.absence:ABL.SG

‘And mountain fortresses (and) island fortresses are not **inhabited** because there is no countryside [nearby].’

Yet even these later texts attest relatively few passives of such new transitives (applicatives).

4.3 Concluding remarks: A hierarchy of transitivizing preverbs

Using the passivization criterion, we can order Vedic preverbs by their “transitivizing force”. Specifically, we find a few examples of passivized secondary transitives with *úpa* and *abhí*,¹⁹ which can therefore be placed at the top of the hierarchy. By contrast, there are no reliable examples of *-yá*-passives with the preverb *ánu* — in spite of the fact that this preverb easily combines with a number of intransitives and typically introduces an accusative into constructions.²⁰

(25) *úpa, abhí* (3) > *ádhi* (2) > others: *ánu, á, pári, práti*, etc. (1 or none)

Evidence is too scant to draw any theoretical conclusions on the basis of this hierarchy. The presence of three directional preverbs at the top of the hierarchy may point to the fact that the preverbs/postpositions of this semantic class were easier to lexicalize than others — most probably due to the privileged position of locative metaphors in language.

5. The reciprocal marker *ví* as an intransitivizing morpheme

5.1 The reciprocal function of *ví* and its origin

While the transitivizing function is attested for a number of Vedic preverbs, we find only one preverb associated with an intransitivizing derivation, *ví*-.

The preverb *ví*, alongside a number of other meanings (splitting in parts, spreading, reversive, etc.), can be used as a reciprocal marker with some verbs, when added to forms with the middle inflexion, cf. *dviṣ* ‘hate’ — *ví-dviṣ-ate* ‘they hate each other’, *vac* ‘speak’ — *ví... avoca-nta* ‘they argued with each other’.

The Indo-European middle morphology is traditionally associated with a variety of intransitive derivations such as passive, reflexive, and anticausative; in other words, middle inflexion (suffixes) might be considered ‘responsible’ for

the intransitivization of base verbs in *ví*-derivatives. Such was indeed the situation in several ancient Indo-European languages, such as Ancient Greek. This is not the case with Vedic, however. As mentioned above (see 2.3.1), non-characterized middle forms only exceptionally render all these functions; normally, all the above-listed meanings/functions are expressed by special morphemes, such as the present passive suffix *-yá-*, specific inflexion of the medio-passive *i*-aorist, and reflexive pronouns *tanú-* and *átman-* (see Kulikov 2009 for details). Likewise, we only find isolated examples of non-characterized middle forms that render a reciprocal meaning without using specific reciprocal markers such as *ví-*. Accordingly, it would be incorrect to claim that that middle morphology is more essential to the valency properties of compounded verbs with *ví-*, and that *ví-* just adds a semantic specification to middle forms. Rather, *ví-* should be considered to be one of the two components of a complex marker of reciprocity, alongside the middle inflexion.

The reciprocal function of *ví* is attested, above all, in early Vedic. In this period, *ví* is in competition with another marker of reciprocity, the adverb *mithás*, which can co-occur with *ví* within the same construction (cf. (31–32) below) or render reciprocal meaning on its own (cf. (32)).

The reciprocal function of *ví* must be rooted in its etymology. Most likely, this preverb goes back to the Proto-Indo-European morpheme **dvi-* ‘two’ (cf. also adverb **dvis* ‘in two’), thus being genetically related to Greek *δια-*, Lat. *dis-*, Old High German *ze(r)-*, for which similar meanings are attested (see already Pott 1859:705ff. and, especially, the convincing argumentation for this etymology in Lubotsky 1994:202ff.). The most remarkable parallel to Vedic *ví* is the Greek prefix *δια-*, which may also render a reciprocal meaning. To mention just a few examples, also taken from Pott’s study (Pott 1859:733): *διά-λογος* ‘conversation’, *δια-ειπεῖν* ‘argue with each other’ (the exact etymological cognate of Ved. *ví-vac*_{MED}), *δια-κυνέω* ‘kiss each other’, *δια-πειλέω* ‘threaten each other’, *δια-μάχομαι* ‘fight against each other’.

In what follows, I will briefly outline the main syntactic patterns attested with *ví*-reciprocals.

