

# Annotation Guidelines for the Vedic Treebank

Sven Sellmer, Oliver Hellwig,  
Erica Biagetti, Salvatore Scarlata,  
Elia Ackermann, Paul Widmer

v3.0 – January 18, 2022

This document contains annotation decisions and examples for the Vedic Treebank (Hellwig et al. 2020). It is conceived as a *vademecum* for future annotators as well as revisors, but also as an entry point and reference for whomever might want to consult our data.

The brief overview of Universal Dependencies in Section 1 maps UD types to the most typical cases found in our data. Section 2 takes the opposite approach: Starting from linguistic constructions found in our texts, it explains which UD structures we used for annotating them.

Expressions of the form  $A \leftarrow \text{obj} \leftarrow B$  indicate that A is dependent from B, and their syntactic relation is *obj*. In this version we introduce sublabels – these are all optional and primarily meant to be helpful for the annotators to adapt to the usage of the main labels used in UD, cf. Section 1.

For the sake of simplicity, *sandhi* phenomena in the examples are resolved.

Glosses used:

Abbreviations of text names: **AB**: Aitareya-Brāhmaṇa, **AVŚ**: Atharva-Veda-Saṃhitā of the Śaunakas, **AśvGS**: Āśvalāyana-Gṛhya-Sūtra, **BĀU**: Bṛhadāraṇyaka Upaniṣad, **MBh**: Mahābhārata, **MS**: Maytrāyāṇī-Saṃhitā, **RV**: Ṛg-Veda-Saṃhitā, **Suśrutasamhitā**: Suśruta-Saṃhitā, **TS**: Taittirīyā-Saṃhitā, **ŚB(M)**: Śatapatha-Brāhmaṇa of the Madhyamīdinas

# Contents

<b>1</b>	<b>UD → Vedic Sanskrit</b>	<b>4</b>
<b>2</b>	<b>Vedic Sanskrit → relation</b>	<b>10</b>
2.1	Absolutive . . . . .	10
2.2	Accusative . . . . .	10
2.3	Adverbial clauses . . . . .	10
2.3.1	Basic annotation . . . . .	10
2.3.2	Adverbial similative clauses . . . . .	11
2.3.3	Absolutives . . . . .	11
2.3.4	Event nouns . . . . .	12
2.3.5	Locativus absolutus . . . . .	12
2.4	Appositions . . . . .	12
2.5	Auxiliaries . . . . .	14
2.6	Comparison . . . . .	16
2.6.1	Comparison with gradation . . . . .	17
2.6.2	Equative and similative constructions . . . . .	18
2.7	Compounds . . . . .	21
2.7.1	Inner structure . . . . .	21
2.7.2	Connection with other words . . . . .	25
2.7.3	<i>Dvandvas</i> and other copulative compounds . . . . .	25
2.7.4	<i>Bahuvrīhi</i> compounds . . . . .	26
2.7.5	<i>Āmreḍitas</i> . . . . .	26
2.8	Coordination . . . . .	27
2.9	Copular clauses . . . . .	28
2.10	Dative . . . . .	29
2.11	Direct speech . . . . .	30
2.12	Disjunct nominals . . . . .	33
2.13	Ditransitive constructions . . . . .	34
2.14	Double-accusative constructions . . . . .	36
2.15	Ellipsis . . . . .	37
2.15.1	Elision in nominals . . . . .	38
2.15.2	Elision of verbs or other predicates . . . . .	38
2.15.3	Comparisons . . . . .	40
2.15.4	Complex cases . . . . .	41
2.16	Indefinite quantifiers . . . . .	42
2.17	“Infinitives” and converbal event nouns . . . . .	43
2.17.1	Converbs of purpose . . . . .	43
2.17.2	Infinitives . . . . .	43
2.17.3	Annotation tips . . . . .	45
2.18	Interjections . . . . .	45
2.19	Locative . . . . .	45

2.20	Modal verbs . . . . .	47
2.20.1	Modals of possibility . . . . .	47
2.20.2	Modals of necessity or obligation . . . . .	48
2.21	Names . . . . .	48
2.22	Numerals . . . . .	48
2.23	Particles . . . . .	49
2.23.1	Negation particles . . . . .	49
2.23.2	Quotative particle . . . . .	49
2.23.3	Interrogative particles . . . . .	50
2.23.4	Particles with scope over words or phrases . . . . .	50
2.23.5	Particles with scope over clauses and sentences . . . . .	50
2.23.6	Particles which take or can take first position in a clause or sentence . . . . .	51
2.23.7	Varia . . . . .	51
2.23.8	Particle chains . . . . .	51
2.24	Prepositions and preverbs . . . . .	51
2.25	Pronouns . . . . .	52
2.25.1	Adverbial usage of pronominal forms . . . . .	54
2.25.2	Pronominal possessors . . . . .	54
2.25.3	The so-called <i>sa-figé</i> . . . . .	55
2.26	Proper names . . . . .	55
2.27	Relative clauses . . . . .	57
2.27.1	Relative clauses with nominals as heads . . . . .	57
2.27.2	Headless relative clauses . . . . .	58
2.27.3	Correlative constructions . . . . .	59
2.27.4	Moods in relative clauses . . . . .	62
2.28	Repeated word forms . . . . .	62
2.29	Secondary predication . . . . .	62
2.30	Subject . . . . .	65
2.31	Transitive constructions . . . . .	66
2.32	Vocative . . . . .	67
<b>Concept Index</b>		<b>69</b>
<b>Index of Relations</b>		<b>72</b>
<b>Index of Vedic Sanskrit Words</b>		<b>73</b>
<b>Index of Cited Passages</b>		<b>76</b>

# 1 UD → Vedic Sanskrit

The following table shows the labels used for our annotations arranged as per [Universal Dependency Relations](#). The labels in brackets were not used.

	NOMINALS	CLAUSES	MODIFIERS	FUNCTORS
CORE ARGUMENTS	nsubj obj iobj	csubj ccomp xcomp		
NON-CORE DEPENDENTS	obl vocative [expl] dislocated	advcl	advmod discourse	aux cop mark
NOMINAL DEPENDENTS	nmod appos nummod	acl	amod	det [clf] case
COORDINATION	MULTIWORD EXPR.	LOOSE	SPECIAL	OTHER
conj cc	fixed flat compound	[list] parataxis	orphan [goeswith] [reparandum]	[punct] root [dep]

## Alphabetical listing of the labels used

Definitions given in quotes in this section are taken from the [UD guidelines](#), if not mentioned otherwise.

**acl** marks the “clausal modifier of a noun” such as relative clauses, participial clauses, exocentric compounds as well as depictive secondary predicates and content clauses. N.B.: If the referent is not overtly expressed or if the clausal modifier entails conditional aspects, the clausal modifier is linked to the predicate with [advcl](#) (see Sec. 2.27).

*Specifying sublabels:*

**:attr** participles and exocentric compounds used as attributes, cf. e.g. Exx. (26), (4), (64), (101).

**:cont** content clauses, see Ex. (117).

**:crel** is used for correlative constructions with “a subtype of adjoined relative clauses: specifically those that are left-adjoined and have a nominal phrase in the adjoined clause that is co-referent with a nominal phrase in the main clause. The former NP is marked with (*or sometimes substituted by*) either a relative clause marker *or an interrogative*, and the correlated NP in the main clause is marked by an anaphoric marker of some sort, commonly a demonstrative.” (Hendery 2012, p. 18) – N.B.: The options highlighted by us are not considered. See Sec. 2.27.3 with Exx. (111), (112).

**:dpct** depictives; cf. e.g. Exx. (122), (123), and (26) for a depictive in a similitive construction.

**:pred** can be used instead of **amod:pred** (q.v.) in *Bahuvrīhis* when the first member is complex, see Ex. (32).

**:ptcp** participles proper, i.e. used as secondary predicates (incl. *to*-adjectives); cf. e.g. Exx. (120), (121), (123).

**:rel** basically all relative clauses, see Sec. 2.27, and *ibidem* also for the exceptions mentioned above *sub acl* and **:crel**.

---

**advcl** “modifies a verb or other predicate (adjective, etc.), as a modifier not as a core complement. This includes temporal, consecutive, conditional, purpose clauses, etc. The dependent must be clausal”. See Sec. 2.3 on various types of adverbial clauses.

*Specifying sublabels:*

Note that many of the following functions may be expressed with indefinite expressions, i.e. with event nouns in oblique cases or participant-oriented depictives, i.e. with participles (65a) or with exocentric compounds (73), see also Sec. 2.7. The difference between the sublabels following below is often not clearly demarkable, cf. e.g. Ex. (3), where conditional, causal, temporal readings are likewise possible.

**:advers** (‘whereas’), cf. Hettrich 1988, 423ff.

**:caus** (‘because’), cf. Hettrich 1988, 413ff., Ex. (98).

**:cond** (‘if’), cf. Hettrich 1988, *passim*, Ex. (119).

**:concess** (‘though’), cf. Hettrich 1988, 369ff.

**:consec** (‘so that’), missing in the RV, thus Hettrich 1988, *passim*, but clearly documented in prose text, cf. Delbrück 1888, p. 329.

**:fin** final expressions and clauses, Hettrich 1988, 386ff., see Sec. 2.17.1.

**:dpct** relative clauses modifying a covert referent, Ex. (109), cf. also the notes following Ex. (108).

**:local** (‘where’), Hettrich 1988, 303ff., Ex. (1).

**:manner** (‘like’), cf. Hettrich 1988, 262ff. Ex. (2).

**:temp** (‘when’), cf. Hettrich 1988, 410ff. and e.g. with the *genetivus/locativus absolutus*, Ex. (5) or with absolutives, Ex. (4).

---

**advmod** “(non-clausal) adverb or adverbial phrase that serves to modify a predicate or a modifier word”. E.g.: adverbs (*adyá* ‘today’), pronominal adverbs (*tásmā* ‘therefore’); some prefixes used in compounds (Sec. 2.7.1), negations, and preverbs (Sec. 2.24). *Specifying sublabels:*

**:pred** for the inner relation in *Bahuvrīhis* with adverbial first members; see Sec. 2.7.1, p. 22.

---

**amod** is used for adjectives: *daivena* ← **amod** ← *manasā*; also see Sec. 2.29.

*Specifying sublabels:*

**:pred** for the inner relation in *Bahuvrīhis* with adjectival first members; see Sec. 2.7.1, p. 22. See also above **acl:pred**.

---

**appos** Following UD we use the label **appos** solely for close appositions where a (generic) modifying nominal immediately follows the modified noun, e.g. *sóma-* → **appos** → *rājān-* ‘King Soma’. For all other cases, i.e. where the apposition does not immediately follow or where it is preposed, we use **nmod:appos**, e.g. *rājān* ← **nmod:appos** ← *vāruṇa* ‘King Varuṇa’. See Sec. 2.4.

---

**aux** marks an auxiliary; see Sec. 2.5.

---

**case** “used for any case-marking element which is treated as a separate syntactic word (including prepositions, postpositions, and clitic case markers). Case-marking elements are treated as dependents of the noun they attach to or introduce.” – Applied to the relations between adpositions and their heads (Sec. 2.24) and to comparative particles and their heads (Sec. 2.6.2).

*Specifying sublabels:*

**:sim** is used for the comparing particles *iva*, *nā* and *yāthā*, see Sec. 2.6.2, e.g. Ex. (25).

---

**cc** marks coordinating conjunctions such as *ca* ‘and’ or *vā* ‘or’.

---

**ccomp** “A clausal complement of a verb or adjective is a dependent clause which is a core argument” and which is not controlled by elements of the superordinate clause, e.g. direct speech (see Sec. 2.11).

*Specifying sublabels:*

**:rel** relative clause as core argument of the main verb, s. Ex. (110).

---

**compound** is used for compounds or similar multiword expressions. Since we annotate the relations between the members of a compound in a wider range, this relation is not used that often, see Sec. 2.7.

*Specifying sublabels:*

**:coord** is used for coordinated members of a compound, i.e. for all *dvandvas* (Sec. 2.7.3, Ex. (34)) and for *adjectival āmreḍitas* (Sec. 2.7.5).

**:name** We use this label with multi-part names when the head is not the left-most term of the multi-word expression, e.g. *jātāvedasam agnīm* (Sec. 2.26, p. 56).

---

**conj** “two elements connected by a coordinating conjunction, such as and, or, etc.” Can be asyndetic (= conjunction missing). The conjunction itself is labelled as **cc** and connected with the 2nd (3rd, 4th, ...) element. See coordination (Sec. 2.8) and repeated words (Sec. 2.7.5).

---

**cop** is used for the copula, a verb that links the subject to a subject complement. The prototypical case of a copula is *as-* ‘be’, but cf. also *bhū-* ‘become, be’; see copular clauses (Sec. 2.9).

---

**csubj** “a clausal syntactic subject of a clause”, see Sec. 2.30, and Ex. (108).

---

**det** Pronouns and some indefinite quantifiers: *sá(s)* ← **det** ← *ásvas* ‘this horse’; see Sec. 2.25.

---

**discourse** is used for interjections (*dhik* ‘Fie!’), discourse particles (*vaí*, *hí*), and elements which are not clearly linked to the structure of the sentence, except in an expressive way, cf. UD. On the annotation of various particles see Sec. 2.23.

---

**dislocated** is the label for extraclausal nominals such as hanging topics and *nominativus pendens*; see Sec. 2.12 on such disjunct nominals and Sec. 2.4 on how to distinguish them from appositions.

---

**fixed** is used in multiword expressions that always appear in the same order of components, like *ha* → **fixed** → *vaí*, see Sec. 2.23.8.

---

**flat** is also used in multiword expressions. All components are linked in *bouquet analysis* to the first one. A typical case of **flat** would be personal names consisting of multiple words, see Ex. (101). The distinction from **appos** is not always easy (see Sec. 2.4). In verbatim quotations, instead, each element is linked in *chaining analysis* to the preceding one, via the relation **flat**, see Sec. 2.11, Ex. (50).

---

**iobj** marks a nominal expression that assumes the G role in a three-place verb, i.e. the argument that is usually affected, stationary, or experiences a change of state (cf. Malchukov, Haspelmath, and Comrie 2010; Bickel 2011). Typically, this includes datives with ditransitive verbs such as *dā-* ‘give’ or the person robbed in the accusative with double accusative constructions as in *muṣ-* ‘rob, steal’, see Sec. 2.14 and 2.10.

---

**mark** stands for *marker* and signals the subordination of the respective clause, e.g. *íti* as marker for direct speech (see Sec. 2.11) or the subordinating conjunctions in adverbial clauses, some of which are discussed in Sec. 2.3.1.

*Specifying sublabels:*

**:sim** is used in clausal comparison or similes (see Sec. 2.6.2, Ex. (2)).

---

**nmod** “used for nominal dependents of another noun or noun phrase and functionally corresponds to an attribute, or genitive complement”. Commonly used for genitives expressing a possessive relation (see Sec. 2.25.2), or rare cases of adnominal dative (see 2.10), and rare and much discussed instances of adnominal locatives, instrumentals, ablatives, cf. e.g. Exx. (85), (53).

*Specifying sublabels:*

**:appos** is used for loose appositive structures where the strict definition of **appos** is not applicable, e.g. *rājan* ← **nmod:appos** ← *vāruṇa* ‘King Varuṇa’ vs. e.g. *sóma-* → **appos** → *rājan-* ‘King Soma’. (Sec. 2.4).

**:pred** for the inner relation in *Bahuvrīhis* with nominal first members; see Sec. 2.7.1, p. 22.

---

**nsubj** marks a nominal which has the S role (single argument of a one-place verb) or the A role (agent-like argument of a two- or three-place verb; cf. Malchukov, Haspelmath, and Comrie 2010; Bickel 2011).

---

**nummod** modifies a noun with a number. See Sec. 2.25 for pronouns and Sec. 2.16 for indefinite quantifiers, which are also annotated as **det**.

---

**obj** labels a non-prepositional nominal expression that assumes the function of the direct object, i.e. in a two-place predicate the second, non-agent-like P argument, in a three-place predicate the T argument which is usually manipulated or moved (cf. Malchukov, Haspelmath, and Comrie 2010; Bickel 2011). Typically, P/T arguments take the accusative case, but other cases are also possible, e.g. the genitive with *ĩš-* ‘reign, command, possess’, as are adpositional phrases. See Sec. 2.2 on nominals in the accusative in relations other than **obj**.

---

**obl** “used for a nominal expression (noun, pronoun, noun phrase) functioning as a non-core (oblique) argument or adjunct. This means that it functionally corresponds to an adverbial attaching to a verb, adjective or other adverb.” Used for all oblique cases, esp. of place, time, direction: locative, ablative, instrumental, also for accusative of direction (see Sec. 2.2), but NOT for indirect objects (see above, **iobj**) and for final expressions (**advcl**).

*Specifying sublabels:*

**:agent** (‘by’), denotes the agent (or experiencer) in passive expressions, normally an **INS**, but in connection with participles also **GEN**, see Exx. (12), (13), (119).

**:benef** (‘in favor of’), typically **DAT**, Exx. (65a), (105) – for the sake of simplicity we also include *malefactive*s (‘to the detriment of’).

**:goal** (‘towards’), i.e. *goal* and *direction*, Exx. (51), (109), (130)

**:grad** (‘compared to’), Exx. (21), (22).

**:instr** (‘with’), Exx. (105), (107), (120).

**:loc** (‘at, in, on ...’), Exx. (49), (110), (122).

**:manner** (‘according to, by, per’), e.g. for nominal-headed adverbials such as *ánu vratám* ‘according to, following the behest’, *ánu svadhām* ‘according to, following one’s own nature, disposition’.

**:path** (‘by way of’), Ex. (10).

**:soc** (‘together with, provided with’), i.e. both *sociative* and *associative*, Exx. (95), (121).

**:source** (‘from’), Exx. (54), (72), (75).

**:temp** (‘at, in, on ...’, and ‘during’), e.g. Exx. (29), (49), (112).

---

**orphan** is used in cases of head ellipsis where simple promotion would result in an unnatural and misleading dependency relation, see Sec. 2.15. Here, the highest ranking argument is promoted to the clausal head and all other relations in the sentence with ellipsis depend as **orphan** from this new head, because other annotations would be misleading.

---



**parataxis** is used to link multiple sentences within direct speech, see Ex. (48).

---

**root** marks the root of the syntactic tree, i.e. the highest ranking component of the clause, which is typically the predicate. Nominal sentences (see Sec. 2.9) and clauses with ellipsis (see Sec. 2.15) can have other elements as their roots.

---

**vocative** is used for a directly addressed participant which is grammatically expressed by a vocative. A vocative form is linked to the main predicate of the clause; other relations such as **nmod** may depend from it.

---

**xcomp** “An open clausal complement (xcomp) of a verb or an adjective is a predicative or clausal complement. Its subject is determined by an argument external to the xcomp ...”  
**xcomp** is also used for secondary predicates not covered by **ac1** such as resultatives.

*Specifying sublabels:*

**:result** non-obligatory secondary predicates: resultatives, cf. Ex. (128).

## 2 Vedic Sanskrit → relation

This section discusses how syntactic phenomena in the language of the Vedas are annotated in the Vedic treebank.

### 2.1 Absolutive

See Sec. 2.3.3.

### 2.2 Accusative

Rule of thumb:

- When in direct object function, accusatives are annotated as **obj**. Note that direct objects can be expressed by other cases as well; e.g. the genitive with *īś-* ‘have at one’s disposal’ or *cit-* ‘become aware of’.
- As a target or goal of a motion, a nominal expression in the accusative may be annotated as **obl**, even if no preverb or preposition is present. We apply a passivization test (restricted, if possible, to the Vedic corpus) to decide between the annotations **obj** and **obl**.
- When used adverbially, e.g. for denoting duration, accusatives are also labelled as **obl** (see Ex. (49)).

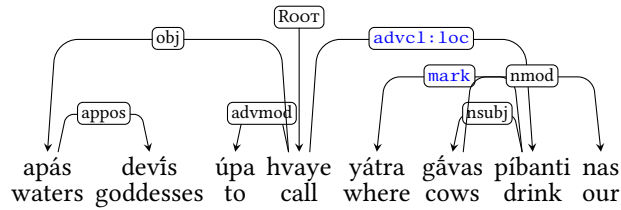
On double accusatives, see Sec. 2.14.

### 2.3 Adverbial clauses

#### 2.3.1 Basic annotation

The subordinating conjunction is labelled as **mark** and depends from the verb of the adverbial clause. The verb of the adverbial clause is linked as **advcl** to the verb of the main clause.

(1) AVŚ 1.4.3ab



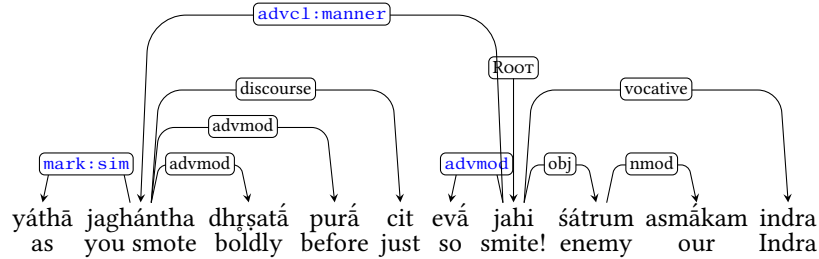
“The heavenly waters I call on, where our kine drink” (Whitney and Lanman 1905)

The pertinent conjunctions are *yād*, *yād*, *yāsmād*, *yādi*, *yātra*, *yādā*, *yārhi*, *yāthā* and *céd*, cf. Delbrück 1888, pp. 572–598, Hettrich 1988.

### 2.3.2 Adverbial similitive clauses

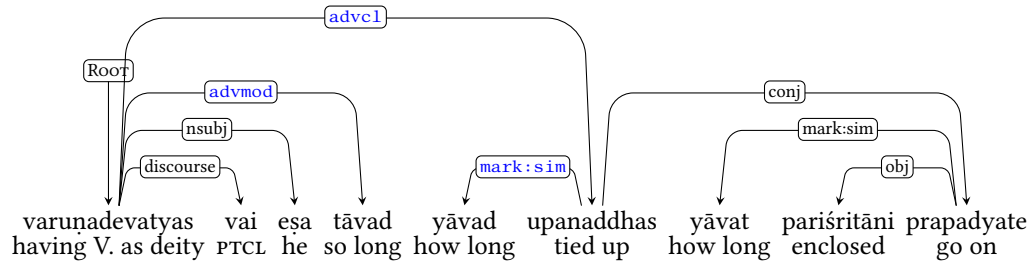
The same procedure applies to adverbial similitive constructions with or without correlatives,<sup>1</sup> e.g. Ex. (2) with *yáthā* (mark:sim) – *evá* (advmod) or Ex. (3) with *yāvat* (mark:sim) – *tāvat* (advmod).

(2) RV 2.30.4cd



“Just as you smote boldly before, so smite our enemy, o Indra.” (Jamison and Brereton 2014)

(3) AB 1.13.26



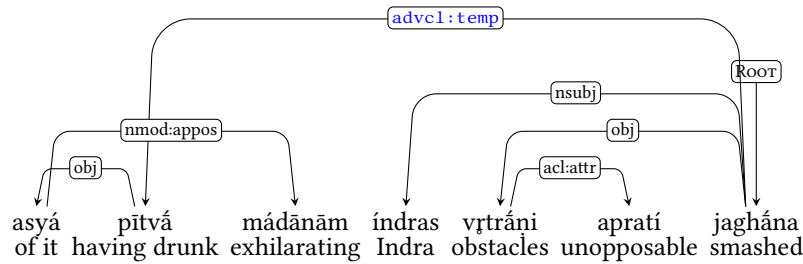
‘He is accountable to Varuṇa as long as he is tied up, (as long) as he enters enclosed spaces.’

For correlatives see Sec. 2.27.3, for comparison and similes Sec. 2.6.2.

### 2.3.3 Absolutives

Absolutives, which often express temporal precedence, are annotated like adverbial clauses with a finite verbal form:

(4) RV 9.23.7



“Having drunk of it, of its exhilarating drinks, Indra smashed the unopposable obstacles.” (Jamison and Brereton 2014)

<sup>1</sup>Cf. Delbrück 1888, p. 595, and for a full account on these constructions Hettrich 1988, pp. 261–271.

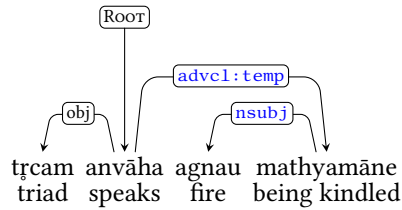
### 2.3.4 Event nouns

For event nouns expressing purpose such as infinitives see Sec. 2.17.

### 2.3.5 Locativus absolutus

In absolute constructions, the logical subject is labelled as **nsubj**. The participle in the locative (genitive, ablative) case serves as the main verb and is connected with **advcl:temp** to the verb of the superordinate clause.

(5) AB 1.16.7



“this triad ... he recites when the fire is being kindled” (Keith 1920, p. 118)

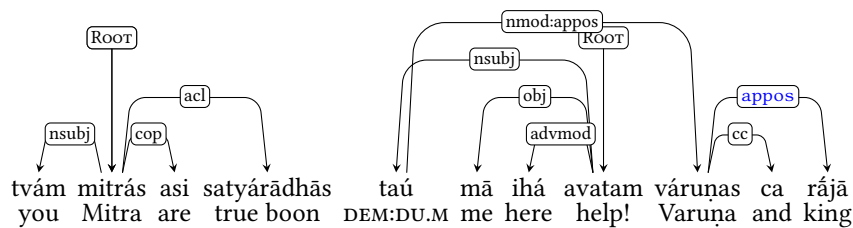
For another example see Ex. (35).

## 2.4 Appositions

Following UD we use the label **appos** for close appositions, i.e. for a “nominal immediately following the first noun that serves to define, modify, name, or describe that noun”, in all other cases, viz. nominals **not immediately following** or those **preposed** – whether adjacent or not – to the modified noun we use **nmod:appos**, thus e.g. *sóma-* → **appos** → *rājan-* ‘King Soma’, and *rājan* ← **nmod:appos** ← *vāruṇa* ‘King Varuṇa’ (N.B.: for this pair this word order is the standard in the RV, but see Ex. (6)). In these cases the name being the specific term is the head, the explaining more generic term, the apposition, is the dependent (cf. Hackstein 2010). On names see Sec. 2.26.

