

## **On secondary predicates in Vedic Sanskrit Syntax and semantics**

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**Abstract:** This paper explores the morpho-syntactic and semantic properties of secondary predicates in Vedic Sanskrit based on a corpus of about 1.500 sentences collected from the *Rigveda* and various prose texts. The features discussed include, among others, possible combinations with main predicates and controllers, word order, and semantic range of secondary predicates. Regarding word order, two tendencies stand out: edge-placement, possibly in connection with heaviness, and post-controller position, especially in Vedic prose, with exceptions being at least partly due to information structure. The semantic range expressed by secondary predicates is very broad with many expressions located in a continuum between participant and event orientation, putting some of them semantically into the vicinity of event-oriented adverbials. This study is situated within an overall research on alignment change in Indo-Aryan: our hypothesis is that the main-clause use of the past passive participles or *ta*-forms, i.e. the forms that in later historical stages trigger ergative alignment, may have originated in subordinate usages as secondary predicates.

**Keywords:** Vedic Sanskrit, secondary predicates, noun-adjective distinction, form-function mapping, flexible word order, ergativity, alignment change.

## 1 Introduction<sup>1</sup>

In Indo-European linguistics and especially in the study of Vedic Sanskrit, secondary predicates have until recently not been studied exhaustively. After some short remarks by Delbrück (1878) on the language of Vedic prose there had been a long gap in the treatment of this topic. In recent years, though, the study of secondary predicates in Indo-European languages has seen a surge of interest, often building on the works of Schultze-Berndt & Himmelmann (2004) and Himmelmann & Schultze-Berndt (2005, eds.), who laid important theoretical foundations and offered a broad typological overview. Papers on secondary predicates in various Indo-European languages have been published within various theoretical frameworks, e.g., on Hittite (Rieken 2017), New Testament Greek (Haug 2011), Young Avestan (Sommer 2017) and Vedic Sanskrit (Keydana 2000, Cantera 2005, Widmer & Scarlata 2017).<sup>2</sup>

This paper builds on Casaretto & Reinöhl (*subm.*) which deals with the challenge of identifying discourse functions in a language no longer spoken and where formal clues are mostly absent due to its ‘non-configurational’ characteristics (e.g., flexible word order of constituents, discontinuous nominal expressions, null anaphora).<sup>3</sup> The authors argue that secondary predicates can nevertheless often be delimited from other functions connected

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<sup>1</sup> This research has been conducted within the project “B 03: Agent prominence and the diachrony of predication in Indo-Aryan” in the Collaborative Research Centre 1252 *Prominence in Language* (DFG, German Science Foundation). Our focus lies on the early stages of the development of participial forms with an originally nominal functional range into main clause nuclei over the course of Indo-Aryan history. Many thanks to Salvatore Scarlata and Paul Widmer (Zürich) and Uta Reinöhl and Simon Fries (Köln), who commented on earlier versions of this paper, and also to two anonymous reviewers for their valuable and helpful comments.

<sup>2</sup> Cp. also on Latin Heberlein (1996), Burkard & Schauer (2012: 354-359), on Ancient Greek Crespo, Conti & Maquieira (2003: 28), Bakker (2009: 217), also Conti (*to appear*) on Gr. ἐχών ‘voluntary, deliberate’, and on compounds in the *Rigveda* Scarlata & Widmer (*to appear*) and Scarlata & Widmer (*subm.*). I would like to cordially thank these researchers for sending me their unpublished manuscripts.

<sup>3</sup> I use the term ‘non-configurational’ here as a short-hand for the above-mentioned characteristics without any of the theoretical implications that were traditionally attached to it (cp. on this also Reinöhl 2020). While the characteristics as such stand,

with the nominal domain (i.e. attributes, appositions, referring expressions). As a starting point, they build on the definition that secondary predicates are participant-oriented expressions describing a state or condition of a referent that overlaps with the temporal frame set by the main predicate. Accordingly, typical examples encode stage-level concepts, such as *angry* or *naked* (e.g. *he left the room **angry/naked***). Individual-level concepts, on the other hand, describe more permanent features of the referent like body size or eye color and therefore are consistent with an analysis as (restricting) attribute or apposition (Himmelfmann & Schultze-Berndt 2005: esp. pp. 1-15). Syntactically speaking, secondary predicates are adjuncts that function as a second predication beside the main predicate while being controlled by another constituent (in the following: controller, cp. Corbett 2006: 4, 35-39), typically an argument. In Indo-European languages, the morphology of secondary predicates is nominal or – to a lesser degree – pronominal.