5.2 Two syntactic types of *ví*-reciprocals

5.2.1 *Direct object reciprocals*

The **direct object reciprocals**, or canonical reciprocals,²¹ suggest the symmetry relation between the subject and direct object (DO): $P(X_{\text{Subj}}, Y_{\text{DO}}) \ \& \ P(Y_{\text{DO}}, X_{\text{Subj}})$; cf. *X and Y kissed (each other) = X kissed Y & Y kissed X*; *X and Y hate each other = X hates Y & Y hates X*. Since such a reciprocalization removes the direct object from the syntactic structure, the preverb *ví* (together with the middle type

of inflexion) can be said to function as an intransitivizer. The DO reciprocals are derived, for instance, for such verbs (mostly denoting hostile activities) as *dviṣ* ‘hate’ — *vi-dviṣ*_{MED} ‘hate each other, be inimical’, *han* ‘kill, destroy’ — *vi-han*_{MED} ‘kill, destroy each other’, *tr̥h* ‘crush, shatter, destroy’ — *vi-tr̥h*_{MED} ‘crush, shatter, destroy each other’, *abhi-car* ‘bewitch’ — *vy-abhi-car*_{MED} ‘bewitch each other’, *śap* ‘curse’ — *vi-śap*_{MED} ‘curse each other, quarrel’. Examples are:

- (26) (AV 3.30.4abc): *vi-dviṣ*_{MED} ‘hate each other, be inimical’
yéna devā ná vi-y-ánti
 which:INS.SG.N god:NOM.PL not VI-go:PRES-3PL.ACT
ná u ca vi-dviṣ-áte mitháḥ
 not also and VI-hate:PRES-3PL.MED mutually
tát kṛṇ-mo bráhma vo gr̥hé
 that:ACC.SG.N make:PRES-1PL.ACT incantation:ACC.SG your house:LOC.SG
 ‘We perform in your house that incantation by virtue of which the gods do not go apart and do not **hate one another (mutually)**.’
- (27) (TS 2.2.11.2): *vi-tr̥h*_{MED} ‘crush, destroy each other’
vi-tr̥mh-āñás tiṣṭhanti
 VI-shatter:PRES-PART.MED:NOM.SG.M stand:PRES:3PL.ACT
 ‘They keep **crushing each other**.’
- (28) (MS 1.9.7:138.16–17): *vi-śap*_{MED} ‘curse each other, quarrel’
yáu vi-śápeyātām
 who:NOM.DU.M VI-curse:PRES:3DU.OPT.MED
ahám bhúyo veda aháx bhúyo veda íti
 I:NOM more know:PF:1SG.ACT I:NOM more know:PF:1SG.ACT thus
 ‘Who **quarrel** (lit. **curse each other**) with the words: “I know more!” — “I know more!” — ...’²²

5.2.2 Indirect object reciprocals

The indirect object reciprocals suggest the symmetry relation between the subject and the second (indirect) object (IO), which surfaces either as the second accusative object, or as the dative argument: P (X_{Subj} , Y_{IO}) & P (Y_{Subj} , X_{IO}). Thus, normally, the transitive verbs do not intransitivize, cf. *vac* ‘speak’ — *vi-vac*_{MED} ‘discuss with each other, contest smth., argue for smth. [LOC]’, *bhaj* ‘distribute, share, give smth. (ACC) to smb. (DAT) as a share’ — *vi-bhaj*_{MED} ‘distribute smth. (ACC) among one another, share with each other’. Examples are:

(29) (RV 6.31.1cd)

ví toké apsú tánaye ca sūré
 VI seed:LOC.SG water:LOC.PL offspring:LOC.SG and sun:LOC.SG
 'a *voc-anta carṣaṇáyo vívācaḥ*
 speak:AOR-3PL.MED tribe:NOM.PL contest:ACC.PL
 'The tribes **contested** (lit. disputed disputes with each other) over seed,
 waters and offspring, over the sun.'

(30) (RV 10.108.8c)

tá etám ūrvám ví bhajanta
 they:NOM.PL.M this:ACC.SG.M herd:ACC.SG VI distribute:PRES:3PL.SUBJ.MED
gónām
 COW:GEN.PL
 'They will **share with each other** this herd of cows.'

