

STUDIES IN SLAVIC AND GENERAL LINGUISTICS

EDITED BY
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EVIDENCE AND
COUNTER-EVIDENCE

ESSAYS IN HONOUR OF FREDERIK KORTLANDT

VOLUME I:
BALTO-SLAVIC AND INDO-EUROPEAN LINGUISTICS

Studies in Slavic and General Linguistics

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Amsterdam – New York 2008

Studies in Slavic and General Linguistics, vol. 32

Evidence and Counter-Evidence

*Essays in honour of
Frederik Kortlandt*

Volume 1:
Balto-Slavic and Indo-European Linguistics

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THE VEDIC TYPE *PATÁYATI* REVISITED: SEMANTIC OPPOSITIONS, PARADIGMATIC RELATIONSHIPS AND HISTORICAL CONNECTIONS

LEONID KULIKOV

–You know, Khaim, I have bought a bike for my little Moshe,
and now he rides like lightning!
–What, that fast?
–No, I mean, in zigzags.

A Jewish joke

1. The Vedic *-áya*-presents: preliminary remarks

1.1 Two types of *-áya*-presents: causatives vs. non-causatives

The Vedic system of present stems includes two formations with the suffix *-áya*-. The formal difference between these two morphological types consists in the alternation grade of the root syllable. The first type shows long or full grade: long grade mostly appears in the roots of the structure *CaC*, while full grade (*guṇa*) is selected by the roots of other structure, cf. *pat* ‘fly’: *pātáyati*, *cit* ‘appear’: *cetáyati*. By contrast, the second type has full (in *CaC* roots) or zero (in roots of other structures) grade, cf. *pat*: *patáyati*, *cit*: *citáyati*. This formal opposition can be reformulated in terms of length of the root syllable:¹ the first type must have a long root syllable (that is, long grade for *CaC*, *CāC-áya*-, and full grade for other structures: *CaRC-áya*-, *CeC-áya*- < **CaṛC-áya*-, *CoC-áya*- < **CaṽC-áya*-), the second type must have a short root syllable (*CaC-áya*-, *CRṬC-áya*-, where *Ṭ* stands for the vocalic variant of a sonant).²

Historically, the former type can be uniformly explained as based on the Proto-Indo-European **o*-grade of the root, which yields *ā* in open syllables

¹ Let it be recalled that a syllable is long if it contains a long vowel (*ā, e, o, ī, ū*) and/or is closed.

² The formal opposition between these two morphological types can be neutralized in the case of (i) non-alternating (non-ablauting) verbal roots – for instance, those which have zero grade (typically, *ī* or *ū*) in all formations (cf. *vid* ‘be firm’: *vīd-áya* ‘makes firm’) and (ii) some *CaC* roots (mostly those terminating in a nasal sonant, *m* or *n*) which fail to lengthen the root syllable (cf. *jan* ‘be born, beget’: *jan-áya*).

in accordance with Brugmann's law (see e.g. Volkart 1994 and Lubotsky 1997), i.e. *pātáyā-* < PIE **pot-éje-*; *cetáyā-* < PIE **kʷoīt-éje-* (see LIV: 382).

The semantic distinction between the full/long grade *-áya-*formations (=long root syllable *-áya-*formations, hereafter called 'type *pātáyati*' for short) as opposed to the zero/full grade *-áya-*formations (= short root syllable *-áya-*formations, hereafter called 'type *patáyati*') is well-known and noticed in all standard Indo-European and Vedic grammars (see, e.g., Beekes 1995: 229; for the most comprehensive treatment of the issue, see Jamison 1983 and Lubotsky 1989): the type *pātáyati* mostly includes causatives (e.g. *pātáyati* 'makes fall, makes fly', *cetáyati* 'makes appear, makes perceive'), while the class of the short root syllable *-áya-*formations (type *patáyati*) mainly consists of non-causative and, most often, intransitive presents.³

The Vedic present suffix *-áya-* of both formations, together with its equally well-attested Iranian parallel (Avestan *-aiia-*, Old Persian *-aya-*), is undoubtedly inherited from Proto-Indo-European. The reflexes of the PIE **-éje/o-*presents are found in a number of Indo-European branches (cf. Slavic *-i-*presents, Gothic *-j-*causatives, Greek verbs in *-έω*, etc.); like the Indo-Iranian *-aiia-*causatives, many of them preserve a causative meaning.

1.2 The non-causative *-áya-*presents and their semantics

While the semantic opposition between the long vs. short root syllable *-áya-*presents (type *pātáyati* vs. type *patáyati*) poses no serious problems, the meaning of the type *patáyati* as opposed to other intransitive present formations made from the same root (as, e.g., in the pair *patáyati* ~ *pátati* 'fly' or *citáyati*, *-te* ~ *cétati* 'appear, perceive') puzzled many Indo-Europeanists. Generally, we find two claims in the literature: (i) (some) Proto-Indo-European **-éje/o-*presents could be iteratives (intensives), denoting repeated processes/activities;⁴ and (ii) this iterative meaning, which

³ Exceptions to this regularity are not impossible. Thus, of the 21 occurrences of the short root syllable *-áya-*present *citáyati*, 13 occur in intransitive constructions, meaning 'appear', and 4 are causatives, meaning 'make appear' or 'make perceive' (thus being synonymous with the long root syllable *-áya-*present *cetáyati*); see Jamison 1983: 57.

⁴ This statement essentially goes back to Brugmann's and Delbrück's studies, in particular to a short but important article by Delbrück (1894); for the history of the problem, see fn. 10 below. The two competing functions of **-éje/o-*presents, i.e. causative and iterative, are now said to be lexically distributed in the proto-language, so that **-éje/o-*presents were causatives if derived from the roots of one class and iteratives if derived from the roots of another class; see LIV: 22f. and section 5 below for some suggestions.

could be proper to the sources of the presents of the type *patáyati* in the proto-language, is only weakly attested or entirely lacking in Vedic (and perhaps already in Proto-Indo-Iranian).