Since stage-level readings like the just mentioned *angry* or *naked* may of course also occur with other nominal functions, e.g., attributes, it follows that a purely semantic definition is not sufficient to identify secondary predicates. Especially nominals denoting emotional or physical states are frequently used in both readings, and often only the context may decide which reading is more probable. While in languages like English, word order is decisive, cp. *The **angry/sick** patient left the hospital* (attribute) vs. *The patient left the hospital **angry/sick*** (secondary predicate)<sup>4</sup>, this criterion will obviously not work in a flexible word order language like Vedic Sanskrit. In the following section, I will therefore briefly outline our methodological approach.

### 1.1 How to identify secondary predicates in Vedic Sanskrit

In the literature, it is generally assumed that in the absence of formal marking, only the context in which an expression occurs enables us to identify its

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it is clear that they are all governed by certain factors, in particular information structure (see, e.g., Lowe 2015: 37-46 with references on word order; Reinöhl 2020 on discontinuity). For the syntax of peripheral arguments and adjuncts, though, much work remains to be done. In the remainder of this paper, I will use the more neutral term ‘flexible word order language’ (see also Reinöhl 2020).

<sup>4</sup> As opposed to the *English patient*, where only individual-level reading, i.e. as an attribute, is possible.

function.<sup>5</sup> In Casaretto & Reinöhl (*subm.*), we have tried to narrow this down a bit by suggesting several clues out of the syntactic and pragmatic context: One of these clues is the embedding of a secondary predicate in one or both parts of a relative-correlative complex clause: If the form is used for expressing the condition of a participant while he undergoes a certain event, this strongly suggests a reading as a secondary predicate. Similarly, temporal or manner adverbs (e.g. *adyá* ‘today’, *sadyáh* ‘on the same day’) may emphasize the temporal overlap with the main predicate. Thirdly, a special syntactic constellation of matrix verb in the second person without overt agent is another important clue (more on this in 4.5.1 below). In the majority of cases, however, we can only rely on more general contextual information and textual coherence, as has already been pointed out by other researchers. Still, the analysis always has to be consistent with a stage-level interpretation, i.e. this reading is a necessary, if not sufficient prerequisite for analysing a form as secondary predicate. In the following example, the exocentric compound *víṣṇu-mukha-* ‘having Viṣṇu in front’ refers to a very specific situation, i.e. that of Viṣṇu leading the gods to the heavenly world, and not to a general habit of this god – based on our knowledge of the Vedic religion:

(1)<sup>6</sup>

<b><i>víṣṇumukhā</i></b>	<i>vái</i>	<i>devā́</i>	<i>ásurān</i>
Viṣṇu_in_front.NOM.PL.M	PART	god.NOM.PL.M	demon.ACC.PL.M
<i>ebhyó</i>	<i>lokébhyaḥ</i>	<i>prañúdyā</i>	<i>svargám</i>
DEM.ABL.PL.M	world.ABL.PL.M	expel.CVB	heaven.ACC.SG.M
<i>lokám</i>	<i>āyan</i>		
world.ACC.SG.M	go.IMPF.3PL		

‘(Having) Viṣṇu at the front, the gods, having expelled the demons from these worlds, went to the heavenly world.’ (MS I 4,7(2))

Note that if this constellation had been a permanent characteristic of the formation of the gods, i.e. consistent with an individual-level reading, then this

<sup>5</sup> Cp. Sommer (2017: 425) on secondary predicates in Avestan and Lowe (2015: 87) on attributes and appositions in the *Rigveda*.

<sup>6</sup> The glossing abbreviations follow the Leipzig Glossing Rules with the following additions: ACT=active, AOR=aorist, INJ=injunctive, IMPF=imperfect, LP=local particle, MID=middle, OPT=optative, PART=particle, PERS=personal pronoun, PPP=perfect passive participle.

would rather suggest an interpretation as apposition or – depending on the context – even as an attribute.

