



Universiteit  
Leiden

The Netherlands

**Voice and valency derivations in Old Indo-Aryan in a diachronic typological perspective: the degrammaticalization of the middle and other trends in the Vedic verbal system**

Kulikov, L.I.; Melazzo L.

**Citation**

Kulikov, L. I. (2008). Voice and valency derivations in Old Indo-Aryan in a diachronic typological perspective: the degrammaticalization of the middle and other trends in the Vedic verbal system. *Usare Il Presente Per Spiegare Il Passato. Teorie Linguistiche Contemporanee E Lingue Storiche. Atti Del Xxxiii Convegno Della Società Italiana Di Glottologia. Palermo, 16-18 Ottobre 2008*, 35, 161-191. Retrieved from <https://hdl.handle.net/1887/20124>

Version: Not Applicable (or Unknown)

License: [Leiden University Non-exclusive license](#)

Downloaded from: <https://hdl.handle.net/1887/20124>

**Note:** To cite this publication please use the final published version (if applicable).

# USARE IL PRESENTE PER SPIEGARE IL PASSATO

## Teorie linguistiche contemporanee e lingue storiche

Atti del XXXIII Convegno  
della Società Italiana di Glottologia

*Testi raccolti a cura di  
Lucio Melazzo*

Palermo, 16-18 ottobre 2008



## INDICE

Premessa . . . . .	9
JOHAN VAN DER AUWERA & LAUREN VAN ALSENOY, <i>Indefiniteness maps: problems, prospects, and 'retrospects'</i> . . . . .	13
PIERLUIGI CUZZOLIN, <i>Usare quale presente per spiegare quale passato? Per una linguistica storica teoricamente consapevole</i> . . . . .	27
MICHELA CENNAMO, <i>Teorie della struttura argomentale e dati diacronici</i> . . . . .	57
GIORGIO GRAFFI, <i>La moda del 'nuovo' nella linguistica dell'ultimo mezzo secolo: realtà ed equivoci</i> . . . . .	91
MICHELE LOPORCARO, <i>Variazione dialettale e ricostruzione. 1. La degeminazione settentrionale. 2. I due neutri del centro-meridione</i> . . . . .	111
LEONID KULIKOV, <i>Voice and valency derivations in old indo-aryan in a diachronic typological perspective: the degrammaticalization of the middle and other trends in the vedic verbal system</i> . . . . .	161
Sessione Poster	
VALENTINA AMICO, <i>Aspetto e azione nell'antico alto tedesco della traduzione dell' harmonia evangeliorum di taziano. un confronto con il gotico</i>	193
RENATA BRIULOTTA, <i>Scalarità vs. discretezza la definitezza di ó, ή, τό nel greco omerico</i> . . . . .	199
LOREDANA COCCIA, <i>"I Figli di *Dyēws-"</i> . . . . .	209

VOICE AND VALENCY DERIVATIONS IN OLD INDO-ARYAN  
IN A DIACHRONIC TYPOLOGICAL PERSPECTIVE:  
THE DEGRAMMATICALIZATION OF THE MIDDLE  
AND OTHER TRENDS IN THE VEDIC VERBAL SYSTEM\*

LEONID KULIKOV

1. PRELIMINARIES

1.1. *Diachronic vs. synchronic typology of linguistic categories*

The present paper concentrates on the diachronic aspects of the typology of transitivity oppositions and valency-changing categories, focusing on evidence available from one branch of Indo-European, Indo-Aryan. It also aims to draw attention to the regrettable imbalance of the synchronic and diachronic typological studies.

On the one hand, we dispose of rich catalogues and a detailed **synchronic** analysis of the systems of valency-changing derivations attested in the languages of the world. On the other hand, a systematic treatment of these categories in a **diachronic** perspective is lacking. The rise, development and decline of these categories mostly remain on the periphery of the typological interests.

It seems advisable to start a diachronic typological research with collecting evidence from languages (language groups) with a history well-documented in texts for a sufficiently long period of time (around 1000 years or more). When approaching the history of a particular valency-changing category, such as passive or causative, it might be useful to outline some kind of diachronic typological **portrait** of the relevant category in the given language group or family, tracing it from the earliest attested texts in an ancient language ( $L_0$ ) onwards up to its reflexes in the daughter languages ( $L_1$ ,  $L_2$  etc.). Of particular interest would also be – if available – evidence from the sister languages of  $L_0$ , which can serve as a basis for a tentative reconstruction of the hypothetical history and possible sources of the category under study in the proto-language.

\* I would like to take this opportunity to express my thanks to the audience of the XXXIIIth Convegno Internazionale della Società Italiana di Glottologia (16-18 October 2008, Palermo) – in particular, to Marina Benedetti, Michela Cennamo, Paolo Di Giovine and Lucio Melazzo, for suggestions and critical remarks.

In order to achieve a uniform presentation of the data obtained in the course of research and to make the results of the study more accessible for general linguists and typologists, it is advisable to develop a typological questionnaire. Questionnaires are commonly used in synchronic typological studies on various grammatical categories, in particular, in the framework of the St. Petersburg Typology Group, for a synchronic study of valency-changing categories, such as causative, passive, reflexive, reciprocal etc. In our case, we will need a **diachronically**-oriented questionnaire; for details, see Kulikov 2010.<sup>1</sup>

One of the best objects for a diachronic typological study of linguistic categories in general and valency-changing categories, in particular, is, for instance, the Indo-Aryan group of the Indo-European language family. We have at our disposal evidence from the uninterruptedly documented history of Indo-Aryan for a period of more than 3.000 years, starting with the Old Indo-Aryan (OIA), which can be roughly identified with (Vedic) Sanskrit,<sup>2</sup> and continued in Middle Indo-Aryan (Pāli and Prakrits) and New Indo-Aryan (Hindi-Urdu, Bengali, Marathi, Sinhalese, etc.). Thus, on the one hand, the rich material collected by the Indo-European comparative linguistics offers a good basis for hypotheses about the origin and possible sources of the morphological and syntactic categories attested in OIA, and thus provides important material for a **retrospective** diachronic typological study. On the other hand, evidence from late Vedic and Middle Indo-Aryan texts as well as from New Indo-Aryan languages allows for a **prospective** diachronic study (how the OIA categories develop into their reflexes in Middle and New Indo-Aryan).

In what follows, I will offer an overview of several features of the Indo-Aryan, and, particularly, of OIA system of voices and valency-changing categories, which are relevant in a diachronic typological perspective. The main tendencies which determine the evolution of the Vedic (OIA) system of transitivity oppositions include: (i) the decline of the middle diathesis, which, as I will argue, amounts to its degrammaticalization; (ii) the rapid growth of new valency-changing categories, passives and causatives; and (iii) the decline of the labile patterning.

1. The diachronic typological questionnaire outlined in Kulikov 2010 was developed for the preparation of the Workshop “Diachronic typology of voice and valency-changing categories” (Turku, Finland, August 2006) and for editing the volume based on the Workshop materials. This questionnaire is also published on the web-site of the Department of Linguistics of Max Planck Institute for Evolutionary Anthropology, Leipzig; see <http://www.eva.mpg.de/lingua/tools-at-lingboard/questionnaires.php>.

2. The most ancient Vedic text, Ṛgveda (RV), dates to the 2nd half of the second millennium B.C. For the chronology of Vedic texts, see Witzel 1995: 96ff. (with bibl.).

## 1.2. Indo-European middle and its functions: general remarks

The diathesis, also labelled ‘active/middle voice’ in the Indo-European and Sanskrit scholarship, is a grammatical category of the Ancient Indo-European verb that surfaces in the type of the verbal personal inflexion. For instance, in the present tense the Vedic verb has endings 2sg. *-si*, 3sg. *-ti* etc. in the active paradigm, as opposed to 2sg. *-se*, 3sg. *-te* etc. in the middle.

The status and value of this category does not remain unchanged in the course of the history of Vedic and Indo-Aryan, in general. On the one hand, Indo-Aryan languages attest the rapid growth of new valency-changing categories, foremost in the present tense system: passives with the suffix *-yá-* and causatives with the suffix *-áya-*. On the other hand, we observe the loss of several grammatical functions of the ancient Indo-European middle. The middle diathesis is usually said to function as a syncretic marker of several intransitive derivations: passive, anticausative (decausative), reflexive, reciprocal. This might be the case indeed in the protolanguage. However, one of the oldest documented Indo-European languages, Vedic Sanskrit, rather attests the decline of the original system. Already in the language of the earliest texts, R̥gveda (RV) and Atharvaveda (AV), these functions are largely taken over by special markers, the only function remaining stable is autobenefactive.

In Section 2, I will briefly discuss evidence for this latter tendency, the decline of the middle diathesis; in Section 3, I will concentrate on the autobenefactive usages of the middle. Section 4 will offer a short outline of the labile syntax and its decline in Old Indo-Aryan. Sections 5 and 6 present a short overview of the general trends attested in the Vedic verbal system, placing them in a broader typological context.

## 2. THE DECLINE OF THE MIDDLE DIATHESIS IN VEDIC

### 2.1. *Passive*

Traditionally, the middle is regarded as one of the main morphological categories responsible for the expression of the passive function. Thus, according to the *communis opinio*, alongside with characterized passive formations (*-ya*-presents, medio-passive *i*-aorists and statives; see Kulikov 2001 and Kümmel 1996), there is a plethora of non-characterized middle forms in all the three tense systems that allegedly function as passives (cf. the shadowed column in the midst of Table 1).

