

VEDIC PLUPERFECT = INTRANSITIVE IMPERFECT?
(TRANSITIVITY AND TENSE IN RIGVEDA)

Leonid I. Kulikov

Research Assistant

Institute of Oriental Studies

USSR, 103031 Moscow, Rozhdestvenka, 12

0. Introduction.

There exist a strict dependency between tense stems and sets of personal endings in Vedic Sanskrit. There are three principal ("primary") verbal stems associated with three main tense systems: PRESENT, PERFECT, and AORIST. The first one includes present proper, imperfect and present injunctive. The term **present** being ambiguous, I use below capital letters (PRESENT) for referring to the present system (including present proper, imperfect, and injunctive) on the whole. The following rules govern the derivation of main tense forms:

- (a) present = present stem + so-called primary ending, cf. *tan* 'stretch' - *tanó-ti* 'stretches';
- (b) imperfect = augment + present stem + so-called secondary ending, cf. *tan* - *á-tano-t* 'stretched';
- (c) present injunctive = present stem + secondary ending, cf. *tan* - *tano-t*; ¹
- (d) perfect = perfect stem + perfect ending, cf. *tan* - *tatán-a* 'has stretched'.

There are, however, some enigmatic forms derived from perfect stems by means of secondary endings and henceforth violating the rules (a-d) - the so-called **pluperfect** and perfect injunctive:

- (e) pluperfect = augment + perfect stem + secondary ending, cf. *dṛh* 'be/make firm' - *á-dadṛh-anta* 'became firm'; ²
- (f) perfect injunctive = perfect stem + secondary ending, cf. *tan* - *tatán-anta*.

The position and function of this forms in the verbal system is not clear, although they seem to be similar to the imperfect forms in their tense meaning.

In the present paper I will try to explain the rise of such anomalous forms as pluperfect; I will demonstrate that at least one of the reasons for creating such forms may be related to syntactic properties of several tense forms. Thus, a brief digression to the problem of relationship between tense

and syntax of Vedic verbal forms is needed.

1. Transitivity and tense in Rigveda

1.1. Data The relationship between syntactic characteristics and tense properties is one of the least investigated problems of RVic verbal system. Some scholars noticed several irregularities in syntax of certain tense forms such as intransitivity of perfect forms as opposed to forms belonging to the PRESENT system (L. Renou,² J. Haudry³). The question under consideration was touched upon by S. Jamison (1983: 160-168) who demonstrated that for some Vedic verbs transitive-causative on -áya- is opposed to a perfect and not to PRESENT intransitive counterpart, cf.: *cit: cetáyati* 'makes perceive' - *cikéta* 'has appeared, appears'; *dī(p): dīpáyati* 'makes shine' - *dīdāya* 'has shone', etc. It may be shown that this correlation (PRESENT : transitive VS. perfect : intransitive) is attested not only for -áya-causatives but also for some primary present stems. Below I give an approximate rate for three RVic verbs; for each verb number of occurrences of perfect and PRESENT forms in intransitive and transitive constructions is indicated:

tan 'stretch' *ṛ* 'go, send' *randh* 'be/make subject'

	pf	pr	pf	pr	pf	pr
itr	≈ 40	≈ 10	6	≈ 10	1	-
tr	≈ 15	≈ 30	1	≈ 70	-	≈ 25

Cf. for instance the following examples demonstrating syntactic use of the verb *tan*:

- (1) *ágne ... brhát tatantha bhānúnā*
 Agni: VOC high stretch: PF ray: INSTR
 'o Agni, you have stretched high with your ray'
 (RV VI.16.21)

- (2) *rātrī vāsas tanute*
 night: NOM clothes: ACC stretch: PR
 'the night spreads [her] clothes' (RV I.115.4)

The phenomenon described above may be referred to as "**split causativity**", by analogy with split ergativity:⁴

- (R) **Perfect forms are mostly intransitive while their PRESENT counterparts are transitive-causative.**

Of course, there exist some exceptions from this rule, cf. the transitive use of perfect *tātāna*:

- (3) *satyám tātāna sūryo*
 truth: ACC stretch: PF Sun: NOM
 'the Sun has stretched the truth' (RV I.105.12)
 However, such occurrences are much more rare, as it may be seen from the tables above.

It should be emphasized that not all the verbs but only a rather delimited class of verbs (although well-attested in RV) obeys the split causativity rule (R); besides, even the verbs belonging to this class may violate it.