Most scholars unanimously agree on (i), but disagree in their opinions as far as (ii) (the preservation of the alleged iterative semantics) is concerned. The iterative meaning is said to be actually attested (Macdonell), (very) poorly attested (Renou), or not attested at all (Jamison, Roessler):

"Those [-áya-]verbs in which the root, though capable of being strengthened, remains unchanged, have not a causative, but an iterative sense." (Macdonell 1910: 393)

"Une autre catégorie moins cohérente, moins nette, est celle de présents (vaguement itératifs) en -áyati, type *patáyati* («voler») de *PAT-* ..." (Renou 1952: 273)

"Well-attested *patáyati* [...], primarily active, is in competition with synonymous act. them. *pátati*, also common in the RV." (Jamison 1983: 61)

Gotō (1987: 60) joins the first group of opinions in the introductory part of his monograph on class I presents:

"Zur Gruppe *citáya*-^{ti}, 'glänzen, leuchten' RV Kh. [...] gehören: *ví...dyutayanta*, 'blitzen' RV; *rucayanta* RV, *rucayant*-JS, 'leuchten'; *śucáyant*-, 'glühend' RV; *śubháyant*-, *śubhayante*, -*anta*, 'sich schmücken' RV [...]. Diese Bildungen sind als Iterative zu beurteilen."

On the same page Gotō qualifies *patáyati* as an iterative:

"Bei *patáya*-^{ti}, (*patáyanta*), 'fliegen' RV+ (neben *pát*⁽ⁱ⁾-*a*-^{ti}) und *dravayanta*, 'laufen' RV dient das kurze -*a*- in der Wz.-Silbe zur Abgrenzung des Iterativs vom Kaus. (*pātáya*-, *drāváyaya*-)."

However, later, in the lemma *páta*-^{ti}, he seems to have changed his mind, noticing that *patáya*-^{ti} lacks an iterative semantics:

"[D]as -*aya*-Präs. *patáya*-^{ti} [...] dürfte eigentlich eine iterative Bildung gewesen sein, obwohl zwischen *páta*-^{ti} und *patáya*-^{ti} im Ved. kaum mehr ein Bedeutungsunterschied bemerkbar ist." (Gotō 1987: 205)

Likewise, Roesler, whose study (1997) on the verbs of light and shining deals, *inter alia*, with a number of short root syllable -áya-presents, finds no conclusive evidence for the iterative semantics of the type *patáyati*:

“Nach Gotō (1987, S. 60) sind die nullstufigen *-áya*-Präsentia, die besonders bei Verben des Leuchtens mehrfach analog gebildet werden, nicht kausativisch, sondern ursprünglich iterativ; in der hier untersuchten Belegen jedoch gibt es keinerlei Anhaltspunkte für eine iterative Bedeutung.” (Roesler 1997: 161, fn. 290)

The statement on the lack of any specific semantics of the short root syllable *-áya*-presents expressed by Jamison and some other scholars appears to be confirmed by the fact that no substantial evidence for the iterative analysis of the type *patáyati* has been provided thus far. By now, this idea seems to have become the *communis opinio*.

Surprisingly, in the Indo-European scholarship, we can find a perfectly clear description of the semantics of the type *patáyati*. More than 100 years ago, in his seminal *Vergleichende Syntax der indogermanischen Sprachen*, Delbrück (1897: 109ff.) qualified its semantics as “iterativ-**ziellose** Bedeutung” (emphasis is mine – LK). The second part of this definition adequately captures the functional opposition between this type and competing intransitive presents belonging to the same individual verbal system (IVS). I will return to Delbrück’s analysis at the end of section 2.

Below I will try to substantiate the following claims. At least for some verbs (in particular, for *pat* ‘fall, fly’), there is a semantic opposition between formations of the type *patáyati* and other intransitive presents (such as *pátati*). However, the meaning of the type *patáyati* cannot be determined as primarily iterative (although in some contexts the iterative meaning may indeed appear). Rather, the opposition between the members of some pairs of the type *pátati* ~ *patáyati* can be captured in terms of the telic/atelic distinction; or, at least, this distinction appears to identify the actual semantic content of the *pátati* ~ *patáyati* opposition more adequately than other aspectual meanings (Aktionsarten, or actionalities), such as iterative or intensive.

1.3 The telic/atelic distinction

To begin with, it will be necessary to formulate a definition of telicity. An action or process can be qualified as telic if it is directed to a certain goal, suggested by the very nature of this action/process (cf. also the term ‘Grenzbezogen(heit)’ introduced by Andersson (1972)). After the achievement of this goal the activity can be considered as realized and thus, normally, stops. By contrast, an atelic action or process does not suggest any inner terminal point built into the situation.

The telic/atelic opposition (also referred to as ‘bound/unbound’ and as ‘predel’nyj/nepredel’nyj’ in the Russian aspectological tradition) is well-studied in the literature dealing with aspectual distinctions and Aktions-arten (actionalities), particularly in Slavicist aspectological studies (see, for instance, Xolodovič 1963; Maslov 1978 = 2004: 314ff.; Maslov 1984: 11ff. = 2004: 29ff.; Comrie 1976: 44-48; Declerck 1979; Dahl 1981). This semantic distinction is well-attested in Slavic languages, where many verbal roots form telic/atelic pairs. Quite naturally, the telicity opposition can be best observed in the cases where the goal of a process/action amounts to a spatial goal, that is, with verbs of motion.

Thus, in Russian, telic/atelic pairs are attested for a number of verbs of motion, such as *bežat’* ‘run’ (telic) - *begat’* ‘run’ (typically, in different directions, without any particular or specified goal, chaotically – atelic), *idti* ‘walk’ (telic) - *xodit’* ‘walk’ (atelic) [a suppletive pair], *letet’* ‘fly’ (telic) - *letat’* ‘fly’ (atelic), *plyt’* ‘swim’ (telic) - *plavat’* ‘swim’ (atelic), *nesti* ‘bear, carry’ (telic) - *nosit’* ‘bear, carry’ (atelic), *vesti* ‘lead’ (telic) - *vodit’* ‘lead’ (atelic), *vezti* ‘carry, drive’ (telic) - *vožit’* ‘carry, drive’ (atelic), etc.