## PASSIVE

Present	Active	Middle		passive -yá-presents
Aorist	Active	Middle		medio-passive aorists in -i/-ran
Perfect	Active	Middle	(?)	statives in -e/-re

Table 1 - Passive in Old Indo-Aryan: traditional view

However, as I argued elsewhere (Kulikov 2006), within the three main tense systems, i.e. those of present, aorist, and perfect, passive is expressed by characterized formations. In fact, the non-characterized (bare) middle forms attested in passive usages include two large groups of formations: middle perfects and middle athematic participles with the suffix *-āna-* (see Delbrück 1888: 264). For instance, the participle *hinvānā-* (root *hi* ‘impel’), taken by all grammars as the middle participle of the nasal present with the suffix *-nó/-nu-* (class V in the Indian tradition), occurs 18 times in intransitive (passive) constructions (as in (1a)), and 10 times in transitive constructions (as in (1b)) in the Ṛgveda:

- (1) a. (RV 9.12.8)
- <sup>3</sup>

<i>sómo</i>	<i>hi-nv-ānó</i>	<i>arṣati</i>
Soma:NOM.SG	impel-PRES-PART.MED:NOM.SG.M	flow:PRES:3SG.ACT

‘Soma, **being impelled**, flows.’

- b. (RV 9.97.32)

... <i>indrāya pavase</i> ...	<i>hi-nv-ānó</i>
Indra:DAT purify:PRES:2SG.MED	impel-PRES-PART.MED:NOM.SG.M
<i>vācam</i>	<i>matibhiḥ kavīnām</i>
speech:ACC.SG	thought:INS.PL poet:GEN.PL

‘You (sc. Soma) purify yourself for Indra, **impelling** (your) speech with the (religious) thoughts of the poets.’

3. The following abbreviations are used for Vedic texts: AB – Aitareya-Brāhmaṇa, AV – Atharvaveda, Br. – Brāhmaṇas, Xp – prose part of text X, MS – Maitrāyaṇī Saṃhitā, RV – Ṛgveda, ŚB – Śatapatha-Brāhmaṇa, Sū. – Sūtras, TB – Taittirīya-Brāhmaṇa, TS – Taittirīya-Saṃhitā, YV – Yajurveda(-Saṃhitā).

By contrast, the finite middle forms made from the same stem (3pl.med. *hinváte* etc.), with which *hinvāná-* is supposed to belong together, can only be employed transitively, meaning ‘to impel’, as in (2):

(2) (RV 9.65.11)

<i>hi-nv-é</i>	<i>vájeṣu</i>	<i>vājīnam</i>
impel-PRES-1SG.MED	price:LOC.PL	runner:ACC.SG
‘I <b>spur</b> on this runner [in the race] for prices.’		

Likewise, the participle *yujāná-* (root *yuj* ‘yoke’) occurs 8 times in intransitive (passive) constructions (as in (3a)) and 14 times in transitive constructions (as in (3b)) in the Ṛgveda:

(3) a. (RV 6.34.2c)

<i>rátbo</i>	<i>ná</i>	<i>mabé</i>	<i>śávase</i>	<i>yuj-ānāḥ</i>
chariot:NOM.SG	like	great:DAT	power:DAT	yoke:AOR-PART.MED:NOM.SG.M
‘... like a chariot <b>yoked</b> for the great power.’				

b. (RV 6.47.19a)

<i>yuj-ānó</i>	<i>harítā</i>	<i>rátbe</i>
yoke:AOR-PART.MED:NOM.SG.M	fallow:ACC.DU	chariot:LOC.SG
‘... (Tvaṣtar,) <b>yoking</b> two fallow [horses] to the chariot.’		

Vedic grammars treat *yujāná-* as a middle participle of the root aorist (see, for instance, Whitney 1885: 132; Macdonell 1910: 370). However, again, as in the case of *hinvāná-*, the corresponding finite forms (3sg. *áyuk-ta* etc.) can only be employed in transitive usages, as in (4):

(4) (RV 7.60.3)

<i>á-yuk-ta</i>	<i>saptá</i>	<i>harítaḥ</i>
AUG-yoke:AOR-3SG.MED	seven	fallow:ACC.PL
‘He <b>has yoked</b> (now) his seven fallow (horses).’		

Similarly, the middle perfect forms of the verb *dhā* ‘put’ (3sg. *dadbé*, 3pl. *dadhiré*) can be employed transitively, meaning ‘has (have) put (on)’, instantiating, in particular, possessive-reflexive (in (5a)) or auto-directional (in (5b)) usages, or in passive constructions, meaning ‘is put / has been put’, as in (5c):

(5) a. (RV 9.18.4)

*ā yó víśvāni vāryā vāsūni hástayor dadb-é*  
 to who all desirable:ACC goods:ACC hand:LOC.DU put:PF-3SG.MED  
 ‘The one who **holds / has put** all desirable goods in his hands ...’

b. (RV 1.85.2)

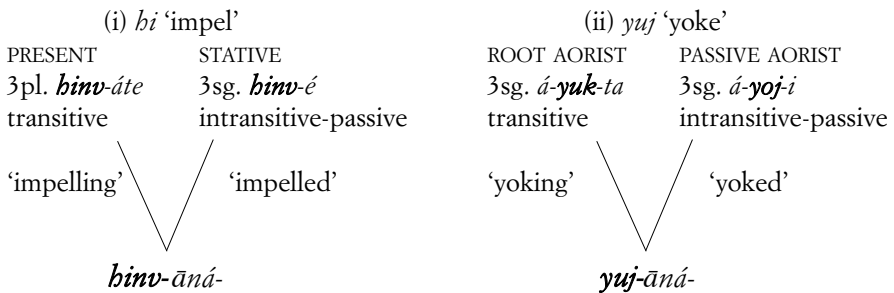
*ādhi śríyo dadb-ire pṛśni-mātar-ah,*  
 on glory:ACC.PL put:PF-3PL.MED Pṛśni-mother-NOM.PL  
 ‘[The Maruts,] whose mother is Pṛśni, have **put on** glory.’

c. (RV 1.168.3)

*bāsteṣu kbādīs ca kṛtīs ca*  
 hand:LOC.PL brooch:NOM.SG and sward:NOM.SG and

*sām dadb-e*  
 together put:STAT-3SG.MED  
 ‘Brooch and sward **is put** in [your] hands.’

Elsewhere I have demonstrated (Kulikov 2006) that the grammatical characteristics of such passive *-āna*-participles and middle ‘perfects’ should be reconsidered. In my view, these participles are homonymous, or morphologically (grammatically) ambiguous. Thus, the participle *hinvāná-* in its transitive usages, meaning ‘impelling’, belongs to the paradigm of the transitive nasal present (*hinváte* etc.). However, it is a member of the paradigm of the stative, i.e. a stative participle (3sg. *hinvé*, 3pl. *hinviré*), when employed intransitively (passively), meaning ‘impelled’. Likewise, *yujāná-* is a member of the paradigm of the (transitive) root aorist (*áyukta* etc.) when employed transitively (‘yoking’), but it is a member of the paradigm of the passive aorist (3sg. *áyojī*, 3pl. *ayujran*), that is, a passive aorist participle, when employed in passive constructions (‘yoked’):



Finally, forms such as *dadhē* (*dhā* ‘put’) or *yuyujré* (*yuj* ‘yoke’) should be taken as a 3sg. or 3pl. forms of the middle perfect when meaning ‘has put’ or ‘have yoked’, and as 3sg. or 3pl. of the stative when meaning ‘is put / has been put’ or ‘are yoked / have been yoked’.

To conclude this short discussion of the passive paradigm, let it be mentioned that the subparadigm of present is in fact defective, too. We mostly find 3sg. and 3pl. forms of the present tense, as well as participles. Next to present tense forms proper, there are rare imperatives (some 10 forms in the RV and AV). Only exceptional attestations of other tense-moods are found, which makes the sub-paradigm of present much more similar to those of the aorist and perfect. The early Vedic passive paradigm is summarized in Table 2. It includes (i) in the present system: the presents with the accented suffix *-yá-*; (ii) in the aorist system: the medio-passive aorist with a defective paradigm, consisting of the 3sg. form in *-i*, 3pl. form in *-ran/-ram*, and participle in *-āna-*; and (iii) in the perfect system: the statives, also with a defective paradigm (3rd person sg./pl. in *-e/-re* and participle) (for details, see Kulikov 2006). Different types of shadowing show the status of the corresponding forms: dark grey = lacking and morphologically impossible; middle grey = morphologically possible but unattested or only exceptionally attested (underdeveloped part of the paradigm); light grey = morphologically possible but rare.

Alongside with these ‘paradigmatic’ passives, there are only exceptional and isolated non-characterized (bare) middle forms.<sup>4</sup> Correspondingly, the middle diathesis cannot be said to serve as the marker of the passive voice.