Intermitting particles in the sequence noun-apposition are not considered to be disruptive, thus the modifier is treated as **immediately following** as in:

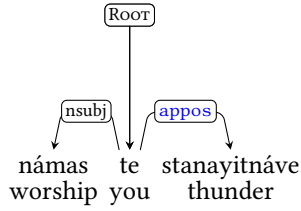
(6) RV 5.40.7cd



‘You are a friend/Mitra since your boons are real; do (you) both help me here, (you) and King Varuṇa!’

Appositions are also found with personal pronouns.

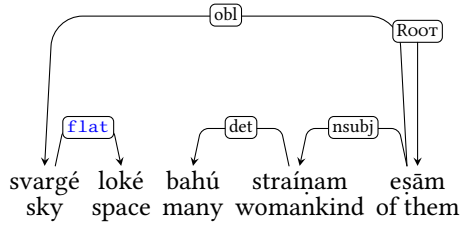
(7) AVŚ 1.13.1ab, [simplified]



‘Homage [be] to you, the thunder!’

Some fixed word pairs are treated as names and their relation consequently labelled with **flat** (see Sec. 2.26), cf. e.g. with the etymologically opaque word *svargá-* ‘sky, heaven’ or ‘celestial’:

(8) AVŚ 4.34.2d

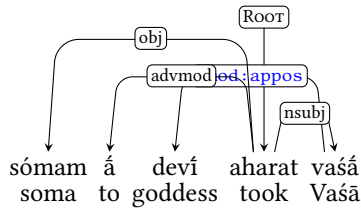


‘In the celestial world, they have many women.’

If one word has more than one apposition (quite frequent in Sanskrit), all appositions should be marked as modifying the first noun, rather than being chained.

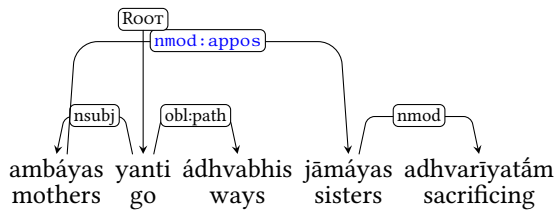
If the modifying nominal is not adjacent, as e.g. in amplified sentences (Delbrück’s “Schleppe”), we use **nmod:appos**.

(9) AVŚ 10.10.12ab



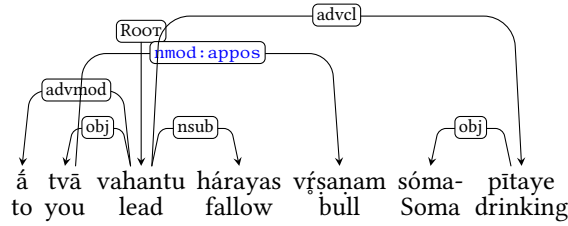
‘Vaśā, the goddess, took the soma’, lit. ‘the goddess took the soma: Vaśā’

(10) AVŚ 1.4.1ab



“The mothers go on their ways, sisters of them that make sacrifice, ...” (Whitney and Lanman 1905)

(11) RV 1.16.1ab



‘Let the fallow bays convey you here, (you), the bull, to drink soma.’

Note that both nominals need to have matching morpho-syntactic information (although it sometimes might be covert as in Ex. (6): *taú:DU.M :: váruṇas:SG.M*);<sup>2</sup> if not, the non-adjacent nominal is annotated as **dislocated** (see Sec. 2.12).

## 2.5 Auxiliaries

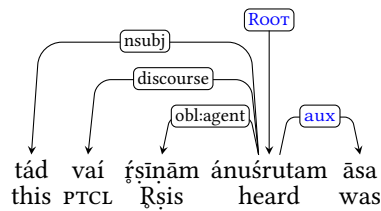
Basic annotation: The auxiliary, bearing the inflection for TAM, is linked with **aux** to the lexically more salient part of the complex verb which becomes its head; the verbal arguments are then linked to this head: *arguments* ← *main event* → **aux** → *auxiliary verb*.

In most cases, verbs such as *as-* ‘be’ or *bhū-* ‘be, become’ are assessed either as full verbs or as copulae (**cop**). In combination with verbal adjectives they can, however, also be understood as auxiliaries as in Exx. (12), (13). The best known auxiliary is *kṛ-* ‘make’ combined with abstract nouns found in periphrastic causatives (Zehnder 2011a)<sup>3</sup> as in Ex. (15). After the RV *kṛ-* is increasingly used as auxiliary in combination with a form of a deverbal noun ending in *-āṁ* in periphrastic perfects (*vidām cakāra*) and sporadically in periphrastic aorists (*vidām akar* in MS). The perfect forms of *as-* occasionally supplant those of *kṛ-* in periphrastic perfects, whereas there are no instances of *bhū-* in the Veda with this function. On the other hand *as-* in combination with a (fixed) form of the agent noun ending in *-tār-* is used for periphrastic future forms.

We apply the same annotation scheme to other *light verbs* such as *i-* ‘go’ + participle in the sense of ‘doing something continuously’ (see Ex. 18) or passive forms of *dhar-* + infinitive in Ex. (19) as well as to other complex verbs as in Ex. (86). – The phenomenon of *light verbs* in Vedic is not thoroughly explored yet, but see Slade 2013.

*as-* ‘be’ with a past participle expanded by an argument:

(12) ŚB(M) 3.2.2.3



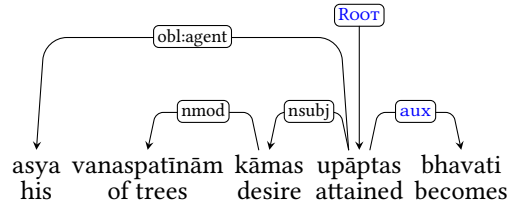
‘This was indeed heard by the Ṛṣis.’

<sup>2</sup>“Good tests include to ask whether the two halves are full nominals, whether the two halves can be swapped or not, and whether there is case or agreement concord (in a language with rich morphology).” (UD)

<sup>3</sup>The few examples of *dhā-* ‘make, put’ in this function are disputed.

*bhū-* ‘become’ can apparently also be used in this function:

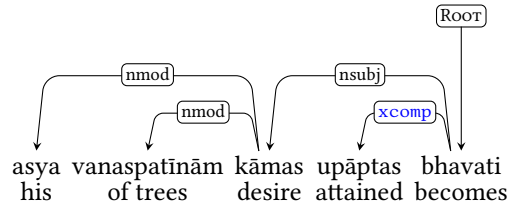
(13) AB 2.1.13



“The desire in ... trees is obtained by him [who knows thus.]” (Keith 1920)

But alternatively we could understand:

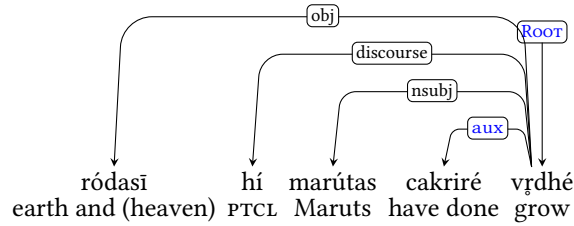
(14) AB 2.1.13



‘His desire for ... trees gets fulfilled [, of him who knows thus.]’

Periphrastic causative: *kr-* combined with a final expression cf. e.g.:

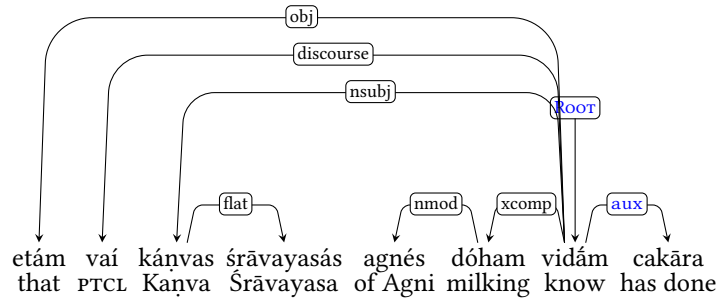
(15) RV 1.85.1c



“for the Maruts made the two world-halves grow strong” (Jamison and Brereton 2014)

Periphrastic perfect: *vidām cakāra* in e.g.:

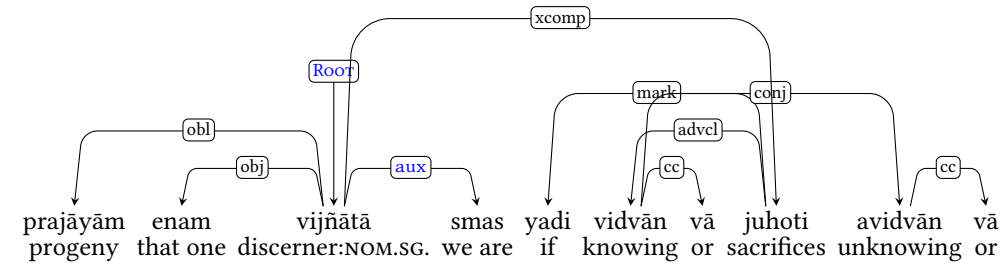
(16) MS 3.3.9



‘That (mantra) Kaṇva Śrāvayasa has recognized as Agni’s milking.’

Periphrastic future with an uninflected form of the agent noun in *-tār-*:

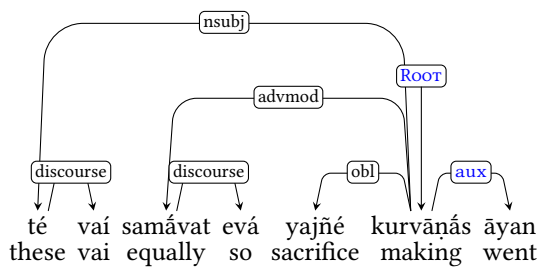
(17) AB 5.30.15



‘In his progeny we shall (then) recognize him – whether he sacrifices (now) knowing (thus) or knowing not.’

*i-* ‘go’ (but also *car-* ‘move on’, later on *ās-* ‘sit’, *sthā-* ‘stand’) used with participles or gerunds suggests a durative or continuative reading of the main action, cf. Delbrück 1888, §218.

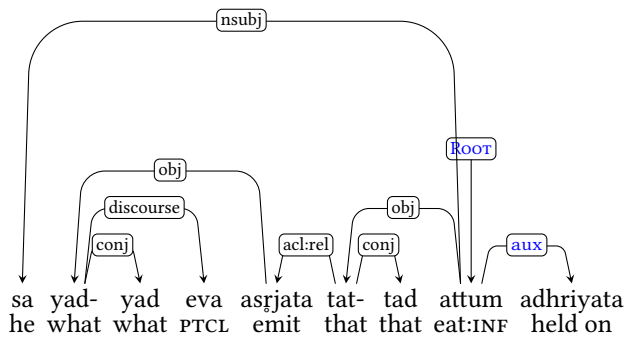
(18) MS 2.5.3.2



‘They kept doing the very same during the sacrifice.’

Passive forms of *dhar-* ‘hold’ + infinitive result in an ingressive reading, cf. *dhar* in PW, vol. III, 873, no. 22b:

(19) BĀU 1.2.5.3



‘Whatever he gave birth to, that he began to devour.’

For modals construed with infinitives see Sec. 2.20.

## 2.6 Comparison

We adopt Treis and Vanhove’s (2017, p. ii) terminology for the constitutive elements of a prototypical comparison construction. The elements are labelled in (20):



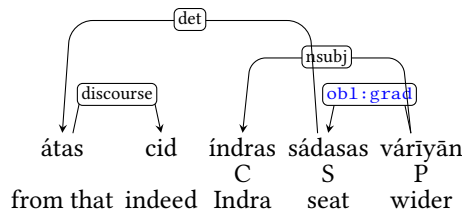
- (20) Susan is more intelligent than Peter

C - PM P SM S  
 C = Comparee  
 PM = Parameter Marker  
 P = Parameter  
 SM = Standard Marker  
 S = Standard

### 2.6.1 Comparison with gradation

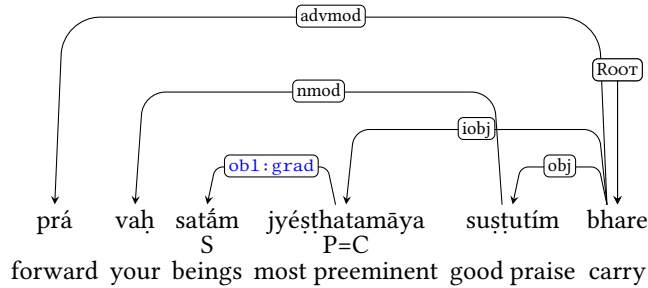
In Vedic, comparison of superiority is often found with the comparative or superlative of adjectives. The standard commonly takes the ablative case (rarely also instrumental or genitive) in comparative constructions and the genitive or locative case in superlative ones; following UD guidelines, we label both **obl:grad**. The following two examples are cases of comparative and superlative constructions respectively:

- (21) RV 3.36.6



“Indra is indeed wider than this seat” (Jamison and Brereton 2014)

- (22) RV 2.16.1



“I carry forward your good praise, (like an oblation into a fire being kindled), for him who is the most preeminent of beings.” (Jamison and Brereton 2014)

Note also that the so-called *ablativus comparationis* is not solely found with comparatives but with positives as well, e.g. in RV 1.46.8a *arítram vām divás pṛthú* “your oar is broader than heaven” (Jamison and Brereton 2014) resp. ‘your oar is as broad as heaven’.<sup>4</sup> Then with adjectives bearing comparative semantics (Delbrück 1888, p. 113) such as *pūrvā*- ‘fore, antecedent’, e.g. in RV 1.123.2a *pūrvā víśvasmād bhúvanād abodhi* “earlier than all creation she has awoke” (Jamison and Brereton 2014), and with its antonym *ápara*- ‘hind, subsequent’, e.g. in RV 1.74.8b *pūrvasmād áparas* ‘behind the one in front’, and finally with *anyá*- ‘other’, e.g. RV 5.47.5c *vápus ... dvé yád īm bibhṛtó mātúr anyé* “the wonder ... that two, other than his

<sup>4</sup>Cf. for the so-called *source/separative schema* Stassen 1985, pp. 39–40, Heine 1997, pp. 115–16, Viti 2002, p. 76.

mother, bear him” (Jamison and Brereton 2014). Morphologically opaque superlatives such as *prathamá-* ‘first’ are accordingly construed with GEN.(PL), e.g. RV 1.24.2ab *agnér vayám prathamáśyāmṛtānām mánāmahe cāru devásya náma* “we will recall the dear name of the god Agni, of the first of the immortals” (Jamison and Brereton 2014).

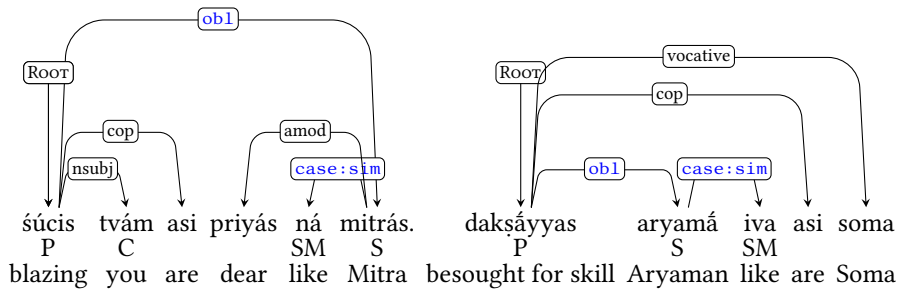
## 2.6.2 Equative and similitive constructions

In the RV, equative and similitive constructions usually employ one of the three particles *ná*, *iva* and *yáthā* as standard marker (cf. Jamison 1982; Pinault 1997); of these, only *iva* and *yáthā* are retained in Vedic prose and in Classical Sanskrit. Constructions of this type always contain a single verb. Delbrück 1888, 476f. claims that *iva* ‘like’ is only used when comparing nominals, while *yáthā* ‘like’ is used for verbs and whole phrases. However, all three particles can appear in both environments and are thus annotated in the same way.

The following subtypes are attested:

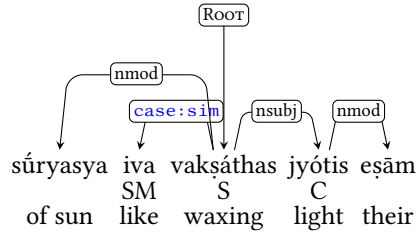
- C is P like S: SM → **case:sim** → S → **obl** → P; s. Exx. (23), (31)
- C is like S: we annotate this type as other cases of nominal predication and label the standard marker as **case:sim** on the standard: SM → **case:sim** → S; s. Ex. (24)
- C VP like S: this type predicates the manner in which C performs the action, that is: as S. Therefore, we treat S as an adverbial attaching to the verb with the relation **obl**, and label the standard marker **case:sim**: SM → **case:sim** → S → **obl** → VP. If however S expresses a kind of role or the passage is best translated with ‘as if C were S’, the suiting annotation is **acl**. The reason for this is that S is similar to a depictive and thus possesses clausal qualities: C → **acl** → S (see 2.29); s. Exx. (25)-(26).
- C<sub>i</sub> C<sub>j</sub>VP like S<sub>i</sub> S<sub>j</sub>: in this type, the two standards correspond each to a different node in the matrix clause, as in a sentence with gapping. Thus, we treat these cases as adverbial clauses (Sec. 2.3) with gapping and label the standard marker **mark:sim**: SM → **mark:sim** → S<sub>i</sub> → **advcl** → VP and S<sub>j</sub> → **orphan** → S<sub>i</sub>; s. Exx. (27)-(28).

(23) RV 1.91.3cd = C is P like S



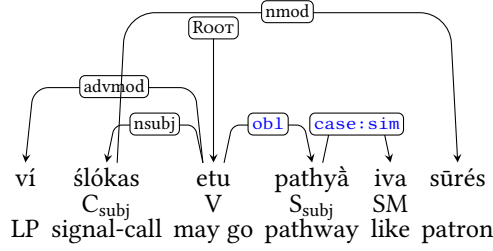
“You are blazing pure, like dear Mitra. You are besought for skill like Aryaman, o Soma.” (Jamison and Brereton 2014)

(24) RV 7.33.8a = C is like S



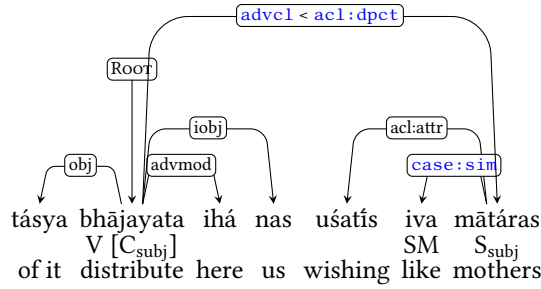
“Their light is like the waxing of the sun.” (Jamison and Brereton 2014)

- (25) RV 10.13.1b = C<sub>subj</sub> V like S<sub>subj</sub>



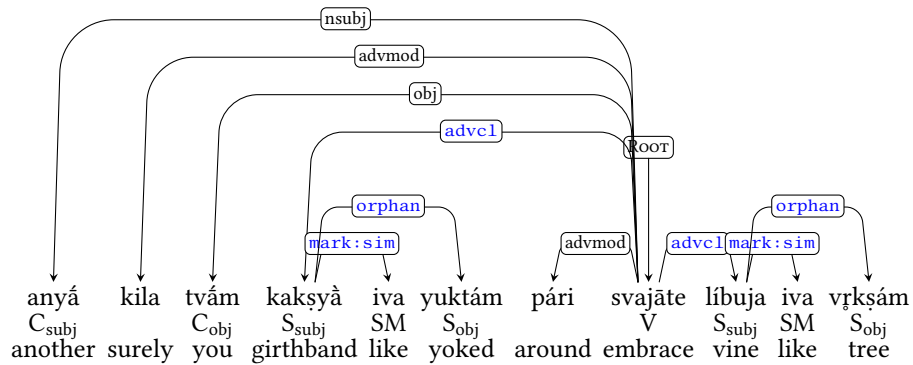
“Let the signal-call of the patron go forth afar like a pathway.” (Jamison and Brereton 2014)

- (26) AVŚ 1.5.2 = [C<sub>subj</sub>] V like S<sub>subj</sub>



‘Let us have part in it here like well-wishing mothers (do let somebody have part in something).’

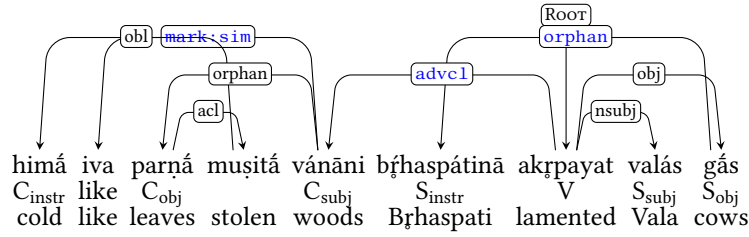
- (27) RV 10.10.13cd = C<sub>subj</sub> V<sub>i</sub> C<sub>obj</sub> like S<sub>subj</sub> V<sub>i</sub>=Ø S<sub>obj</sub>



“Another (woman) will surely embrace you, like a girthband a yoked (horse), like a vine a tree.” (Jamison and Brereton 2014)

Triple similes are attested too:

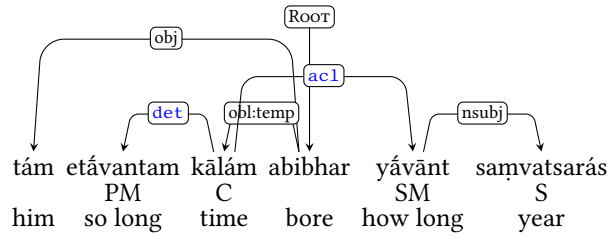
(28) RV 10.68.10ab = C<sub>subj</sub> C<sub>obj</sub> C<sub>instr</sub> V<sub>i</sub> like S<sub>subj</sub> S<sub>obj</sub> S<sub>instr</sub> V<sub>i</sub>=Ø



“As the woods (lament) their leaves stolen by cold, Vala lamented for the cows (stolen) by Bṛhaspati.” (Jamison and Brereton 2014)

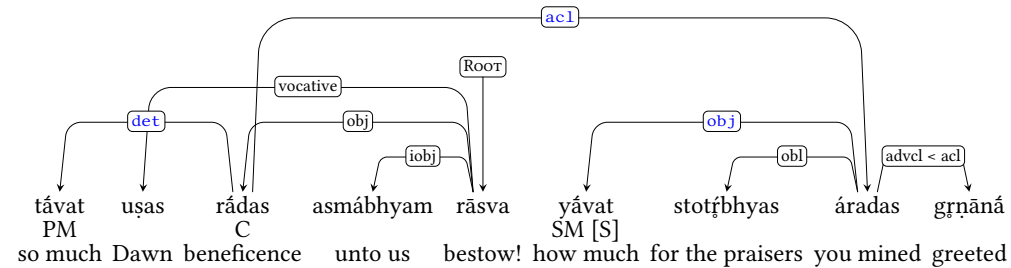
Comparison of equality can also be encoded by correlative constructions with the pronominal adjectives *yāvant-* ‘as big, as much, as wide’ and *tāvant-* (*et al.*) ‘so big, so much, so wide’ derived from the adverbs *yāvat* and *tāvat*, cf. (AiGr., vol. II 2, 876f.). Clauses introduced by the relative *yāvant-* depend as **acl** to the reference noun, while *tāvant-* modifies the noun as **det**, just as in relative clauses (see Sec. 2.27.3), as shown in examples (29) and (30). – For cases of adverbial *yāvat* and *tāvat* see Sec. 2.3.2.

(29) BĀU 1.2.4.5 = PM C SM S



‘He carried him for as long [a time] as a year [is long].’

(30) RV 7.79.4ab = PM C SM [S]

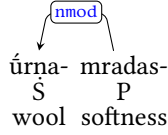


“As much beneficence, Dawn, bestow unto us as you mined for the praisers while being greeted!” (Jamison and Brereton 2014)

Note: *yāvat* ← **obj** ← *āradas* through NP ellipsis.

Finally, equatives can be expressed by compounds:

(31) RV 10.18.10



‘having the softness of wool = soft as wool’ – with C = the Earth or the Barhis (RV 5.5.4)

Similatives are also found within vocative phrases, cf. Ex. (140).

## 2.7 Compounds

The copious use of nominal compounds is among the most characteristic traits of Vedic Sanskrit and even more so of Classical Sanskrit. Notably, the bulk of the nominal compounds in Vedic Sanskrit consists of exocentric compounds, i.e. – to put it simply – of complex words which can be used as adjectives.

The main reference for the formation of compounds (and their use) is still AiGr., vol. II 1.

### 2.7.1 Inner structure

As suggested by UD for annotating the inner structure of compounds we use criteria that we deem fit for Vedic Sanskrit. This means that we use (as far as possible) all dependency relations that can be used for outer dependencies such as *nmod*, *amod* etc. When the head of a compound is a verbal expression, nominalized or not (verbal noun, root, stem) as in the so-called *verbal governing compounds* or *synthetics* we use *obj*, *obl*, *xcomp* etc. according to the following **rule of thumb**: If the head occurs as an independent word, we rather tend not to assign verbal values to the relation.

For example *sómapīti-* ‘draught of Soma’, where *pīti-* ‘draught’ occurs independently, therefore *sóma-*  $\leftarrow$  *nmod*  $\leftarrow$  *pīti-*. But for *somapéya-* ‘the drinking of Soma, draught of Soma’, *peya-* ‘drinking, draught’ does not occur independently in Vedic (but does so in Classical Sanskrit), therefore *soma-*  $\leftarrow$  *obj*  $\leftarrow$  *péya-*.