There are several diagnostic contexts which allow for either only telic or only atelic verbs and thus help to distinguish between these two meanings, cf. (1-5) (see also Declerck 1979: 763ff.):⁵

- (1) *Dlja togo čtoby podderživat’ formu, Ivan ežednevno begal [xodil, plaval, ...] / *bežal [*šël, *plyl, ...] 2 časa.*
 ‘In order to stay fit, John was running [walking, swimming, ...] for two hours every day’. (atelic)

⁵ In fact, it is quite difficult to find pure diagnostic contexts, i.e. those which only allow for one member of the telic/atelic pair and entirely rule out the other, so that asterisks in (1-5) should probably be bracketed: *Ivan ežednevno begal [xodil, plaval, ...] / (*)bežal [(*)šël, (*)plyl, ...] 2 časa*, etc. In all cases where either telic or atelic reading is clearly preferred, as in (1-5), we can figure out a rather rare but theoretically possible situation which may legalize the opposite reading. Thus, adding *domoj* ‘home’ to (1) (i.e., *Ivan ežednevno* [verb of motion] *domoj 2 časa* ‘John [was running, swimming, walking, ...] home two hours every day’), we can use telic verbs on condition that we understand the situation as follows: on his way home (oriented, telic motion!), John started to run [walk, etc.] and was running [walking, ...] for two hours.

In all such cases, contextual clarifications may help to make one of the two readings very improbable, but we are practically unable to get rid of it entirely. This situation is typical of aspectual contrasts (and well-known to aspectologists). Thus, there are many contexts which favour the perfective (imperfective) aspect but there are very few which entirely rule out the opposite member.

- (2) *Ne znaja, čem sebja zanjat', Ivan begal [xodil] po komnate [plaval v bassejne, ...] / *bežal [šěl] po komnate [*plyl v bassejne, ...].*
 'Not knowing how to keep himself occupied, John was running [walking] in the room [swimming in the pool, ...]'. (atelic)
- (3) *Segodnja Ivan bežal [šěl,plyl, ...] / *begal [*xodil, *plaval, ...] domoj odin.*
 'Today John was running [walking, swimming, ...] home alone'. (telic)
- (4) *Na puti domoj Ivan bežal [šěl, ...] / *begal [*xodil, ...] čerez les.*
 'On his way home John was running [walking, ...] through the forest'. (telic)
- (5) *Ivan bežal [šěl,plyl, ...] / *begal [*xodil, *plaval, ...] (celyx) 2 km.*
 'John was running [walking, swimming, ...] (as much as) 2 km'. (telic, said of a motion directed to some goal)

Note that the telic/atelic distinction cannot be identified with and is essentially independent from the aspectual opposition 'perfective/imperfective' ['soveršennyj/nesoveršennyj vid'] – although there are some correlations between telicity and perfectivity. Thus, imperfective verbs can be atelic (*begat', letat', etc.*) or telic (*bežat', letet', etc.*).

Likewise, atelicity cannot be identified with iterativity/frequentativity, although the atelic, non-oriented character of an activity (motion) obviously favours the development of an iterative semantics, in accordance with scenarios such as the following: 'move without a certain goal' → 'move in different directions' → 'move repeatedly, several times'.

2. Vedic oppositions of the type *patáyati* ~ *pátati*

2.1 Evidence from the *Ṛgveda* and *Atharvaveda*

The two most ancient Vedic texts, the *Ṛgveda* (RV) and *Atharvaveda* (AV), attest fifteen pairs consisting of an intransitive short root syllable -áya-present of the type *patáyati* and another intransitive present formation belonging to the same individual verbal system (IVS). The full list of such pairs (given by Jamison (1983: 56ff.)) includes: *kṛpáyati* ~ *kṛpate* 'mourn (for), long (for)', *citáyati, -te* ~ *cétati* 'appear, perceive', *tujáyati* ~ *tujāti* 'press forward', *turáyati* (RV), *tvarayati* (AV^{1×}) ~ *turánt-* 'hasten', *dasayate* (RV^{1×}) ~ *dásyati* 'become exhausted', *ví dyutayate* (RV^{1×}) ~ *dyótate* 'shine', *dravayanta* (RV^{1×}) ~ *drávati* 'run', *nadáyati, -te* ~ *nádati* (AV+) 'resound', *patáyati* ~ *pátati* 'fly', *ṛṣayádhyai* (RV^{1×}) ~ *ṛṣyati* 'harm, to be harmed', *rucayate* (RV^{1×}) ~ *rócate* 'shine', *śucáyati* ~ *śócati* 'gleam', *śubháyati, -te* ~

śóbhate, *śúmbhate*, *śumbháte* ‘be beautiful, splendid’, *saráyanta* (RV^{1×}) ~ *sísṛte* ‘run’, *áheḍayant-* (RV^{1×}) ~ *áheḍant-* ‘be angry’. Some of these *-áya*-intransitives are hapaxes and/or nonce formations.⁶

After the RV the type *patáyati* goes out of use: in the AV we only find 3 attestations of *patáyati* and one attestation of *tvarayati* (replacing the RVic *turáyati*). Apparently, the RV is the only text where we may perhaps find some traces of the original specific meaning of the type *patáyati* – if any. Accordingly, in what follows, I will limit my search to the evidence available from the RV.

Some of the above-listed *-áya*-intransitives are hapaxes and/or nonce formations created analogically. Therefore, it makes sense to start with pairs consisting of a formation of the type *patáyati* and its counterpart, another intransitive present, both of which are well-attested in Vedic and, presumably, inherited from Proto-Indo-European. A textbook example of such pair is *patáyati* ~ *pátati*. Let us have a closer look at the usages, contexts, syntactic patterns and semantic features typical of these two formations.