		PRESENT		AORIST		PERFECT/STATIVE	
		INDICATIVE	IMPERATIVE	INDICATIVE	INJ.	INDICATIVE	IMPER.
SG	1	...	...				
	2	... , <i>yujyáse</i>	[ <i>dhīyasva</i> ]			[ <i>śṛṇviṣé</i> ]	
	3	<i>sūyáte, yujyáte</i>	[ <i>dhīyātām</i> ]	<i>ásāvi, áyoji</i>	... , <i>yoji</i>	<i>sunvé, yuyujé</i>	[ <i>duhām</i> ]
DU	1	...	...				
	2	...	...				
	3	[ <i>ucyete</i> ]	...				
PL	1	[ <i>-panyāmahe</i> (?)]	...				
	2	...	<i>yujyadhvam</i>				
	3	... , <i>yujyante</i>	[ <i>badhyantām</i> ]	... , <i>áyujran</i>	...	<i>sunvire, yuyujré</i>	
PART.	<i>sūyámāna-, yujyámāna-</i>		<i>s<sup>h</sup>vāná-, yujāná-</i>		<i>sunvāná-, yuyujāná-</i>		

Table 2 - Passive paradigm in early Vedic

4. These include, for instance, class I present *stávate* ‘is praised’ and class IX present

## 2.2. Reflexive

The reflexive is another valency-decreasing (intransitivizing) derivation traditionally associated with the middle diathesis. There are indeed some doubtless instances of the reflexive usage of the middle forms (see Gonda 1979: 50; Delbrück 1888: 236ff.; Speijer 1896: 48f.), such as *abhy āṅkte* ‘he anoints himself’ in ŚB 3.1.3.7, *pīpīše* ‘[Rudra] has adorned himself’ in (6) or *śīśīte* ‘sharpen himself’ in (7):

(6) (RV 2.33.9)

<i>pīpīś-e</i>	<i>hīranyaiḥ</i>
adorn:PERF-3SG.MED	golden.decoration:INS.PL
‘[Rudra] has adorned himself with golden decorations.’	

(7) (RV 1.36.16)

<i>yó</i>	<i>mártyaḥ</i>	<i>śīśī-te</i>	<i>áty</i>	<i>aktúbhir</i>
who:NOM.SG.M	mortal:NOM.SG	sharpen:PRES-3SG.MED	over	night:INS.PL
‘The mortal who sharpens himself by night ...’ ( who is too nimble ...)				

Such examples are relatively few, however, and in many cases the term ‘reflexive’ is misleading. In fact, many occurrences of middle forms, traditionally qualified as ‘reflexive’,<sup>5</sup> instantiate anticausatives; cf. *pṛ́* ‘fill’: *pūrīyate* ‘becomes full’ (not ‘fills oneself’); *pū* ‘purify’: *pávate* ‘becomes clean’ (not ‘purifies oneself’); or *vah* ‘carry, convey’: *vábate* ‘drives’.<sup>6</sup> Furthermore, several non-passive intransitives which may historically go back to true reflexives, exhibit idiomatic semantic changes, cf. *śap* ‘curse’: *śápate* ‘swears’ (←\*‘curses oneself’); *śā* ‘sharpen’: *śīśīte* ‘is too nimble’ (←\*‘sharpens himself’); for a detailed discussion, see Kulikov 2007b. Instead, the reflexive meaning is typically expressed in Vedic by two pronouns of substantive origin, *tanú-* (originally meaning ‘body’), and *ātmán-* (‘breath’), as in (8-9):

*gṛṇīte* ‘is praised’, which are likely to be based on the stems of the statives *stáve* (see Narten 1969) and *gṛné* ‘is praised’, instantiating a sort of back derivation (Rückbildungen). A few sigmatic aorists (mostly 3pl. forms): *ayukṣata* ‘(they) have been yoked’, *ādṛkṣata* ‘(they) have been seen, visible, (they) have appeared’, *áśṛkṣata* ‘(they) have been set free’ must be replacements of the medio-passive 3pl.aorists in *-ran*, which disappear after the RV.

5. See e.g. Speijer 1896: 48; Gotō 1987: 27, 49 et passim.

6. ‘Autocausative’ in accordance with Geniušienė’s (1987) classification of intransitive derivations.

(8) (RV 1.147.2)

*vandārus te tan<sub>u</sub>vām vande agne*  
 praiser:NOM.SG your self:ACC.SG praise:PRES:1SG.MED Agni:VOC.SG  
 ‘As your praiser, I praise myself, o Agni.’

(9) (MS 1.6.4:93.3)

*hīraṇyam dadā-ty ātmānam evā téna punī-te*  
 gold:ACC.SG give:PRES-3SG.ACT self:ACC.SG thereby purify:PRES-3SG.MED  
 ‘He gives gold; thereby he purifies himself.’

### 2.3. Reciprocal

Forms where the middle type of inflexion alone expresses the reciprocal meaning are few in number. One such example is the dual form *tarete* in RV 1.140.3 (see Kulikov 2007a; Gotō 1987: 161):

(10) (RV 1.140.3)

*ubhá tarete abbí mātārā śísum*  
 both:NOM.DU overrun:PRES:3DU.MED towards mother:NOM.DU child:ACC.SG  
 ‘The both parents overrun one another towards the child (sc. Agni, fire).’

Again, as in the case of passive or reflexive, the regular markers of reciprocity include several special morphemes which typically co-occur with the middle type of inflexion: preverbs *sám* ‘together’ and *ví* ‘asunder’; adverb *mīthás* ‘mutually’;<sup>7</sup> and periphrastic constructions with *anyó(a)nyám* ‘another-another’; for details see Kulikov 2007a.

### 2.4. Anticausative

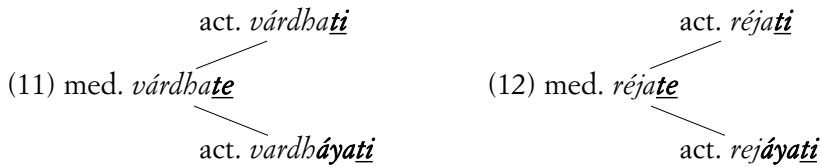
The causative/anticausative distinction is the only valency-changing derivation which, unlike passive, reflexive and reciprocal, is regularly expressed by the active/middle opposition, at least in early Vedic, as in med. *várdhate* ‘grows’ ~ act. *várdhati* ‘makes grow, increases’, med. *réjate* ‘trembles’ ~ act. *réjati* ‘makes tremble’. However, even in that case the contribution of the middle diathesis to the marking of a valency-decreasing derivation is rather limited. The middle type of inflexion is not the only mark-

7. Cf. also the compound *mīthas-túr-* ‘surpassing each other’, derived from the same root as the form *tarete* in (10).

er of anticausative, being supported by the stem opposition – which, eventually, weakens the role of the middle as a marker of anticausative within the system.

First, there are several types of causative/non-causative oppositions, where causative and anticausative differ both in diathesis (active/middle) and type of stem. Thus, transitive-causative presents with nasal affixes are commonly opposed to anticausative class I presents or class IV presents (with the suffix *-ya-*), cf. *pávate* ‘becomes clean’ ~ *punáti* ‘makes clean’; *ríyate* ‘flows, bubbles’ ~ *rináti* ‘makes flow, makes bubble’.

Second, already in early Vedic the binary oppositions of the type med. *várdhate* ~ act. *várdhati*, med. *réjate* ‘trembles (intr.)’ ~ act. *réjati* ‘makes tremble’ are often complicated by adding a third member, the more characterized causative with the suffix *-áya-*: *vardháyati*, *rejáyati*,<sup>8</sup> cf. (11-12):



In later texts, the causative meaning is still more regularly rendered by the suffix *-áya-*, which decreases the functional weight of the active/middle opposition even further.

### 3. THE AUTOBENEFACTIVE FUNCTION OF THE MIDDLE FORMS

#### 3.1. Benefactive and autobenefactive: preliminaries and definitions

The only functional domain which the middle diathesis does not cede to or share with other markers, is the group of functions which can be qualified as ‘**self-beneficent**’, or ‘**autobenefactive**’.

Here it will be in order to remind the definition of the benefactive derivation within the framework developed by the Leningrad/St. Petersburg Typology Group, in terms of a calculus of possible relations between two main levels of presentation of the linguistic structure.<sup>9</sup> These include: (i) the

8. On this class of verbs, see, in particular, Jamison 1983: 153ff.

9. See Kulikov 2011 for further details and references.

level of semantic arguments, or semantic (macro-)roles (Agent, Patient, Experiencer, etc.); and (ii) the level of grammatical relations, or syntactic functions (Subject [S], Direct Object [DO], Indirect Object [IO], Oblique Object [Obl]). Voices (active, passive, antipassive) and valency-changing categories (causative, etc.) can be determined as patterns of mapping of semantic arguments onto syntactic functions (grammatical relations).

Adding an Indirect Object to the set of arguments and the meaning ‘for (the sake of)’ to the meaning of the base proposition typically yields the derivative called ‘benefactive’. The Indirect Object refers to a participant, which usually bears the semantic role of Beneficiary,<sup>10</sup> corresponding to the person or entity benefiting from the performed activity – hence the term ‘benefactive’, cf. (13):<sup>11</sup>

(13) Benefactive

X	...	⇒	X	...	W
S	...		S	...	IO

An important (and typologically quite common) type of verbal derivation based on the benefactive is called the ‘self-beneficent’. The self-beneficent, or ‘affective’, derivation (also termed ‘subjective version’ in Kartvelian grammar) can be described as the result of a successive application of two elementary derivations, the benefactive and the indirect reflexive; cf. (14):

(14) Self-beneficent (subjective version)

X	...	⇒	X	...	W
S	...		S	...	IO
↓					
X = W		...			
S		...			