1. **Verbal governing compounds**, i.e. compounds where the relation between its members is verbal (see above), are labelled following the annotation of verbal phrases:
  - Verbal governing compounds ending on roots (cf. for the RV Scarlata 1999):
    - *gātu-*  $\leftarrow$  *obj*  $\leftarrow$  *vid-* ‘knowing/finding the way’,
    - *dhana-*  $\leftarrow$  *obj*  $\leftarrow$  *spṛt-* ‘winning the prize’,
    - *āhutī-*  $\leftarrow$  *obl*  $\leftarrow$  *vṛdh-* ‘growing strong through the poured offering’,
  - with redundant or opaque extensions:
    - *anna-*  $\leftarrow$  *obj*  $\leftarrow$  *ād-á-* ‘eating food’,
    - *vasu-*  $\leftarrow$  *obj*  $\leftarrow$  *dā-van-* ‘giving good(s)’,
    - *sarūpa-*  $\leftarrow$  *xcomp*  $\leftarrow$  *kṛ-t-* ‘making uniform’ with the regular extension *-t-* for roots ending on a short vowel – for *xcomp* see Sec. 2.14
  - also with overt case marker in the dependent:
    - *apsu-*  $\leftarrow$  *obl*  $\leftarrow$  *jā-* (besides *ab-*  $\leftarrow$  *obl*  $\leftarrow$  *jā-*) ‘born in the waters’,
    - *rathe-*  $\leftarrow$  *obl*  $\leftarrow$  *sthā-* ‘standing on a chariot; charioteer’
  - or with adverbial first member:
    - *sākam-*  $\leftarrow$  *advmod*  $\leftarrow$  *úḁ-* ‘growing up all at once’,

- *raghu-* ← *advmod* ← *syád-* ‘rushing swift(ly)’ – the latter might be also annotated as *raghu-* ← *advcl* ← *syád-*, if the first member is understood as participant-oriented depictive.
  - The same applies to other verbal governing compounds such as those ending on thematic stems and influenced by and blended with verbal present stems, e.g.:
    - *vājam-* ← *obj* ← *bhará-* ‘carrying off the prize’;
    - *dhiyam-* ← *obj* ← *jinvá-* ‘quickening thought(s)’;
    - *viśvam* ← *obj* ← *invá-* ‘setting everything or everyone in motion’;
    - *ugram* ← *advmod* ← *paśyá-* ‘looking dreadfully’;
    - *agnim* ← *obj* ← *indhá-* ‘kindling fire’
  - or those ending on *ana-*: *indra-* ← *obj* ← *mādana-* ‘exhilarating Indra’
  - or final *to*-adjectives (“PPP”):
    - *bráhma-* ← *obl* ← *saṃśita-* ‘sharpened by brahman’
2. Compounds with nominal inner relations are labelled *nmod*, *amod* etc., as in nominal phrases: *nmod* is used to express various kinds of relations between nouns in a compound, except for *dvandvas* (see below Sec. 2.7.3). Adjectives which form part of a compound are typically annotated with *amod*, as in a regular clause:
- ***Bahuvrīhis***, also often addressed as *possessive compounds*.

The relation between the members of this type (AiGr., vol. II.1, §108) is basically that found in copular clauses (see Sec. 2.9, where the second member of the compound would be the subject and the first member its predicate, thus e.g. for *índra-śatru-* an adequate annotation would be *\*índra-* → *nsubj* → *śatru-* ‘whose enemy is Indra’. This annotation is not viable since the second member of the compound, where the inflectional elements are attached to, is identified with the head of the compound as a whole. Thus this head and the head of the inner relations do not coincide. (See also below, with further examples, *sub* “Special cases”, p. 23.)

For *ugrá-bāhu-* two interpretations are possible, of which the second, where the first member is deemed to be an attributive modifier of the second, is widely accepted (so AiGr., vol. II.1, §108a, p. 274): *\*ugrá-* → *nsubj* → *bāhu-* ‘sb. whose arms are strong’ and *ugrá-* ← *amod* ← *bāhu-* ‘sb. with strong arms’. Note that the second annotation matches that of the *karmadhāraya* type, and hence the type *índra-śatru-* could, in analogy to *tatpuruṣas*, be annotated with *nmod*, though this might further encourage the erroneous notion that *bahuvrīhi* are just derived from *karmadhāraya* or *tatpuruṣas*. To emphasize the difference the annotators may add the sublabel *:pred* in the case of *bahuvrīhis*.

Some examples:

- *gó-* ← *nmod:pred* ← *vapus-* ‘sb. with the beauty of a cow’;
  - *índra-* ← *nmod:pred* ← *śatru-* ‘sb. whose enemy is Indra’;
  - *vṛkṣá-* ← *nmod:pred* ← *keśa-* ‘sb. whose hairs are (like) trees’;
  - *yamá-* ← *nmod:pred* ← *śreṣṭha-* ‘of which Yama is the best’;
  - *ugrá-* ← *amod:pred* ← *bāhu-* ‘sb. with strong arms’;
  - *tad-íd* ← *amod:pred* ← *artha-* ‘sb. who has/envisages exactly that goal’.
- also with adverbial first member (AiGr., vol. II.1, §110f. Sadovski 2000):
- *ádhi* ← *advmod:pred* ← *rukma-* ‘sb. with jewellery on’

- *ví* ← **advmod:pred** ← *aṃsa-* ‘sb. with his shoulders apart: Cobra’

NB: *Bahuvrīhis* are often expanded by (redundant) adjectival suffixes to reinforce their status as adjectives, so e.g. with unaccented *-ka-* or with *-á-*, *-ya-* etc.

A subtype consists of substantivized *Bahuvrīhis* with collective meaning (AiGr., vol. II.1, §117) such as *an-amitrá-* N ‘inhostility’, i.e. ‘the state of having no enemies at all’, built on *amitrá-* M ‘hostile’ or *sarva-vedas-á-* N ‘all goods and chattels’ built on *védas-* N ‘belongings’. The (possessive) suffix respectively the stem ending *-á-* is typical for these formations. Collective *Bahuvrīhis* with numeral first members are called *Dvigus*, e.g. *ṣaḍ-ṛc-á-* ‘a hexad of stanzas, a strophe of six stanzas’ or *ṛcá-* and *tricá-* N but also M < *tri-ṛc-á-* ‘a triad, strophe of three stanzas’. The formations with first member *ardhá-* ‘half’ are controversial, cf. e.g. *ardha-devá-* ‘demigod’, which for sure does not designate one half of a god but rather somebody who is on one part divine by lineage.

- ***Tatpuruṣas* and *Karmadhārayas***, i.e. formations where the compound yields a hyponym of the compound’s head, as in:
  - *Tatpuruṣas*: *viś-* ← **nmod** ← *pāti-* ‘lord of the clan’
  - *Karmadhārayas*: *pūrṇá-* ← **amod** ← *mās-(a-)* ‘full moon’
- **Prepositional governing compounds** are annotated as prepositional phrases are:
  - *āti-* ← **case** ← *avi-* ‘[passing] over or through the strainer’,
  - *anu-* ← **case** ← *kāmá-* ‘according to one’s desire, agreeable’ (AiGr., vol. II.1, §118f. Sadovski 2000)

NB: This type yields also adverbs when the formation is used event-oriented, e.g. for example RV *anuṣvadhām :: ánu svadhām* ‘in accordance with one’s own will/nature’.

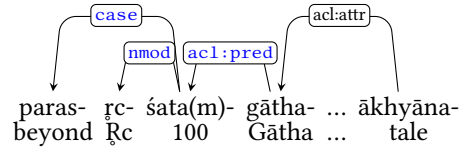
3. **Special cases**, where the head of the compound is **not** the head of the internal relation, are labelled with the generic label **compound** – with the exception of *bahuvrīhis*. See on this issue also the considerations for *bahuvrīhis* on p. 22.

- Verbal governing compounds with the first member as head of the formation are rare. The verbal heads consist of inflected verbal forms or of opaque verbals, cf. e.g.
  - *bharád-* ← **compound** ← *vāja-* ‘carrying off the prize’, synonym to *vājam-* ← **obj** ← *bhará-* (see above), where the formation and status of the first member is disputed,
  - *dāti-* ← **compound** ← *vāra-* ‘who donates wished goods’ – the only form matching the first member is the 3SG.AOR.CONJV.ACT of the root *dā-* ‘give’.
- Some *Bahuvrīhis* show an inverted order of their members (AiGr., vol. II.1, §116), e.g. *putra-hata-* for *hatá-putra-* both ‘sb. whose son has been slain’. This type has been possibly attracted to the verbal governing compounds with second member ending in *-ta-*, see p. 22, but extended to other formations, e.g. *petva- ... alūnapūrva-* (ApSS 7.6.1) ‘a ram who has no been shorn before’. We annotate *putra-* ← **compound** ← *hata-*, *alūna-* ← **compound** ← *pūrva-*.
- The label **compound** might be also used for other complex cases, where the relation between the members is opaque, cf. AiGr., vol. II.1, §123f. Note however that many cases discussed there imply an utterance e.g. *mama-satyá-* ‘conflict’ < ‘a situation where people present say or think *māma satyám* ‘it’s mine for sure’ or ‘mine is the

truth” or *itihāśā*- ‘legend, tale’ < *īti ha āśa* ‘it was verily thus’ or *āpo-revatī*- designating the stanza RV 10.30.12 which begins with the vocative phrase ‘āpo revatīḥ’ ‘ye rich waters ...’; hence they can be annotated in analogy to direct speech, see Sec. 2.11.

Sometimes the structure of a compound seems uncommon or even elusive; consider e.g. *paraṛkśatagāthaṃ śaunaḥśepam ākhyānam* (AB 7.18.10) “the tale of Śunaḥśepa, with a hundred Ṛc verses as well as Gāthas” (Keith 1920) with the complex compound *paras-ṛc-śata(m)-gātha-* – the tale includes one hundred Ṛcas and 31 Gāthas. One possible interpretation is:

(32) AB 7.18.10



‘the tale containing in surplus of one hundred Ṛcas (also some) Gāthas’

The elements of *paraṛkśatagātha-* are

- the *Tatpuruṣa* (p. 23) *ṛc-* ← *nmod* ← *śata(m)-* ‘a hundred stanzas’, germ. ‘ein Hunderter an Stanzen’, see for *nmod* Sec. 2.22,
- the prepositional governing compound (p. 23) *paras-* ← *case* ← *ṛc-śata(m)-*,
- the *Bahuvrīhi* (p. 22) *paras-ṛc-śata(m)-* ← *acl:pred* ← *gātha-*, see Sec. 2.7.2.

Or with a hierarchical annotation:

*para=ṛk=śata-gātha-* resp. (*para((ṛk)(śata))*)(*gātha-*).

Note that it is not always possible to keep apart *bahuvrīhi*s from verbal governing compounds; this applies e.g. to *vṛṣṭi-dyāv-* ‘who lets the sky rain’, generally interpreted as \**vṛṣṭí-* → *obj* → *dyāv-* > *vṛṣṭí-* ← *compound* ← *dyāv-*, but where the analysis as *vṛṣṭí-* ← *nmod:pred* ← *dyāv-*, i.e. as so-called factitive *bahuvrīhi* or “Doppelpossessivum”, literally ‘having the sky have rain’, is perhaps to be preferred.

A recurrent type of compound shows a *to*-adjective (“PPP”) as first member. Such compounds can often be interpreted in two ways, thus e.g. *sutá-soma-* could mean ‘who has pressed soma (at his disposal)’: *sutá-* ← *amod* ← *soma-*, but also ‘who has pressed soma (himself)’ or even ‘who has soma pressed’, i.e. ‘who prompts sb. to press soma’: \**sutá-* → *obj* → *soma-* (synonym to *soma-* ← *obj* ← *sú-t-*) > *sutá-* ← *compound* ← *soma-*.

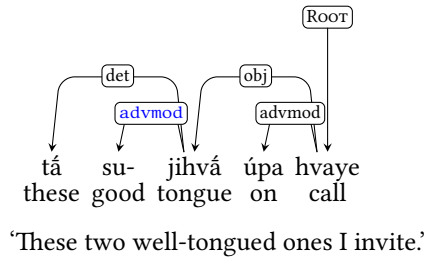
The frequent compounds with second member *kāma-* such as *paśu-kāma-* ‘sb. who craves for/wants cattle’ are annotated *paśú-* ← *nmod* ← *kāma-* or, against our rule of thumb given in the introductory notes above, *paśú-* ← *obj* ← *kāma-*, since the noun *kāma-* ‘lust, love for’ and its derivations can also be constructed with verbal complements, so e.g. already in the RV *kāma-* ... *rāyé* (DAT) ‘sb. craving for riches’, *kāmín-* ... *pītím* (ACC) ‘sb. craving for a drink’, or in the AV *mām* (ACC) ... *kāmena* ‘out of love for me’.



The differences between these two types of compounds have been over-emphasized, but for further pertaining considerations pointing out the similarities, cf. Scarlata and Widmer 2015 and Olsen 2017.

Indeclinables such as *sa-* ‘with, together’, *su-* ‘well, good’, *a(n)-* ‘not, without’, *dus-* ‘badly, poorly’ as first members of a compound are connected with **advmod**, without distinction between prefixes and adverbs. **Note:** *sa-* ‘same’ is annotated as **det**.

(33) RV 1.13.8



### 2.7.2 Connection with other words

In Vedic Sanskrit, *bahuvrīhis*, verbal and prepositional governing compounds (see above) and other exocentric compounds are used as adjectives, and may thus express a secondary predication, cf. Scarlata and Widmer 2015. They also correspond or are even equivalent to relative clauses, and are therefore linked with **acl** to their referent or with **advcl** to the verb when the referent is a covert subject, see Sec. 2.29. Prepositional governing compounds used as adverbs are linked with **advcl**, see p. 23.

### 2.7.3 Dvandvas and other copulative compounds

On the origin and development of *dvandvas* see AiGr., vol. II 1, 149ff. The term is based on the adverb *dvamdvaṁ* ‘in pairs’ which itself goes back to a so-called *āmreḍita*-compound *dvā-dvā* (see Sec. 2.7.5, and cf. AiGr., vol. II 1, p. 29).

Asyndetic structures of elliptic dual forms such as e.g. *mitrāvāruṇā* (NOM.DU.M), *mitráyos váruṇayos* (GEN./LOC.DU.M in RV 7.66.1) are not (yet) compounds. The transition to compounds takes place gradually in the RV, cf. *mitrāvāruṇayos* (RV 10.130.5), where the first element has lost its case but apparently not its number marker, and still both elements are accented. The final stage is reached with e.g. *indravāyū* (RV 7.90.7), where the first element is represented by its stem form and the whole structure bears one single accent.

We annotate:

*mitrá* → **conj** → *vāruṇā*

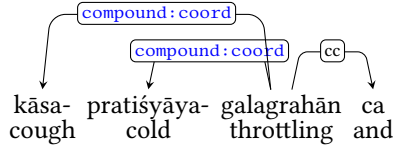
*mitrá-* ← **compound:coord** ← *vāruṇayos*

*indra-* ← **compound:coord** ← *vāyū*

*Dvandvas* are not limited to forms of the dual, cf. e.g. the plural forms *indrā-marutas* (VOC.PL in RV 2.29.3) ‘Indra and the Maruts’, *pitā-putrās* (NOM.PL in MS 4.2.12) or the singular form *keśa-śmaśrū* (ACC.SG.N in AVŚ 8.2.17) ‘hair and beard’.

Copulative compounds with more than two members are unusual in the oldest layers but their number increases in time (AiGr., vol. II 1, p. 159: “Die Zahl der Glieder ist unbeschränkt”), cf. e.g.

(34) Suśrutasaṃhitā Utt. 55.7



‘coughs, colds and constriction of the throat’<sup>5</sup>

The label **compound:coord** is also used for compounds consisting in two (or more) coordinated adjectives, thus *padbhyām dakṣiṇa-savyābhyām* (AVŚ 12.1.28) ‘with the right and left foot’: *dakṣiṇa* ← **compound:coord** ← *savyābhyām*, or, with disjunctive coordination, *yás ... satyānṛtām vācam vādati* (MS 3.7.3-78.2) ‘who gives a speech part true part untrue’: *satya* ← **compound:coord** ← *anṛtām*.<sup>6</sup> The same applies to “mixed colors adjectives” such as *nila-lohitā-* (RV 10.85.28) ‘dark red’ with *nila-* ‘darkcolored, dark blue’ and *lohitā-* = *rohitā-* ‘red, reddish’ and to doubled adjectives that express intensity, e.g. *mahā-mahā-* ‘very big, mighty’, cf. AiGr., vol. II 1, 147f.

*Dvandvas* used as adjectives, independently of whether they are built on nouns or adjectives, are basically linked to their heads with the label **ac1**, thus just like other complex adjectives such as exocentric compounds, see Sec. 2.7.2.

## 2.7.4 Bahuvrīhi compounds

schreiben! mAtRdeva usw., s. Diskussion

## 2.7.5 Āmreḍitas

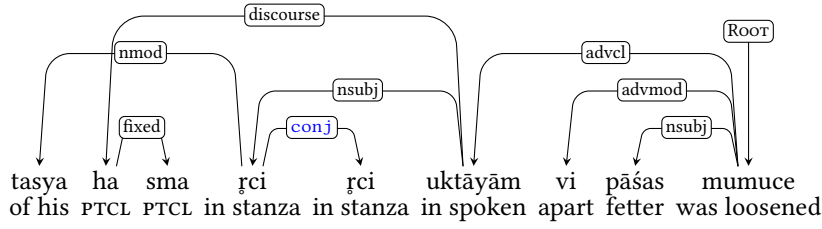
The term means ‘repeated, reiterated’ (i.e. *ā-mreḍita-*, cf. EWAia, vol. II, p. 387 *sub MRED*).

Repeated word forms coalesce regularly to *āmreḍita*-compounds (AiGr., vol. II 1, 143ff.), i.e. a group of two successive homonymous word forms, primarily of nouns in the sg, of which only the first bears an accent. The two elements are connected with **conj** with the accented first word form functioning as the head, e.g.:

(35) AB 7.16.13

<sup>5</sup>Note the redundant conjunction *ca*, cf. AiGr., vol. II 1, p. 165.

<sup>6</sup>Note that in this case the two elements might also be understood as substantives and the resulting *dvandva* to be then used as an adjective with agreement with its head, cf. with the appositive *dvandva satyānṛté* (ACC.DU.N) the variant expression in ŚB(M) 9.5.1.12 *vācam evā satyānṛté satyām caivānṛtaṃ ca* ‘(Devas and Asuras inherited) speech (consisting in) truth and untruth, (speech) both true but also untrue’ resp. ‘... (speech which is) truth but also untruth’.



‘And just as each stanza of his (of Śunaḥśepa) was spoken a (single) bond came off.’<sup>7</sup>

Less often *āmreḍitas* are based on adjectives. The repetition or reiteration, especially in the case of numeral adjectives, results in a plural meaning, and this again leads to the usage of plural forms in *āmreḍitas*, cf. e.g. AB 3.25.2 *tāni ha tarhi caturakṣarāṇi-caturakṣarāṇy eva chandāmsy āsan* ‘The metres then were of four syllables each only.’ (Keith 1920). A switching point might be tangible in RV 5.52.17b: *ékam-ekā śatā dadus* ‘they (the Maruts) have given (me) a hundred each’ – *ékam-ekā śatā* probably represents \**ékam śatām ékam śatām*.<sup>8</sup> In this special case we prefer to declare the head of the formation that element which agrees in case and number with its head, thus – in analogy to *dvandvas* (s. Sec. 2.7.3) – we annotate *ékam* (ACC.SG.N) ← *compound:coord* ← *ekā* (ACC.PL.N) ← *nummod* ← *śatā* (ACC.PL.N). The same applies to *āmreḍitas* where the stem form in the first member is generalized as e.g. in *úttara-uttaras* (NOM.SG.M in TS 2.3.6.2.), and further in derivations thereof, e.g. *uttara.uttar-in-*. On *ékaika-* cf. AiGr., vol. III, 396f. and then also on the “half-compounded” forms of repeated *anyá-* and *ítara-* (to express reciprocity) cf. AiGr., vol. III, 491f.

N.B.: Compounds consisting in repeated (stem) forms of adjectives such as *mahā-mahá-* ‘very big, very potent’ are, as shown by their meaning and accentuation, not *āmreḍitas*; see Sec. 2.7.3, p. 26, with reference.

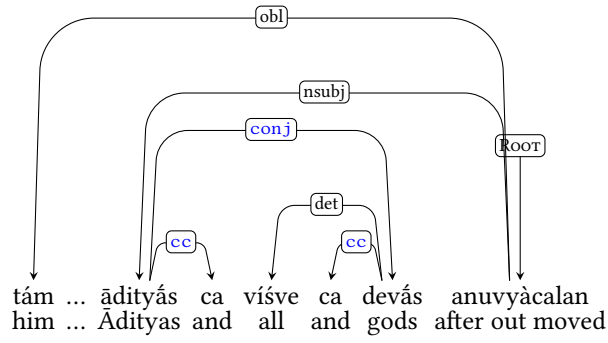
## 2.8 Coordination

The default label for coordination is *conj*, and the coordinating conjunctions are labelled as *cc*. The conjunction (*ca*) is normally placed after the first word of a nominal. The conjuncts are connected in *left-to-right* bouquet analysis starting from the first, leftmost, conjunct, which then functions as head of the phrase.

(36) AVŚ 15.2.1

<sup>7</sup>Note that *tasya* might as well depend from *pāśas* and thus the particles *ha sma* from *mumuce*.

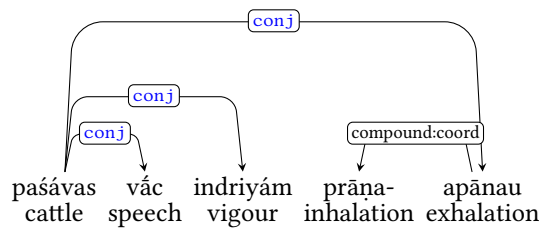
<sup>8</sup>The whole sentence (RV 5.52.17ab) reads: *saptā me saptā śákīnas ékam-ekā śatā dadus* which could mean ‘(Appearing in) seven (groups of) seven they (the Maruts), being capable (to do so), have given me a hundred each.’ – it remains unclear whether the result is 700 or 4900.



“after him moved out both ... the Ādityas and all the gods” (Whitney and Lanman 1905)

The conjuncts can be connected asyndetically.

(37) MS 3.10.6



‘cattle, speech, vigour, in-breathing (and) out-breathing’

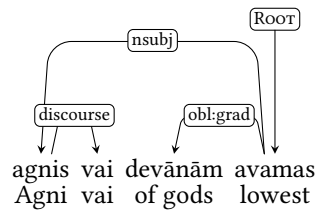
For the concatenation of sentences in direct speech see Sec. 2.11, for coordinated members of compounds Sec. 2.7.3 and 2.7.5.

## 2.9 Copular clauses

The verb *as-* ‘be’ is connected with **cop** to the root, whereas *bhū-* ‘become’ is only rarely used in this function in Vedic. Note, however, that both these verbs can also be used as full verbs.

Clauses without overt copula:

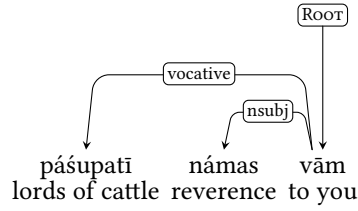
(38) AB 1.1.1



‘Agni [is] the lowest of the gods.’

Also used for the frequent construction *nāmas* ‘homage to’:

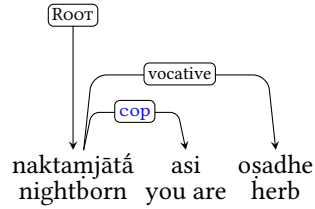
(39) AVŚ 11.2.1



‘O lords of cattle, [let] reverence [be] to you (both).’

Without overt subject:

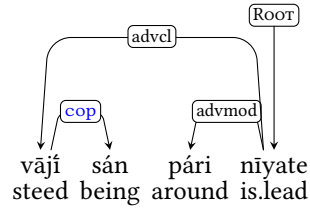
(40) AVŚ 1.23.1



‘You are grown at night, O herb.’

An analogous annotation is chosen, when *as-* occurs as a participle. In this example, the clause *vājī sán* can be annotated as **advcl** (alternatively, but dispreferred, also as **csubj**):

(41) RV 4.15.1b



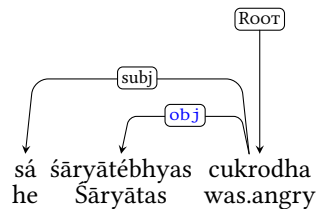
‘Being a steed he (Agni) is lead around.’

## 2.10 Dative

Nominal expressions in the dative case assume a wide range of functions and the assignment of relations varies accordingly. The most prominent relations include **iobj** with three-place predicates (see Sec. 2.13).

The second, dative argument of the two-place verb *krudh-* ‘be angry at’ is assigned the label **obj**, see Delbrück 1888, pp. 140–145.

(42) ŚB(M) 4.1.5.3

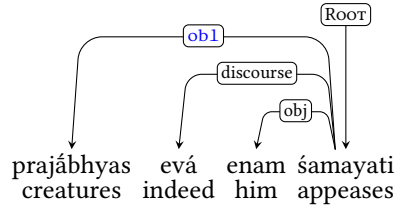


‘he was angry at the Śāryātas’

Datives that don't belong to the argument frame of the verb are labelled according to their function.

Instances of *Dativus commodi* or *incommodi* are labelled **obl**.

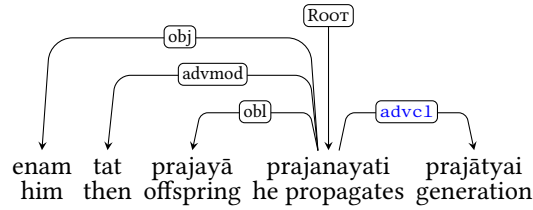
(43) TS 5.2.2.3



‘in the interest of the creatures he appeases him’

Dative deverbal nouns indicating the purpose of a verbal action are annotated as **advcl** as in AB 1.1.10.

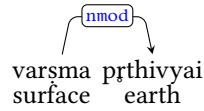
(44) AB 1.1.10



‘Then he makes him reproduce through his offspring, in order to get offspring.’