2.2 Types of subjects

First, in order to determine the character of motion expressed by *pátati* and *patáyati*, it will be in order to catalog the most typical subjects with which these two presents are attested.

pátati usually appears with the subjects referring to deities, creatures or things moving (flying) purposefully, usually towards a certain goal. This present is particularly common with the subject of Áśvins making their divine journey (RV 1.183.1, 5.78.1-3, 8.10.6, 8.35.7, 8.35.8, 8.35.9) or of their chariot (1.46.3);⁷ it also occurs with the subject of Yama (10.14.16), as well as of horses driving Sūrya (5.29.5) or Maruts (8.7.35). Very frequent is *pátati* with the subject of arrow(s) (*didyú-*, *didyút-*, *bāṇá-*) or of other weapons shot at some target, cf. RV 4.16.17 (*tigṃá yád ... aśániḥ pátāti* ‘when the sharp thunderbolt will fly ...’), 6.75.11, 6.75.16, 6.75.17, 7.25.1, 7.85.2, 10.27.22 (where arrows are compared with birds), 10.38.1, 10.134.5, 10.158.2. Other

⁶ Thus, a number of verbs of light and shining have built short root syllable *-áya*-presents analogically (see Gotō 1987: 60; Roesler 1997: 161, fn. 290); they may be of denominative origin (Lubotsky 1989).

⁷ Although Áśvins can be compared with birds (as in RV 1.183.1 *vīr ná* ‘like a bird’; 5.78.1-3, 8.35.8 *haṃsāv iva* ‘like two geese’; 8.35.9 *śyenāv iva* ‘like two hawks’), it is evident that their motion is crucially different from the predominantly non-oriented fluttering of birds.

subjects attested with *pátati* include, in particular, prayer (3.39.3), falling flows of rain (1.79.2) and race horses (6.4.5).

By contrast, *patáyati* occurs with the subject of fluttering bird(s), cf. RV 1.24.6, 1.155.5, 1.163.6, 5.45.9, 7.104.18 – that is, beings whose motion is regarded as prevailing non-oriented and chaotic. Also, it appears with the subject of:

- mountains fluttering like birds (RV 4.54.5);
- evil creatures of various kinds (6.71.5 *ábhvam* ‘monster(s)’, 7.104.20 *śváyātavaḥ* ‘dog-like sorcerers’);
- Indra compared to an angry bull dashing around (RV 10.43.8 *vṛṣā ná kruddháh patayad rájassv á*);
- the semen chaotically moving within the vagina before conception takes place (10.162.3);
- senses and wishes going in different directions, cf. RV 6.9.6 *ví me kárṇā patayato ví cákṣuḥ* ‘my hearing [lit. ears] flies in all directions, my seeing’;⁸ 3.55.3 *ví me purutrā patayanti kāmāḥ* ‘my wishes fly in many directions’, 10.64.2 *venāḥ patáyanty á díśaḥ* ‘mental powers fly in all directions’;
- stream(s) of liquid in a whirlpool (RV 4.58.7, 9.86.43);
- lightnings (RV 5.83.4).

In all these usages, *patáyati* is likely to refer to essentially non-oriented or chaotic flying, dashing around, meandering and similar types of motion.

This is not to say of course that these types of subjects are impossible or exceptional with the class I present *pátati*. Thus, *pátati* does occur with the subject of birds; however, in such cases it normally denotes an oriented non-chaotic motion, crucially different from that expressed by *patáyati*, cf. RV 1.25.7 (*vīnām padām antárikṣeṇa pátatām* ‘path of birds flying through the atmosphere’), 1.164.47, 10.27.22, 10.165.5.⁹

⁸ Cf. Rus. *glaza razbegajutsja* (lit.) ‘eyes are running in all directions’ (said of someone who tries to visualize, cover with seeing, too many different objects), with the verbal prefix *raz-*, which is the semantic equivalent of Ved. *ví-*.

⁹ One of the few exceptions is RV 10.80.5 *váyo antárikṣe pátantaḥ* ‘birds flying in the atmosphere/sky’, where one might expect the *-áya*-present (*patáyantaḥ*). *pátati* is likely to refer here to a non-specified type of motion; see Section 2.4 below.

2.3. Other syntactic arguments and typical usages/contexts

The relevance of the telic/atelic distinction for the interpretation of the opposition between *pátati* and *patáyati* is further corroborated by other syntactic features of constructions attested with these presents, such as secondary arguments with which they occur. In this section I will discuss a few such features, illustrating some configurations of flying typically expressed by these verbs.

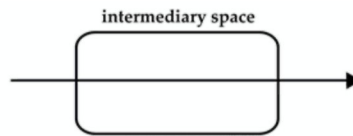
Most importantly, *pátati* may appear with an accusative, dative or adpositional (postpositional) phrase (PP) referring to the spatial goal of motion or general (abstract) goal to be achieved, as shown in the following figure:



Cf.:

- +Acc: RV 1.33.2 *júṣṭāṃ ná śyenó vasatīm patāmi* 'I am flying like a falcon to his beloved nest'; 1.164.47 (*dívam* 'to the sky');
- +Dat: RV 1.25.4 (*vásyaīṣṭaye* 'in search of the better, of welfare'), 8.35.9 (*havyádātaye* 'for presenting oblations');
- +PP: RV 8.35.7 (*vánéd úpa* 'to the wooden vessel').

Furthermore, *pátati* occurs constructed with the instrumental denoting the place through which the subject is moving, particularly often with *antárikṣeṇa* 'through the atmosphere, sky, intermediary space between earth and heaven' (1.25.7, 8.7.35, 10.136.4), also with *pathíbhiḥ* '(following) the paths' (10.87.6). We also find accusatives in this usage, cf. RV 1.168.6 (*ví ... patatha tveṣām arṇavám* 'you fly through a mighty stream'), 10.14.16 (... *patati śaḷ urvīḥ* '[Yama] flies through six wide [spaces]'). Such a feature can hardly characterize a non-oriented flying (cf. (4) above). The spatial configuration characterizing this type of motion can be schematically represented as follows:

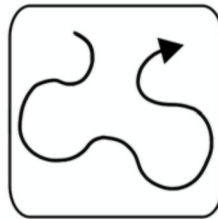


Furthermore, *pátati* appears with the accusative of covered distance, which, again, suggests the motion directed to a certain goal (cf. (5)), as in RV 2.16.3 *yád ... pátasi yójanā purú* ‘when you fly many yojanas’:

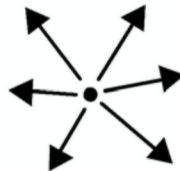


Finally, unlike *patáyati*, *pátati* is not infrequent with preverbs which specify the direction of flying or falling: *prá* ‘away, forth’ (10.27.22, 10.95.14, 10.97.13, 10.165.5), *nír* ‘away’ (10.24.5), *úd* ‘up(wards)’ (1.164.47, 2.43.3) and *áva* ‘down’ (10.97.17). Cf. also RV 1.29.6, where *pátāti* ‘[the wind] will fly’ is constructed with the adverb *dūrām* ‘far away’.