10. For some situations, this semantic role is closely related to or even (almost) identical with that of the Recipient.

11. Another term, taken from the Kartvelian grammatical tradition, is ‘objective version’; see, in particular, Boeder 1969; 2005: 34ff.



argument: ‘to yoke one’s chariot’, etc.); and (iii) **autodirectional**, which includes transitive verbs of caused motion, typically referring to the motion of the referent of the direct object caused by the Agent. Their middle counterparts, most often used with preverbs such as *ā* ‘to(wards)’, denote the process of the motion of the object towards the Agent, such as obtaining or taking of the object by the Agent. A handbook example of this type is the conversive pair *dā* (active) ‘give’ ~ *ā-dā* (middle) ‘take’.

### 3.2.1. Self-beneficent meaning proper

The self-beneficent, or canonical, subtype of the autobenefactive function (‘to do smth. for oneself’, as in the handbook example (17) *yājati* ‘worships, sacrifices’ ~ *yājate* ‘worships, sacrifices for oneself’), was briefly discussed above and does not require special comments. Cf., for instance, the active and middle forms of the verbs *pac* ‘cook’ in (18-20), *kr̥* ‘make’ (21) and *gr̥h* ‘take, seize’ (22-23):<sup>12</sup>

• *pac* ‘cook’:

(18) (ŚB 3.3.4.17)

<i>yātbā</i>	<i>yébhyaḥ</i>	<i>paksyá-nt</i>	<i>s-yā-t</i>
like	who:DAT.PL.M	cook:FUT-PART.ACT:NOM.SG.M	be-OPT-3SG.ACT
<i>tān</i>	<i>brūyād:</i>	<i>ity-abé</i>	
they:ACC.PL.M	say:OPT:3SG.ACT	such-day:LOC	
<i>vaḥ</i>	<i>pak-tā</i> <sup>13</sup>	<i>as-mi</i>	<i>iti</i>
you:DAT	cook-FUT.II	be(AUX)-1SG.ACT	thus

‘Like the one would say [to those] for whom he will cook (a meal): “On such and such a day I will cook (a meal) for you” ...’

(19) (ŚB 5.3.5.4)

<i>rājā</i>	<i>tvā</i>	<i>pak-ṣya-te</i>
king:NOM.SG	you:ACC	cook-FUT-3SG.MED
‘The king will cook you for himself’ [said towards an animal].		

12. Most of the examples quoted below are taken from Delbrück 1888: 236ff. and Speijer 1896: 48f.

13. The symbol ‘∪’ indicates that a sandhi has been undone.

(20) (RV 1.164.43)

*ukṣāṇam pṛśnim apaca-nta vīrās*  
 bull:ACC.SG motley:ACC.SG.M cook:IMPF-3PL.MED hero:NOM.PL  
 ‘The heroes cooked the motley bull for themselves.’

• *kr̥* ‘make’:

(21) (AB 1.23.1)

*te devā abruvan: puro vā ime*  
 that:NOM.PL.M god:NOM.PL say:IMPF-3PL.ACT fortress:ACC.PL this:NOM.PL.M  
*’surā imām̐l lokān akr-ata ; puras*  
 asura:NOM.PL this:ACC.PL.M world:ACC.PL make:AOR-3PL.MED fortress:ACC.PL  
*imām̐l lokān prati karavāmahā iti*  
 this:ACC.PL.M world:ACC.PL against make:PRES-3PL.SUBJ.MED thus  
 ‘Those gods said: These Asuras (demons) have made these worlds [their]  
 fortresses for themselves; we shall make these worlds [our] fortresses in  
 response.’

• *gr̥b* ‘take, seize’:

(22) (TS 6.4.11.1)

*tābhyām etām āśvinām agr̥bṇ-an*  
 they:DAT.DU.F this:ACC.SG.M of.Aśvins:ACC.SG.M take:IMPF-3PL.ACT  
 ‘They (PL.) took for these both (DU.) this [cup] appointed for the Aśvins.’

(23) (TS 6.4.9.1)

*té devā āgrayaṇāgrān gr̥bhān apaśyan ;*  
 that:NOM.PL.M god:NOM.PL āgrayaṇāgrān:ACC.PL vessel:ACC.PL see:IMPF-3PL.ACT  
*tān agr̥bṇ-ata*  
 that:ACC.PL.M take:IMPF-3PL.MED  
 ‘Those gods saw the āgrayaṇāgrān-vessels; they took them [for themselves].’

### 3.2.2. Possessive-reflexive type

The possessive-reflexive type suggests that the subject is referentially identical with the possessor of some other argument (‘to wash **one’s** hands’, etc.). It has two important subtypes, (a) DO-oriented possessive-reflexives, where the subject is referentially identical with the possessor of the referent of the direct object; and (b) other verbs, where the subject is referentially identical with the possessor of the referent of some other argument (for instance, oblique).

(a) DO-oriented possessive-reflexives are attested, for instance, for the middle forms of the verbs *kṛt* ‘cuts (off)’, *nij* ‘wash’ and *kṛ* ‘make’, as in (25, 27-29); cf. also (4, 5a):

(24) (TS 6.1.8.4)

*abhām rākṣaso grīvā āpi kṛntāmi*  
 I:NOM Rakṣas:GEN.SG neck:ACC.PL cut.off:PRES:1SG.ACT  
 ‘I cut off the necks of the Rakṣas-demon.’

(25) (TS 6.1.1.2)

*nakhāni nī kṛnta-te*  
 nail:ACC.PL down cut.off:PRES-3SG.MED  
 ‘He cuts off his nails.’

(26) (TS 7.2.10.2)

*yéna pātrena annambibhrati yát tán ná nirṇénij-ati ...*  
 which vessel food brings if that:ACC.SG.N not wash:INTENS-3PL.ACT  
 ‘If they do not wash that vessel with which one brings the food ...’

(27) (ŚB 1.2.5.23)

*átha pāñī áva nenik-te*  
 then hand:ACC.DU down wash:INTENS-3SG.MED  
 ‘Then he washes his hands.’

(28) (RV 1.55.1)

*śíśṭ-te vajrám*  
 sharpen:PRES-3SG.MED vajra:ACC.SG  
 ‘He sharpens his vajra ...’

(29) (TS 7.5.8.5)

*yátbā suparnā ut-patīsyāñ chīra uttamám kuru-té*  
 like bird:NOM.SG up-fly:FUT3SG.ACT head:ACC.SG high:ACC.SG.M-N make:PRES-3SG.MED  
 ‘Like a bird, when it is going to fly up, raises its head ...’

(b) Rarer are examples of co-referential relation between the Subject and the Possessor of another argument, Oblique object – e.g. Instrumental, as in (31), or Locative, as in (32):

(30) (RV 9.26.6)

*tām tvā hinv-anti vedbásah*  
 that you:ACC impel:PRES-3PL.ACT adept:NOM.PL  
 ‘The adepts impel you (for running).’

(31) (RV 9.72.1)

*hinv-áte*                      *matí*  
 impel:PRES-3PL.MED    prayer:INS.SG  
 ‘They urge [the race horse] by means of their prayer.’

(32) (ŚB 1.8.1.14)

*sá*                      *hótur*                      *ibá*                      *ní limpa-ti;*  
 he:NOM.SG.M              hotar-priest:GEN.SG    here                      besmear:PRES-3SG.ACT  
  
*tád dhótā*                      *óṣṭhāyor*                      *ní limpa-te*  
 then Hotar:NOM.SG    lip:GEN-LOC.DU              besmear:PRES-3SG.MED  
 ‘He besmears the Hotar-priest’s [fingers] here [with clarified butter]; then the Hotar-priest smears on his lips [with it].’

Parallels to this meaning can also be found in other Indo-European languages, in particular, in Ancient Greek (see, for instance, Allan 2003), cf. (33):

(33) (Hdt. 2.178.1)

ἔδωκε    χώρους    ἐνιδρύσασθαι    βωμοὺς καὶ τεμένεια    θεοῖσι  
 gave    lands    set.up:INF.MED    altars    and sanctuaries    god:DAT.PL  
 ‘... he gave lands where they might set up altars and sanctuaries to **their** gods.’

### 3.2.3. Auto-directional type

The **auto-directional** type includes transitive verbs of caused motion, typically referring to the motion of the referent of the direct object caused by the Agent. Their middle counterparts, most often used with preverbs such as *ā́* ‘to(wards)’, denote the process of the motion of the object towards the Agent, such as obtaining or taking of the object by the Agent.