Occasionally, the dative case is used in adnominal modification, as in Ex. 45.

(45) AB 2.2.7



‘the surface of the earth’

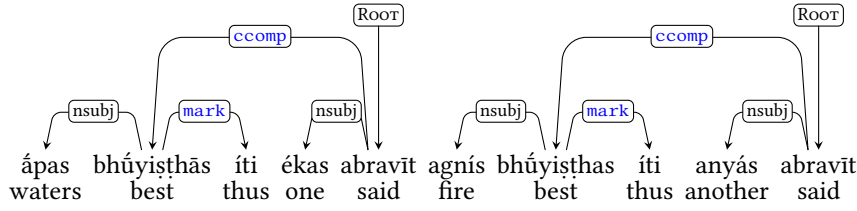
## 2.11 Direct speech

When annotating direct speech, we distinguish between cases where a speech verb is present, and those where it is not.

If a speech verb is present,<sup>9</sup> the utterance is a clausal complement (**ccomp**) of the speech verb. In this case, the quotative particle *īti*, if present, depends from the main verb of the speech with **mark**; see Ex. 46 and also Sec. 2.23.2.

(46) RV 1.161.9ab

<sup>9</sup>This applies as well to verbs bearing the notion of THINK-, KNOW-, HEAR-, SEE-, FEARING *vel sim.* (Hock 1982, 41f.).



“‘The waters are most important’, [thus] one said. ‘Fire is most important’, [thus] another said.’

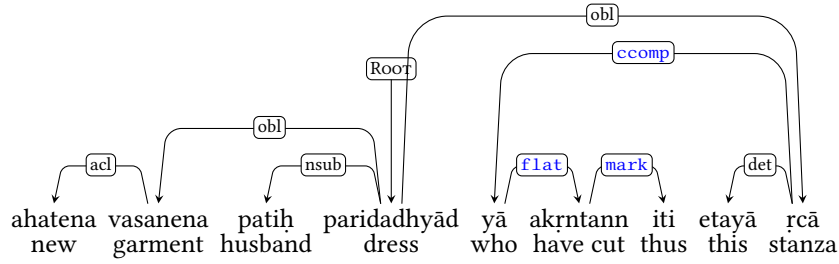
Multiple statements within the *íti*-section are connected with **parataxis** in chaining mode from left to right, i.e. the leftmost sentence is parent of the following one on the right etc., and the predicate of the rightmost sentence is linked to the quotative particle (see e.g. Ex. 48).

Note that the syntactic structure of cited Mantras (e.g. from the RV), which are mostly truncated verbatim quotes and therefore often without a coherent syntax, is not annotated. The last word of such citations is linked to *íti* with **mark**, and the remaining words of the mantra are chained with **flat** from left to right, starting with the first word of the citation which becomes its root (see Exx. 47, 50). The decision for whether or not a passage is actually a cited mantra is made on the basis of Bloomfield 1906.

If no verb of speech is present, we distinguish three sub-cases.

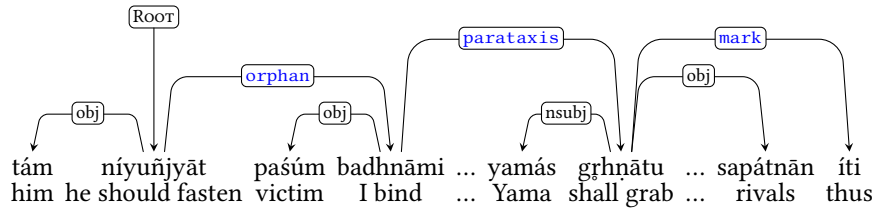
1. If a noun that denotes a speech act is present, we connect the speech with this noun using **ccomp**. This annotation is typically used when a text mentions that a Vedic mantra (*ṛc*-, *mantra*-, *sūkta*-, *anuvāka*- etc.) is uttered, as in Ex. 47. Note that this annotation is also used when the actual noun is not present, but can easily be supplied from the context; see e.g. PārGS 2.2.14 *āpo hi ṣṭheti tisṛbhiḥ* ‘(he does something) with the three (ṛc’s) “you are the waters” (etc.)’
  2. If no such noun is present, we connect the head of the direct speech to the highest ranking element in the sentence which is presumed to be associated with the given speech context. Such an arc is basically labelled with **orphan** indicating that a verb of speech is missing in the sentence (see Exx. 48, 49 and 50b).<sup>10</sup>
  3. If a suitable parent of a direct speech is not available or not to be ascertained the main element of the direct speech is labelled as **root** (main verb or predicate for an original speech, leftmost element for cited mantras). As using the label **mark** for *íti* indicates that the direct speech is a subordinate clause, this option should be used sparingly, see Ex. 50a.
- (47) GGS 2.1.18: Using **ccomp** for the dependent of a noun (*ṛcā*) which points to a truncated mantra (from AVŚ 14.1.45a):

<sup>10</sup>This annotation follows the tradition and commentators, the assumption being that the speech is dependent on a form of speech verb corresponding to a participle denoting a simultaneous event such as ‘speaking’ or to a noun corresponding to an adverbial such as ‘with the words’ is elided (for example if *etayā ṛcā* in Ex. 47 were missing). Hence the speech (**ccomp**) becomes through promotion the new head of the sequence. Now the elided form would have been linked to the superordinated sentence with **acl:depict** to the subject or **advcl:depict** to the predicate in the case of a participle or with **obl:soc** in the case of an adverbial. Our choice is to link the sequence to the superordinated predicate in any case.



‘The husband puts on a new dress with the mantra ‘Those who have cut’.’

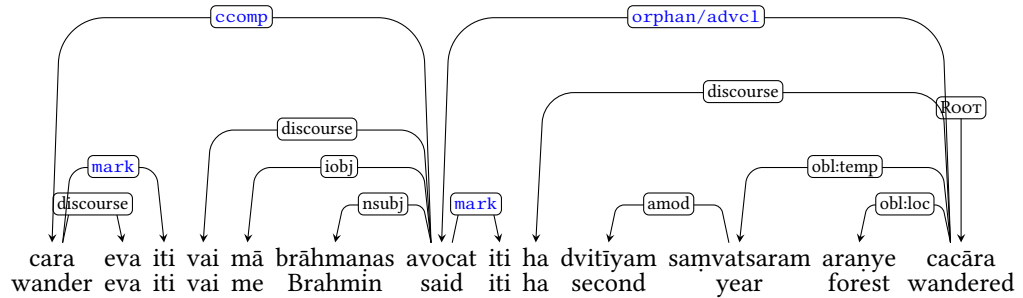
(48) MS 2.5.6.31-32



‘Him (the aforementioned ram) [the sacrificer] shall fasten [to the post] [speaking] thus: “I bind the victim. ... Yama (Death) shall grab the rivals.”’

When annotating the nested direct speech in Ex. 49, we use *ccomp* for the inner statement (*cara eva*) which depends from the speech verb *vac-* (*avocat*), but *orphan* or optionally *advcl* for connecting the outer direct speech (*iti vai ... avocat*) with *cacāra*, the verb of the parent clause. The option *advcl* is chosen if *iti* is read with a causal connotation, s. here Sec. 2.23.2.

(49) AB 7.15.2



*orphan*: ‘[Thinking:] “The Brahmin told me<sub>j</sub> “Wander!””, he<sub>j</sub> wandered in the forest for a second year.’

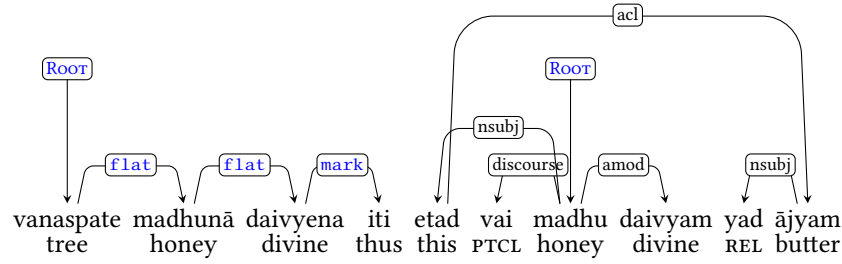
*advcl*: “The Brahmin told me<sub>j</sub> “Wander!””, hence he<sub>j</sub> wandered in the forest for a second year.’

In the following example Ex. 50 with a mantra quote from RV 3.8.1b (note the flat annotation of the text of the mantra) the speech sequence is linked to the (nominal) main clause mainly by the lexical item *madhu-*. It’s questionable whether a dependency can or should be posited in such cases. Thus different annotations might apply:

(50) AB 2.2.4

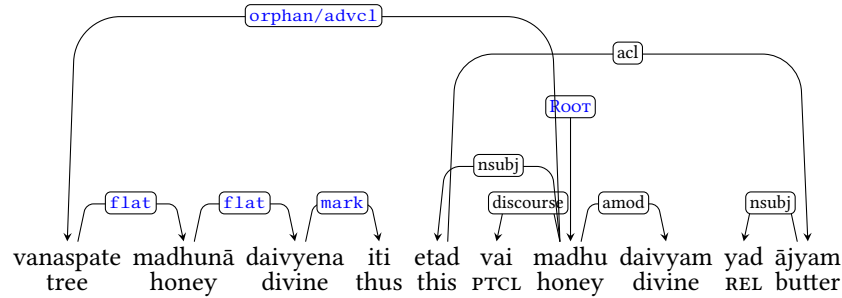
a. without a dependency declared:





‘[Mantra:] “O tree, with divine sweetness ... [they anoint you] ... ” – [Explanation:] This butter (used at the current sacrifice) verily corresponds to/is the divine sweetness (mentioned in the Mantra).’

b. with possible dependencies declared:



**orphan:** ‘Speaking out the mantra “O tree, with divine sweetness ... [they anoint you] ...” this butter verily is/(becomes) the divine sweetness.’

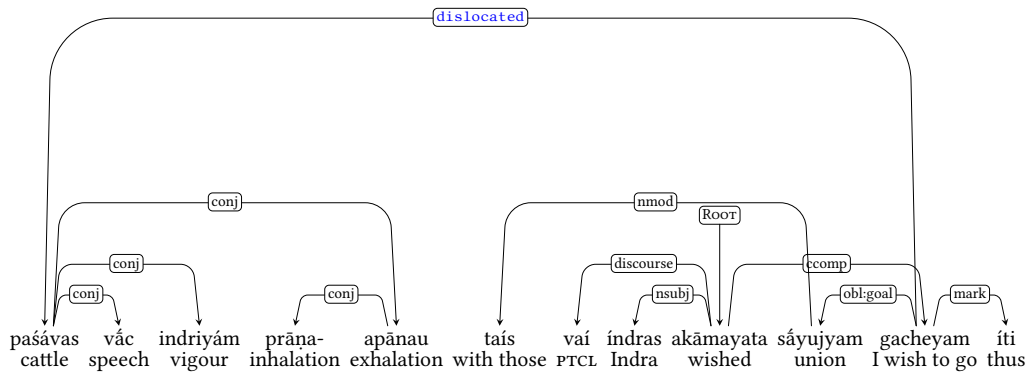
**advcl** with causal *īti*: ‘By virtue of the mantra “O tree, with divine sweetness ... [they anoint you] ...” this butter (used at the current sacrifice) verily is/(becomes) the divine sweetness.’

## 2.12 Disjunct nominals

Under this heading we subsume dislocated nominals such as hanging topics and *Nominativus pendens* constructions, which we link with **dislocated** to the head of the clause (see **UD**).

In the following example the preposed nominals in the nominative case (*paśāvas ... apānau*) don’t agree with the resumptive pronoun in the instrumental case (*taís*).

(51) MS 3.10.6

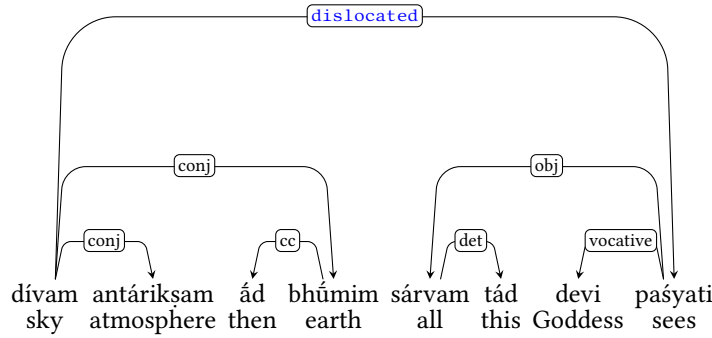


““Cattle, speech, vigour, in-breathing (and) out-breathing, – with them”, Indra desired, “may I be united.” (Oertel 1926, 30f.) – lit. ‘may I enter into communion with them’

Further examples can be found in Oertel 1926, *passim*.

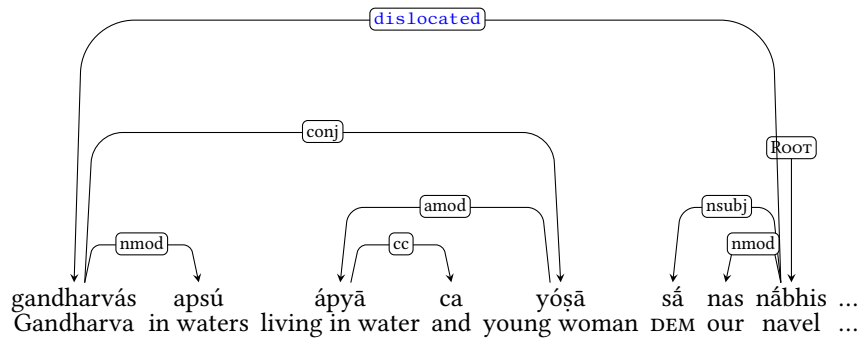
The dislocated nominal and the nominal resuming it in the main clause agree in case, but not in number and gender in the following two examples:

(52) AVŚ 4.20.1cd



“The sky, the atmosphere, then the earth – all that, O divine one (f.), he looks at.” (Whitney and Lanman 1905)

(53) RV 10.10.4cd



‘The Gandharva in the waters and the water nymph – that is our origin ...’

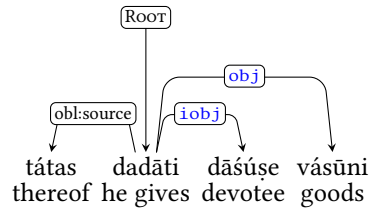
N.B.: The pronominal form *sā* agrees with *nābhis*.

## 2.13 Ditransitive constructions

Ditransitive constructions consist of a three-place predicate (Malchukov, Haspelmath, and Comrie 2010; Bickel 2011) that defines three arguments: an agent-like argument (A), which in a canonical Vedic construction takes the nominative case and is labelled *nsubj*; a second argument, T, which is usually manipulated or moved (often in the accusative case); a third argument, G, that is usually affected, stationary, or experiences a change of state, often in the dative case (e.g. in transfer verbs such as *dā-* ‘give’), or in the accusative (e.g. the person robbed with *muṣ-* ‘rob, steal’), etc. Notably, we acknowledge that the exact number of arguments of a particular Vedic predicate has not yet been established and leave it, for the time being, to the annotator to decide. See also Sec. 2.14 for double accusative constructions and Sec. 2.10 for the use of the dative.

An example for the verb *dā-* ‘give, bestow’, where the source of the transfer is indicated as well, would be:

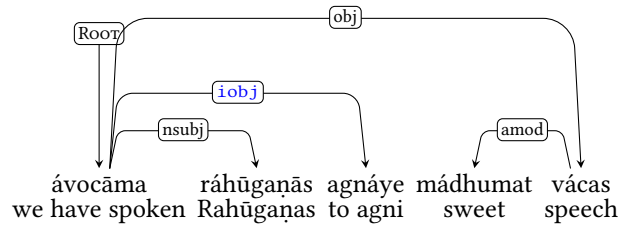
(54) RV 7.27.3c



‘[Indra is king ... over whatever there is on earth.] Thereof/From this he gives goods to whom worships (him).’

Verbs of speech vary in the assignment of case for the G argument (dative, accusative), cf. with the verb *vac-* ‘speak’ the following examples. In the first one, the G argument is in the dative:

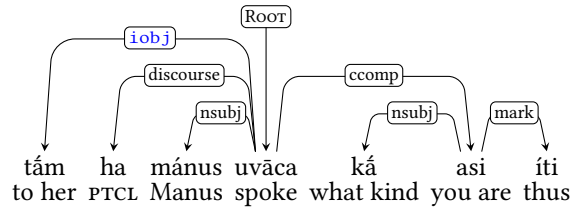
(55) RV 1.78.5ab



“We Rāhūgaṇās have spoken a honeyed speech to Agni.” (Jamison and Brereton 2014)

In this example, the G argument is in the accusative:

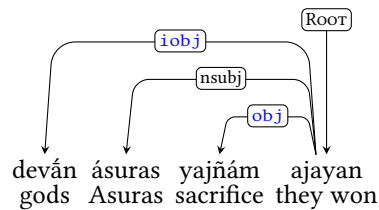
(56) ŚB(M) 1.8.1.9



‘To her (Īḍā) then Manu spoke: “(What kind of girl >) Who are you?”’

With *ji-* ‘obtain, snatch sth. from sb. by force’, both the T and the G argument take accusative case:

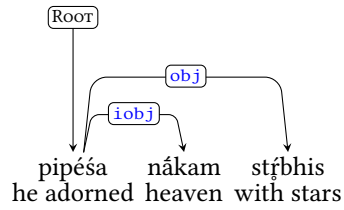
(57) MS 1.9.8.2



‘The Asuras won the sacrifice from the Gods.’

The verb *piś-* ‘adorn’ takes a T argument in the instrumental case, the G argument is in the accusative:

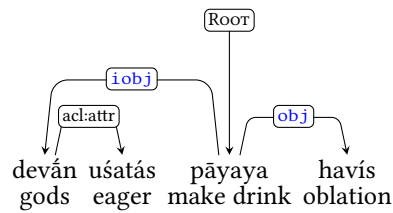
(58) RV 1.68.10



‘He (Agni) adorned heaven’s vault with stars.’

In three-place derived causative constructions, the causee usually takes the accusative or instrumental case, the direct object of the embedded predicate is in the case assigned by the embedded predicate (Kulikov 2011). We label the causee *iobj*, the embedded direct object *obj*.

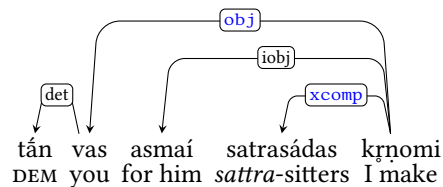
(59) RV 2.37.6



‘Make the eager gods drink the oblation!’

Verbs like *kr-* ‘make someone [turn into] x, cause someone to become x’ with a double accusative case frame follow the same scheme: The argument that undergoes the transformation is annotated as *obj* and the (planned) result as *xcomp*. The same also goes for *dhā-* with this meaning and *bhū-* ‘become’.

(60) AVŚ 1.30.4



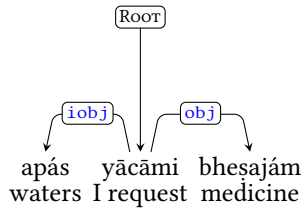
‘I make you for him sitters at the sessions (*sattrá-*).’

For another example see Ex. (69).

## 2.14 Double-accusative constructions

Double-accusative constructions are common, e.g. with *yāc-* ‘request, ask something from somebody’. We assign the thing asked for the label *obj*, the person asked *iobj*.

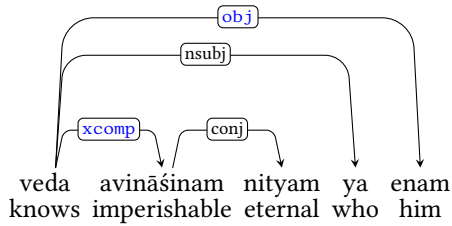
(61) RV 10.9.5



‘I ask medicine from the waters.’

In predications such as ‘know/consider sb. (P) as x, call sb. (P) x’ the second argument (P) is annotated as **obj**. The predicative nominal expression is labelled **xcomp** (following UD guidelines).

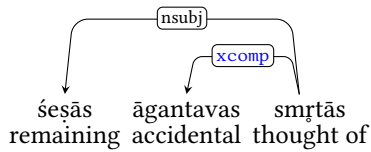
(62) MBh 6.24.21 [post-vedic]



‘who knows him as imperishable and eternal’

This annotation is also found with participial predicates or in clauses with seemingly elided copula:

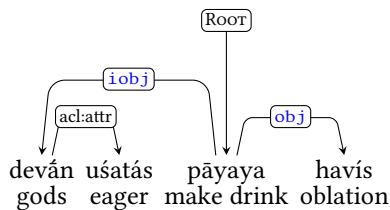
(63) Suśrutasaṃhitā Sū. 34.6



‘The remaining ones are considered accidental.’

In ditransitive double-accusative causative constructions, the causee is assigned the label **iobj**, the embedded direct object **obj**. See also Sec. 2.13

(64) RV 2.37.6



‘Make the eager gods drink the oblation!’

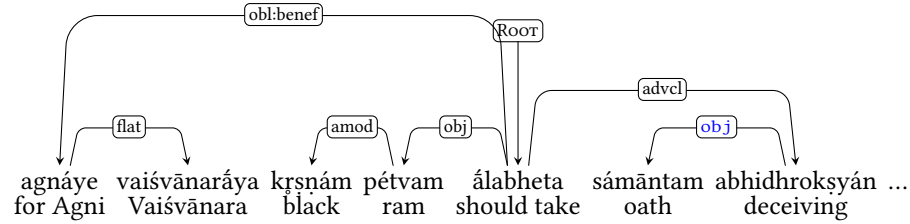
## 2.15 Ellipsis

See the UD guidelines on [ellipsis](#) for a general overview.

### 2.15.1 Elision in nominals

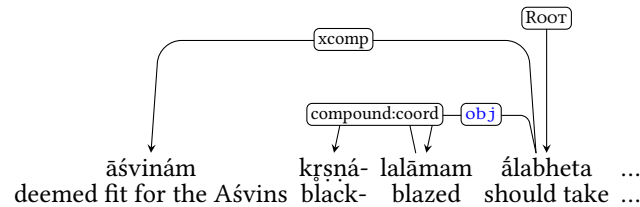
In the following interrelated sequence, where some sentences in between have been omitted, the subject of the clauses is not overtly expressed, but is known from the context. The participial clause in the first sentence depicts this known subject and is linked with **advcl** to the predicate of the superordinate clause. In the second sentence the object proper (*pétvam* ‘ram’) is elided and the dependent and orphaned compounded adjective (*kṛṣṇá-lalāmam*) is promoted to function as object of the verb, this according to the promoting order for nominal dependents declared in **UD: amod > nummod > det > nmod > case**.

(65) a. MS 2.5.6.3



‘For Agni Vaiśvānara he [i.e. the sacrificer] should seize a black ram, if he intends to break an oath. ...’

b. MS 2.5.6.4

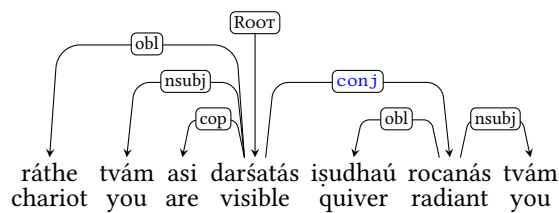


‘(As a victim deemed fit for the) Áśvins [he] should seize a black (ram) with a blaze. ...’

### 2.15.2 Elision of verbs or other predicates

The verb is elided, but the truncated sentence can be constructed as a clause with non-overt copula (*asi* is missing with *rocanás*):

(66) AVŚ 4.10.6



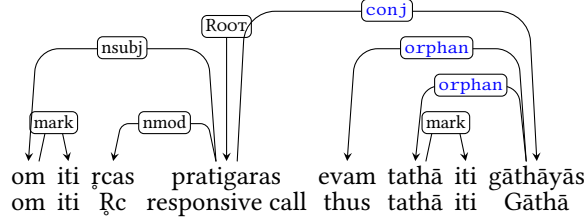
‘You are conspicuous on the chariot, you [are] radiant on the quiver.’

In all other cases with gapped predicates, the dependent with the highest rank is promoted and becomes the “new verb”, its “new”, “non-functional dependents” are linked with the label **orphan** from there. The hierarchy is the following, where the leftmost dependent has got the

highest rank: **nsubj** > **obj** > **iobj** > **obl** > **advmod** > **csubj** > **xcomp** > **ccomp** > **advcl** (cf. **UD**).

In the following example the predicate is represented by a (deverbal) noun (*pratigaras*) with the nominal dependent *ṛcas* (**nmod**).<sup>11</sup> In the second, conjunct clause the head of the nominal predicate is gapped. The dependent (*gāthāyās*) of the nominal gapped inherits its dependents, which are then linked with **orphan** since the resulting relations after the promotion are opaque (cf. **UD**):

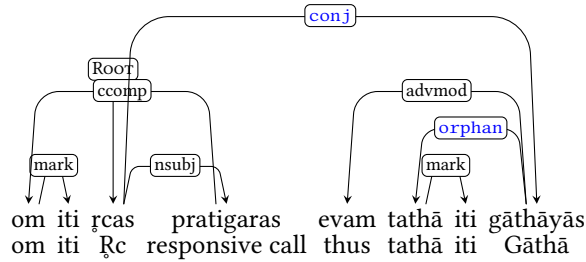
(67) AB 7.18.13



‘“Om” is the responsive call for a Ṛc, and “tathā” [the one] for a Gāthā.’ – following Keith 1920.

A valid alternative reading for the sentence given in Ex. (67) yields the following annotation:

(68) AB 7.18.13

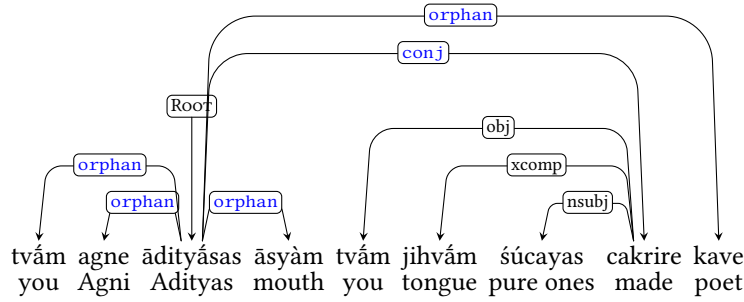


‘The responsive call “Om” is (apt) for a Ṛc, and likewise [the responsive call] “tathā” is (apt) for a Gāthā.’