However, there remain numerous examples that cannot be straightforwardly assigned to a particular function, as they also allow for a different functional interpretation. Especially the differentiation of secondary predicates from stage-level attributes like *The **angry** patient left the hospital* as well as from loose appositions remains a problem. This can be illustrated by taking a short look at appositions: While narrow appositions in phrases such as ***President** Washington* are considered to be co-referential and typically encode a particular role or title of a person, loose appositions such as *George Washington, **the first president of the United States*** give additional descriptions about a referent that is already identifiable from the context. Loose appositions therefore act as non-restrictive modifiers as opposed to attributes which are (mostly) restrictive and narrow appositions, which can be either. Structurally, the latter are considered to form one complex nominal expression with the entity-referring nominal, while loose appositions involve separate nominal expressions. They may also constitute a whole string of expressions modifying the same noun (cp. Lowe 2015: 87 on RV 2,27,3). In our Vedic prose corpus, we find mostly narrow appositions with adjacent word order, while in the Rigveda, loose appositions in adjacent or non-adjacent position with regard to their modified noun are extremely frequent. Delimiting the latter from secondary predicates can be difficult, if the context does not favour either a stage-level or an individual-level interpretation (cp. on this also Casaretto & Reinöhl, *subm.*). However, our functional approach allows to identify about 280 cases in our corpus where the context and the other clues mentioned above clearly suggest a usage as a secondary predicate. It is these comparatively straightforward cases which form the foundation for the present paper and which enable us to discuss the syntactic and semantic properties of secondary predicates.

The central result of this study is that, despite the lack of a clear mapping of function onto form, it is possible to identify several strong formal correlates. Based on the functional understanding of what it takes to form a secondary predicate and starting with the clear cases, default mappings onto formal structure can be identified including word order preferences and preferences with regard to the types of word formation used for specific semantic functions (see sections 4.3 and 5 below).

## 1.2 Subtypes: Depictives, circumstantials, and resultatives

Apart from secondary predicates of the type mentioned so far, also called depictives, there are two other possible subtypes: resultatives and circumstantials. Depictives are by far the most common type of secondary predicates, while circumstantials and resultatives are either rarely attested or not easily identifiable in our corpus.

Resultatives express a state that has been reached after the event encoded by the main verb has been accomplished, e.g. *He wiped the counter **clean*** or *The pond froze **solid***.<sup>7</sup> Possible examples from Vedic are

(2)

<i>utá</i>	<i>médham</i>	<i>śrtapākaṃ</i>	<i>pacantu</i>
and	ritual_offering.ACC.SG.M	cooked.ACC.SG.M	cook.IMP.3PL

‘And let them cook the ritual offering **(until it’s) done**.’ (RV 1,162,10d, example taken from Sommer 2017: 429)

(3)

<i>dāḍṛhāṇó</i>	<i>vájram</i>	<i>índro</i>	<i>gábhastyoḥ</i>
hold.PTCP.PROF.MID.NOM.SG.M	Vajra.ACC.SG.M	Indra.NOM.SG.M	hand.LOC.DU.M

<i>kṣádmeva</i> <sup>8</sup>	<i>tigmám ...</i>	<i>sám</i>	<i>śyad</i>
[kṣádma	<i>tigmám ...</i>	<i>sám</i>	<i>śyat]</i>
knife.ACC.SG.N	like	sharp.ACC.SG.N	LP
			hone.PRS.INJ.3SG

‘Holding the Vajra in (his) hands, Indra honed (it) **sharp** like a carving knife’ (RV 1,130,4ab, example taken from Keydana 2000: 371)<sup>9</sup>

In the corpus collected for this study, the only examples possibly belonging to this category have *kar* ‘make’ as matrix verb, cp. for instance

<sup>7</sup> Cp. on resultatives in European languages recently Riaubienè (2015), on English resultatives Croft (2012).

<sup>8</sup> Throughout this paper, Sandhi phenomena have been retained in the examples except for those cases where word boundaries are blurred. There, a second line without Sandhi has been inserted.

<sup>9</sup> Here, attributive function is also possible, i.e. ‘like a sharp carving knife’, cp. on this Scarlata & Widmer (*subm.*, 6.4), where also other examples with possibly resultative notion are discussed.