(a) The most important subgroup of this class includes middle verbs which denote obtaining or taking of the object by the Agent. This type of the auto-directional function is typically attested for middle forms with preverbs (i.e. verbal prefixes, which in early Vedic may still appear as free morphemes). This function is particularly common for the verbs compounded with the preverb *ā́* ‘to, towards, here, directed towards the speaker’, which very often contributes to the change in the orientation of the activity. The handbook example of this type is the conversive pair *dā́* (active) ‘give’ ~ *ā-dā́* (middle) ‘(α) ‘take, seize’ [cf. (35-36)]; (β) ‘receive’ [cf. (37)]:

- *dā* (active) ‘give’ ~ *ā-dā* (middle) (α) ‘take, seize’ ; (β) ‘receive’:

(34) (RV 6.27.8)

*viṃśatīm*    *gāḥ* [...]    *maghāvā*    *mābyam*    *samrāt*  
 twenty:ACC    cow:ACC.PL    liberal:NOM.SG.M    I:DAT    emperor:NOM.SG  
*abhyāvartī* [...]    *dadā-ti*  
 Abhyāvartin:NOM.SG    give:PRES-3SG.ACT  
 ‘The liberal emperor Abhyāvartin gives me 20 cows.’

(35) (RV 1.8.3):

*ā vayām*    *vājraṃ* [...]    *dad-t-mahi*    *jāyema* [...]    *spr̥ḍbah*  
 to we:NOM    club:ACC.SG    give:PRES-OPT-1PL.MED    win:OPT:1PL.ACT    rival:ACC.PL  
 ‘May we take the club (and) win over our rivals!’

(36) (RV 1.32.3)

*ā sāyakam*    *maghāvā*    *adat-ta*    *vājraṃ*  
 to missile:ACC.SG    liberal:NOM.SG.M    give:IMPF-3SG.MED    club:ACC.SG  
 ‘The liberal [Indra] seized the missile, the club.’

(37) (RV 2.23.9)

*spārbhā*    *vásu*    *manuṣyā*    *dad-t-mahi*  
 desirable    goods:ACC.PL    human:ACC.PL.N    give:PRES-OPT-1PL.MED  
 ‘May we obtain the desirable human goods.’

This type of meaning is attested not only for the verb *dā* ‘give’, but for a number of verbs of caused motion, in particular, for verbs of putting and verbs of throwing, such as *dhā* ‘put, place’, *ún-nī* ‘take out, bail’ and *as* ‘throw’; cf. (38-44):

- *dhā* (active) ‘put, place’ ~ (*ā-*)*dhā* (middle) ‘take’

(38) (RV 10.21.6)

*tvaṃ*    *vásūni*    *kāmyā* [...]    *vīśvā*    *dadhā-si*    *dāśūṣe*  
 you:NOM    goods:ACC.PL.N    desirable    all    put:PRES-2SG.ACT    pious:DAT.SG.M  
 ‘You put all desirable goods for the pious one.’

(39) (RV 6.18.9)

*dhī-ṣvā*    *vājraṃ*    *hāste*  
 put:AOR-2SG.IMPV.MED    vajra:ACC.SG    hand:LOC.SG  
 ‘Take (lit. put) the vajra-weapon in your hand.’

Note that (39) can also be analyzed as an instance of the sub-type (b) of the possessive-reflexive meaning: the Subject is referentially identical with the Possessor of the referent of the Locative (see Gonda 1979: 58).

(40) (RV 3.44.4)

*dhat-ta*                      *āyudham*                      *ā*                      *vājram*                      *bāhvōr*  
 put:PRES-3SG.MED    weapon:ACC.SG    to                      vajra:ACC.SG                      arm:LOC.DU  
 ‘He takes the weapon in his hands.’

(41) (ŚB 4.4.1.12)

*āto*                      *hī*                      *devébhya*                      *unnāya-nti*  
 therefrom                      because                      god:DAT.PL                      take.out:PRES-3PL.ACT  
 ‘... because from there they bail [Soma juice] for the gods.’

Example (42) shows that, in some cases, we cannot draw with accuracy the border between the auto-directional and self-beneficent meanings:

(42) (TS 6.2.4.1)

*tēsām*                      *yá*                      *unnāya-te*                      *hīya-ta*                      *evá*  
 that:GEN.PL.M    who:NOM.SG.M    take.out:PRES-3SG.MED    leave:PRES-3SG.MED  
 ‘[The one] of them who takes out [a little food] for himself is left behind.’

• *as* (active) ‘throw’ ~ *ā-as* (middle) ‘take, receive’:

(43) (RV 1.103.3c)

*vidvān*                      *vajrin*                      *dāsyave*                      *hetīm*  
 skillful:NOM.SG.M    vajra-holder:VOC    Dasyu:DAT.SG    weapon:ACC.SG  
*asya-ō*  
 throw:PRES-2SG.IMPV.ACT  
 ‘O vajra-holder, the skillful one, throw the weapon at the Dasyu.’

(44) (ŚB 1.5.2.1)

*ghṛtāvātīm*                      *adhvāryo*                      *srúcam*                      *āśasya-sva*  
 with.ghee:ACC.SG.F    priest:VOC    spoon:ACC.SG    to throw:PRES-2SG.IMPV.MED  
 ‘O priest, take a spoon with ghee (in your hand).’

• (*ā-*)*bū* ‘call’:

(45) (ŚB 11.2.2.6)

*ātba*                      *enam*                      *eṣābutir ...*                      *ā*                      *hvaya-ti*  
 and                      he:ACC.SG.M    huti:NOM.SG    to                      call:PRES-3SG.ACT  
 ‘And this huti[-priest] calls out to him.’

(46) (ŚB 11.4.1.2)

*hánta* ◡ *enam*                      *brahmódyam*                      *āhvá*    *yāmabai*  
 well    he:ACC.SG.M    dispute:ACC.SG    to    call:PRES:1PL.SUBJ.MED  
 ‘Well, we shall call him (lit.: obtain by calling) for a dispute.’

(b) Another subtype of the auto-directional class includes middle verbs denoting **putting the referent of the direct object on the Agent’s surface**. The verbs of this class are also commonly used with spatial preverbs such as *pári* ‘around’, *úd* ‘up’, and some others. Typical representatives of this class are verbs which denote putting on clothes, armour or protection, as is the case with the verb *nah* ‘tie’, well-attested with a variety of preverbs:

(47) (ŚB 1.3.3.14)

*tád*                      *várma* ◡ *evá* ◡                      *etád*                      *agnáye*                      *nabya-ti*  
 then                      armour:ACC.SG    this:ACC.SG.N    agni:DAT.SG    tie:PRES-3SG.ACT  
 ‘Then he buckles this armour on Agni.’

(48) (TS 7.4.2.4)

*ātmána*                      *evá*                      *tád*                      *yájamānāḥ*  
 breath:DAT.SG                      verily                      thus                      sacrificer:NOM.PL  
  
*śárma*                      *nabya-nté*                      *’nārtiyai*  
 protection:ACC.SG                      tie:PRES-3PL.MED    non-perdition:DAT  
 ‘Verily thus the sacrificers put on a protection for the breath, to avoid perdition.’

Cf. also *ādhi śríyo dadhire* ‘[the Maruts] have put on glory’ in (5b).

The auto-directional function represents one of the most interesting subtypes of the autobenefactive group. The relation between the middle member of the pair and the corresponding active verbs is not quite symmetric. The large variety of types of motion expressed by the active verb (*put*, *give*, *throw*, *tie*, *twist*, etc.) is reduced to mere taking, obtaining or putting, that is, to the meaning which retains virtually no traces of the semantics of the base verb. Semantically, this idiomatic shift in the meaning of the base verb is easy to explain: apparently, the meanings such as ‘take’, ‘put on (clothes)’ eventually go back to the meaning of the base verb + the component ‘for oneself’: literally ‘give for oneself’, ‘throw for oneself’, ‘put for oneself’, etc.

#### 4. DEVELOPMENT OF THE NEW VALENCY-CHANGING CATEGORIES

The decline of the middle is compensated by and goes essentially parallel with the development of the new valency-changing categories, foremost within the system of present.

##### 4.1. *Causatives*

Causatives with the suffix *-áya-* dramatically increase their productivity already within the OIA period. In early Vedic (and probably in Proto-Indo-European) they can only be derived from intransitives and intransitive/transitives (I/T) verbs of perception and consumption (*dṛś* ‘see’, *vid* ‘know’, *pā* ‘drink’) (Thieme 1929; Jamison 1983). In middle Vedic (in the language of Vedic prose, or Brāhmaṇas) we find first occurrences of causatives of transitives, such as *kṛ* ‘make’ – *kāráyati* (Br.+) ‘cause to make’, *vac* ‘speak’ – *vācáyati* (YV<sup>p+</sup>) ‘make speak’, *hr̥* ‘take, carry’ – *hāráyati* (YV<sup>p+</sup>) ‘make take, make carry’ (see e.g. Hock 1981). Finally, late Vedic and post-Vedic texts (Sūtras and Epics) attest first examples of causatives with double characterization in *-āpaya-*: *aś* ‘eat’ – *aśāpayati* (Mānava-Gṛhya-Sūtra) (~ simple causative *āśayati* (Br.+)), *kṣal* ‘wash’ – opt. *kṣālāpayīta* (Sū.) (~ simple caus. *kṣālayati* (Br.)). These formations correspond to (and may actually originate in) Middle and New Indo-Aryan double causatives.