In the case of leftward gapping, the dependent which in the first conjunct has the highest rank is promoted to the “new-head” position. The second conjunct, i.e. the one bearing the verb, is connected to the “new head” via **conj** and does not require any **orphan** relation:

(69) RV 2.1.13ab

<sup>11</sup>Note that the number and case of *ṛcas* (GEN./ABL.SG.F or NOM./ACC.PL.F) is ascertained by the parallel form *gāthāyās* (GEN./ABL.SG.F) – *prāti* is predominantly construed with ACC., but as well with GEN. or/and ABL., and possibly even with LOC. (RV 8.82.1), cf. PW, s.v.

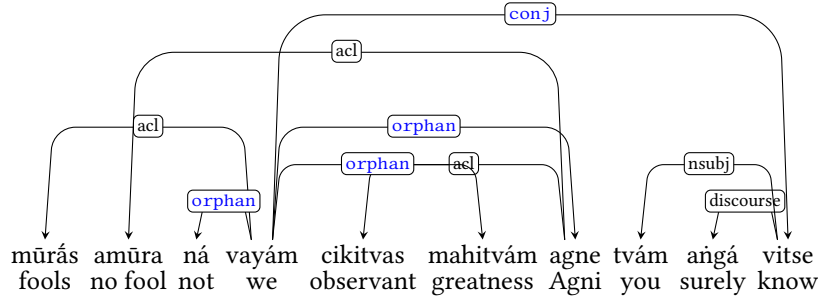


‘The Adityas (made) you, Agni, their mouth; the pure ones made you their tongue, o poet!’

See also Ex. (72).

The following is another example of ellipsis in coordination, where the elliptical form is not completely identical to its model (sloppy identity). Here, the overt verbal form *vitse* is a second person singular form of the verb *vid-* ‘to know’, but one has to recover a first person plural. This phenomenon has no consequences on the annotation label.

(70) RV 10.4.4ab



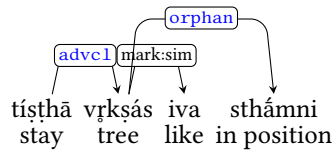
‘We fools do not (know) your greatness, o Agni who have perceived (everything) being anything but a fool, but you surely know (it).’

According to the UD guidelines, “the **orphan** relation is only used when an ordinary relation would be misleading (for example, when attaching an object to a subject)”. Therefore, *mūrās* ‘fools’ retains its **acl** relation to the “new head” *vayám*, and the same do *amūra* and *cikitvas* with respect to their head *agne*; all other dependents are instead connected via **orphan**.

### 2.15.3 Comparisons

Also see Sec. 2.6.2.

(71) AVŚ 4.7.5



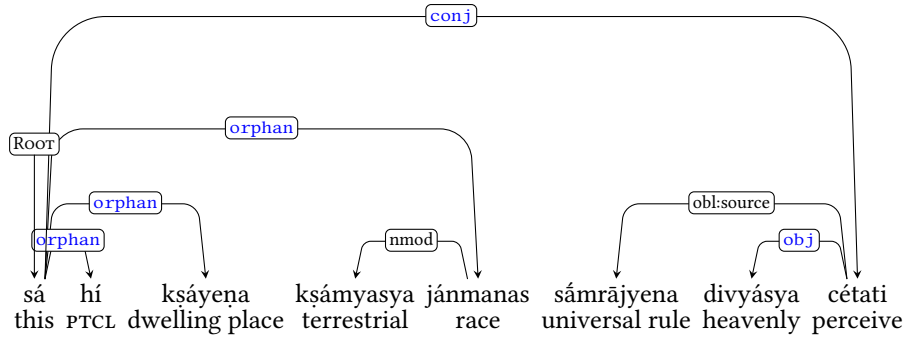
‘Stay like a tree [stays] in position.’



## 2.15.4 Complex cases

In the following example (RV 7.46.2ab) the verb *cétati* is omitted in the first clause, whereas the second lacks the subject *sá* and the object *jánmanas*. The latter is represented by its promoted nominal dependent *divyásya* which becomes the “new” object (according to the promoting order mentioned in Sec. 2.15.1): *amod*  $\Rightarrow$  *obj*. The dependent with the highest rank in the first clause with its verb gapped is the subject *sá* which is promoted to “new head”, *nsubj*  $\Rightarrow$  *root* (according to the respective promoting order given in Sec. 2.15.2), and thus inherits from the gapped verb its dependents which are linked with *orphan* thereto.

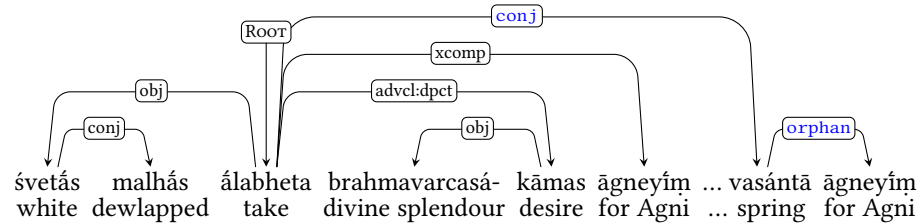
(72) RV 7.46.2ab



“For in consequence of his dwelling place he takes cognizance of the earthly race and, in consequence of his universal rule, of the heavenly.” (Jamison and Brereton 2014).

In the following example from MS 2.5.2, *āgneyīm* ‘being for Agni’ is interpreted as secondary predicate of *ālabheta*, and *vasántā āgneyīm* is elliptical. As *āgneyīm* in the ellipsis takes up the *xcomp* argument, the oblique *vasántā* (*obl*) is promoted before it (*obl*  $\Rightarrow$  *xcomp*).

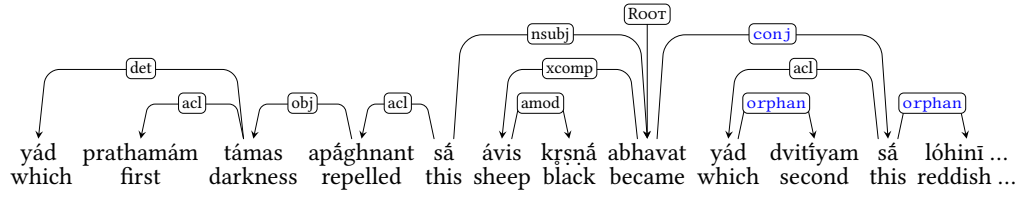
(73) MS 2.5.2.27



‘White [heifers] with dewlaps shall he take [for the sacrifice], if he wishes for the divine splendour, one for Agni, [one for Br̥haspati and one for Sūrya]: for Agni in the spring time, [for Br̥haspati in the rainy season and for Sūrya in the cold season]’ (following Amano 2009, p. 559).

MS 2.5.2.3-4 shows another complex case, where *orphan* is used for an orphaned *ac1* (*dvitīyam*) as well as for the orphaned adjective modifier (*amod*) *lōhinī* ‘red (fem.)’ of the unexpressed noun *āvis* ‘sheep’ in the clausal complement (*xcomp*):

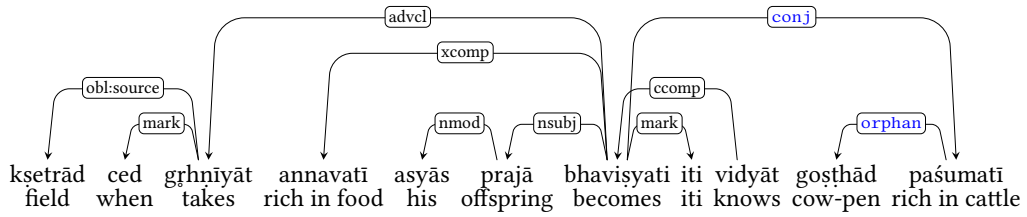
(74) MS 2.5.2.3-4



‘What darkness [the gods] carved out first, that turned into a black sheep, what [they carved out] second, that [turned into a] ruddy [sheep] ...’

In ÁśvGS 1.5.5, the ellipsis refers back to a sentence uttered in a direct speech and to an adverbial clause dependent from it (*ced* ‘when’). According to the order of promotion suggested in the UD guidelines *paśumatī* ‘rich in cattle’ becomes the head, and *goṣṭhād* ‘from the cowpen’, a dependent (*obl*) of the elided verb of the adverbial clause (*grhṇīyāt*), is linked to the new head with *orphan*.

(75) ÁśvGS 1.5.5

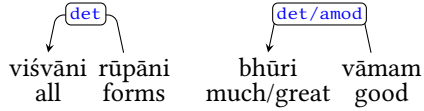


‘He should know: When he takes (something) from a field, his offspring will become rich in food; [when he takes] from a cow-pen, [his offspring will become] rich in cattle.’

## 2.16 Indefinite quantifiers

Our annotation is based on decisions found in the English UD treebanks, where quantifiers such as ‘all’, ‘every’, ‘each’ etc. are annotated as *det*.

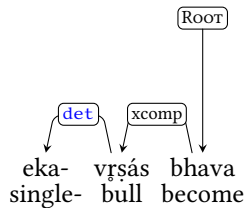
(76)



Some lexical items can oscillate between quantification and other uses, for example *bhūri* ‘much; great’ or *sārva* ‘whole; all’. Depending on the context of its use, annotators are free to annotate individual instances with *amod* or *acl* as well.

The label *det* also applies to *éka* ‘only, single, sole’, whereas ‘one’ should be annotated as *nummod*.

(77) AVŚ 6.86.1



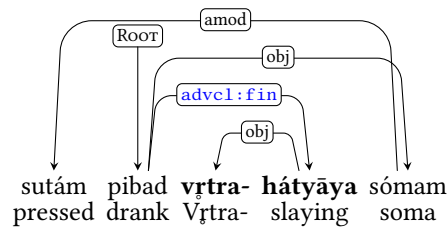
‘Become the single bull!’ (addressed to a ruler)

## 2.17 “Infinitives” and converbal event nouns

### 2.17.1 Converbs of purpose

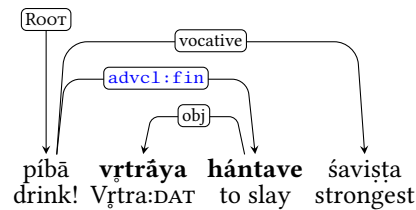
It is unclear whether a category *infinitive* fits the situation found in Vedic Sanskrit. In recent times the question has been raised explicitly by Zehnder 2011b where the answer given with good reason is a negative one. Following Zehnder 2016, p. 138 the forms addressed as infinitives in the Veda all consist in inflected event nouns used as adjuncts of the superordinate predicate, primarily to express purpose, and posited in “a continuum of expressions of purpose (Germ. ‘finale Ausdrücke’) with the two poles, (a) datives of synchronic verbal abstracts and (b) converbs of purpose.” This continuum may be illustrated with the pair of isofunctional expressions *vṛtra-hátyāya* and *vṛtrāya hántave*, cf.:

(78) a. RV 5.29.7d



‘He (Indra) drank (the) pressed soma for the slaying of/to slay Vṛtra.’

b. RV 10.116.1b



‘Drink, strongest (Indra), (soma) in order to slay Vṛtra/for the slaying [of] Vṛtra.’<sup>12</sup>

The label *advcl* is chosen to emphasize the affinity to adverbial clauses with the conjunctions *yád* or *yáthā*.

### 2.17.2 Infinitives

A more traditional account, for which see Delbrück 1888, 410ff. and more recently Keydana 2013, distinguishes the following basic functions of *infinitives*:

- (i) adjunct infinitives, Ex. (78b)
- (ii) complement infinitives, Ex. (79)
- (iii) predicative infinitives, Ex. (80)

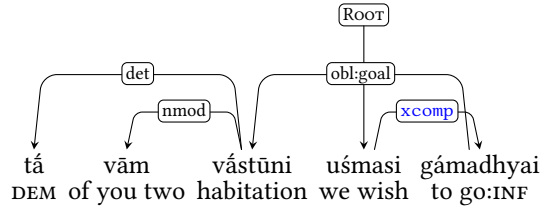
<sup>12</sup>The peculiar dative form *vṛtrāya* denoting the object of the event noun is “attracted” to the form of the latter, cf. the detailed discussion in Keydana 2013, 107ff.

(iv) matrix infinitives, Ex. (81)

An instance of (i) is Ex. (78b).

For (ii), cf. with *vaś-* ‘wish for’, e.g.:

(79) RV 1.154.6a



‘We wish to go to your dwellings.’

A first alternative reading would be: ‘We wish your dwellings as those we intend to go to in future times.’ Then *vāstūni* is to be interpreted as direct object (**obj**) of the matrix verb *uśmasi* with *gāmadhyai* being a predicative complement (**xcomp**) to the object. – N.B.: the *infinitive gāmadhyai* is evidently built on the conjunctive/subjunctive stem of *gam-* ‘go’, thus our translation highlighting the intention and the hypothetical event in the future.

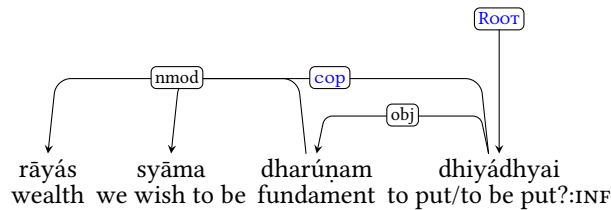
A second alternative is to read *gāmadhyai* as a mere loose adjunct in analogy to (i) or to Sec. 2.17.1: ‘we wish your dwellings so/in order that we might want to go thereto in future times’. The linking label of *gāmadhyai* to the matrix verb would then be **advcl:fin**.

Note also that the diathesis/voice of *infinitives* is defined by the context and is (normally) not derivable from the formation (but see Ex. (80) with the footnote).

For further examples cf. Sec. 2.20. Following Keydana 2013, 139ff. *factitive* complement infinitives belong to this group; on the other hand they could be analysed as periphrastic causatives, see here Ex. (15) in Sec. 2.5.

An example for a predicative infinitive (iii) would be:

(80) RV 7.34.24d



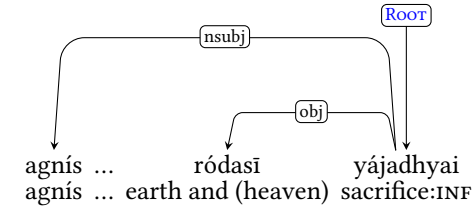
“Might we be (fit) to found the buttress of wealth.” (Jamison and Brereton 2014), but:

“Pussions-nous être (tels) que le fondement de la richesse s’établisse (en nous) !” (EVP, vol. 5, p. 39)<sup>13</sup>

<sup>13</sup>“Cette traduction respecte la tendance passive de l’infin. en *-dhyai*.” (EVP, vol. 4, p. 94). Of course the passive

Finally, *infinitives* are deemed to be occasionally used independently, i.e. as matrix verbs (iv) as e.g. in:

(81) RV 6.12.1b



‘Agni shall sacrifice to Earth and Heaven.’ or “Agni is to sacrifice to the two world-halves.” (Jamison and Brereton 2014)

### 2.17.3 Annotation tips

The following points might be run through as a simplified decision tree:

- (A) *Converbs of purpose* and/or *adjunct infinitives* and all others expressions denoting a purpose, no matter if they have dependents or not, are linked with **advcl:fin** to the superordinated predicate. A first clue can be the *form of interest* being synchronically assignable to the dative case. Note that the form ending in *-tum* gradually absorbs all the others’ functions and is then continued and becomes the sole form in post-vedic Sanskrit.
- (B) *Complement infinitives* (including *modals*, see Sec. 2.20) are basically linked with **xcomp** to the respective matrix verb. A first clue here can be the *form of interest* being synchronically NOT assignable to the dative case. – Should the annotator disagree with the concept of *complement infinitives* he might want to fall back to the annotation shown for (A) respectively to the options illustrated for Ex. (79).
- (C) *Factitive complement infinitives* are basically annotated as *periphrastic causatives* (see Sec. 2.5). Some annotators might opt for (B) instead.
- (D) *Predicative and matrix infinitives* are treated as predicates.

### 2.18 Interjections

... and exclamations: **discourse** of the main verb, e.g. *óm*, *svāhā*, *hánta*, *uvé*; or of a noun: *pátamga hai* ‘hey locust’.

### 2.19 Locative

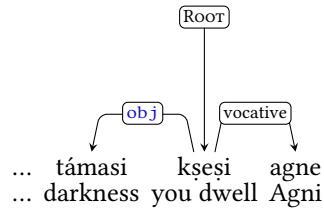
Often annotated as **obl**. With two- and three-place predicates a nominal expression in the locative can assume the P, T or G role (Delbrück 1888, pp. 118–120); see also Sec. 2.3.5.

With locational two-place verbs such as *kṣit-* ‘dwell in, reside in, abide in’ the second argument is often expressed with a locative, cf.:

(82) RV 10.51.5b

---

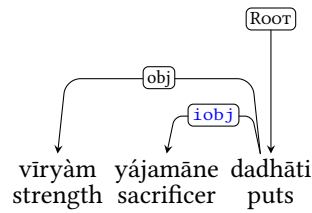
reading chosen by Renou could be due to the passive stem upon which the form might have been built: *\*dhiyáte* for *dhīyáte*?



"Yet you dwell in darkness, Agni." (Jamison and Brereton 2014)

With three-place predicates the G role may be assumed by a nominal expression in the locative, cf. *dhā-* 'put something somewhere, place something somewhere':

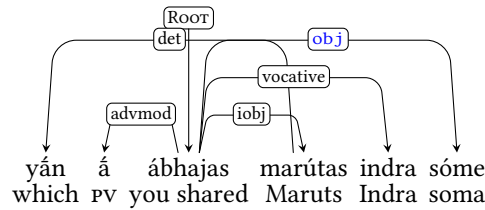
(83) TS 2.3.7.4



'he places strength into the sacrificer', cf. Delbrück 1888, p. 121

The T role with *ā-bhaj-* 'share something with someone':

(84) RV 3.35.9

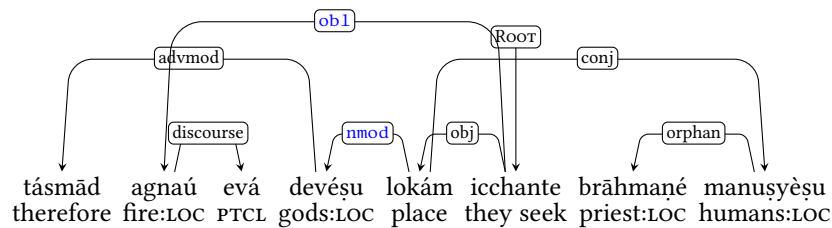


'the Maruts to whom you gave a share in soma, Indra'

For the locativus absolutus see Ex. (5).

Locatives are, though rarely, used (as perhaps other cases as well) adnominally, cf. e.g.:

(85) BĀU 1.4.15.3



'Therefore, within/in front of the fire they seek to find a place to be among the gods, and within/in front of the priest (one) among humans.'

The locative *devéṣu* is here rather an attribute to *lokám* than an oblique to the verb, and could eventually and finally be interpreted as a possessive attribute: 'the gods' world' (Germ. 'die

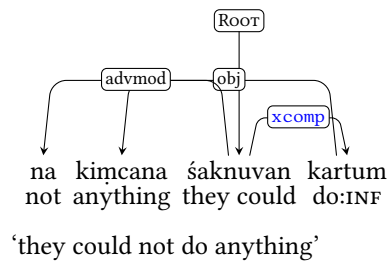
Götterwelt'). It doesn't matter whether the phrase *devéṣu lokám* is based on a clause in which the locative had oblique function: the result is a case form used adnominally. The same applies of course to *manuṣyēṣu*, short for *manuṣyēṣu lokám*. See also Ex. (53).

## 2.20 Modal verbs

### 2.20.1 Modals of possibility

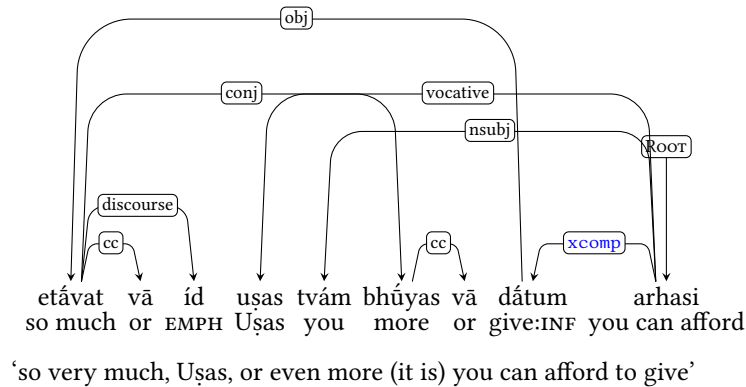
In Vedic, the modal meanings of possibility can, other than with grammatical moods, also be expressed by lexical resources, i.e. with predicates such as *śak-* 'can, be able to', *arh-* 'to be worthy of, to be allowed to; to be able to afford', *īśvará-* 'able to' (ADJ). Unlike in English these lexemes show full semantics and are thus hardly to be addressed as auxiliaries; they are therefore NOT labelled with *aux*.

(86) AB 1.7.3



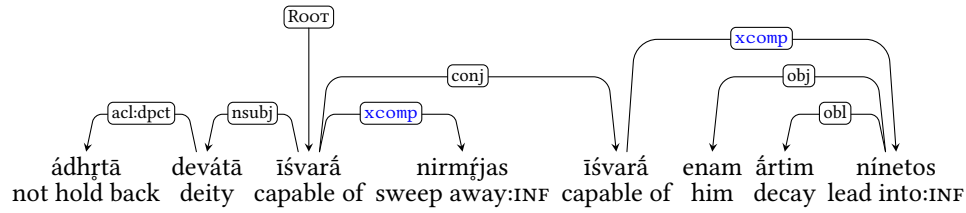
For alternative readings and annotations see Sec. 2.17.3 and Ex. (79).

(87) RV 5.79.10ab



Note that in the given context the active voice of *dātum* is undisputed, since in the whole hymn it is Dawn who is said to bestow goods on the community. Otherwise a reading 'You are worthy to be given so very much and even more' might be appropriate.

(88) MS 2.5.1.58



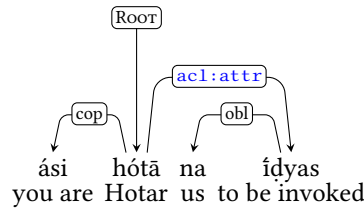
‘Being unstoppable the deity (Vāyu = Wind) is capable of sweeping (the sacrifice) away, is capable of leading him (the sacrificer) into disintegration.’, cf. Amano 2009, p. 554.

Note the genitive/ablative form of the two INF which correspond to the argument structure of the underlying verb *īś-* ‘be master of’, cf. Sec. 2.2.

### 2.20.2 Modals of necessity or obligation

Modal meanings of necessity or obligation are mostly expressed by gerundives. When they have predicative function, gerundives constitute the head of their clause and can occur alone or with a copula, viz. with *as-* ‘be’ or *bhū-* ‘become, be’.

(89) RV 1.12.3c



“You are the Hotar, to be reverently invoked by us.” (Jamison and Brereton 2014)

## 2.21 Names

See Sec. 2.26.

## 2.22 Numerals

The basic annotations for **cardinals** (Macdonell 1916, pp. 98–101) are:

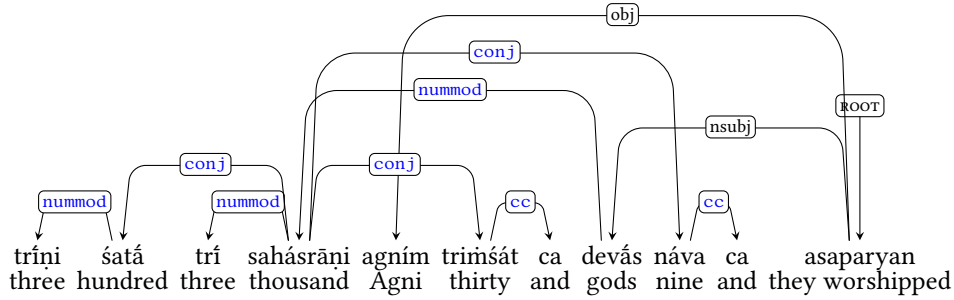
- NUMERAL OR INFLECTED NUMERAL ← **nummod** ← COUNTED UNITS – see e.g. *trī* [PL.N] ← **nummod** ← *sahásrāṇi* [PL.N] ← **nummod** ← *devās* [PL.M] in Ex. (90).
- NUMERAL SUBSTANTIVE → **nmod** → GEN. OF COUNTED UNITS – e.g. *gávām* [GEN.PL] ← **nmod** ← *sahásraḥ* [INS.PL.N] ‘with thousands [of] cows’ (RV 5.30.13b) or (*dvé ... śaté*) [NOM/ACC.DU.N] → **nmod** → *gós* [GEN.SG!] ‘two hundred[s of] cow(s)’ (RV 7.18.22a)
- NUMERAL SUBSTANTIVE → **amod** → ADJECTIVAL DERIVATION OF COUNTED UNITS – e.g. (*śaṣṭís sahásram*) [NOM.SG.N] → **amod** → *gávyam* [NOM.SG.N] ‘1,060’ or ‘60,000 cows’ (RV 1.126.3c)



Numerals can be complex, either formed parathetically or compositionally or in both ways, cf. for a detailed account AiGr., vol. III, pp. 337–400. Following the UD guidelines, we annotate according to the syntactic structure of complex numerals wherever possible; if no clear syntactic structure is discernible, *flat* is used for joining the elements of the complex numeral using bouquet annotation, cf. UD.

At RV 3.9.9ab, the number 3,339 (dependent as *nummod* from the subject *devās* ‘gods’) is constructed as the sum  $3 \cdot 100 + 3 \cdot 1000 + 30 + 9$  using a weak, albeit discernible internal syntactic structure:

(90) RV 3.9.9ab



‘Three hundred (and) three thousand[s] and thirty and nine gods worshipped Agni.’