(4)

<i>tā</i>	<i>ādyā</i>	<i>akṛta</i>
DEM.ACC.PL.F	edible.ACC.PL.F	make.AOR.MID.3SG
'He made them [i.e. <i>prajā</i> - 'offspring'] <b>edible.</b> ' (MS I 5,10(3), repeated several times)		

In ex. (4), there seems to be a particularly close semantic tie between matrix verb and the nominal, which is reminiscent of complex predicates like English *John made her **happy***, where the predicative complement, *happy*, is obligatory in order to complete the sentence (English example discussed in Riaubienė 2015: 7). Precisely because of this close semantic relation it is controversial whether resultatives actually are a subtype of secondary predicates or whether they are a completely separate type of adjunct. In some languages, they are expressed by formal means different from secondary predicates, e.g. by complex predicates (Himmelmann & Schultze-Berndt 2005: 4, also Simpson in the same volume, pp. 83-85, on Warlpiri, where resultatives are encoded by nominals with special affixes). It is therefore not certain whether *ādyā*- 'edible' in the example above should be classified as resultative or as complex predicate (cp. on this also Casaretto & Reinöhl, *subm.*).

Circumstantials differ from depictives in that there is not only a temporal overlap but also a conditional or concessive relation between the two predicates, e.g. *I can't work **hungry*** or ***even hungry** I can still work* (Himmelmann & Schultze-Berndt 2005: 15-19). Although this sounds like a straight-forward criterion, many Vedic examples lend themselves to various readings, and especially the conditional reading is frequently possible as well (cp. also the examples given in Scarlata & Widmer, *subm.*, 6.3), cp. the following example:

(5)

<i>īndrā</i>		<i>yāhi</i>
[īndra	<i>ā</i>	<i>yāhi]</i>
Indra.VOC.SG.M	LP	drive.IMP.2SG
<i>dhiyēśitō</i>		<i>vīprajūtaḥ</i>
[ <i>dhiyā</i>	<i>iṣitāḥ</i>	<i>vīprajūtaḥ]</i>
thought.INS.SG.F	urge_on.PPP.NOM.SG.M	sped_by_poets.NOM.SG.M
<i>sutāvataḥ</i>		<i>ūpa</i>
provided_with_Soma.GEN.SG.M	LP	
<i>brāhmāṇi</i>	<i>vāghātaḥ</i>	
sacred_formulation.ACC.PL.N	cantor.GEN.SG.M	

‘O Indra, drive here! – **roused by our insight, sped by our inspired poets**, to the sacred formulations of the cantor who has the pressed soma.’ (RV 1,3,5ab, Jamison & Brereton 2014, similarly RV 1,33,14c *śaphācyuto reṇúr nakṣata dyām* ‘**stirred up by hooves**, the dust reached heaven’)

Here, *iṣitáh* might be interpreted as depictive (‘having been roused’) or as circumstantial (‘because you have been roused’).

Himmelmann & Schultze-Berndt (2005: 17-18) suggest the scope of negation as possible criterion for identifying circumstantials, since they are non-focal and thus remain outside the scope of the negation (see also Conti, *to appear*, who uses this criterion on Gr. ἐξών). Our corpus only has two examples with negation, though, both from the *Śatapatha Brāhmaṇa*. Regarding this criterion they would both qualify as circumstantials, cp.

(6)

<i>nàivāhaṃ</i>			<i>tām</i>
[ná	evá	ahám	tām]
NEG	PART	PERS.NOM.1SG	DEM.ACC.SG.M

<i>jīvantam</i>	<i>hāsyāmi</i>	
[jīvantam	hāsyāmi	íti]
live.PTCP.PRS.ACT.ACC.SG.M	leave.FUT.1SG	QUOT

‘I will not leave him **while he lives**.’ (ŚB 4,1,5,9; cp. also ŚB 1,8,1,6 [ex. 28])

It is possible and quite probable that more of the examples analysed as depictives in this paper actually belong to the category of circumstantials, but due to the lack of clear examples I will refrain from a decisive delimitation of both functions for now and use the terms ‘depictives’ and ‘secondary predicates’ synonymously for all expressions that are not resultatives.