An exhaustive investigation of this problem does not exist as yet. Unfortunately, I cannot touch upon it in this paper in a more detailed way, so I confine myself to the above data.

1.2. Typological explanation.

The correlation described above may seem to be rather strange: it is not clear why perfect forms are not quite syntactically similar to PRESENT ones being mostly intransitive. Nevertheless, recent typological studies throw light on this question. As it was been demonstrated by Hopper and Thompson (1980), Tsunoda (1981) and other typologists, there exist various correlations between transitivity and other features of a sentence, such as tense and aspect of verbs, volitionality, definiteness of noun phrases, etc. In particular, stativity (as opposed to punctuality, activity) is one of the intransitivity features (Hopper, Thompson 1980: 266ff.). Taking into account that stativity is one of the important properties of perfect in Vedic (and in old Indo-European dialects at all; cf. Neu 1983), we may treat syntactic properties of perfect in the framework of Hopper-Thompson theory. Thus, it seems quite natural that perfect forms of certain verbs are most commonly intransitive. One may assume that language of RV conserves some rests of a more archaic system which existed in some (unattested) Indo-European dialects.

2. "Split causativity" system and its development.

2.1. It is difficult to imagine a language with a strict split causativity (namely, perfect forms are always intransitive, etc.), however, even a verbal system containing some elements of split causativity cannot be quite stable.⁵ Really, several combinations of syntactic and tense properties ('perfect & transitive-causative', 'PRESENT & intransitive') can not be expressed in this system, so the verbal paradigm is defective:

	'PF'	'PR'
intransitive	[PF]	
transitive		[PR]

Table 1

(Here and below the notation [PF] or [PR] refers to perfect or PRESENT forms respectively, whereas the notation 'PF'/'PR' refers to perfect or PRESENT meaning. Crossed squares denote gaps in the paradigm.)

The following ways of elimination of such gaps may be used:

(i-ii) One of the oppositions may be eliminated: 'intransitive ~ transitive' (table 2) or 'perfect ~ PRESENT' (table 3):

	'PF'	'PR'
itr / tr	[PF]	[PR]

Table 2

	'PF/PR'
itr	[PF]
tr	[PR]

Table 3

The first way seems the most probable: the tense system on the whole remains while correlations with transitivity disappear. This is the case of Late Vedic and Post-Vedic Sanskrit.

The second way is also possible: formal distinctions between tense forms remain, however their basic function is transformed: perfect markers become markers of intransitivity, while PRESENT ones indicate transitivity (causativity). Only some traces of such development may be observed in Early Vedic. This way of evolution could be one of the reasons of the "erosion" of boundaries between different tenses noticed by many grammarians (cf. for instance Whitney 1955 on present use of perfect). It may be expected that such "erosion" phenomena are proper to verbs obeying the rule (R) and henceforth showing paradigmatic gaps to be filled (like 'PRESENT & intransitive'). Perfect forms with present meaning of such verbs could serve as intransitive counterparts of transitive PRESENTS, etc. Really, present use of perfect forms is especially well attested for the verb *cit* (Grassmann 1976: Sp.448) cited above as an evidence for split causativity. Cf.:

- (4) *sá ciketa sáhiyasā*
this appear: PF stronger: INSTR

agnís *citrépa* *kármanā*
 Agni:NOM bright action:INSTR
 'this Agni manifests himself with stronger,
 bright action' (RV VIII.39.5)

(iii) Both oppositions remain whereas paradigmatic gaps are filled by new forms ([x], [y]) derived on the base of existing ones (table 4). One may assume

	'PF'	'PR'
intransitive	[PF]	[x]
transitive	[y]	[PR]

Table 4

that these formations must be "hybrid" to some extent combining several elements of both perfect and present formations. Below I focus just on this opportunity because it is the most important for my study.