By contrast, *patáyati* typically refers to a chaotic motion (flying, fluttering, etc.) and accordingly may occur constructed with the locative of the space within which this motion is performed, as in RV 10.43.8 *vṛṣā ná kruddhāḥ patayad rájassv á* ‘like an angry bull, [Indra] is dashing in clouds of dust (aerial spaces?)’:



We also find usages where *patáyati* is constructed with adverbials such as *purutrā*, (RV 3.55.3: ‘my wishes fly in many directions’) or *á díśaḥ* (RV 10.64.2: ‘[the watching mental powers] fly in all directions’), explicitly referring to the motion (flying) of a plural subject in many (all) directions:



Finally, *patáyati* does not occur with preverbs which denote the direction of motion, such as *prá* or *áva* (common with *pátati*), but is well-attested with the preverb expressing the chaotic (multidirectional) motion, *ví* (RV 3.55.3, 6.9.6).

2.4 Semantic and syntactic features of *pátati* and *patáyati*: a recapitulation

The most important of the above-discussed features are summarized in the table below. For each of them, I indicate the number of occurrences of *pátati* and *patáyati*.

	<i>pátati</i>	<i>patáyati</i>
Subjects		
birds	4× (1.25.7, 1.164.47, 10.27.22, 10.165.5 – all said of oriented flying); 1× (10.80.5 – non-specified?)	6× (1.24.6, 1.155.5, 1.163.6, 5.45.9, 6.46.11, 7.104.18)
senses, wishes	–	3× (3.55.3, 6.9.6, 10.64.2)
evil creatures	1× (10.87.6 – with Ins. of path)	2× (6.71.5, 7.104.20)
Aśvins	6× (1.183.1, 5.78.1-3, 8.10.6, 8.35.7, 8.35.8, 8.35.9)	–
chariot or horses of some god(s)	3× (1.46.3, 5.29.5, 8.7.35)	–
arrows and other weapons	10× (4.16.17, 6.75.11, 6.75.16, 6.75.17, 7.25.1, 7.85.2, 10.27.22, 10.38.1, 10.134.5, 10.158.2)	–
<u>Other syntactic arguments and typical usages/contexts</u>		
+ Acc./Dat./PP of goal	5× (1.33.2, 1.164.47; 1.25.4, 8.35.9; 8.35.7)	–
+ Ins. or Acc. of intermediary space	6× (1.25.7, 1.168.6, 8.7.35, 10.14.16, 10.87.6, 10.136.4)	–

'in all directions'	2× (10.38.1, 10.134.5 – said of arrows)	3× (3.55.3, 6.9.6, 10.64.2)
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Compounds with preverbs

<i>prá</i> 'away'	4× (10.27.22, 10.95.14, 10.97.13, 10.165.5)	–
<i>úd</i> 'up(wards)'	2× (1.164.47, 2.43.3)	–
<i>ví</i> 'in all directions'	–	2× (3.55.3, 6.9.6)

The above table clearly shows that the content of the semantic opposition *pátati* ~ *patáyati* can most adequately be captured in terms of the telic/atelic distinction.

The difference between these two present formations does not, of course, amount to this single semantic contrast. First of all, in some cases, certain parameters may favour a telic reading, while others support another one, or *vice versa*. Thus, in RV 10.38.1 *viṣvak pátanti didyávaḥ* 'arrows fly in all directions' and 10.134.5 *viṣvak patantu didyávaḥ* 'let arrows fly in all directions', *pátati* occurs with the adverb *viṣvak* 'in all directions', typical of an atelic motion. In spite of that, the author may have chosen the class I present because of the subject of arrows (*didyávaḥ*), which strongly imposes a telic (goal-oriented) interpretation. By contrast, in RV 6.46.11 *yád antárikṣe patáyanti parṇíno didyávaḥ* 'when feathered arrows fly in the sky ...', the author may have used the atelic present *patáyanti* with the subject of arrows, comparing numerous arrows flying in all directions with chaotically fluttering birds (*parṇínah*).

Furthermore, as mentioned in section 1.3, in some contexts atelic verbal forms could easily develop an iterative semantics, according to the scenario 'move chaotically' → 'move in different directions' → 'move repeatedly'. Yet the atelic meaning seems to be more basic and underlie the iterative one, rather than *vice versa*.

Finally, in some usages *pátati*, as the unmarked member of the morphological opposition, could denote types of motion non-specified with regard to the telic/atelic distinction, cf. RV 10.80.5 *váyo antárikṣe pátantaḥ* 'birds flying in the atmosphere/sky', discussed above.

No doubt, Delbrück (1897: 109ff.) had this predominantly atelic semantics of *patáyati* in mind when characterizing its meaning as "iterativ-ziellose Bedeutung". He also rightly noticed the unmarked character and non-specific usages of one member of the opposition, *pátati*, as opposed to the marked *patáyati*:

“Dass bei *patáyati* der Ausgangs- oder Zielpunkt bezeichnet wäre, habe ich nicht gefunden [...] *Pátati* kann so gebraucht werden, dass man eine Verschiedenheit von *patáyati* nicht bemerkt [...] In anderen Stellen erscheint deutlich der begrenzte (einaktige) Gebrauch, z.B. [...] fliege der Pfeil [...]” (Delbrück 1897: 110)

Unfortunately, Delbrück’s observation was disregarded in the later scholarship.¹⁰ Like in many other cases, he considerably anticipated the contemporary Indo-European linguistics – a feature which he has in common with the addressee of this Festschrift.