**Ordinals** are adjectives partly derived from ordinals with several suffixes all ending in *-a* (Macdonell 1916, pp. 101–103). They are annotated as *amod*.

Note the difference between e.g. the cardinal *ekādaśa* ‘11’ and the ordinal *ekādaśā-* ‘11th’ (with the inflected forms of the INS.PL *ekādaśābhis* respectively *ekādaśāis*).

## 2.23 Particles

This section summarizes our annotation decisions for enclitics and particles and is not meant as an exhaustive treatment of Vedic particles, which are summarily discussed in Delbrück 1888, p. 22, §13, p. 471f., pp. 472–546.

### 2.23.1 Negation particles

In clause-initial position the polarity operator *ná* usually negates the clause or has scope over the following expression, in all other positions its scope extends over the immediately following element. In prohibitive sentences the particle used is *mā́*, see Ex. (91). The nominal negation *a(n)-* is used in compounds, including non-finite verbal forms. All these are linked with *advmod* to their respective heads. Note that postponed *ná* is also used as a marker in similitive constructions, accordingly annotated as *case:sim* (See Sec. 2.6.2).

### 2.23.2 Quotative particle

For *íti* as quotative particle, i.e. following, but also preceding a direct speech, see here Sec. 2.11: *mark*. Occasionally, *íti* is used as adverb ‘thus, so’ (*advmod*). *íti* is basically an adverb built on the proximal particle and/or pronoun stem *i(-)*, and has anaphoric, but also occasionally cataphoric reference.

The use as adverb (**advmod**) ‘thus, so, in this way’ is tangible e.g. in RV 5.41.17ab: *íti cin nú ... dévāso vānate mārtyo vas* ‘Verily thus [= in this way/with these words] a mortal man seeks to win you over, ye gods’, RV 10.27.3a *nāhām tām veda yā iti bravīti* ‘I do not know anyone who speaks thus.’ or RV 10.115.9ab: *íti tvāgne ... řsayo ’votan* ‘Thus [= with the words/verses just spoken] the seers have invoked you, Agni.’

By and by this adverb was felt to closely belong to the spoken statement and was reclassified as marker of the direct speech (see Sec. 2.11) and thus as quotative particle; cf. as an example of the underlying development Ex. 46: ‘[The waters are most important.] [Thus one said.]’ (**advmod**) > ‘[The water are most important, \*thus] [one said] (**mark**) > ““The waters are most important”, one said.’

Besides this prominent use *íti* is found in other closely related functions (Hock 1982, p. 42), so:

- causal: “therefore, hence” (**mark** + **advcl**), cf. Ex. 49 (Hock 1982, 54f.)
- naming: “by name”, cf. RV 8.92.2 *puruhūtām ... índra iti bravītana* ‘Him who is invoked by many ... do ye call by (his name) “Indra”!’ (**mark** + **ccomp**)
- apostrophizing: “so-called” e.g. in RV 5.61.8ab *utā ghā némo ástutaḥ púmāñ iti bruve pañiḥ* ‘Even some unpraised niggard is occasionally called “man”.’ (**mark** + **ccomp**)
- explicative and/or enumerating “namely, i.e.; e.g.” GB 1.1.17.1 ... -- (???)
- listing: “etc.” (???)

### 2.23.3 Interrogative particles

Beside their pronominal use *kát* and *kím* are also found as interrogative particles, cf. Etter 1985, *passim*, and are in such cases annotated parallel to *íti*, i.e. with **mark**. Note that there are also instances where the interpretations as interrogative adverbs ‘why, how?’ are possible; → **advmod**.

### 2.23.4 Particles with scope over words or phrases

According to Delbrück the scope of some particles is the word or the phrase to which they are attached to. These are coordinating *ca* (**cc**), disjunctive *vā* (**cc**), comparative *iva* (**case:sim**), emphatic *cid* and *á* (**discourse**), and emphatic/expository *evá* (**discourse**). The latter, when sentence-initial, is also used as adverb (**advmod**) in the RV and AV. N.B.: *ca* and *cid* are found after the first word of a nominal, thus e.g. *viśve ca devās* ‘and all the gods’.

### 2.23.5 Particles with scope over clauses and sentences

Particles in Wackernagel position tend to have the whole sentence in their scope: *vái, khálu, kíla, íd, aṅgá, svid, ha, sma, kam*. These are linked with **discourse** to the predicate. The same position is held by the following particles, but the relation to the predicate might vary in context: sentence-connective also adding a moment of immediacy *u* (**cc** or **discourse**), temporal *nú*, which is as well used in evaluative function as in English “now, let’s see ...” (**advmod**, **discourse**), adversative-connective *tú*, which is also used in various pragmatic functions as in German “Er ist *doch* da.” (“Yes, he is here.”) (**cc**, **discourse**) affirmative *áha* (**discourse**), and causal-explicative *hí* (**discourse**).

### 2.23.6 Particles which take or can take first position in a clause or sentence

*ápi* ‘close’ in the RV is a preposition construed with the locative case ([case](#)). From the RV onwards it is also used as emphatic particle pre- or postponed to a word ([discourse](#)). *utá* ‘and’ is a word or clause connective in the RV ([cc](#)). On *íti* see [Sec. 2.23.2](#). *evám*, found only once in the RV, supersedes *evá* (see [Sec. 2.23.4](#)) as adverb ([advmod](#)). *átha* (in the RV also *ádha*) is used as an adverb in main clauses ([advmod](#)) marking a consequence of preceding statements, ‘then, thereupon’, quite often with an adversative notion, ‘but then’. In main and independent clauses these particles may also be annotated as conjunctions with [cc](#).

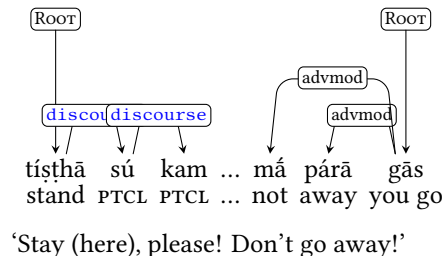
### 2.23.7 Varia

- Whereas the adverbial and adjectival use of *sú* ‘good, well’ and of its antonym *dus-* ‘bad(ly)’ are well established as first members of compounds (see [Sec. 2.7.1](#), p. 25) an independent adverb *sú* is not attested. Independent *sú* is used as a particle with as its scope a clause imparted with the speaker’s hope for the satisfactory fulfillment of his pronouncements, often left out in translations (see below [Ex. \(91\)](#)). We annotate *sú* ← [discourse](#) ← VERB.
- The particles *ca*, *cid* and *caná* serve generalizing functions, and are often combined with interrogative pronouns, thus e.g. *kás ca*, *kás cid*, *kás caná* mean all ‘whoever’, see here [Ex. \(97\)](#). The particles are linked to their heads with the label [fixed](#).

### 2.23.8 Particle chains

Particles can occur in chains or/and in groups. In groups we declare the left-most element as head, and link the other particles to it with the label [fixed](#), thus e.g. *ha* → [fixed](#) → *vaí* or *khálu* → [fixed](#) → *vaí*. In other cases, where an additive or cumulative use is assumed, we chain the particles, as e.g. in:

(91) RV 3.53.2a



## 2.24 Prepositions and preverbs

Also see [Sec. 2.23](#) on particles.

The term *preposition* was (and is occasionally still) used as hyperonym for both, adpositions (pre-, post-, circumpositions) and preverbs, but is gradually shifting to denote only the former. Following Hettrich, Casaretto and Schneider (2004) we will use the term *local particles*.

Rule of thumb:

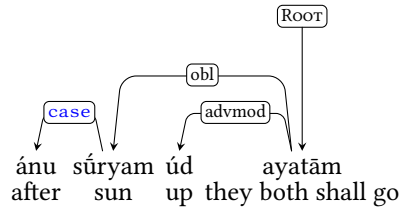
**case** local particles used as adpositions with governed nouns in independent prepositional phrases. According to the **UD**, independent prepositional phrases bear the **obl** relation to their heads.

**advmod** local particles used as preverbs, i.e. modifying verbs.

The local particles listed by Delbrück 1888, pp. 440–470 and there labelled as “(echte) Prae-positionen” (prepositions proper) can often be used in both manners. These are contrasted with words which are used only adnominally (called “unechte Prae-positionen” (prepositions “improper”) by Delbrück 1888, pp. 470–471).

In the following example we focus on the local particles *ú* and *ánu*.

(92) AVŚ 1.22.1

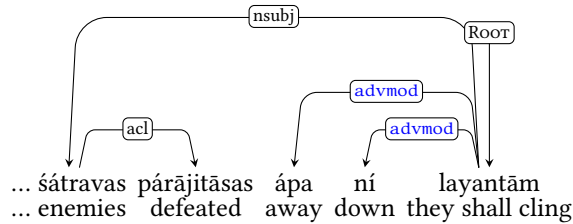


“Let them (both) go up toward the sun.” (Whitney and Lanman 1905) or with a marked interpretation of *ánu* as adposition: ‘Let them both go upward after/following the sun.’

Following Delbrück 1888, p. 453 *ú* is only used with verbs, thus we link this word with its predicate with **advmod**. *ánu* as well is often used as preverb, so *inter alia* with the verb *i-* ‘go’; the interpretation of *ánu* as an adposition is made probable by the univerbations with its governed nouns such as in *anuśvadhām* (adverb) from *ánu svadhām* resp. *svadhām ánu* (adverbials), all meaning ‘according to one’s own nature’, or as in preposition governing compounds such as *ánu-vrata-* (adjective) ‘sb. who follows a behest, a bidding’ from *ánu vratām* (adverbial) ‘following a behest’. Thus in our example both interpretations and annotations (**case** or **advmod**) are possible.

Multiple preverbs are linked individually to the verb:

(93) RV 10.84.7cd



‘(And) once completely defeated the enemies shall hole up themselves (far) away.’

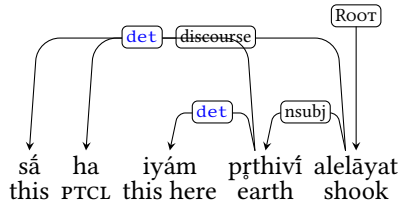
## 2.25 Pronouns

Basic annotation for pronouns relating to nominal heads, i.e. for demonstratives, relatives, adjectival interrogatives: PRONOUN ← **det** ← HEAD.

Possible combinations of pronouns are discussed in Delbrück 1888, pp. 211–212.

Not uncommon are combinations of two demonstratives such as in:

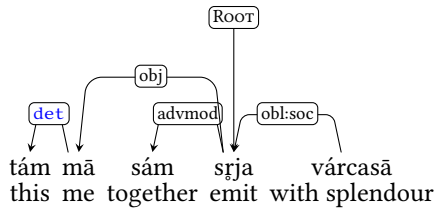
(94) ŚB(M) 2.1.1.8



‘This very earth here was shaking.’

Or of a demonstrative and a personal pronoun, where the head is represented by the personal pronoun, as in:

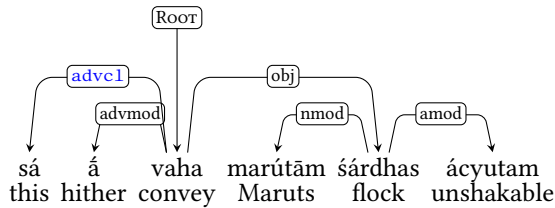
(95) RV 1.23.23d



‘Provide me with splendour!’

Note that some scholars read the pronoun *sá-/tá-* in such cases as depictive, thus ‘This earth [*sá* = as she appears in the present condition] here [*iyám* denoting proximal deixis] was shaking.’ respectively ‘Provide me [*tām* = as such, as described afore ] with splendour!’. Since this issue is much discussed and still under investigation, it is left to the annotator to decide between determinative and depictive value of *sá-/tá-*. Note, however, that in case of depictive interpretation, *sá-/tá-* depends on its referent via [ac1](#). If the referent is not overtly expressed, *sá-/tá-* is instead connected to the superordinate predicate via [advcl](#):

(96) RV 2.3.3c

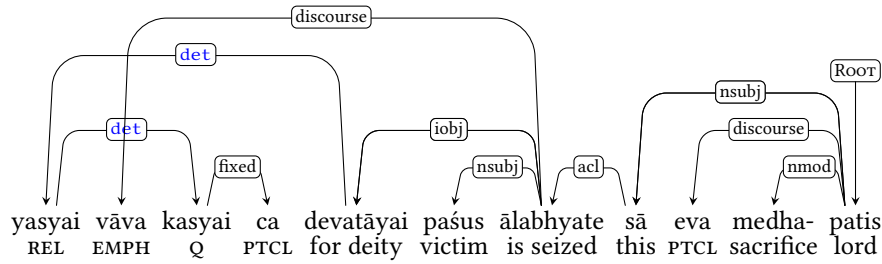


‘As such, convey hither the unshakable flock of the Maruts.’

See also Sec. 2.29 on secondary predication.

A special combination consists in the sequence of relative, interrogative pronoun, and a generalizing particle, i.e. *yá- ... ká- ca, cid, caná*, found in relative clauses, cf. Delbrück 1888, 569f. Here the interrogative element (*ká- ca*) is subordinated to the relative *yá-*, hence we annotate HEAD → [det](#) → *yá-* → [det](#) → *ká- ca*, as in:

(97) AB 2.6.5



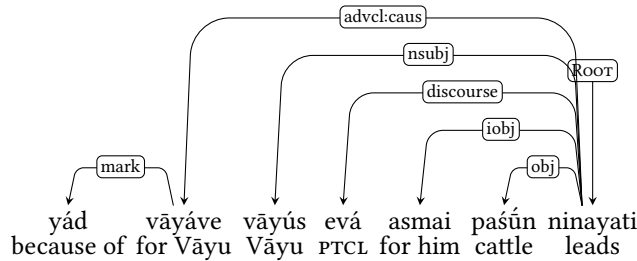
“To whatever deity the victim is slaughtered, that is the lord of the sacrifice.” (Keith 1920)

### 2.25.1 Adverbial usage of pronominal forms

Some forms of the determinative pronouns can appear in adverbial functions, so e.g. *tāsmāt* ‘hence, therefore’ (ABL.SG. of *tā-*) or *tēna* ‘therewith, thereby’ (INS.SG.). Most common are the subordinating *yād* ‘when, if, because of’ and its correlate *tād* ‘then, thus, there’ which correspond and are probably originally identical with the NOM./ACC.SG.N. of *yā-* respectively *tā-*.

As with other relative adverbs (see Sec. 2.3 with Ex. (116)) we annotate *yād* as conjunction linking the predicate of the relative clause to the superordinate sentence, as e.g. in:

(98) MS 2.5.1.82



‘Since (the victim was consecrated) to Vāyu, Vāyu verily thus brings up cattle for him (= the sacrificer).’

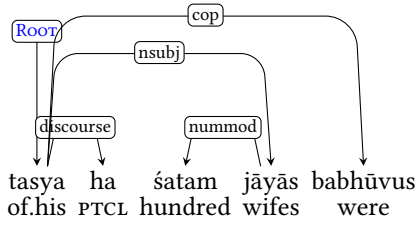
For an Ex. of adverbial *tad* see Ex. (44).

### 2.25.2 Pronominal possessors

Adjectival possessive pronouns are rare. We find occasionally old adjectival derivations from the oblique (non-nominative) stems of personal pronouns such as *māma-ka-* or *māma-kā-* both from *māma* GEN.SG to *ahām* ‘I’. Also the reflexive adjective *svá-* is used as possessive of all persons. The most common means is the use of GEN-forms or of the enclitic forms of the personal pronouns, thus *māma* or encl. *me*, *asmākam* or encl. *nas* for *asmāka-* ‘our; of ours’, then *tāsya* ‘his; of his’, and *tēsām* ‘their; of theirs’, etc. The basic annotation is, just as with nouns, PRO (GEN. or encl.) ← *nmod* ← HEAD.

In the predicative possession construction with an oblique possessor in the genitive, the possessor is promoted to *root*, cf.

(99) AB 7.13.1

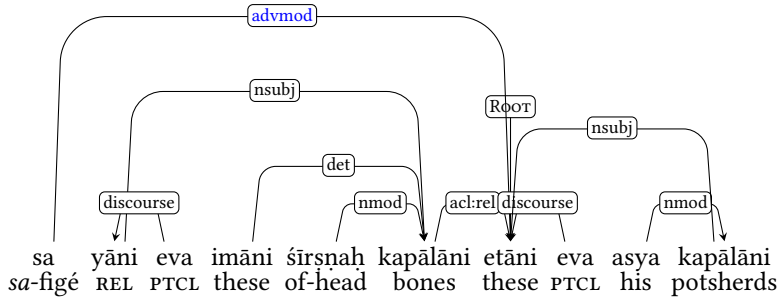


‘He had hundred wives.’

### 2.25.3 The so-called *sa*-figé

It is a curious fact of Vedic syntax that a pronominal form (mostly *sa*) sometimes appears at the beginning of a sentence without referring to any of its components. This phenomenon, known as *sa*-figé, is characterized by two features: disagreement and extraclausality (Hock 1997, on which publication we also draw for the following examples).

(100) AB 7.13.1

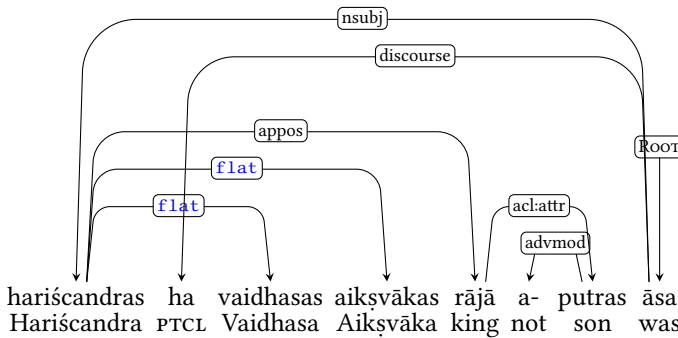


‘Now, his potsherds are just these bones of the head.’

### 2.26 Proper names

When the name consists of several words in the same case all elements are linked with *flat* to the leftmost part of the name, which becomes the head, cf.:

(101) AB 7.13.1

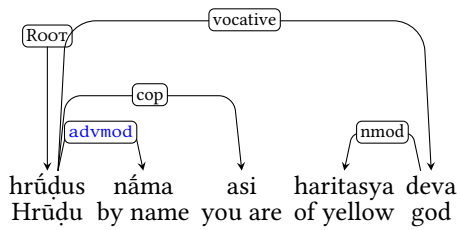


‘(There once) was Hariścandra Vaidhasa Aikṣvāka, a king who had no son.’

This also applies to a proper name immediately followed by a fixed epithet: the pair is treated just as appositions are (see Sec. 2.4), viz. the head is the name, e.g. *agní-* in *agnáye jātāvedase* (DAT). But this is not applicable to the equivalent pair in *jātāvedasam agnīm* (ACC), because with **flat** the head has to be the left-most term. We then use the label **compound:name**. The same applies to naming juxtapositions: the head consists in the part of the name that bears the inflection, e.g. *apām nāpāt* : *apām nāpātam* or *bṛhas pātis* : *bṛhas pātīm*, hence the heads are *nāpāt-*, *pāti-*, and the annotation is *apām* ← **compound:name** ← *nāpāt-* resp. *bṛhas* ← **compound:name** ← *pāti-*. A special case is the combination of *vīśve* and *devās* (etc.) depending on its interpretation as ‘all the gods’ or ‘the all-gods’ – in the second case we annotate *vīśve* ← **compound:name** ← *devās*, cf. Ex. (36), where the intermitting particle *ca* does not disrupt the coalescence of the pair.

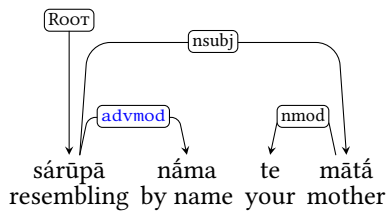
Proper names can be marked with *nāma*. Following PW, s.v. we annotate *nāma*<sup>14</sup> as an **advmod** of the head of the name, corresponding to the engl. adverbial ‘by name’.

(102) AVŚ 1.25.3b



‘You are Hrūḍu by name, O god of the yellow (= jaundice?)’

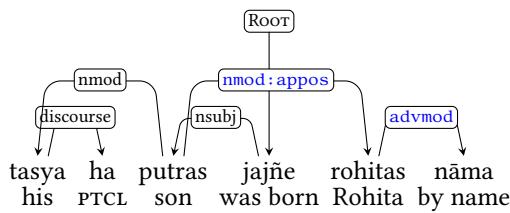
(103) AVŚ 1.24.3a



‘Your mother is called “resembling”.’

When the name introduced by *nāma* modifies another word, the name becomes **appos** resp. **nmod:appos** of that word.

(104) AB 7.14.2



‘To him, a son called Rohita was born.’

<sup>14</sup>The adverbial use of the form *nāma* goes back to naming parentheses “the name is ...”.

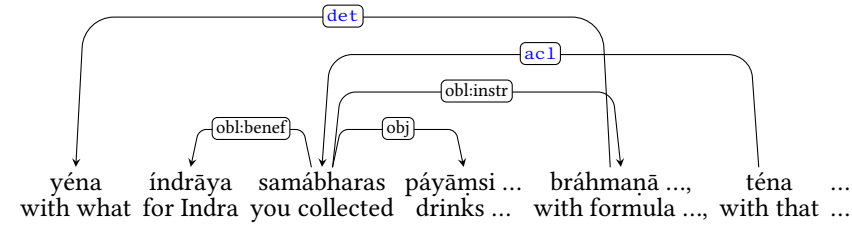


## 2.27 Relative clauses

A full account on relative clauses in the RV is given in Hettrich 1988, see also Delbrück 1888, pp. 553–598.

Basic annotation: the relative pronoun is linked with **det** to the noun it refers to within the relative clause, else it is treated as a nominal. The relative clause is then linked to the main clause *qua* its head with **acl**, cf. e.g.:

(105) AVŚ 1.9.3

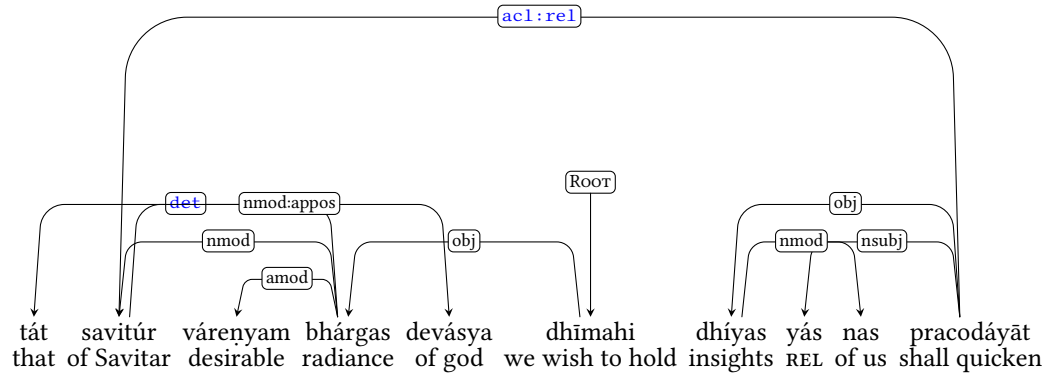


“With what ... worship ... thou didst bring together draughts ... for Indra, therewith, (O Agni, do thou increase this man here;)” (Whitney and Lanman 1905)

### 2.27.1 Relative clauses with nominals as heads

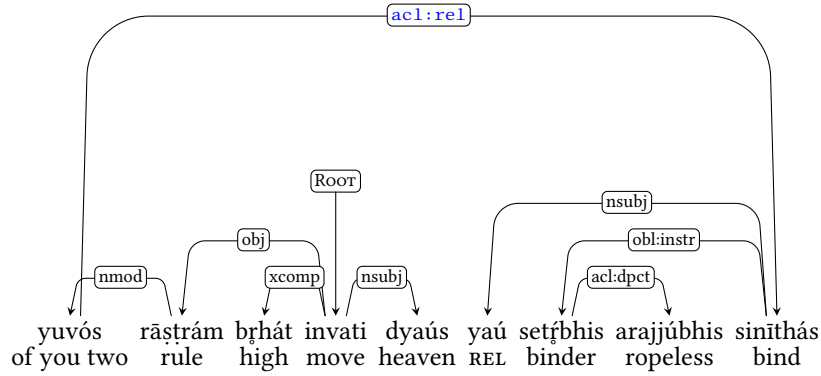
Relative clauses modifying a nominal (noun, pronoun) in clauses without a correlative pronoun: The clause is connected with **acl:rel** to the referent in the superordinate clause.

(106) RV 3.62.10



“Might we make our own that desirable effulgence of god Savitar, who will rouse forth our insights.” (Jamison and Brereton 2014)

(107) RV 7.84.2ab

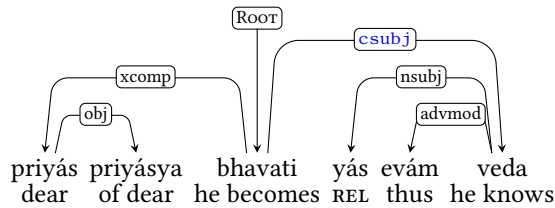


‘Heaven moves up high the rule of you two, who bind (aided) by your binding (agents) who do not require ropes (to do so).’