5.3 Reciprocal passives

As in the case of the secondary (preverbal) transitives, the *-yá*-passivization test turns out to be of crucial importance. Since the **indirect object reciprocals** derived from transitives retain the direct object and thus remain transitive, they can easily be passivized, as in (31), quite in accordance with our expectations:

(31) (Hiraṇyakeśi-Śrauta-Sūtra 3.8.66):

pass. of *ví-bhaj*_{MED} 'distribute among each other, share with each other'
adhi-śrayaṇa-kāle mitho ví-bhaj-yeran
 on-putting-time:LOC.SG mutually VI-distribute-PRES.PASS:3PL.OPT
 'When one puts [the oblation] on [fire], [the rice grains] **should be**
 (**mutually**) **distributed** [by the participants of the rite among each other].'

Since the canonical reciprocalization is an intransitivizing derivation, one might expect that **canonical (DO) vi-reciprocals** cannot be passivized. Yet, we do find a few examples of passives of such reciprocals, in particular, a passive of *vi-trh*_{MED} 'crush, shatter, destroy each other':

(32) (AV 1.28.4)

putráṃ at-tu yātudhān-ḥ
 SON:ACC.SG eat:PRES-3SG.IMPV.ACT sorceress:NOM.SG
svásāram utá nāptyām
 sister:ACC.SG and granddaughter:ACC.SG
ádhā mithó vikeś.yò ví ghn-atām yātudhānyò
 then mutually hairless VI kill:PRES-3PL.IMPV.MED sorceress:NOM.PL
ví trh-ya-ntām arāy.yaḥ
 VI shatter-PRES.PASS-3PL.IMPV.MED hag:NOM.PL

‘Let the sorceress eat [her own] son, sister, and granddaughter; then let the hairless sorceresses (mutually) destroy each other; let the hags **be crushed (killed) by each other.**’

The reciprocal interpretation (‘let the hags be crushed (killed) by each other’) is supported, on the one hand, by the reciprocal context of the beginning part of the passage, and, on the other hand, by (33), where the reciprocal meaning is expressed with the same passive verb by another marker of reciprocity, the adverb *mithás*:

- (33) (AVŚ 5.17.7 ≈ AVP 9.15.7)
vīrá yé tṛh-yá-nte (AVŚ) / *han-ya-nte* (AVP)
 hero:NOM.PL who shatter-PRES.PASS-3PL kill-PRES.PASS-3PL
mithó brahmajāyā hinas-ti tán
 mutually Brahman’s.wife:NOM.SG hurt-PRES-3SG.ACT they:ACC
 ‘When heroes **are mutually shattered/killed (by one another)**, it is the Brahman’s wife who hurts them.’

Another verbal form which can be tentatively interpreted as a passive of a canonical reciprocal is the Ṛgvedic hapax *vipanyāmahe*. The form occurs in a difficult passage:

- (34) (RV 1.180.7ab): pass. of *vī-pan* ‘admire, glorify each other’ (?)
vayāṃ cid dhī vāx jaritāraḥ satyā
 we:NOM.PL only since your praiser:NOM.PL true:NOM.PL.M
vī-pan-yāmahe vī pañīr hitāvān
 VI-glorify-PRES.PASS:1PL VI Pañi:NOM.SG having.hidden:NOM.SG.M
 ‘Since only we, the true praisers of yours (sc. Áśvins), ???; [may stay] away the Pañi, the possessor of the hidden [goods].’

The form in question was the subject of long debate in the literature. Traditionally, *vipanyāmahe* is held for a passive from *pan* ‘admire, glorify, praise’ and correspondingly translated as ‘we are glorified [as genuine praisers]’; thus, for instance, Geldner (1951: I, 259): ‘wir werden ... anerkannt.’²³ However, such an interpretation leaves unexplained the exact semantic contribution of the prefix *vī* to the meaning of this compound.

Some scholars saw here a denominative of *vipanyā-* ‘glory’ (Gotō 1987:206, fn. 413) or a derivative of a different root (²*pan* ‘sich abmühen’ or *vīp* ‘be/become (mentally) excited’; for a summary and discussion of suggested interpretations, see Kulikov 2012: 144ff., with bibl.