##### 4.2. *Passives*

Present passives with the suffix *-yá-* likewise increase their productivity. In early Vedic, these formations are attested for some 40 roots, which only include non-derived transitives. In middle Vedic (young mantras, Yajurveda, Brāhmaṇas), we find first examples of *-yá-*passives derived from secondary stems (desideratives and causatives of intransitive verbs). Finally, in late Vedic and post-Vedic (from the Śrauta-Sūtras onwards), passives of causatives derived from transitives first appear (cf. caus. *dhāpáyati* ‘makes put’ – *ni-dhāpyamāna-* ‘being caused to put [its foot]’ (Vaitāna-Sūtra), caus. *pāyáyati* ‘makes drink’ – *pāyyamāna-* ‘being caused to drink’ (Āpastamba-Śrauta-Sūtra); for details, see Kulikov 2001.

To sum up, we observe two parallel tendencies in the history of Indo-Aryan. The loss of most original (intransitivizing) functions of the middle and the lexicalization of many middle forms suggests that the diathesis opposition, albeit physically preserved in the paradigm, loses a large part of

its functional content, thus being **degrammaticalized** (see Section 6). This process is supported and, as a matter of fact, compensated by the grammaticalization of several new categories, such as, first of all, -yá-passives and -áya-causatives, reflexives with *ātmán-* and reciprocal constructions with *anyo'nya*.

## 5. DECLINE OF LABILE SYNTAX

The third important tendency which determines the development of the Old Indo-Aryan verbal syntax is the decline of lability. The term 'labile' refers to verbs or verbal forms which can show a valence alternation with no formal change in the verb, cf. Eng. *The door **opened** ~ John **opened** the door*; Vedic *rudrā ṛtāsya sādaneṣu **vāvṛdhuḥ*** 'Rudras **have grown** [intransitive] in the residences of the truth' ~ *īndram ukthāni **vāvṛdhuḥ*** 'The hymns **have increased** [transitive] Indra' (see (57) below). The ancient Indo-European languages, such as early Vedic and (Homeric) Greek, are usually considered as characterized by a high degree of lability. According to the *communis opinio*, they had a considerable number of labile verbs and verbal forms. Being one of the most intriguing aspects of the (ancient) Indo-European verb, this phenomenon has even caused quite desperate claims expressed by some Indo-Europeanists, such as:

"Que signifiait donc [la forme proto-indo-européenne] \**e-liq-ê-s*? Était-ce 'tu laissas' ou 'tu restas'? Si l'un des deux, comment est-il devenu l'autre? Si tous les deux, il faut convenir que nos ancêtres manquaient de clarté" (Henry 1893: 121)

Almost a half-century later, H. Hirt in his seminal *Indogermanische Grammatik* (VII/II: *Syntax*) has formulated his views less emotionally, but hardly more optimistically:

"Bei den Sätzen mit Verben muß man <...> unterscheiden, ob das Verb allein steht oder noch eine Ergänzung, ein Objekt, fordert, ob es nach der gewöhnlichen Ausdrucksweise intransitiv oder transitiv ist. <...> Nun ist aber die Unterscheidung nicht so wesentlich, da intransitive Verben transitiv und transitive intransitiv werden können. Wäre sie von großer Bedeutung, so würden wir wohl eine Verschiedenheit der Form zwischen den beiden Kategorien antreffen" (Hirt 1937: 28)

In fact, however, the productivity of the labile patterning in such ancient Indo-European languages as Vedic is strongly exaggerated. Unfortunately, till now we have no full treatment of the phenomenon of lability in ancient Indo-European languages. In what follows, I will confine myself to pointing out several parts of the Vedic verbal paradigm where

labile patterning was particularly common, arguing for the secondary character of lability in most such cases (for details, see Kulikov 2003).

### 5.1. *Lability of middle present forms*

In a number of middle forms of the system of present, labile patterning results from the polyfunctionality of the middle diathesis. The middle inflexion can express either the selfbeneficent (auto-benefactive) meaning with no valency change (cf. the textbook example act. *yájati* ‘sacrifices’ ~ med. *yájate* ‘sacrifices for oneself’, as in (17)), or an intransitivizing derivation, most often, anticausative (decausative). Correspondingly, in the cases where the middle diathesis can have both functions, its middle forms can be employed either transitively with the self-beneficent meaning, or intransitively, so that we are confronted with labile patterning, as in the case of verbs *svádate* ‘makes sweet / is sweet’; *códate* ‘impels / rushes, hastens’, *námate* ‘bends’, *bhárate* ‘brings (for oneself) / brings oneself’, *váhate* ‘carries / drives, goes’, *śráyate* ‘lays, fixes on, fastens / leans on’. Cf. (49a-b):

(49) a. (RV 9.74.9)

*sváda-sva* *índrāya* *pavamāna* *pītāye*  
 be/make.sweet:PRES-2SG.IMPV.MED Indra:DAT.SG Pavamāna:VOC.SG drink:INF  
 ‘Be sweet for Indra, O Pavamāna (= Soma sap), for drinking.’

b. (RV 3.54.22)

*sváda-sva* *havyā*  
 be/make.sweet:PRES-2SG.IMPV.MED oblation:ACC.PL  
 ‘Make the oblations sweet [for yourself].’

Labile syntax is also attested for presents with nasal affixes (i.e. with the suffixes *-nó/-nu-*, *-nā/-nī-* and with the infix *-ná/-n-* = classes V, IX and VII in the traditional notation), particularly for their thematicized variants (see Kulikov 2000), such as the thematic middle present *prṇáte* ‘fills; fills oneself’.

### 5.2. *Verbs constructed with content accusatives: type púṣyati ‘prosper’ / ‘make prosper’*

Another type of the Vedic and Indo-European lability is represented by the verbs of the type *púṣyati*, employed both in the intransitive usage ‘prosper, thrive’ and the transitive-causative usage, meaning ‘make prosper, make thrive’, as in (50a-b):

(50) a. (RV 7.32.9)

*taráñir*      *íj*      *jayati*      *kṣéti*      ***púśya-ti***  
 fast:nom.sg    only      wins      dwells      prosper:PRES-3SG.ACT  
 ‘Only the one who is fast is victorious, dwells (in peace), **prosper**.’

b. (RV 8.39.7)

*sá*      *mudá*      *kāvya*      *purú*  
 he:NOM.SG.M    joy:INS.SG      poetic.inspiration:ACC.PL    many

*viśvam*      *bhūma*      *iva*      ***púśya-ti***  
 everything:ACC      earth:NOM.SG    like      prosper:PRES-3SG.ACT  
 ‘By [his] joy, he (sc. Agni) [makes thrive] many poetic inspirations, as the earth **makes thrive** everything.’

Elsewhere (Kulikov 1999) I have argued that only intransitive constructions, as in (50a), represent the original, authentic usage for this verb. The overwhelming majority of the occurrences with the accusative are, in fact, either (i) constructions with the ‘etymological’ accusative (*puśtí-* ‘prosperity’, *póśa-* ‘prosperous thing’), or (ii) constructions with the content accusative (Inhaltsakkusativ), referring to some aspect(s), parameter(s) or scope of prosperity; cf. (51-53):

(51) (RV 6.2.1)

*tvám ... śrávo*      *váso*      ***puśtím***      *ná*      ***púśya-si***  
 you:NOM    glory:ACC.SG    vasu:VOC.SG    prosperity:ACC.SG    as    prosper:PRES-2SG.ACT  
 ‘You, o Vasu, **prosper in glory** [= you are glorious], as [one prospers] in **prosperity** [= as one is prosperous].’

(52) (TB 3.9.7.2)

*tásmād*      *rāja*      *paśūn*      *ná*      ***púśya-ti***  
 therefore      king:NOM.SG    cattle:ACC.PL    not      prosper:PRES-3SG.ACT  
 ‘...therefore the king does not prosper in cattle.’

(53) (RV 1.81.9)

*eté*      *ta*      *indra*      *jantávo*  
 this: NOM.SG.M    your      Indra:VOC      people:NOM.PL

***viśvam***      ***púśya-nti***      ***váryam***  
 all:ACC      prosper:PRES-3PL.ACT    desirable.good:ACC.SG  
 ‘These men of you, O Indra, **prosper in all desirable goods**.’<sup>14</sup>

14. Such constructions with content accusative are erroneously translated by some scholars as transitive-causative. Cf. Renou’s translation of (53): ‘[T]oi, tu **fais fleurir** le

The rare transitive-causative usages, as the one illustrated in (50b), are likely to result from the reanalysis of constructions with content accusative, in accordance with the following semantic scenario: *bhūma víśvam puśyati* ‘the earth thrives in everything [what exists on it]’ → ‘the earth makes thrive everything [what exists on it]’.

### 5.3. Middle athematic participles and middle perfects

Labile patterning is also very common for middle athematic participles with the suffix *-āna-*. However, as I argued in Section 2.1, the labile syntax of forms such as *hinvāná-* ‘impelling; impelled’ and *yujāná-* ‘yoking; yoked’ is a direct corollary of their morphological (grammatical) ambiguity. The transitive occurrences of *hinvāná-* belong with the present paradigm, while its intransitive-passive attestations belong to the paradigm of the perfect/stative. Likewise, *yujāná-* is a middle root aorist participle in transitive usages and a medio-passive aorist participle in intransitive-passive usages.