### 2.27.2 Headless relative clauses

A relative clause may function as subject of a verb in the superordinate clause; the relation is then labelled with **csubj**, cf.:

(108) AVŚ 15.11.7



“he becometh dear to his dear one (m.), who knoweth thus.” (Whitney and Lanman 1905)

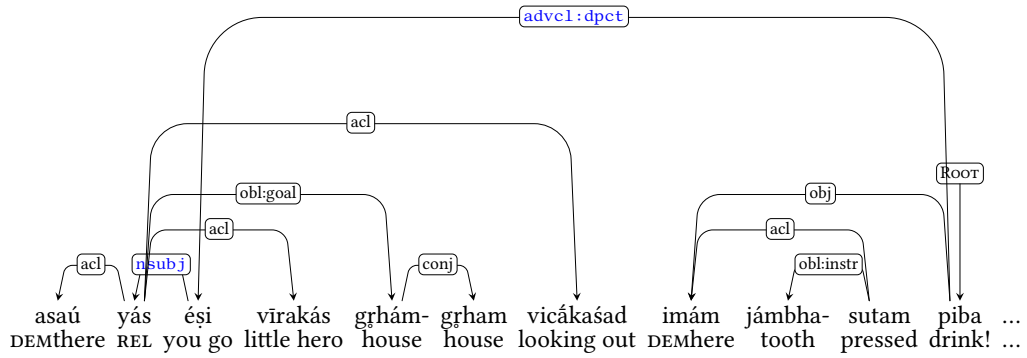
If the referent is already known but not overtly expressed, the clause has depictive value and is connected to the superordinate predicate with **advcl:dpct** or with **advcl:cond**, if the annotator prefers a conditional reading. Thus:

- ‘who(ever) knows thus ...’: **csubj**
- ‘he (the aforementioned), knowing thus, ...’: **advcl:dpct** resp. ‘if he knows thus’.

See for a similar instance Ex. (131).

When the verb of the main clause is an imperative of the second person, and thus entails a 2nd person subject, the dependent relative clause can only be read as depictive to this covert subject: **advcl:dpct**

(109) RV 8.91.2abc

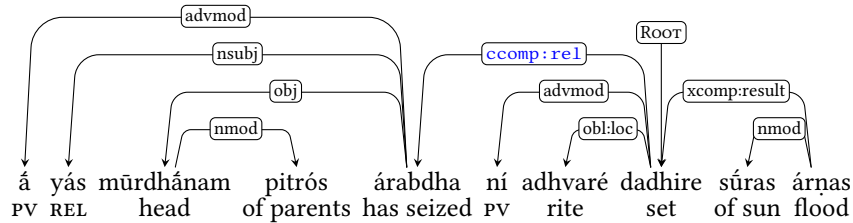


‘(You), who (just like any) pubescent male roam over there from house to house desperately looking out (for your pleasure), drink this (soma) here, pressed with (my very own) teeth ...!’<sup>15</sup>

See also Sec. 2.30.

A relative clause as complement of the main clause is linked with *ccomp* as in:

(110) RV 10.8.3ab

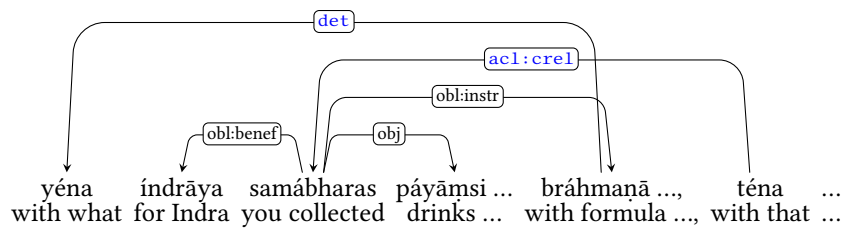


“He who has seized the head of his two parents [=Heaven and Earth? kindling sticks?], (him) they [=priests] have set down at the rite as the sun’s undulating flood.” (Jamison and Brereton 2014)

### 2.27.3 Correlative constructions

Relative clauses in correlative constructions proper (or correlative diptych, as defined, among others, by Hendery 2012, p. 18, see here the full citation of her definition on p. 4) are linked to the main clause with *acl:crel*, but only where the referent is indeed available and expressed within the relative clause, see Exx. (111), (112) vs. Ex. (113).

(111) = (105) AVŚ 1.9.3

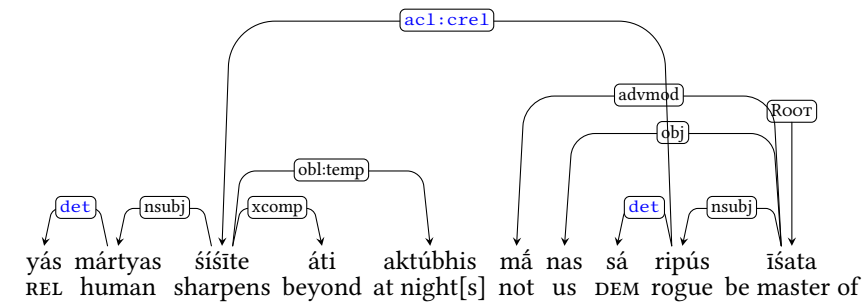


“With what ... worship ... thou didst bring together draughts ... for Indra, therewith, (O Agni, do

<sup>15</sup>Note that the distal deictic pronoun *asaú* is, due to the context and in contrast to the proximal deictic *imám*, rather part of the relative clause, and does thus not function as correlative to the relative pronoun *yás*.

thou increase this man here:;)” (Whitney and Lanman 1905)

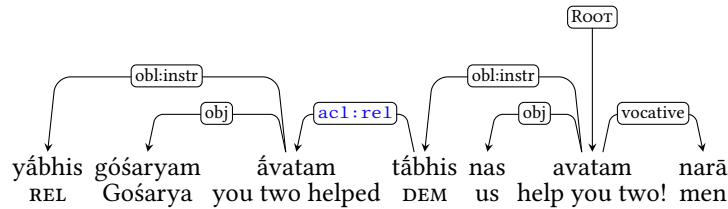
(112) RV 1.36.16cd



“Whatever mortal sharpens his (wits to) over(trump us), at night, the rogue shall not be master of us!”

Following Hettrich 1988, p. 530 an example of a REL substituting an NP of a correlative diptych (cf. Hendery 2012, p. 18) might be found in e.g.:

(113) RV 8.8.20cd

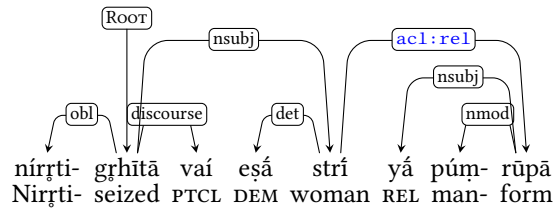


“With (those forms of help) with which you helped ... Gośarya, with those help us, o men;” (Jamison and Brereton 2014)

Here the REL *yābhis* but also the DEM *tābhis* represent the unexpressed referent *ūtībhis* ‘with helps’, but it is not possible to determine which part is elliptical.<sup>16</sup> Hence we prefer to annotate the relation with **acl:rel**.

Though correlative pronouns are present, the definition of correlative diptych is also not met in the following two examples with right-adjoined relative clause:

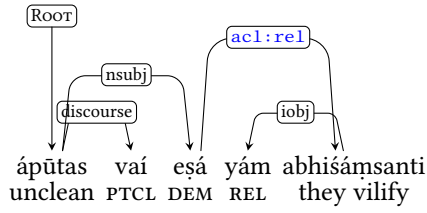
(114) MS 2.5.5.38



‘That woman indeed is seized by Nirṛti (void, death), who has a man’s looks.’

<sup>16</sup>The three elements combined are only found in all 23 Stanzas of RV 1.112, where the *refrain* of the fourth verse resumes *yābhis* in the left-adjoined relative clauses: *tābhis ū sū ūtībhis aśvinā ā gatam* “—with those forms of help come here, o Aśvins” (Jamison and Brereton 2014).

(115) MS 2.5.5.11



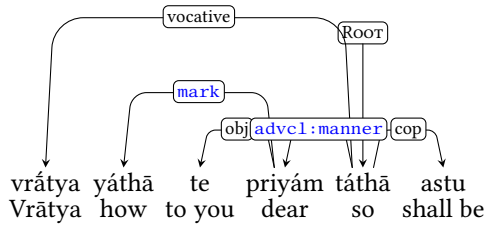
‘He (the sacrificer), whom they speak against, is not purified.’

Cf. for other examples Hettrich 1988, pp. 632–634.

On the correlated pronominal adjectives *yāvant-* ‘as big, as much, as wide’ and *tāvant-* (*et al.*) and their adverbial counterparts see Exx. (29), (30), and resp. Ex. (3).

Clauses with relative adverbials (*yāthā*, *yātra*, *yād* etc.) are linked to the predicate of the superordinate clause with **advcl**; the relative adverbials are treated as conjunctions and linked to the predicate of the adverbial clause with **mark**, cf.:

(116) AVŚ 15.11.6

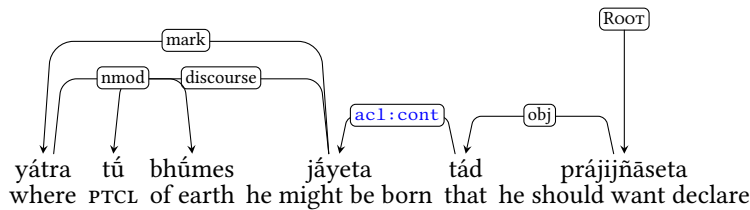


“Vrātya, be it so as is dear to thee!” (Whitney and Lanman 1905)

See also Sec. 2.3, and on *priya-* Ex. (136).

But: subordinate clauses introduced by relative adverbs such as *yātra* ‘where’ or *yātas* ‘from where’ and dependent on *verba sentiendi* or *verba dicendi* are to be interpreted as interrogative content clauses (Hettrich 1988, 318, 326f.), and annotated with **acl:cont**.

(117) MS 2.5.5.31

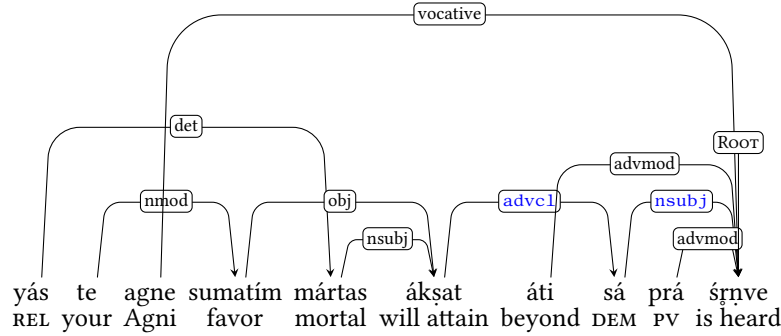


‘Where on earth he might have been born, that he should want to make known.’

### 2.27.4 Moods in relative clauses

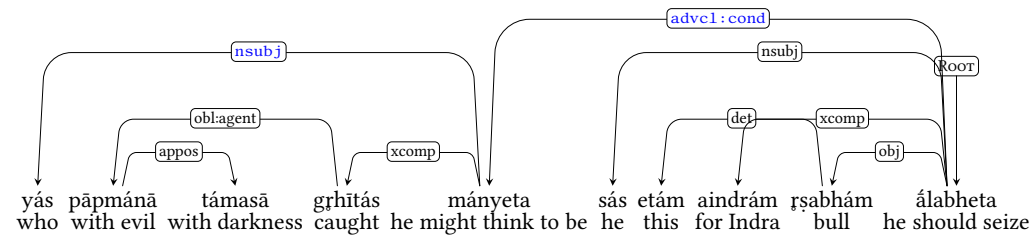
If the verb of a relative clause expresses potentiality, eventuality, etc. as with a grammatical mood such as the subjunctive/conjunctive (118)<sup>17</sup> or optative (119), the clause can be treated as an adverbial, and then be linked to the predicate of the superordinate clause with *advcl*, cf.:

(118) RV 10.11.7



“Whatever mortal will attain your favor, o Agni ..., he is famed beyond (all)” (Jamison and Brereton 2014)

(119) MS 2.5.3.28



‘If (a sacrificer) might think he has been caught by the evil “darkness”, he should seize said bull as [a victim] deemed fit for Indra.’

Cf. on this issue also Hettrich 1988, 583ff.

## 2.28 Repeated word forms

Repeated word forms coalesce regularly to so-called *āmreḍita*-compounds; see Sec. 2.7.5.

## 2.29 Secondary predication

Basic annotation:

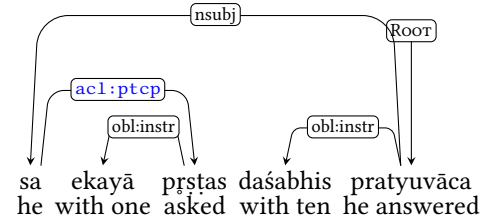
- *acl* (if the secondary predicate is depictive)
- *xcomp* (if the secondary predicate is a core argument of the superordinate predicate or a resultative)

<sup>17</sup>On the form *ákṣat* cf. the discussion in Narten 1964, 160f. 3SG.CONJV or 3SG.INJ.

See also Double accusative (Sec. 2.14), UD [acl](#) and UD [xcomp](#)

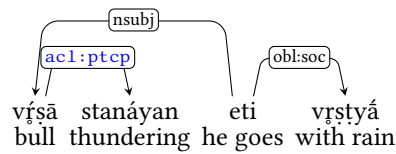
[acl](#): typically participles are used as depictives, see *prṣṭa-*, respectively *stanāyant-* in:

(120) AB 7.13.3



‘He, having been asked with one (stanza), replied with ten.’

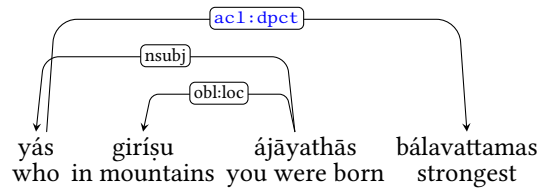
(121) AVŚ 1.12.1b



‘The bull goes thundering with rain.’

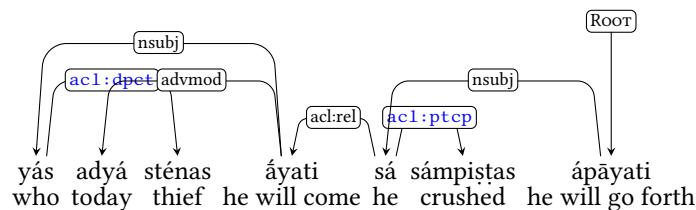
Of course depictives are not limited to participles, but comprise all sort of adjectives and even nouns. For a fitting English translation we often use the adverb ‘as’, cf.:

(122) AVŚ 5.4.1ab



‘you who were born in the mountains, [being/as] the strongest one’

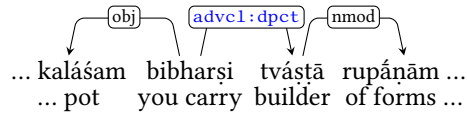
(123) AVŚ 4.3.5ab



‘He, who arrives as a thief today, will leave crushed.’

If the subject is not overt, the dependent is connected to the verb with [advcl](#).

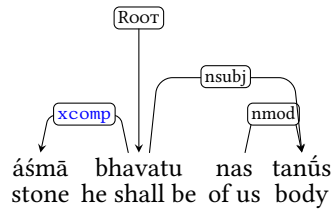
(124) AVŚ 9.4.6ab



‘(You [subject not overt]) carry a pot (full of Soma), (you being) a shaper of forms ...’

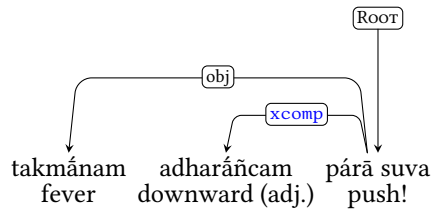
**xcomp** is used for obligatory predicatives and resultatives, typically with predicates such as *bhū-* ‘become, turn into (intrans.)’ or *kṛ-* ‘make, turn into (trans.)’, cf.:

(125) RV 6.75.12b



‘Let our body become stone!’

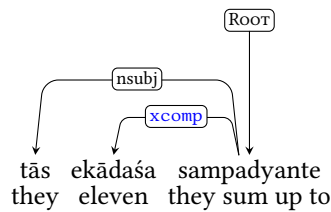
(126) AVŚ 5.22.3cd



‘Push the fever downwards!’

**xcomp** is also used with *sam-pad-* ‘make up, sum up to, turn into’, as in:

(127) AB 2.2.33

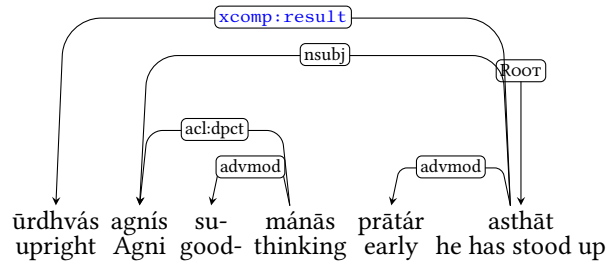


‘They (thus) make up eleven.’

In the following two examples *ūrdhvā-* ‘upright, erect’ is a secondary predicate to verb forms belonging to the same root *sthā-* which are however set apart by their verbal aspect, thus **xcomp** (as a resultative) with the aorist *asthāt*,

(128) RV 5.1.2b

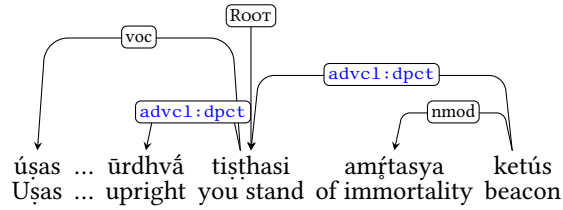




‘(Inducing) good thoughts Agni has just arisen early in the morning (to stand) upright.’

but as a depictive with the present tense *tiṣṭhasi*, virtually **ac1**, which is however connected as **advcl:dpct** to the primary predicate because the head is not overtly expressed:

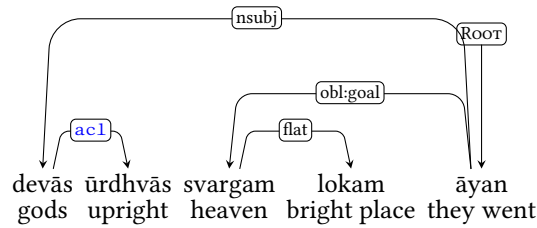
(129) RV 3.61.3ab



‘Uṣas, upright you stand as the beacon of immortality.’

Sometimes *ūrdhvā-* seems to be semantically equivalent to the preverb *úd* or the adverb *ūrdhvām*, though being clearly participant-oriented:

(130) AB 2.1.1

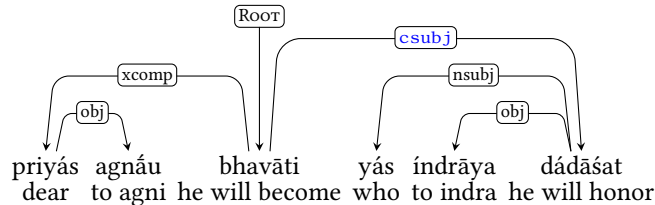


‘The gods went up to the sky.’

## 2.30 Subject

Annotated as **nsubj**, when the subject is a single word, but as **csubj**, when it consists of a clause, as in this example:

(131) RV 5.37.5cd



‘He will become dear to Agni – the one who will do ritual service to Indra.’ (Jamison and Brereton 2014)

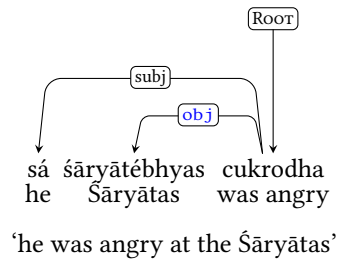
See also 2.27.2.

### 2.31 Transitive constructions

Transitive constructions consist of a two-place predicate (Bickel 2011) that defines two arguments: an agent-like argument (A), which in a canonical Vedic construction takes the nominative case and is labelled **nsubj**, and a second argument, P (labelled **obj**), which is not agent-like and often takes the accusative case, but other cases occur as well. Importantly, we acknowledge that the exact number of arguments of many Vedic predicates has not yet been established and leave it, for the time being, to the annotator to decide.

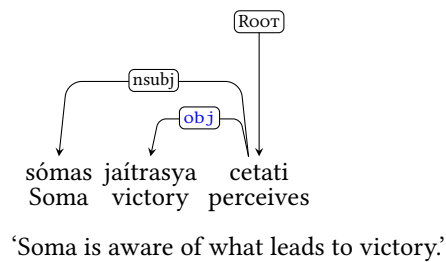
The second, dative argument of the two-place verb *krudh-* ‘be angry at’ is assigned the label **obj**, see Delbrück 1888, pp. 140–145.

(132) ŚB(M) 4.1.5.3



With the verb *cit-* ‘be aware of, perceive’ the second argument can be expressed with the accusative case or with the genitive case as in:

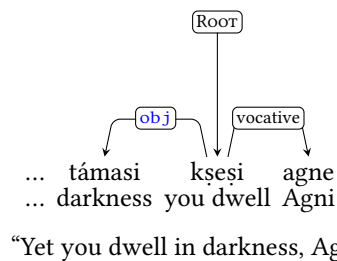
(133) RV 9.106.2c



For a second case see Ex. (72).

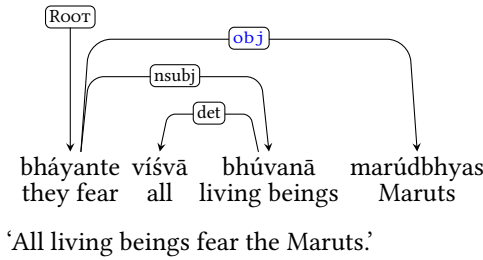
With the verb *kṣit-* ‘dwell, reside, abide’ a second argument is often expressed with a locative, cf.:

(134) RV 10.51.5b



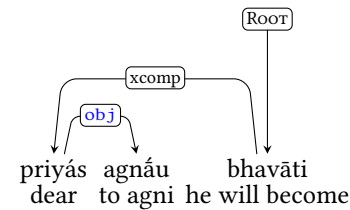
The second argument of the verb *bhī-* ‘fear so. or sth., be scared of’ is regularly expressed with the ablative case:

(135) RV 1.85.8c



With adjectives as nominal part of a predicate (e.g. *priyá-* ‘dear’), the second argument is linked to the adjective with *obj*:

(136) RV 5.37.5c



“he will become dear to Agni” (Jamison and Brereton 2014)

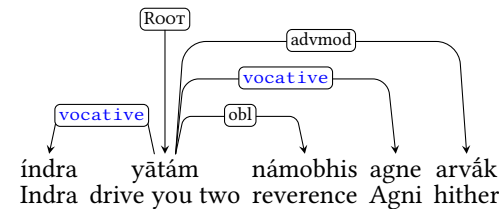
## 2.32 Vocative

Following UD we connect vocatives to the main verb of the host sentence with *vocative*, though, from a Vedistic point of view, vocatives rather need to be addressed as sentences on their own. When multiple vocatives are present in one sentence, they are singly linked to the verb if they have different referents or if, with the same referent, each of them constitutes an individual vocative phrase marked by an own accent. Of course the latter only applies to accented texts. For vocative phrases with the same referent, we follow the usual annotation wherever a dependency is tangible or plausible. Cf. for further details Delbrück 1888, 33ff., 106.

Here some examples (with the vocatives accented as in the texts):

Two vocatives, two referents with, consequently, a verb in dual form:

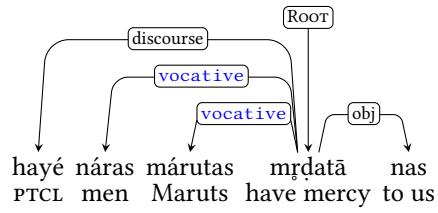
(137) RV 6.60.3b



‘Indra and Agni, do drive hither (led) by our reverences.’

Two vocatives, one plural referent – the two vocatives bear each an accent and are thus to be treated as separated:

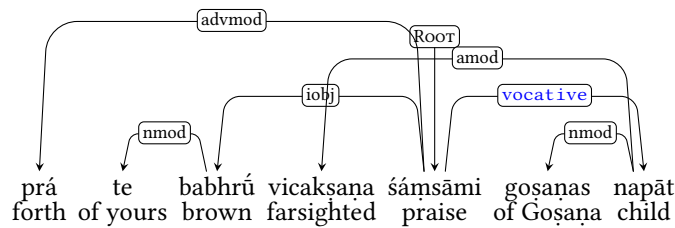
(138) RV 5.57.8a



‘Oy! Men, Maruts, be merciful to us!’

Two vocatives, one adjectival modifying the other, possibly a proper name, who has a further nominal dependent:

(139) RV 4.32.22ab

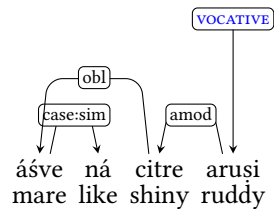


‘I offer my praise to the two bay-brown (horses) of yours, you farsighted son of Goṣaṇa/(of the winner of cows).’

See also Sec. 2.26.

Noteworthy is also the embedding of similes in the vocative phrase, as in:

(140) RV 1.30.21c



‘o you red lady (Dawn) who are shiny like a mare’ – annotation and translation following Delbrück 1888, p. 106

For a further complex vocative phrase see Ex. (70) .