This paper is structured as follows: After introducing our corpus in section 2, previous treatments of Vedic secondary predicates are discussed in section 3. The bulk of this paper is formed by sections 4 and 5: Section 4 treats various syntactic features of secondary predicates, like their combination with main predicates (4.1), the case form of the controller (4.2), word order (4.3), word classes and construction types (4.4), and morphological marking (4.5). Section 5 gives an overview over the semantic range attested with secondary predicates and discusses their relation to event-oriented adjuncts. The conclusion in section 6 sums up our findings and contextualizes our study within our overall research on alignment change in Indo-Aryan.



## 2 Corpus

The corpus this analysis is based on consists of 1.517 sentences collected from various Vedic texts, starting with the *Rigveda* (315 sentences, all containing participles, from RV 1,1,1-1,61,6 and 2,1,1-2,15,7).<sup>10</sup> In order to include a diachronic perspective in our analysis and for a wider perspective on word order, we have enlarged our corpus substantially by some prose texts, namely the *Maitrāyaṇī Samhitā* (730 sentences: MS I 4,5(1) - I 5,13(1)), the *Jaiminīya Brāhmaṇa* (225 sentences: JB 1,5-7; 1,11-13; 1,22-25; 1,28; 1,68-69; 1,73; 1,85; 1,87; 1,89; 1,98-99), and the *Śatapatha Brāhmaṇa* (247 sentences: ŚB 1,8,1,1-11; 4,1,3,1-16; 4,1,5,1-16).<sup>11</sup> All sentences are morphologically glossed<sup>12</sup> and annotated for grammatical roles and animacy, based on the GRAID schema (Haig & Schnell 2011).<sup>13</sup>

Due to the restrictions mentioned in the previous section, precise numbers for the different syntactic functions are hard to provide. Still, we count about 280 possible candidates for secondary predicates in our corpus. Their distribution is uneven, though, with the majority of them found in the *Rigveda* where 34% of the sentences contain one – or frequently more than one – secondary predicate (145 attestations in all). The other texts range between 13% (*Jaiminīya Brāhmaṇa*, 34 attestations) and 8% (*Maitrāyaṇī Samhitā* with 75 attestations and *Śatapatha Brāhmaṇa* with 28 attestations).

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<sup>10</sup> By selecting a corpus from book I and II we see evidence from different chronological strata of the *Rigveda*. While it would of course be preferable to include more material and also other books, we need to postpone this to a later date.

<sup>11</sup> For the *Rigveda* edition cp. van Nooten & Holland (1994), for the *Maitrāyaṇī Samhitā* von Schroeder (1881-1886), for the *Jaiminīya Brāhmaṇa* Caland (1919), for the *Śatapatha Brāhmaṇa* Weber (1855). The *Rigveda* translations take into account Jamison & Brereton (2014) and Geldner 2003 [1951]. For the *Maitrāyaṇī Samhitā* translations cp. Amano (2009), for the *Jaiminīya Brāhmaṇa* Caland (1919), and for the *Śatapatha Brāhmaṇa* Hettrich (1988).

<sup>12</sup> The prose glosses are our own. For the *Rigveda* glosses cp. the web-based *VedaWeb* research platform, an online infrastructure for the linguistic study of Indo-Aryan texts currently developed at the University of Cologne. A beta version is already accessible ([vedaweb.uni-koeln.de](http://vedaweb.uni-koeln.de)).

<sup>13</sup> For our research purposes, we have added certain formal and functional categories to the basic GRAID annotation set regarding sub-types of participles and their various syntactic uses.

It is important to bear in mind that the different percentages of the *Rigveda* and the prose texts respectively have two origins: Firstly, for research reasons, we have taken only those sentences of the *Rigveda* that contain participles, while we have collated cohesive text paragraphs from the prose texts. Thus, our data is skewed towards a preponderance of participles used as secondary predicates, and it is not possible to directly compare the numbers given for the *Rigveda* with those given for the prose texts. Still, even looking only at the prose texts, there are numerous examples of participles in this function, so despite the bias of our corpus the tendency for participles to be used as secondary predicates is confirmed. Secondly, one has to bear in mind genre effects: The highly stylized language of the *Rigveda* is characterized, among other features, by poetic descriptions of the various deeds of the Vedic gods. These are frequently expressed by nominals functioning as appositions, attributes or secondary predicates, all linked by agreement to another nominal constituent.<sup>14</sup> The style of the Vedic prose, on the other hand, is much simpler.<sup>15</sup> This holds especially for the non-narrative *Maitrāyaṇī Samhitā*-passages where sentences consisting of subject and nominal predicate (with or without overt copula) abound, cp. the following two examples from the *Rigveda* and the *Maitrāyaṇī Samhitā*, respectively, as typical representatives of their genre:

(7) RV 1,1,7

<i>úpa</i>	<i>tvāgne</i>		<i>divé-dive</i>
[úpa	tvā	agne	divé-dive]
LP	PERS.ACC.2SG	Agni.VOC.SG.M	daily
<i>dóṣāvastar</i>		<i>dhiyá</i>	<i>vayám</i>
evening_illuminator.VOC.SG.M		insight.INS.SG.F	PERS.NOM.1PL
<i>námo</i>	<i>bháranta</i>		
homage.ACC.SG.N	bring.PTCP.PRS.ACT.NOM.PL.M		
<i>émasi</i>			
[á	imasi]		
LP	go.PRS.1PL		

‘We approach you, o Agni, illuminator in the evening, every day with our insight, bringing homage.’ (Jamison & Brereton 2014)

<sup>14</sup> Following Corbett (2006, esp. pp. 5-7) I prefer “agreement” instead of “concord” as term irrespective of whether we are dealing with the nominal or verbal domain.

<sup>15</sup> Cp. Lowe (2015: 37<sup>45</sup>, with references) on the possible artificiality of the language of Vedic prose.

(8) MS I 4,5(4)

<i>agnérvā</i>		<i>eṣá</i>	<i>yógaḥ</i>
[agnéḥ]	vái	eṣáh	yógaḥ]
Agni.GEN.SG.M	PART	DEM.NOM.SG.M	harnessing.NOM.SG.M
'This is the harnessing of Agni.'			

Ex. (7) contains a loose apposition (*dóṣāvastar* 'illuminator in the evening', modifying the vocative *agne* 'Agni', cp. similarly also in RV 4,4,9; 7,15,15) and a secondary predicate (*námo bhárantaḥ* 'bringing homage', controlled by *vayám* 'we'). There is no finite verb in the *Maitrāyaṇī Saṁhitā*-example (8), as the copula may be omitted, and the noun in the nominative (*yógaḥ* 'harnessing') functions as a nominal predicate.

### 3 Previous treatments of secondary predicates in Vedic Sanskrit

Until about 20 years ago, Delbrück's (1878) brief remarks were the most detailed ones on secondary predicates in Vedic Sanskrit, although not using this terminology. He writes on p. 40 on the use of participles in the *Satapatha Brāhmaṇa*:

"Das Participium steht hinter dem Substantiv. ... Zum Beispiel ...: *yáthedām paśávo yuktá manuṣyèbhyo váhanty, evaṁ cándāṁsi yuktáni devébhyo yajñám vahanti* wie das Zugvieh, **wenn es angeschirrt ist**, den Menschen etwas fährt, so fahren die Metra, **angeschirrt**, zu den Göttern das Opfer hin 1,8,2,8 ... In diesen Sätzen, die sich leicht vermehren lassen, erfüllt das Participium seine eigentliche Bestimmung, einen Nebenvorgang auszudrücken." (Delbrück 1878: 40, highlighting added)<sup>16</sup>

Delbrück connects here the "proper use" of participles – to express an "accompanying" or "side event" – with a particular syntactic position, namely that of following the participant in question. Despite Delbrück's choice of words in speaking of a side event – which would rather suggest adverbial function word – the examples he gives do not so much express side *events*,

<sup>16</sup> "The participle stands after the noun. ... e.g. ...: *yáthedām paśávo yuktá manuṣyèbhyo váhanty, evaṁ cándāṁsi yuktáni devébhyo yajñám vahanti* 'Just like cattle, **when yoked**, drives (sth.) to men, so the metres, **when yoked**, drive the sacrifice to the gods.' In these sentences, to which more can be added easily, the participle fulfils its proper function, i.e. the expression of a side event." [A.C.]