The same holds for the allegedly labile 3rd sg. and pl. middle perfects as well as for the corresponding middle perfect participles. Transitive forms such as *dadhé* (*dhā* ‘put’) (‘has put’) or *yuyujré* (‘have yoked’) should be taken as a 3sg. or 3pl. forms of the middle perfect, as in (5a-b), while passive occurrences (‘is put / has been put’; ‘are yoked / have been yoked’; cf. (5c)) belong with the stative paradigm.

### 5.4. Active perfects

Of more authentic character is the labile patterning of the active perfects. Typical examples are perfects of the verb *vṛdh* ‘grow, increase’.<sup>15</sup> Both active and middle forms of this verb can be employed either intransitively or transitively. For instance, the 3rd person plural active form *vāvṛdhūh* occurs in the *R̥gveda* 6 times in intransitive usages (as in (57a)) and 14 times in transitive-causative usages (as in (57b)) (see Renou 1924; Kümmel 2000: 469ff. for details):

renom (des hommes) comme une floraison (de richesses), ô (dieu qui t’étends) au loin sur les populations, ô Vasu.’ (Renou, 1964 [EVP XIII]: 36; see also Renou 1958: 13). Cf. also the translation offered by Dumont (1948) for (52): ‘... Therefore ... the king does not feed cattle’.

15. The labile syntax of the early Vedic perfect (especially common in the *R̥gveda*) may originate in the predominant intransitivity of the Proto-Indo-European perfect, some

(57) a. (RV 2.34.13)

<i>rudrá</i>	<i>ṛtásya</i>	<i>sádaneṣu</i>	<i>vāvṛdh-uh</i>
Rudra:NOM.PL	law:GEN.SG	residence:LOC.PL	grow:PF-3PL.ACT

‘Rudras **have grown** in the residences of the truth.’

b. (RV 8.6.35)

<i>índram</i>	<i>uktbāni</i>	<i>vāvṛdh-uh</i>
Indra:ACC.SG	hymn:NOM.PL	grow:PF-3PL.ACT

‘The hymns have increased Indra.’

After the Ṛgveda, we observe the decline of the labile syntax. Already in the second most ancient Vedic text, the Atharvaveda, we find very few labile forms. Most of the active perfects which show labile syntax in the Ṛgveda are either attested in intransitive usages only (e.g., (*ā*) *vāvárta* ‘has turned / has made turn’, both intransitive and transitive in the RV, as opposed to AV *-vāvarta* ‘has turned’ (intr.); see Kümmel 2000: 462ff.), or in transitive usages only (RV *mamāda* ‘has rejoiced, has been exhilarated / has exhilarated’ (tr.), as opposed to AV 7.14.4 3sg.subj.act. *mamādat* ‘he should exhilarate’ (transitive); see Kümmel 2000: 356ff.), or do not occur at all (as is the case with RVic *vāvṛdhúh* ‘have grown / have increased’, *rurucúh* ‘have shone / have made shine’).

## 6. DEGRAMMATICALIZATION OF THE MIDDLE IN OLD INDO-ARYAN

To sum up, already in early and, especially, in middle Vedic, the intransitivizing functions of the middle are largely taken over by specialized morphemes (present passive suffix *-yá-*, reflexive pronouns *tanû-* and *ātmán-*, reciprocal adverb *mithás* and preverb *ví-*, etc.), while the autobenefactive meaning proves to be more stable and becomes the main function of the middle diathesis. The stability of the autobenefactive subclass of the functions of the middle diathesis as opposed to the transitivity-changing (intransitivizing) functions, such as passive, reflexive, reciprocal, and anticausative is preserved until the very end of the Vedic period.

The loss of many original functions of the middle and the lexicalization of middle forms suggests that the diathesis opposition, albeit physically preserved in the paradigm, loses a large part of its grammatical content. The Indo-European middle, which is likely to have been employed as a synthetic marker of several intransitive derivations in the proto-language, loses

traces of which can still be found in early Vedic and Homeric Greek; for details, see Kulikov 2003; 2006.

one by one its intransitivizing functions, thus being degrammaticalized. This process is supported by the grammaticalization of several new categories (*-yá*-passives and *-áya*-causatives, reflexives with *ātmán-* and reciprocals with *anyo'nya*); in other words, the **grammaticalization** of new valency-changing categories (as well as new reflexives with *ātmán-* and reciprocals with *anyo'nya*) runs parallel with the **degrammaticalization** of the diathesis (middle/active) opposition. This is an important counter-example against one of the crucial claims of the grammaticalization theory, on the unidirectionality of grammaticalization (see e.g. Heine & Kuteva 2002).

#### 7. CONCLUDING REMARKS: INDO-ARYAN WITHIN AND BEYOND THE INDO-EUROPEAN TYPOLOGICAL CONTEXT

To sum up, we observe three main tendencies in the evolution of the Indo-Aryan syntax, which are partly related to, but not entirely dependent from, each other. The decline of the labile patterning essentially runs parallel with two processes: the rise and development of new valency-changing categories, causatives with the suffix *-áya-* (see Jamison 1983) and passives with the suffix *-yá-* (see Kulikov 2001), which brings the language to a more overt morphological marking of the transitivity oppositions; and (ii) the degrammaticalization of the middle diathesis, which amounts to transferring most functions of the (Proto-)Indo-European middle to specialized markers.

Importantly, these tendencies are not shared with most other branches of Indo-European. It will now be in order to consider the situation in Indo-European in a diachronic typological perspective. On the one hand, several groups of Indo-European, including most Germanic, Romance and Slavic languages, replace the old syncretic marker of the valency-reducing categories, the middle diathesis, with a new one, mostly going back to the Proto-Indo-European reflexive pronoun *\*s(u)e-* (for this issue, see, in particular, Cennamo 1993). On the other hand, a number of Romance and Germanic languages attest the emergence and expansion of labile patterning (which becomes particularly common and productive in English); the expansion of labile verbs is also well-attested in Greek. Furthermore, the Proto-Indo-European causative morpheme *\*-eie-*, still well-attested in Gothic (*jan*-verbs; see e.g. García García 2005) and Old Church Slavonic (*i*-causatives; see Gołąb 1968; Nichols 1993), has left only few traces in modern Germanic and Slavonic languages. This type of evolution, well-attested in the **Western** part of the Indo-European area, might be called '**syncretic**'.

By contrast, several other daughter languages, mostly those which belong to some **Eastern** branches of Indo-European, radically abandon the

syncretic strategy and develop special markers for several intransitive derivations. These include, in particular, Indo-Aryan and Armenian markers of morphological passive going back to Proto-Indo-European suffix *\*-ie/o-*; the Indo-Iranian reflexive pronoun *tanú-* (originally meaning ‘body’) and Indo-Aryan *ātmán-* (← ‘breath’); Indo-Iranian reciprocal pronouns. Furthermore, morphological causatives become quite productive in some Eastern branches,<sup>16</sup> in particular, in Armenian (causative marker *-uc’anem* based on the nasal present derived from a sigmatic aorist; see Kortlandt 1999) and Indo-Iranian (productive morphological causative suffixes *-áya-*, *-aiia-* going back to Proto-Indo-European *\*-eie/o-*).<sup>17</sup> An interesting feature (isogloss) shared by several **Eastern** Indo-European languages of the non-syncretic type, such as Indo-Aryan, Iranian, and Armenian, is the parallel development of the new non-syncretic passive and productive morphological causative. The Proto-Indo-European middle diathesis is degrammaticalized and eventually disappears. The labile syntax, even if attested in some ancient languages of the Eastern branches, tends to disappear in the course of their history. This type can be labelled ‘**antisyncretic**’.

Thus, we observe two basic types of evolution, or two evolutionary types, attested in the history of the system of transitivity oppositions and valency-changing categories in Indo-European: syncretic type found in many Western branches and anti-syncretic type attested at least in some Eastern branches, in particular, in Indo-Aryan.

Typologically, the Eastern type, as attested in Indo-Aryan, shares more features with some non-Indo-European families, such as Turkic or Altaic in general, rather than with the Western Indo-European type, as attested in Germanic or Greek. Like Indo-Aryan, Turkic has productive morphological valency-changing categories, such as causative or reciprocal, and there is some evidence for the decline of labile patterning (still present in Old Turkic) as well as the underdeveloped middle voice, as shown in Table 3.

16. On the corresponding synchronic type, ‘causativizing’ (or ‘transitivizing’) languages, see Nichols et al. 2004.

17. Another important tendency attested in Indo-Iranian is the change from the multiple to the single causative. That is, starting from quite an intricate system of causatives, which includes *-áya*-presents, causatives with nasal affixes, and some other morphological types, Indo-Aryan ends up with the system with clear preponderance of the *-áya*-causatives, which become the only productive causative formation already by the end of the Vedic period. It is interesting to note that the final point of the evolution of system of causative formations from Old Egyptian to Coptic (C. Reintges, p.c.) resembles in several respects the starting point of the evolution of the system of causative oppositions in Indo-Aryan. Apparently, these two language groups represent two opposite evolutionary types as far as the causative system is concerned.

	middle voice	morphological valency- changing categories	labile syntax
East Caucasian	0	+(+)	+(+)
Kartvelian	+	+	0
Egyptian/Coptic	+	+(+)	+
Germanic	++ (new)	-	++
Romance	++ (new)	-	+(+)
Slavic	++ (new)	-	0
Greek	+	0/(+)	++
Indo-Aryan	-	++	-
Turkic	0/-	+(+)	0/-

0 lacking  
 + present  
 ++ increasing (in productivity, frequency etc.)  
 - decreasing/disappearing

Table 3 - Voice and transitivity: diachronic typological features of some language families

The Western type has no such clear non-Indo-European parallels as the Eastern type, although we probably can observe some affinities with such families, as, for instance, Kartvelian or Egyptian.