Whatever the morphological analysis of *vipanyāmahe*, it must be a nonce formation, triggered by the word play (*vī-pan* ... *vī pañi-*). The traditional passive interpretation seems quite plausible, with the following minor modification: *vī*

may have a reciprocal value here, and the form in question can be interpreted as a passive of the (unattested) reciprocal **ví-panante* ‘they glorify each other’, thus meaning:

‘Since only we, the true praisers of yours (sc. Ásvins), **are glorified by each other ...**’

Passives of canonical reciprocals, albeit very few in number, are worthy of special discussion. From the typological point of view, this syntactic type is highly unusual and challenging for some of our basic assumptions on the semantic content of the reciprocal derivation, even contradicting, in some respects, our linguistic intuition. As mentioned above, canonical reciprocals must be intransitive by definition, which, at first glance, rules out passivization. In the case of constructions with reciprocal pronouns (cf. English *each other*, German *einander*), we have at least a formal possibility of passivization resting upon an empty direct object in the surface structure (*each other*, *einander*): *we glorify each other* → *we are glorified by each other*. In the case of a morphological reciprocal (as in Vedic), the syntactic aspects of this derivation remain unclear. Since this peculiar construction is only twice attested in the Vedic corpus, it would be premature to speculate on the exact meaning behind such passive reciprocals. But, on the basis of the existence of this, even if rare, pattern, one may assume that the intransitivizing force of the morpheme *ví-* in *ví*-reciprocals is considerably weaker than that of other intransitivizing morphemes (e.g., the passive suffix *-yá-*). This may be due to the fact that *ví-* can readily be combined with transitives without affecting their transitivity, as in the case of *bhid* ‘split, break’ — *ví-bhid* ‘split, break in pieces’ and *muc* ‘loose, free’ — *ví-muc* ‘unloose, unharness’.

6. Vedic preverbs as (in)transitivizers: Concluding remarks

To conclude this brief survey of the alleged Old Indo-Aryan valency-changing preverbs, we are now able to formulate a generalization that holds for both transitivizing and intransitivizing preverbs and, given the assumption that Vedic preserves archaic features of the ancient Indo-European syntactic type, is also valid for the situation in Proto-Indo-European. Both the transitivizing preverbs (*ánu*, *áti*, *abhí*, *úpa*, etc.) and the intransitivizing *ví* show a **weak (in)transitivizing force**. On the one hand, the transitivizing preverbs only exceptionally make fundamentally intransitive verbs into true transitives, as the passivization test shows. On the other hand, the intransitivizing preverb *ví* does not seem to intransitivize the verb completely, since the corresponding reciprocal can still be passivized.

This means that the verbal prefixes belong to the very periphery of the Vedic valency-changing markers. I have argued that in Vedic Sanskrit prefixed

(compounded) verbs do not actually reach the status of ‘true transitives’, the main transitivity alternations being marked foremost by suffixal morphemes (causative suffix *-áya-*, among others) and the type of inflexion (active/middle distinction). One may assume that early Vedic, unlike many other ancient Indo-European languages, attests an earlier stage of the process ending up with univerbation and complete transitivization of such prefixed verbs.

Grammatical abbreviations

ACC	accusative	M	masculine
ACT	active	MED	middle
AOR	aorist	N	neuter
DAT	dative	NOM	nominative
DO	direct object	OPT	optative
DU	dual	PART	participle
F	feminine	PF	perfect
GEN	genitive	PTCL	particle
IMPF	imperfect	PASS	passive
IMPV	imperative	PL	plural
INS	instrumental	PRES	present
IO	indirect object	SG	singular
LOC	locative	SUBJ	subjunctive

Abbreviations of texts

ĀśŚS	Āśvalāyana-Śrauta-Sūtra	PB	Pañcaviṃśa-Brāhmaṇa
AV(Ś)	Atharvaveda (Śaunakīya recension)	RV	Ṛgveda
AVP	AV, Paippalāda recension	ŚB	Śatapatha-Brāhmaṇa (Mādhyandina recension)
KpS	Kaṇṇṇṇhala-Kaṇṇṇhala-Saṃhitā	ŚrSū.	Śrauta-Sūtras
KS	Kāṇṇṇhaka(-Saṃhitā)	TS	Taittirīya-Saṃhitā
MS	Maitrāyaṇī Saṃhitā	YV	Yajurveda(-Saṃhitā)