3. Other pairs of the type *patáyati* ~ *pátati*

In this section I will discuss a few other examples of the type *patáyati* ~ *pátati*, i.e. of the opposition built by a short root syllable *-áya*-formation and another intransitive present of the same IVS.

3.1 *dravayanta* ~ *drávati* ‘run’

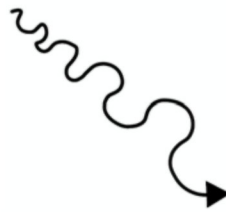
Noteworthy is the only occurrence of the short root syllable *-áya*-formation *dravayanta*:

- (6) (RV 10.148.5)
 ūrmír ná nimnáír dravayanta vákvāḥ
 ‘The [praises] are running sinuously, like a stream through a valley’.

Jamison (1983: 60) qualifies it as a nonce formation created alongside the ordinary class I present *drávati*, but leaves unanswered the question which

¹⁰ It is important to note that Brugmann (1892: 1147ff.), as well as Delbrück in an earlier paper of his (1894), offers as many as three terms for identifying the semantic distinction between *pátati* and *patáyati* (“eine Function, die man als intensive, iterative oder frequentative bezeichnen mag”). In this list we do not find yet any mention of the atelic (‘ziellose’) meaning. It appears a few years later in Delbrück’s *Vergleichende Syntax*, replacing the term ‘intensive’. In the 2nd edition of his *Grundriss* (1916: 247), Brugmann accurately mentioned this important correction by Delbrück: “Die Verba dieser Klasse [= with the suffix **-éje/o-* – LK] fungieren seit uridg. Zeit als Kausativa [...] oder als Iterativa (genauer ist die Bedeutung als iterativ-ziellos zu bezeichnen), bezw. Intensiva”. Unfortunately, most scholars seem to have merely disregarded this important addendum, only referring to Brugmann’s and Delbrück’s earlier formulations, instead of Delbrück’s more correct definition (1897). The terms ‘iterative’ and ‘intensive’ (“meist iterativ-intensive Bedeutung”) appear, in particular, in Thumb and Hauschild’s authoritative handbook (1959: 338ff.). From Brugmann’s and Thumb and Hauschild’s handbooks, they have found their way into some other studies on the Indo-European and Vedic verb, still further obscuring matters.

specific meaning the author of the hymn may have had in mind when using this particular form. According to Gotō (1987: 178), “*dravayanta* ist wohl als Iterativ-Stamm zu beurteilen”; however, the context barely supports the iterative interpretation of this passage (‘praises are running repeatedly’?). It seems that the poet rather refers to a typical trajectory of a water stream on a flat surface, a river whimsically meandering through a valley, as shown in the below figure; the same idea is expressed by the adjective *vákva-* ‘sinuous, crooked’, derived from the root *vañc* ‘move, go crookedly, waveringly’:



3.2 *ví ... dyutayanta ~ dyótamānā-* ‘shine, flash’

Oppositions of the type *patáyati ~ pátati* are also attested for a few verbs of light and shining: *ví dyutayate ~ dyótate* ‘shine’, *rucayate ~ rócate* ‘shine’, *śucáyati ~ śócati* ‘gleam’, *śubháyati, -te ~ śóbhate, śumbhate, śumbháte* ‘be beautiful, splendid’. Most often, we do not discover any subsumable semantic distinction between the members of such pairs; as rightly noticed by Roesler (1997: 161, fn. 290), a few such verbs built zero grade *-áya-* formations analogically. Furthermore, the telic/atelic distinction seems to be much less important for verbs of this semantic domain than for verbs of motion.

Yet, there is at least one pair for which the telic/atelic distinction appears to be as relevant as in the case of *patáyati ~ pátati*. The RVic hapax *-áya-* present *-dyutayate* ‘shine, flash’ (cf. (7)) is opposed to the class I present *dyóta-^{te}* id., attested from the late RV onwards (one occurrence in book 10, quoted under (8)):

- (7) (RV 2.34.2)
vy àbhríyā ná dyutayanta vṛṣṭáyah
 ‘[The lightnings] flash like rainy thunderclouds.’
- (8) (RV 10.177.2)
tām dyótamānām svaryām manīṣām
 ‘This sun-like (?) knowledge, which lights up ...’

An important difference between these two usages consists, in particular, in the type of subjects of *dyut*. While *vy ... dyutayanta* refers to flashings produced by lightnings (note the *figura etymologica* *vidyút*- ‘lightning’ / *vy ... dyutayanta*), *dyótamānā*- is likely to characterize the light similar to that produced by the sun. The creation of the nonce form *vy ... dyutayanta* was certainly supported by the noun *vidyút*-. In addition, the -*áya*-present may emphasize both the repeated (iterative) flashing and the non-straightforward, zigzag trajectory of a chained or forked lightning (cf. the joke quoted in the epigraph). Note also that the subject of lightning occurs with yet another short root syllable -*áya*-present, *patáyati* (RV 5.83.4), where it is likely to refer to a zigzag motion, too. The constant illuminating light produced by the sun (*dyótamānā*) is of a clearly different nature.

4. Other (present) formations with atelic semantics

The relevance of the telic/atelic distinction is not limited to the -*áya*-presents of the type *patáyati*. There is another formation which may exhibit the atelic meaning, the reduplicated present (class III in the traditional notation).

A particularly instructive example is provided by the verb *bhr̥* ‘carry, bring’. The class I present derived from the verb *bhr̥* exhibits a telic or non-specified meaning (*bhárati* ‘brings’; cf. Germ. *bringen*, Rus. *nesti*), being clearly opposed to the reduplicated present *bíbharti* ‘carries’ (cf. Germ. *tragen*, Rus. *nosit*), employed with an atelic (or iterative) meaning. Again, as in the case of the type *patáyati*, the atelic semantics of some reduplicated presents has been noticed as early as Delbrück's *Vergleichende Syntax* (1897:18): “*bíbharti* wird von der nicht auf ein Ziel gerichteten Thätigkeit des Tragens gebraucht”.¹¹ Cf. an especially clear instance of the telic/atelic opposition in (9):

¹¹ See also Joachim 1978: 116-117; Gotō 1987: 225-227; Kulikov 2005: 443-444.