The origins of these features and the anti-syncretic evolutionary type, in general, instantiated by Indo-Aryan is a difficult problem on its own. It may be (partly) due to the influence of the substrate languages of the Altaic or Dravidian type. These languages could be responsible for some other features of Indo-Aryan as well, in particular, for the dramatic restructuring of the case system, loss of many Proto-Indo-European cases and the emergence of the new, agglutinative, case systems.

## REFERENCES

- ALLAN, Rutger J., 2003, *The middle voice in Ancient Greek: A study in polysemy*, Amsterdam, Gieben.
- BOEDER, Winfried, 1969, "Über die Versionen des georgischen Verbs". *Folia Linguistica* 2: 82-152.
- BOEDER, Winfried, 2005, "The South Caucasian Languages", *Lingua* 115: 5-89.
- CENNAMO, Michela, 1993, *The reanalysis of reflexives: a diachronic perspective*, Napoli, Liguori.
- DELBRÜCK, Berthold, 1888, *Altindische Syntax*, Halle a. S., Verlag der Buchhandlung des Waisenhauses.
- DUMONT, Paul-Émile, 1948, "The Horse-Sacrifice in the Taittirīya-Brāhmaṇa: the eighth and ninth prapāthaka of the third kāṇḍa of the the Taittirīya-Brāhmaṇa with translation". *Proceedings of the American Philosophical Society* 92 (6): 447-503.
- GARCÍA GARCÍA, Luisa, 2005, *Germanische Kausativbildung: Die deverbalen Jan-Verben im Gotischen*, Göttingen, Vandenhoeck & Ruprecht ('Historische Sprachforschung', Ergänzungsheft 45).
- GENIUŠIENĖ, Emma, 1987, *The Typology of Reflexives*, Berlin, Mouton de Gruyter ('Empirical approaches to language typology' 2).
- GOŁĄB, Zbigniew, 1968, The grammar of Slavic causatives. In: Kučera, Henry (ed.), *American Contributions to the 6th International Congress of Slavists*, Vol. I: *Linguistic Contributions*, The Hague, Mouton: 71-95.
- GONDA, Jan, 1979, *The medium in the R̥gveda*, Leiden, Brill ('Orientalia Rheno-Traiectina' 24).
- GOTO, Toshifumi, 1987, *Die "I. Präsensklasse" im Vedischen: Untersuchung der vollstufigen thematischen Wurzelpräsentia*, Wien, Verlag der Österreichischen Akad. der Wiss. ('Österreichische Akad. der Wiss., Philos.-Hist. Kl., Sitzungsberichte' 489; 'Veröffentlichungen der Kommission für Sprachen und Kulturen Südasien' 18). (2., überarbeitete und ergänzte Aufl. 1996).
- HEINE, Bernd / KUTEVA, Tania, 2002, *World lexicon of grammaticalization*, Cambridge, Cambridge University Press.
- HOCK, Hans Henrich, 1981, "Sanskrit causative syntax: a diachronic study". *Studies in the Linguistic Sciences* 11 (2): 9-33.
- JAMISON, Stephanie W., 1983, *Function and form in the -āya-formations of the Rig Veda and Atharva Veda*, Göttingen, Vandenhoeck und Ruprecht ('KZ', Ergänzungsheft 31).
- KORTLANDT, Frederik H.H., 1999, "The Armenian causative". *Annual of Armenian Linguistics* 20: 47-49. [Repr. in: KORTLANDT, F.H.H., *Armeniaca*, Ann Arbor, Caravan Books, 2003].
- KULIKOV, Leonid, 1999, "May he prosper in offspring and wealth: A few jubilee remarks on the typology of labile verbs and Sanskrit *púsyati* 'prosper; makes prosper'". In: RAKHILINA, Ekaterina V. / TESTELETS, Yacov G. (eds), *Tipologija i teorija jazyka: Ot opisaniya k ob"jasneniju. K60-letiju A.E. Kibrika*. [Typology and linguistic theory: From description to explanation. For the 60th birthday of Aleksandr E. Kibrik], Moskva, Jazyki russkoj kul'tury: 224-244.

- KULIKOV, Leonid, 2000, "Vedic causative nasal presents and their thematicization: a functional approach". In: SMITH, John Charles / BENTLEY, Delia (eds.), *Historical linguistics 1995. Selected papers from the 12th International Conference on Historical Linguistics*. Vol. 1: *General issues and non-Germanic Languages*, Amsterdam, Benjamins ('Current Issues in Linguistic Theory' 161): 191-209.
- KULIKOV, Leonid, 2001, *The Vedic -ya-presents*, PhD diss., Leiden University.
- KULIKOV, Leonid, 2003. "The labile syntactic type in a diachronic perspective: The case of Vedic". *SKY Journal of Linguistics* 16: 93-112.
- KULIKOV, Leonid, 2006, "Passive and middle in Indo-European: Reconstructing the early Vedic passive paradigm". In: ABRAHAM, Werner / LEISIÖ, Larisa (eds.), *Passivization and typology: form and function*. Amsterdam: Benjamins ('TSL' 68), 62-81.
- KULIKOV, Leonid, 2007a, "Reciprocal constructions in Vedic". In: NEDJALKOV, Vladimir P. et al. (eds.), *Reciprocal constructions*, Vol. 2, Amsterdam, Benjamins ('TSL' 71): 709-738.
- KULIKOV, Leonid, 2007b, "The reflexive pronouns in Vedic: A diachronic and typological perspective". *Lingua* 117 (8): 1412-1433.
- KULIKOV, Leonid, 2010, "Bridging typology and diachrony: a preliminary questionnaire for a diachronic typological study of voice and valency-changing categories". In: DMITRENKO, Sergej Ju. / VYDRIN, Valentin F. et al. (eds.), *Problemy grammatiki i tipologii: sbornik statej pamjati V. P. Nedjalkova* [Issues in typology and grammar: Memorial volume for V. P. Nedjalkov]. Moscow, Znak, 139-163.
- KULIKOV, Leonid, 2011, "Voice typology". In: SONG, Jae Jung (ed.), *The Oxford Handbook of Linguistic Typology*, Oxford, Oxford University Press, 368-398.
- KUMMEL, Martin, 1996, *Stativ und Passivaorist im Indoiranischen*, Göttingen, Vandenhoeck & Ruprecht ('Historische Sprachforschung' ; Ergänzungsheft 39).
- KUMMEL, Martin, 2000, *Das Perfekt im Indoiranischen*, Wiesbaden, Reichert.
- MACDONELL, Arthur Anthony, 1910, *Vedic grammar*, Strassburg, Trübner ('Grundriss der Indo-Arischen Philologie und Altertumskunde' I, 4).
- NARTEN, Johanna, 1969, "Zum "proterodynamischen" Wurzelpräsen". In: HEESTERMAN, J.C. et al. (eds.), *Pratidānam: Indian, Iranian, and Indo-European studies presented to F.B.J. Kuiper on his sixtieth birthday*, The Hague, Mouton: 9-19. [= NARTEN, Johanna, *Kleine Schriften*, I, Wiesbaden, Reichert, 1995: 97-107].
- NICHOLS, Johanna, 1993, "Transitive and causative in the Slavic lexicon: Evidence from Russian". In: COMRIE, Bernard / POLINSKY, Maria (eds.), *Causatives and Transitivity*, Amsterdam, Benjamins ('SLCS' 23): 69-86.
- NICHOLS, Johanna / PETERSON, David A. / BARNES, Jonathan, 2004, "Transitivizing and detransitivizing languages". *Linguistic Typology* 8: 149-211.
- RENOU, Louis, 1924, "Védique *vāvṛdhé*, *vāvṛdhúh*". *BSL* 24: 185-188.
- RENOU, Louis, 1964, *Études védiques et pāninéennes* [EVP], Vol. XIII, Paris, Boccard ('PICP' 22).
- RENOU, Louis, 1958, *Études sur le vocabulaire du Rgveda*, Première série, Pondichéry, Institut français d'indologie ('PIFI' 5).
- SPEIJER [Speyer], Jacob S., 1896, *Vedische und Sanskrit-Syntax*, Strassburg, Trübner ('Grundriss der Indo-Arischen Philologie und Altertumskunde' I, 6).

- 
- THIEME, Paul, 1929, *Das Plusquamperfektum im Veda*, Göttingen, Vandenhoeck & Ruprecht ('KZ', Ergänzungsheft 7).
- WHITNEY, William Dwight, 1885, *The roots, verb-forms, and primary derivatives of the Sanskrit language*. Leipzig, Breitkopf and Härtel.
- WITZEL, Michael, 1995, "Early Indian history: linguistic and textual parameters". In: ERDOSY, George (ed.), *Language, material culture and ethnicity. The Indo-Aryans of ancient South Asia*, Berlin / New York, de Gruyter ('Indian Philology and South Asian Studies' 1): 85-125.