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Notes

1. For lists of preverbs, see, for instance, Whitney 1889:396ff.; Renou 1952:316ff.
2. This is a rough rule which covers the accentual behavior of verbs in the great majority of cases; for details, see, for instance, Klein 1992.
3. In cases with more than one preverb preceding the verbal form, only the last one, i.e. that closest to the verb, bears the accent.
4. For the early Vedic passive paradigm and relationships between middle type of inflexion and passive voice, see Kulikov 2006.
5. It is worth mentioning that the behavior of preverbs/adpositions attested in these languages is not always perfectly parallel to that in (early) Vedic. Thus, as Lehmann (1983:160) concludes for Latin, “[p]reverb and preposition are not functionally equivalent; *x adit y* and *x it ad y* are not synonymous; there is no regular transformational relationship between the two constructions”.
6. Cf., e.g., Gaedicke (1880:91): “Jedes Intransitivum wird im Indischen durch gewisse Richtungswörter oder Präpositionen zu einem Transitivum”. See also Speijer 1886:32; 1896:7; Sen 1927:368ff. [= 1995:28ff.]; Renou 1952:316ff.
7. For a discussion of the applicative derivation, see, for instance, Austin 1997; Shibatani 2000; Peterson 2007.
8. The symbol $\cup$ shows that the sandhi has been undone.
9. On the syntax of the verb *bhā* ‘shine’, see Roesler (1997:81ff., 88); cf. Roesler’s (1997:84) translation of the passage in question: ‘Denn wenn du mit den Strahlen aufleuchtest, bescheinst du den ganzen Lichtraum’.
10. See, for instance, the criteria formulated by Kilby (1984:40) for English grammar, but also relevant cross-linguistically:
 - “(i) a DO is a noun phrase which immediately follows a verb
 - (ii) a DO is a noun phrase which can be made into a subject by the passivization rule. [...]
 - (iii) a DO is a noun phrase whose referent is affected by, or created by, the action of the verb.
 - (iv) a DO is one of the noun phrases which a verb is required to occur with.”

Note that only the first two criteria are syntactic and operational in the strict sense of the word.

Another important study on the English verb, Duffley 2006, singles out the following two criteria: “the direct object [...] corresponds logically to the subject of a passive construction with the same verb”; and, “another criterion for identifying a direct object is the possibility of substitution by a pronoun in the objective case: [...] I like Joe [~] I like him.” (Duffley 2006: 36).

11. As rendered, for instance, in the standard German translation by Geldner (1951: I, 133) (‘Jenes dein höchstes indrisches (Wesen) ist weit weg, dieses hielten die Seher vor Zeiten fest. Auf Erden ist dies eine, im Himmel das andere von ihm: Es wird wie ein Feldzeichen zu einem Ganzen zusammengefügt’; emphasis is mine. — LK) or by Kupfer (2002: 134): ‘[d]as (besitz[s]t) du als höchstes indrisches (Wesen) in weiter Ferne. (Die) Weisen bestätigen dieses (sc. Wesen) hier seit alters. Auf (der) Erde ist dieses eine (hier), im Himmel sein anderes. Zusammengemischt wird es wie (ein) Licht zu einem ganzen (sc. brennenden Licht)’.

12. On the interpretation of this difficult cosmogonic passage, see, in particular, Geldner 1951: I, 133.

13. To quote a few such definitions: “Ein transitives Verb fordert ein subjektfähiges, d.h. bei der Passivierung zum Subjekt aufzuhebendes Objekt im Akkusativ” (Bußmann 1983: 557); “Transitive Verben sind solche Verben, bei denen ein Akkusativobjekt stehen kann, das bei der Passivtransformation zum Subjektsnominativ wird” (Helbig & Buscha 1993: 53).

14. Cf., e.g., Delbrück 1888: 104f.; Haudry 1977: 149. For a general discussion of this criterion, see, for instance, Anderson 1988: 300ff.