(9) (RV 10.30.13)

*yád āpo ádṛśram ... ghr̥tām páyāṃsi bíbhṛatīr mádhūni ... índrāya sómam
súṣutam bhárantīh*

‘When the waters, which carry [*bíbhṛatīr*] ghee, milk, and honey,
which bring [*bhárantīh*] the well-pressed soma-sap to Indra, became
visible...’

A similar semantic opposition between non-reduplicated and reduplicated presents is instantiated by the verb *pad* ‘fall, move’. The *-ya*-present *pádyate* ‘falls, moves’ (unspecified motion) is opposed to the reduplicated present *píḍa-* ‘trudge, plod’ (atelic; in Strunk/Gotō’s description, ‘stapfen, auf der Stelle treten’), attested in the middle participle *píḍamāna-* (see Strunk 1977: 977-980; Gotō 1987: 280, fn. 650).

Note that, as in the case of the type *patáyati*, in some usages the atelic (non-oriented) verbal forms can easily develop the iterative semantics, so that reduplicated presents can also express repeated, iterated activities.

It is interesting to note that, in fact, there is a double functional parallelism between *-áya*-presents and reduplicated formations. On the one hand, both short root syllable *-áya*-presents (type *patáyati*) and reduplicated presents (class III) can render the atelic (‘ziellose’) meaning. On the other hand, the causative function is shared by the long root syllable *-áya*-presents (type *pātáyati*) and yet another reduplicated formation, the causative aorist of the type *ápīpatat*. As M. Leumann has demonstrated (1962), the causative reduplicated aorist is likely to originate in the imperfect of the reduplicated present. Note also that a few reduplicated (class III) presents function in Vedic as causatives within the corresponding IVSs, cf. *ṛcchāti* ‘attains, reaches’, *ṛṇvati* ‘moves, sets in motion’ ~ *īyarti* ‘sets in motion’,¹² *yúcchati* ‘keeps away’ ~ *yuyóti* ‘makes keep away’ (see e.g. Joachim 1978: 53ff.; 139ff.).

This functional similarity is shown in the scheme below:

¹² For the relationships between several presents derived from *ṛ* (*ar*) that probably reflect more than one originally different roots (PIE **h₁er-*, **h₂er-* and **h₃er-* (?)), see, in particular, Kümmel 2000; LIV: 238, 269ff., 299ff.

(non-specified/telic)	atelic	causative
	short root syllable	long root syllable
	-áya-presents:	-áya-presents:
(other presents:	type <i>patáyati</i>	type <i>pātáyati</i>
class I, <i>cha</i> -presents,	reduplicated presents	reduplicated (causative) aorists:
etc.)	(class III): <i>bíbharti</i> etc.	type <i>ápīpatat</i> (reduplicated presents: <i>íyarti</i> etc.)

5. Concluding remarks: cognates and sources of the type *patáyati*

To conclude the discussion of the semantics of the type *patáyati*, it will be in order to briefly touch upon its possible cognates and parallels outside Indo-Iranian. There is probably no need to argue that evidence for the atelic meaning of some **-éje/o*-presents can be found in other branches of Indo-European. In fact, some reflexes of this Proto-Indo-European type which are traditionally called ‘iteratives’ can be more adequately characterized as atelic formations. This holds, in particular, for a few Greek *-έω* verbs, such as *ποτέομαι* ‘flutter around’,¹³ and, especially, some Slavic *i*-verbs. Note that, as in the case of the Vedic *-áya*-presents, this morphological type is ‘shared’ by causatives and iterative/atelic verbs; cf. Old Church Slavonic causatives *-moriti* ‘make die’, *-ložiti* ‘make lie, place’, *topiti* ‘make sink’, *kvasiti* ‘make sour’, etc. vs. atelic verbs *nositi* ‘bear, carry’, *voditi* ‘lead’, *voziti* ‘carry, drive’, etc.¹⁴ On the basis of the Slavic evidence, it would be tempting to assume that the distribution of these two **-éje/o*-types was dependent on the transitivity of the base verb: the same suffix functioned as a transitivizer (causative morpheme) when applying to intransitives and rendered the atelic meaning with transitives. The Vedic evidence partly supports this scheme: in early Vedic, *-áya*-causatives can only be derived from intransitives; however, in contrast to the situation in Slavic, *patáyati* iteratives mostly derive from intransitives, too. Since we find no reliable evidence for the Proto-Indo-European **-éje/o*-presents with the **e*- or zero grade in the root (which might yield the Vedic type *patáyati/dyutáyati*), this morphological subtype may represent an Indo-Aryan innovation. Perhaps Vedic has reinterpreted the original opposition between causative and atelic **-éje/o*-presents derived from intransitives and transitives, respectively,

¹³ See Tucker’s (1990: 144ff. et passim) objections against the iterative interpretation of this type in Greek.

¹⁴ See e.g. Vaillant 1966: 410ff. and, particularly, the delicate analysis of the Balto-Slavic reflexes of the **-éje/o*-causatives and iteratives and their interplay with another verbal type, **-āie*-denominatives, offered by Kortlandt (1989).

as the opposition between causatives and (prevailingly intransitive) non-causatives, entirely blocking the *-áya*-derivation from transitives. Later, the secondary distinction between short and long root syllable *-áya*-presents could be introduced, in order to distinguish atelic verbs from causatives.