## Concept Index

“Schleppe”, 13

ablative

*ablativus comparationis*, 17

in gradation, 17

absolute, 11

accusative, 10

adverbial use, 10

double accusative, 36

of direction, 8

adjunct, 8

adposition, 51

amplified sentence, 13

aorist

periphrastic, 14

argument

argument structure, 7, 8, 37, 66

A, 34

argument structure, 34

G, 7, 34

P, 8, 37, 66

S, 8

T, 8, 34

auxiliary verbs, 14

bahuvrīhi, 22, 26

*dvigu*, 23

collective, 23

bouquet analysis

left-to-right, 27

causative, 36, 37

periphrastic, 15

chaining, 13

parataxis, 31

citations, 31

comparative, 17

comparison

ellipsis, 40

equative, 18

gradation, 17

similative, 18

compound

*bahuvrīhi*, 22

*dvigu*, 23

*karmadhāraya*, 23

*tatpuruṣa*, 23

*āmreḍita*, 26

collective, 23

copulative, 25

possessive, 22

prepositional governing, 23

synthetic, 21

verbal governing, 21

conjunction, 27

content clause, 61

converbs of purpose, 43

coordinated ellipsis, 37

coordination, 6, 27

asyndeton, 28

with conjunction, 27

copula, 28

copular clause, 6, 28

correlative, 59

dative

*dativus commodi*, 8, 30

*dativus finalis*, 30, 43, 45

*dativus incommodi*, 8, 30

*dativus pro genitivo*, 30

in possessive constructions, 7, 30

of purpose, 30

direct object, 10

direct speech, 6, 30

disjunct nominal, 7, 33

ditransitive construction, 34

doubled words, 62

*dvandva*, 25

*dvigu*, 23

ellipsis, 37

comparison, 40

coordination, 37

in clauses, 38

in nominals, 38

- promoting nominal dependents, 38
  - promoting verbal dependents, 39
- enumeration, 27
- equative, 18
- event noun, 43
- exclamation, 45
- future
  - periphrastic, 15
- gapping, 37
- genitive
  - genetivus absolutus*, 5, 12
  - as direct object, 10
  - as obl, 15
  - in gradation, 17
  - possessive, 7
- goal of a motion, 10
- gradation, 17
- indefinite quantifier, 42
- infinitive, 43
  - as adjunct, 43, 44
  - as complement, 44, 47
  - matrix infinitive, 45
  - predicative infinitive, 44
- instrumental
  - in gradation, 17
- interjection, 45
- light verbs, 14, 16
- local particles, 51
- locative, 45
  - locativus absolutus*, 5, 12
  - adnominal, 46
  - in gradation, 17
- mantra, 31
- modal verbs, 47
  - necessity, 48
  - possibility, 47
- multiple preverbs, 52
- name, 12, 55
- negation, 49

- nominative
  - nominativus pendens*, 33
- numeral, 48
- particle, 49
  - íti*: adverb, 50
  - íti*: causal, 32, 33, 50
  - íti*: quotative, 30, 49, 50
  - sú*, 51
  - chain, 51
  - comparing *iva*, *ná*, *yáthā*, 18
  - generalizing *ca*, *cid*, *caná*, 51, 53
  - in Wackernagel position, 50
  - interrogative, 50
  - negation, 49
  - polarity, 49
  - quotative, 30, 49, 50
  - scope: nominals, 50
  - scope: sentences, 50
  - sentence-initial, 51
- perfect
  - periphrastic, 15
- periphrastic
  - aorist, 14
  - causative, 15
  - future, 15
  - perfect, 15
- polarity operator, 49
- possession
  - dative, 7
  - genitive, 7
- postposition, 51
- preposition, 51
- prepositional phrase, 52
- preverb, 51
- pronominal adjectives
  - yávant-*, *távant-*, 20
- pronominal adverbs
  - yávat*, *távat*, 11
- pronoun, 52
  - adverbial, 54
  - correlative, 59
  - possessive, 54
  - sa-figé, 55

with apposition, 12  
proper name, 12, 55  
quotative, 49  
quotes, 31  
relative adverbial, 61  
relative clause, 57  
repeated word form, 62  
repetition, 26, 62  
secondary predication, 62  
similative, 11, 18  
speech verb, 30, 35, 61

subject, 65  
transfer verb, 34  
transitive construction, 66  
verb  
    light verb, 14, 16  
    modal verbs, 47  
    of perception, 61  
    of speech, 30, 35, 61  
    transfer verbs, 34  
verbal noun, 12  
vocative, 9, 67

## Index of Relations

- :pred, 22
- acl, 9, 18, 20, 25, 26,  
40–42, 53, 57, 62,  
63, 65
- acl:attr, 48
- acl:cont, 61
- acl:crel, 59, 60
- acl:depict, 31
- acl:dpct, 19, 63
- acl:pred, 6, 24
- acl:ptcp, 63
- acl:rel, 57, 58, 60, 61
- advcl, 4, 8, 10, 11, 18–20,  
22, 25, 29, 30, 32,  
33, 38, 40, 43, 50,  
53, 61–63
- advcl:cond, 58, 62
- advcl:depict, 31
- advcl:dpct, 58, 59, 64, 65
- advcl:fin, 43–45
- advcl:loc, 10
- advcl:manner, 11, 61
- advcl:temp, 11, 12
- advmod, 11, 21, 22, 25,  
49–52, 56
- advmod:pred, 22, 23
- amod, 5, 21–24, 41, 42, 48,  
49
- amod:pred, 5, 22
- appos, 6, 7, 12, 13, 56
- aux, 14–16, 47
- case, 23, 24, 51, 52
- case:sim, 18, 19, 49, 50
- cc, 6, 27, 28, 49–51
- ccomp, 30–32, 50, 59
- ccomp:rel, 59
- compound, 23, 24
- compound:coord, 25–27
- compound:name, 56
- conj, 25–28, 38–42, 49
- cop, 14, 28, 29, 44
- csubj, 29, 58, 65
- det, 7, 8, 20, 25, 42, 52–54,  
57, 59, 60
- det/amod, 42
- discourse, 45, 50, 51
- dislocated, 14, 33, 34
- ellipsis, 37
- fixed, 7, 51
- flat, 7, 13, 31–33, 49, 55, 56
- iobj, 8, 29, 35–37, 46
- mark, 10, 30–33, 49, 50, 61
- mark:sim, 11, 18–20
- nmod, 9, 21–24, 30, 39, 46,  
48, 54
- nmod:appos, 6, 7, 12–14,  
56
- nmod:pred, 22, 24
- nsubj, 12, 22, 34, 41, 59,  
62, 65, 66
- nummod, 27, 42, 48, 49
- obj, 1, 8, 10, 20–24, 29,  
35–38, 41, 44, 46,  
66, 67
- obl, 10, 17–19, 21, 22, 30,  
41, 42, 45, 46, 52
- obl:grad, 17
- obl:soc, 31
- orphan, 8, 18–20, 31–33,  
38–42
- orphan/advcl, 32, 33
- parataxis, 31, 32
- root, 14–16, 31, 41, 44, 45,  
54, 55
- vocative, 67, 68
- xcomp, 9, 15, 21, 36, 37,  
41, 44, 45, 47, 48,  
62, 64
- xcomp:result, 65



## Index of Vedic Sanskrit Words

\*dhiyáte, 45

-dhyai, 44

-ka-, 23

-t-, 21

-tum, 45

-tár-, 14, 15

-ya-, 23

-á-, 23

-ām, 14

#, numerals:

2, 48

3, 48, 49

9, 49

30, 49

60, 48

100, 48, 49

1000, 48, 49

1060, 48

3339, 49

60000, 48

dakṣiṇa, 26

ápara-, 17

a(n)-, 25, 49

ab-, 21

adyá, 5

agnim, 22

agnáye jātávedase, 56

agní-, 56

ahám, 54

alūna-, 23

ana-, 22

anna-, 21

anṛtām, 26

anu-, 23

anuvāka-, 31

anuṣvadhám, 23, 52

anyá-, 17

apsu-, 21

apám, 56

apám nápāt, 56

apám nápātam, 56

arh-, 47

artha-, 22

as-, 6, 14, 28, 29, 48

asi, 38

asmáka-, 54

asmákam, 54

asthāt, 64

avi-, 23

aṃsa-, 23

aṅgá, 50

bhará-, 22, 23

bharád-, 23

bhī-, 67

bhū-, 6, 14, 15, 28, 36, 48, 64

bhūri-, 42

bráhma-, 22

bāhu-, 22

bṛhas, 56

bṛhas pátim, 56

bṛhas pátiḥ, 56

ca, 6, 27, 50, 51

ca, cid, caná, 51, 53

caná, 51

car-, 16

ced, 42

cid, 50, 51

cit-, 10, 66

céd, 10

cétati, 41

daivena, 5

devéṣu, 46

devéṣu lokám, 47

devás, 49, 56

dhana-, 21

dhar-, 16

dhik, 7

dhiyam-, 22

dhā-, 14, 36, 46

dhiyáte, 45

divyásya, 41

dus-, 25, 51

dvitíyam, 41

dvé, 48

dyāv, 24

dyāv-, 24

dā-, 7, 23, 34, 35

dā-van-, 21

dāti-, 23

dátum, 47

evá, 11, 50, 51

evám, 51

gam-, 44

goṣṭhād, 42

gámadhyai, 44

gó-, 22

gātha-, 24

gātu-, 21

ha, 7, 50, 51

ha sma, 27

hata-, 23

hánta, 45

hí, 7, 50

i-, 14, 16, 52

indhá-, 22

indra-, 22, 25

invá-, 22

iva, 6, 18, 50

iyám, 53

ji-, 35

jinvá-, 22

jánmanas, 41

jātávedasam agním, 6, 56

já-, 21

kam, 50

keśa-, 22

khálu, 50, 51

krudh-, 29, 66  
 kṛ-, 14, 15, 36, 64  
 kṛ-t-, 21  
 kṛṣṇá-lalāmam, 38  
 ká-, 53  
 ká- ca, 53  
 kát, 50  
 kila, 50  
 kím, 50  
 kāma-, 24  
 kāmá-, 23  
 kāma-, 24  
 kṣit-, 45, 66  
  
 lokám, 46  
 lóhinī, 41  
  
 manasā, 5  
 mantra-, 31  
 manuṣyèṣu, 47  
 manuṣyèṣu lokám, 47  
 me, 54  
 mitrá, 25  
 mitrá-, 25  
 mumuce, 27  
 muṣ-, 7, 34  
 máma, 54  
 máma-ka-, 54  
 má, 49  
 māma-ká-, 54  
 mās-(a-), 23  
 mādana-, 22  
  
 nas, 54  
 nava, 49  
 ná, 6, 49  
 námas, 28  
 nápāt-, 56  
 nú, 50  
 nāma, 56  
 náma, 56  
  
 paras, 24  
 paras-ṛc-śata(m)-, 24  
 paśu-kāma-, 24

paśumatī, 42  
 paśyá-, 22  
 paśú-, 24  
 peya-, 21  
 piś-, 36  
 prathamá-, 18  
 priya-, 61  
 priyá-, 67  
 pṛṣṭa-, 63  
 putra-, 23  
 páti-, 23, 56  
 pétvam, 38  
 péya-, 21  
 pāśas, 27  
 pīti-, 21  
 pītí-, 21  
 pūrva-, 23  
 pūrṇá-, 23  
 pūrva-, 17  
  
 raghu-, 22  
 rathe-, 21  
 rocanás, 38  
 rukma-, 22  
 rájan, 6, 7, 12  
 rájan-, 6, 7, 12  
 ṛc-, 24  
 ṛc-śata(m)-, 24  
  
 sa, 55  
 sa-, 25  
 sahasra, 49  
 sahasra-, 48  
 sahásra-, 48  
 sam-pad-, 64  
 sarūpa-, 21  
 sattra, 36  
 satya-, 26  
 savyábhyām, 26  
 saṁśita-, 22  
 sma, 50  
 soma-, 21, 24  
 somapéya-, 21  
 spṛt-, 21

stanayant-, 63  
 sthā-, 16, 64  
 sthá-, 21  
 su-, 25  
 sutá-, 24  
 sutá-soma-, 24  
 svadhām ánu, 52  
 svid, 50  
 svá-, 54  
 sváhā, 45  
 syád-, 22  
 sá, 41  
 sá(s), 7  
 sá-/tá-, 53  
 sárva-, 42  
 sóma-, 6, 7, 12, 21  
 sómapīti-, 21  
 sú, 51  
 sú-t-, 24  
 sākam-, 21  
 sá, 53  
 sūkta-, 31  
  
 tad, 54  
 tad-íd, 22  
 tasya, 27  
 tiṣṭhasi, 65  
 to-, 22, 24  
 triṁśat, 49  
 trī, 49  
 trī, 48  
 trīṇi, 49  
 tá-, 54  
 tád, 54  
 tám, 53  
 tásmād, 5  
 tásmāt, 54  
 táśya, 54  
 téna, 54  
 téṣām, 54  
 tú, 50  
 tábhis, 60  
 távat, 11

u, 50  
 ugram, 22  
 ugrá-, 22  
 ugrá-bāhu-, 22  
 utá, 51  
 uvé, 45  
 uśmasi, 44  
  
 vac-, 32, 35  
 vapus-, 22  
 vasu-, 21  
 vasántā, 41  
 vasántā āgneyīm, 41  
 vai, 7, 51  
 vaś-, 44  
 viś-, 23  
 viśvam, 22  
 vṛkṣá-, 22  
 vṛtra-hátyāya, 43  
 vṛtráya, 43  
 vṛtráya hántave, 43  
 vṛdh-, 21  
 vṛṣṭi-dyāv-, 24  
 vṛṣṭí-, 24  
 vāi, 50  
 váruṇa, 6, 7, 12  
 váruṇayos, 25  
 váruṇā, 25  
 ví, 23  
 víd-, 21  
 víśve, 56  
 vā, 6, 50  
 vāja-, 23

vājam-, 22, 23  
 vāra-, 23  
 vāyú, 25  
 vāstūni, 44  
  
 yāc-, 36  
 yadá, 10  
 yamá-, 22  
 yáthā, 11  
 yáthā, 10  
 yá-, 53, 54  
 yád, 10, 43, 54, 61  
 yádi, 10  
 yārhi, 10  
 yásmād, 10  
 yátas, 61  
 yáthā, 6, 18, 43, 61  
 yáttra, 10, 61  
 yábhis, 60  
 yád, 10  
 yávat, 11, 20  
  
 ádha, 51  
 ádhi, 22  
 áha, 50  
 ánu, 52  
 ánu svadhām, 8, 52  
 ánu vratám, 8, 52  
 ánu-vrata-, 52  
 ápi, 51  
 áradas, 20  
 átha, 51  
 áti-, 23

ávis, 41  
 áśvas, 7  
 éka-, 42  
 íd, 50  
 índra-, 22  
 índra-śatru-, 22  
 íti, 7, 30, 31, 33, 49–51  
 óm, 45  
 úd, 52, 65  
 úkṣ-, 21  
  
 ā-bhaj-, 46  
 á, 50  
 ād-á-, 21  
 āgneyīm, 41  
 āhutī-, 21  
 ās-, 16  
 álabheta, 41  
 íś-, 8, 10, 48  
 íśvará-, 47  
  
 śak-, 47  
 śata(m)-, 24  
 śata-, 49  
 śatru-, 22  
 śatá-, 48  
 śreṣṭha-, 22  
 ūrdhvá, 65  
 ūrdhvá-, 64, 65  
 ūtíbhī-, 60  
  
 ṛc-, 31  
 ṣaṣṭí-, 48

## Index of Cited Passages

### AB

1.1.1, 28  
1.1.10, 30  
1.13.26, 11  
1.16.7, 12  
1.7.3, 47  
2.1.1, 65  
2.1.13, 15  
2.2.33, 64  
2.2.4, 32  
2.2.7, 30  
2.6.5, 53  
5.30.15, 16  
7.13.1, 54, 55  
7.13.3, 63  
7.14.2, 56  
7.15.2, 32  
7.16.13, 26  
7.18.10, 24  
7.18.13, 39

### AVŚ

1.12.1b, 63  
1.13.1ab, 12  
1.22.1, 52  
1.23.1, 29  
1.24.3a, 56  
1.25.3b, 56  
1.30.4, 36  
1.4.1ab, 13  
1.4.3ab, 10  
1.5.2, 19  
1.9.3, 57, 59  
10.10.12ab, 13  
11.2.1, 28  
15.11.6, 61  
15.11.7, 58  
15.2.1, 27  
4.10.6, 38  
4.20.1cd, 34  
4.3.5ab, 63  
4.34.2d, 13  
4.7.5, 40

5.22.3cd, 64  
5.4.1ab, 63  
6.86.1, 42  
9.4.6ab, 63

### AśvGS

1.5.5, 42

### BĀU

1.2.4.5, 20  
1.2.5.3, 16  
1.4.15.3, 46

### GGS

2.1.18, 31

### MBh

6.24.21, 37

### MS

1.9.8.2, 35  
2.5.1.58, 47  
2.5.1.82, 54  
2.5.2, 41  
2.5.2.27, 41  
2.5.2.3-4, 41  
2.5.3.2, 16  
2.5.3.28, 62  
2.5.5.11, 61  
2.5.5.31, 61  
2.5.5.38, 60  
2.5.6.3, 38  
2.5.6.31-32, 32  
2.5.6.4, 38  
3.10.6, 28, 33  
3.3.9, 15

### RV

1.12.3c, 48  
1.126.3c, 48  
1.13.8, 25  
1.154.6a, 44  
1.16.1ab, 13  
1.161.9ab, 30  
1.23.23d, 53

1.30.21c, 68  
1.36.16cd, 60  
1.68.10, 36  
1.78.5ab, 35  
1.85.1c, 15  
1.85.8c, 67  
1.91.3cd, 18  
10.10.13cd, 19  
10.10.4cd, 34  
10.11.7, 62  
10.116.1b, 43  
10.13.1b, 19  
10.18.10, 20  
10.4.4ab, 40  
10.51.5b, 45, 66  
10.68.10ab, 20  
10.8.3ab, 59  
10.84.7cd, 52  
10.9.5, 36  
2.1.13ab, 39  
2.16.1, 17  
2.3.3c, 53  
2.30.4cd, 11  
2.37.6, 36, 37  
3.35.9, 46  
3.36.6, 17  
3.53.2a, 51  
3.61.3ab, 65  
3.62.10, 57  
3.8.1b, 32  
3.9.9ab, 49  
4.15.1b, 29  
4.32.22ab, 68  
5.1.2b, 64  
5.29.7d, 43  
5.30.13b, 48  
5.37.5c, 67  
5.37.5cd, 65  
5.40.7cd, 12  
5.57.8a, 68  
5.79.10ab, 47  
6.12.1b, 45

6.60.3b, 67  
6.75.12b, 64  
7.18.22a, 48  
7.27.3c, 35  
7.33.8a, 18  
7.34.24d, 44  
7.46.2ab, 41  
7.79.4ab, 20

7.84.2ab, 57  
8.8.20cd, 60  
8.91.2abc, 58  
9.106.2c, 66  
9.23.7, 11  
Suśrutasamhitā  
Sū. 34.6, 37  
Utt. 55.7, 26

TS  
2.3.7.4, 46  
5.2.2.3, 30  
ŚB(M)  
1.8.1.9, 35  
2.1.1.8, 53  
3.2.2.3, 14  
4.1.5.3, 29, 66

## Abbreviations

- AiGr. Jakob Wackernagel and Albert Debrunner (1930–1957). *Altindische Grammatik*. 2. 3 vols. Göttingen: Vandenhoeck & Ruprecht.
- EVP Louis Renou (1955–1969). *Études védiques et pāṇinéennes*. 17 vols. Paris: Éditions E. de Boccard.
- EWAia Manfred Mayrhofer (1986–2001). *Etymologisches Wörterbuch des Altindoarischen*. 3 vols. Heidelberg: Winter.
- PW Otto Böhtlingk and Rudolph Roth (1855–1875). *Sanskrit-Wörterbuch*. 7 vols. St. Petersburg: Kaiserliche Akademie der Wissenschaften.

## References

- Amano, Kyoko (2009). *Maitrāyaṇī Saṃhitā I–II. Übersetzung der Prosapartien mit Kommentar zur Lexik und Syntax der älteren vedischen Prosa*. Bremen: Hempen.
- Bickel, Balthasar (2011). “Grammatical relations typology”. In: *The Oxford Handbook of Linguistic Typology*. Ed. by Jae Jung Song. Oxford: Oxford University Press, pp. 399–444.
- Bloomfield, Maurice (1906). *A Vedic concordance, being an alphabetic index to every line of every stanza of the published Vedic literature and to the liturgical formulas thereof, that is, an index to the Vedic mantras, together with an account of their variations in the different Vedic books*. Cambridge, Mass.: Harvard University Press.
- Böhtlingk, Otto and Rudolph Roth (1855–1875). *Sanskrit-Wörterbuch*. 7 vols. St. Petersburg: Kaiserliche Akademie der Wissenschaften.
- Delbrück, Berthold (1888). *Altindische Syntax*. Halle: Verlag der Buchhandlung des Waisenhauses.
- Etter, Annemarie (1985). *Die Fragesätze im Ṛgveda*. Berlin/New York: de Gruyter.
- Hackstein, Olav (2010). *Apposition and nominal classification in Indo-European and beyond*. Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- Heine, Bernd (1997). *Cognitive Foundations of Grammar*. Oxford: Oxford University Press.
- Hellwig, Oliver, Elia Ackermann, Salvatore Scarlata, and Paul Widmer (2020). “The Treebank of Vedic Sanskrit”. In: *LREC 2020*. URL: <http://www.lrec-conf.org/proceedings/lrec2020/pdf/2020.lrec-1.632.pdf>.
- Hendery, Rachel (2012). *Relative clauses in time and space*. Amsterdam: Benjamins.
- Hettrich, Heinrich (1988). *Untersuchungen zur Hypotaxe im Vedischen*. Berlin/New York: de Gruyter.
- Hettrich, Heinrich, Antje Casaretto, and Carolin Schneider (2004). “Syntax und Wortarten der Lokalpartikeln im Ṛgveda, IV: I. Allgemeines, II. *úpa*, III. *áva*”. In: *Münchener Studien zur Sprachwissenschaft* 64, pp. 17–130.
- Hock, Hans Henrich (1982). “The Sanskrit quotative: A historical and comparative study”. In: *Studies in the Linguistic Sciences* 12.2, pp. 39–85.
- (1997). “Nexus and ‘extraclausality’ in Vedic, or ‘sa-figé’ all over again: A historical (re)examination”. In: *Historical, Indo-European, and Lexicographical Studies. A Festschrift for Ladislav*

- Zgusta on the Occasion of his 70th Birthday, ed. by Hans Henrich Hock. Vol. 90. Trends in Linguistics. Studies and Monographs. Berlin – New York, pp. 49–78.
- Jamison, Stephanie W. (1982). “Case disharmony in Rgvedic similes”. In: *Indo-Iranian Journal* 24, pp. 251–271.
- Jamison, Stephanie W. and Joel P. Brereton (2014). *The Rigveda: the Earliest Religious Poetry of India*. New York: Oxford University Press.
- Keith, Arthur Berriedale (1920). *Rigveda Brahmanas: The Aitareya and Kauṣītaki Brāhmaṇas of the Rigveda*. Cambridge, Massachusetts: Harvard University Press.
- Keydana, Götz (2013). *Infinitive im Rgveda: Formen, Funktion, Diachronie*. Leiden: Brill.
- Kulikov, Leonid (2011). “Voice typology”. In: *The Oxford Handbook of Linguistic Typology*. Ed. by Jae Jung Song. Oxford: Oxford University Press, pp. 368–398.
- Macdonell, Arthur Anthony (1916). *A Vedic Grammar for Students*. Oxford: Clarendon Press.
- Malchukov, Andrej, Martin Haspelmath, and Bernard Comrie (2010). “Ditransitive constructions. A typological overview”. In: *Studies in ditransitive constructions. A comparative handbook*. Ed. by Andrej Malchukov, Martin Haspelmath, and Bernard Comrie. Berlin: de Gruyter Mouton, pp. 1–35.
- Narten, Johanna (1964). *Die sigmatischen Aoriste im Veda*. Wiesbaden: Harrassowitz.
- Oertel, Hanns (1926). *The syntax of cases in the narrative and descriptive prose of the Brāhmaṇas, Vol. I: The Disjunct Use of Cases*. Heidelberg: C. Winter.
- Olsen, Susan (2017). “Synthetic compounds from a lexicalist perspective”. In: *Zeitschrift für Wortbildung / Journal of Word Formation* 1, pp. 17–45. URL: <https://www.peterlang.com/view/journals/zwjw/zwjw-overview.xml>.
- Pinault, Georges (1997). “Distribution des particules comparatives dans la Rik-Samhitā”. In: *Bulletin d’Études Indiennes* 13-14, pp. 307–367.
- Renou, Louis (1955–1969). *Études védiques et pāṇinéennes*. 17 vols. Paris: Éditions E. de Boccard.
- Sadovski, Velizar (2000). “Die exozentrischen Zusammensetzungen mit Vorderglied Präverb/Präposition im Rgveda: Entheos-Komposita und präpositionale Rektionskomposita”. In: *Indoiranisch. Arbeitstagung der Indogermanischen Gesellschaft vom 2. bis 5. Oktober 1997 in Erlangen*. Ed. by Bernhard Forssman and Robert Plath. Wiesbaden: Reichert Verlag, pp. 455–473.
- Scarlata, Salvatore (1999). *Die Wurzelkomposita im Rg-Veda*. Wiesbaden: Reichert.
- Scarlata, Salvatore and Paul Widmer (2015). “Vedische exozentrische Komposita mit drei Relationen”. In: *Indo-Iranian Journal* 58, pp. 26–47. DOI: [10.1163/15728536-0580010](https://doi.org/10.1163/15728536-0580010).
- Slade, Benjamin (2013). “The diachrony of light and auxiliary verbs in Indo-Aryan”. In: *Diachronica* 30:4, pp. 531–578.
- Stassen, Leon (1985). *Comparison and Universal Grammar*. Oxford: John Benjamins Publishing Company.
- Treis, Yvonne and Martine Vanhove, eds. (2017). *Similative and equative constructions. A cross-linguistic perspective*. Typological Studies in Language 117. Amsterdam, Philadelphia: John Benjamins Publishing Company.
- Viti, Carlotta (2002). “Comparazione e individuazione: uno studio sugli equativi ṛgvedici *iva e ná*”. In: *Archivio Glottologico Italiano* 87, pp. 46–87.
- Whitney, William Dwight and Charles Rockwell Lanman (1905). *Atharva-Veda Samhitā*. Cambridge: Harvard University.

- Zehnder, Thomas (2011a). *Das periphrastische Kausativ im Vedischen*. Münchener Forschungen zur historischen Sprachwissenschaft 12. Bremen: Hempen.
- (2011b). “Zur Funktion der Infinitive im Veda”. In: *Indogermanistik und Linguistik im Dialog. Akten der XIII. Fachtagung der Indogermanischen Gesellschaft vom 21. bis 27. September in Salzburg*. Ed. by Thomas Krisch and Thomas Lindner. Wiesbaden: Reichert Verlag, pp. 622–631.
  - (2016). “Review of Kaydana, Götz 2013: Infinitive im Ṛgveda: Formen, Funktion, Diachronie”. In: *JSALL* 3.1, pp. 133–139.