15. See Gaedicke 1880; Delbrück 1888: 164ff.; Gonda 1957a; 1957b; Jamison 1983: 27ff.; for Classical Sanskrit, see Ostler 1979: 242ff.; Hock 1982: 131.

16. Note that the ‘morphological explanation’ of this fact, suggested by one of the anonymous reviewers of this paper (“the passive constructions used as a transitivity criterion involve verb forms that originally did not exist for the intransitive verbs whose combination with a preverb tends to be reanalyzed as transitive compounds”) does not hold true in this case: formations with the unaccented suffix *-ya-* and with the accent on the root (= present class IV in the traditional Indian grammar), historically related to the passive suffix *-yá-*, can readily be made from intransitive verbs, such as *pad* ‘fall’ — *pádyate*, *jan* ‘be born, arise’ — *jáyate*, etc. The existence of such forms shows that, from the morphological point of view, present formations with the suffix *-ya-/yá-* would not be impossible for intransitive verbs. The constraint on derivation of *-yá-* presents from intransitives must be of syntactic, and relatively recent, character.

17. This constraint does not hold for the late (post-Vedic) Sanskrit. In particular, mention should be made of impersonal passives made from intransitives, such as in (9–10) (see Ostler 1979: 353ff.; Renou 1930: 290, 498):

(9) *māsam* *ās-ya-te* *devadattena*
month:ACC.SG sit-PRES.PASS-3SG Devadatta:INS.SG
‘Devadatta sits for a month.’ (lit.: ‘(It) is (being) sat by Devadatta (for) a month.’)

(10) (Daśakumaracarita 96; quoted from Ostler 1979: 353)
bhadrakāḥ *pratīkṣ-ya-tām* *kaṃcit kālam*
good.sir:VOC.PL wait-PRES.PASS-3SG.IMPV some time:ACC.SG
‘Good sirs, wait (would you be so kind as to wait) for a moment.’

The imperative forms of such passives, as in (10), were used, in particular, in the polite style of speech, for instance when addressing persons of high social status (see Renou 1930: 413).

Moreover, according to ancient Indian grammarians (see Renou 1930: 290; Ostler 1979: 355f.), accusatives of time could even be promoted to the subject position in passive constructions, as in (11):

- (11) *māsa ās-ya-te devadattena*
 month:NOM.SG sit-PRES.PASS-3SG Devadatta:INS.SG
 ‘Devadatta sits for a month.’ (lit.: ‘A month is (being) sat by Devadatta.’)

A detailed study of the Vedic *-yá*-passives reveals, however, that such forms and constructions are unattested in Vedic prose (which is supposed to have served as the base dialect for the ancient Indian grammatical tradition). The fact that such examples can be found in texts of the classical (post-Vedic) period is of no demonstrative value, since it is exactly under the uncontested authority of the Pāṇinian grammar that these texts have been created (for a short discussion of this sociolinguistic situation, see Kulikov 2004: 123f.).

18. The sign “+” after the (abbreviated) name of a text (“X+”) means: ‘in X and more recent, younger texts’, ‘from X onwards’.

19. Cf. also examples of compounds based on some transitives, such as *abhí-car* ‘bewitch’ (← *car* ‘perform’), *abhí-śams* ‘calumniate’ (← *śams* ‘recite, praise’), *abhí-ṣic* ‘besprinkle, consecrate’ (← *śic* ‘pour’).

20. Cf. similar arguments on the intransitivity of the compounds with *ádhi* in Dash 1991: 152ff.

21. I basically follow the terminology and classification as outlined in Nedjalkov 2000; Geniušėnė & Nedjalkov 2000; Nedjalkov 2007.

22. I follow the reciprocal interpretation by Delbrück (1888: 254, 568) (‘wenn zwei sich gegenseitig verfluchen und jeder dabei sagt...; ‘wenn sich zwei zanken...’), which seems more likely than that suggested by Gotō (1987: 304f.): ‘wenn zwei gegenseitig schwören (behaupten) würden ...’ and adopted by Amano (2009: 346): ‘Wenn aber zwei im Streit miteinander schwören...’

23. Thus also Grassmann 1873: 772. The reflexive interpretation ‘wir rühmen uns’ (Grassmann 1877: 173; Hillebrandt 1891: 87) is hardly possible.

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