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REFERENCES

- Andersson, Sven-Gunnar
1972 *Aktionalität im Deutschen. Eine Untersuchung unter Vergleich mit dem russischen Aspektsystem. I: Die Kategorien Aspekt und Aktionsart im Russischen und im Deutschen* (Studia Germanistica Upsaliensia 10). Uppsala: Universitetet.
- Beekes, Robert S.P.
1995 *Comparative Indo-European linguistics. An introduction*. Amsterdam: Benjamins.
- Brugmann, Karl
1892 *Grundriss der vergleichenden Grammatik der indogermanischen Sprachen. Zweiter Band: Wortbildungslehre (Stammbildungs- und Flexionslehre). Zweite Hälfte: Zahlwortbildung, Casusbildung der Nomina, Pronomina, verbale Stammbildung und Flexion (Conjugation). 2. Lieferung*. Strassburg: Trübner.
1916 *Grundriss der vergleichenden Grammatik der indogermanischen Sprachen. Zweiter Band: Lehre von den Wortformen und ihrem Gebrauch. Dritter Teil / Erste Hälfte. Zweite Bearbeitung*. Strassburg: Trübner.
- Comrie, Bernard
1976 *Aspect: an introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge University Press.
- Dahl, Östen
1981 "On the definition of the telic-atelic (bounded-nonbounded) distinction". In: Philip Tedeschi and Annie Zaenen (eds.), *Tense and Aspect* (Syntax and Semantics 14), 79-90. New York: Academic Press.
- Declerck, Renaat
1979 "Aspect and the bounded/unbounded (telic/atelic) distinction". *Linguistics* 17, 761-794.
- Delbrück, Berthold
1894 "Der Typus φέρω – φορέω im Arischen". *Indogermanische Forschungen* 4, 132-133.
1897 *Vergleichende Syntax der indogermanischen Sprachen. 2. Theil*. Strassburg: Trübner. [= K. Brugmann und B. Delbrück. *Grundriss der vergleichenden Grammatik der indogermanischen Sprachen. Bd. IV/2*]

- Gotō, Toshifumi
1987 *Die "I.Präsensklasse" im Vedischen: Untersuchung der vollstufigen thematischen Wurzelpräsentia*. Wien: Verlag der Österreichischen Akademie der Wissenschaften. [2., überarbeitete und ergänzte Aufl. 1996]
- Jamison, Stephanie W.
1983 *Function and form in the -áya-formations of the Rig Veda and Atharva Veda* (KZ, Ergänzungsheft 31). Göttingen: Vandenhoeck & Ruprecht.
- Joachim, Ulrike
1978 *Mehrfachpräsentien im R̥gveda* (Europäische Hochschulschriften: Reihe XXI, Linguistik 4). Frankfurt am Main: Lang.
- Kortlandt, Frederik
1989 "Lithuanian *statyti* and related formations". *Baltistica* 25/2, 104-112.
- Kulikov, Leonid
2005 "Reduplication in the Vedic verb: Indo-European inheritance, analogy and iconicity". In: B. Hurch (ed.), *Studies on reduplication* (Empirical Approaches to Language Typology 28), 431-454. Berlin: Mouton.
- Kümmel, Martin
2000 "Der Aorist der Wurzel(n) *ar* im Vedischen". In: Bernhard Forssman & Robert Plath (eds.), *Indoarisch, Iranisch und die Indogermanistik. Arbeitstagung der Indogermanischen Gesellschaft vom 2. bis 5. Oktober 1997 in Erlangen*, 253-266. Wiesbaden: Reichert.
- Leumann, Manu
1962 "Der altindische kausative Aorist *ajījanat*". In: E. Bender (ed.), *Indological studies in honor of W. Norman Brown*, 152-159. New Haven: American Oriental Society.
- LIV
2001 *Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstamm-bildungen*. Unter der Leitung von Helmut Rix und der Mitarbeit vieler anderer bearbeitet von Martin Kümmel [et al.]. 2., erweiterte und verbesserte Auflage. Wiesbaden: Reichert. [1. Auflage: 1998]
- Lubotsky, Alexander
1989 The Vedic -áya-formations. *Indo-Iranian Journal* 32, 89-113.
1997 Review of Volkart 1994. *Kratylos* 42, 55-59.
- Macdonell, Arthur Anthony
1910 *Vedic grammar*. Strassburg: Trübner.
- Maslov, Jurij S.
1978 *K osnovanijam sopostavitel'noj aspektologii*. In: Jurij Maslov (ed.), *Voprosy sopostavitel'noj aspektologii* (Problemy sovremennogo teoretičeskogo i sinxronno-opisatel'nogo jazykoznanija 1), 4-44. Leningrad: Izd-vo LGU. [Reprinted in Maslov 2004, 305-364].
1984 *Očerki po aspektologii*. Leningrad: Izd-vo LGU. [Reprinted in Maslov 2004, 19-302].
2004 *Izbrannye trudy: Aspektologija. Obščee jazykoznanie*. Moskva: Jazyki sl-avjanskoj kul'tury.
- Renou, Louis
1952 *Grammaire de la langue védique*. Lyon, Paris: IAC.

- Roesler, Ulrike
1997 *Licht und Leuchten im Ṛgveda. Untersuchungen zum Wortfeld des Leuchtens und zur Bedeutung des Lichts* (Indica et Tibetica 32). Swisttal-Odendorf: Indica et Tibetica Verlag.
- Strunk, Klaus
1977 "Zwei latente Fälle des verbalen Präsensstammtyps *tīṣṭha-(ti)* im Veda". In: Wolfgang Voigt (ed.), XIX. *Deutscher Orientalistentag. Vorträge* (Zeitschrift der Deutschen Morgenländischen Gesellschaft, Supplement III, 2), 971-983. Wiesbaden: Steiner.
- Thumb, Albert, and Richard Hauschild
1959 *Handbuch des Sanskrit. II. Teil: Formenlehre*. Heidelberg: Winter.
- Tucker, Elizabeth F.
1990 *The creation of morphological regularity: Early Greek verbs in -éō, -áō, -óō, -úō and -ío* (KZ, Ergänzungsheft 35). Göttingen: Vandenhoeck & Ruprecht.
- Vaillant, André
1966 *Grammaire comparée des langues slaves. Tome III. Le verbe*. Paris: Klincksieck.
- Volkart, Marianne
1994 *Zu Brugmanns Gesetz im Altindischen*. Bern: Universität Bern.
- Xolodovič, Aleksandr A.
1963 "O predel'nyx i nepredel'nyx glagolax". In: E.M. Pinus & S.N. Ivanov (eds.), *Filologija stran Vostoka*, 3-11. Leningrad.