3. Rise of pluperfect.

How the new forms mentioned above can be derived? I demonstrated in the preceding sections that there existed a correlation between tense and transitivity. In particular, perfect was associated with intransitivity, so we can expect that some elements of perfect forms could be reinterpreted as markers of intransitivity. For instance, we may assume that perfect stem becomes to some extent a "bearer" of intransitive meaning. This is not strange if we take into account a very close relation between stem types and syntax of forms derived from these stems in old Indo-European dialects.⁶ Henceforth, "hybrid" forms derived from a perfect stem by means of endings proper to PRESENT system could retain present or imperfect meaning while being syntactically intransitive. Pluperfect (= augment + perfect stem + secondary ending) and perfect injunctive (= perfect stem + secondary ending) are just such hybrid forms, so we may expect that at least one of the functions of these formations can be formulated as '**intransitive imperfect**' (resp. '**injunctive**'). The meaning of pluperfects was investigated by P.Thieme in his monograph "Das Plusquamperfektum im Veda" (1929) where he stated that these formations are used in the same way as imperfect (Thieme 1929: 4). Below I quote some RVic passages (partially borrowed from Thieme 1929) containing pluperfect (or perfect injunctive):⁷

tan 'stretch, spread' - *tatánanta*:

- (5) *áhāni víśvā tatánanta kr̥ṣṭáyah*
 days: ACC all spread: PF. INJ tribes: NOM
 'in all the days the tribes spread' (RV I.52.11)

Here the pluperfect form is used in the same way (i.e. intransitively) as the major part of perfect forms (cf. (2)) as opposed to present forms used most commonly in transitive-causative constructions, cf.:

- (6) *tántum ā tanvate ... kaváyah*
 thread: ACC stretch: PR poets: NOM
 'the poets spread the thread' (RV I.159.4)

cit 'appear; perceive' - *cikito*:

- (7) *tvám soma prá cikito manīṣā*
 you Soma: VOC appear: PF. INJ intellect: INSTR
 (RV X.51.3)

'You, o Soma, manifest yourself through intellect'
 (Thieme 1929: 46)

Cf. transitive usage of non-perfect forms:

- (8) *tád índro ártham cetati*
 then Indra: NOM goal: ACC perceive: PR
 'then Indra perceives the goal' (RV I.10.2)

- (9) *mahó árnah sárasvatī*
 great stream: ACC Sarāsvati: NOM
prá cetayati ketūnā
 illuminate: PR banner: INSTR
 'Sarāsvati illuminates the great stream
 with her banner' (RV I.3.12)

dī 'shine' - *ádīdeḥ*:

- (10) *tvád bhiyā víśa āyann āsiknīr*
 you fear: INSTR races: NOM come: IMPF dark

vaíśvānara pūrāve śósucānah
 Vaishvanara: VOC Puru: DAT gleam: PRTC
pūro yád agne daráyann ádīdeḥ
 castles: ACC when Agni: VOC crush: PRTC shine: PPF
 'For fear of you dark races went away, when you, o
 Vaishvanara, gleaming for Puru, crushing [their]
 castles, shone' (RV VII.5.3)

(Thieme 1929: 37)

The passage above demonstrates that pluperfects (*ádīdeḥ*) are similar to imperfects (*āyann*) as to their tense meaning.

tviṣ 'stirr up; shine' - *átitviṣanta*:

- (11) *sám acyante vr̥jánātītviṣanta yát*
 gird oneself belt shine: PPF when
 '[Maruts] gird themselves with a belt after having
 shone' (RV V.54.12)

Cf. intransitive perfect form:

- (12) ... *titviṣé* *śávo*
 stirr up: PF force: ACC
 'the force have stirred up' (RV I.52.6)
 (Thieme 1929: 46)

- dr̥h* 'be / make firm' - *ádadr̥hanta*:
 (13) *yadéd* *ántā* *ádadr̥hanta* *púrva*
 when limits: NOM become firm: PPF first
 'when the first limits became firm...' (RV X.82.1)
 (Thieme 1929: 47)

The passages cited above clearly demonstrate that pluperfects may be used just as intransitive imperfects/injunctives henceforth confirming the hypothesis on the function of pluperfects formulated above.

It is interesting to note that P. Thieme, although not formulating the rule (R) in an explicit way, uses it sometimes while reinterpreting some passages. For instance, Thieme translates some perfect and pluperfect forms derived from the root *pī* 'swell' otherwise than Geldner. The passage RV IV.16.21

- (14) *indra* ... *iṣam* *jaritré*
 Indra: VOC sacrificial food praiser: DAT
nadyò *ná* *pīpeh*
 rivers: NOM like swell

is read by Thieme as follows: "o Indra, mögest du dem Sänger Labung strotzen (a non-causative interpretation - L.K.), wie die Flüße (Labung strotzen)" (Thieme 1929: 40); otherwise Geldner: "... mögest du nun dem Sänger Speise anschwellen lassen (causative! - L.K.) ..." As we can see, the accusative *iṣam* is interpreted as accusative of result, Resultatsakkusativ (or accusative of content? - for a discussion, see Jamison 1983: 28-30). Most scholars make a difference between a result/content accusative and a normal direct object as in the causative construction below:

- (15) *pínvatam* *gā* ... *no*
 swell: PR. IMPV. 2. DU cows: ACC our
 'make our cows swell' (RV I.148.2)

Thus, such interpretation allows Thieme to treat the form *pīpeh* as intransitive, henceforth avoiding a violation of the principle (R).

One more example is worth mentioning. While analysing the form *rīreca* (as in the passage RV IV.16.6 *apó rīreca* 'he set free the waters'), Thieme (1929: 42) treats it as a new (!) factitive perfect built as a counterpart to present *rinákti* 'sets free'; the existence of an old intransitive (henceforth, corresponding to the rule (R)) perfect is considered by Thieme to be very probable.

Finally, some forms are treated by Thieme as pluperfects without any comments although an aorist treatment is allowed as well. E.g., *átitviṣanta* (cf. (11)) may be considered (at least from the formal point of view) both as a pluperfect (so Thieme) and as a reduplicated (causative) aorist; however, the second option is excluded because of its intransitive reading.

It seems to me that the observations above allow to "reconstruct" to some extent Thieme's adherence to the rule (R). Although he did not formulate this regularity anywhere, he used it for translating some passages (IV.16.21, VII.23.4) and for characterizing some forms.

Now we can also easily account for such anomalous forms as presents derived from perfect stems like *cit - cikétati* (perfect stem *ciket-*) 'appears'. It is quite natural that such forms may be used as intransitive presents and fill one more of the paradigmatic gaps.

4. Split causativity and the rise of reduplicated aorist.

One more observation is to be added to the above data which may be well accounted for in the framework of the split causativity hypothesis. As is well known, one of the seven Old Indian aorist types, reduplicated aorist (aorist 3) with causative meaning (like *jan* 'be born' - *ájījanat* 'gave birth', *pat* 'fall' - *apīpatat* 'made fall', etc.) is more recent by origin than others. Originally, there was no aorist type associated with causative meaning. The sources of this formations were investigated by M. Leumann (1962) who demonstrated that this type was borrowed from the PRESENT system: the reduplicated imperfect (a form belonging to the "third present class") was reinterpreted as an aorist. This fact is easy to account for if we remember that the transitive-causative meaning was to some extent associated with the PRESENT system on the whole; henceforth, it is quite natural that a causative gap in the aorist system was filled by a form belonging to the PRESENT system.

5. Some anomalous perfect forms may be accounted for in a similar way.

5.1. *yuyopimá:*

(16) *ácittī yát táva dhármā yuyopimá*

infatuation: INSTR if your laws: ACC erase: PF

'if we have violated (lit. erased) your rules because of [our] infatuation ...' (RV VII.89.5)

This form is irregular: the root *yup* 'erase, be erased' is presented by full grade instead of weak one

(*yuyupimá). The perfect forms derived from this root (cf. yuyópa 'is erased') are expected to be most commonly intransitive, so a causative perfect must have a special marker of transitivity. As it was been assumed by S. Jamison (1983: 165), the original perfect stem (yuyup-) might be rearranged under the influence of the -áya-causative (yopáyati) related to the PRESENT system.

5.2. *jijinváthuh, pipinváthuh*. Both forms appear in one and the same Rigvedic hymn I.112:

(17) *bhujuým ... jijinváthuh*

Bhujuu: ACC make alive: PF

'you have made alive Bhujuu ...' (RV I.112.6)

(18) *yābhī rasām kṣódasodnáḥ pipinváthur*

which Rasa: ACC stream-water make swell: PF

'by means of which [forces] you have filled Rasa with the water of the stream' (RV I.112.12).

These forms are also irregular being derived not directly from the root (*ji* 'be active, alive; animate'; *pī* 'swell') but containing present stem affix -*nv-* (-*nó-/-nu-*) often used for deriving causative nasal presents (cf. *pī* 'swell' - *pīnvati* 'makes swell, fattens', *r* 'go; send' - *ṛnóti, ṛnvati* 'sends').

All the three anomalous perfect forms mentioned above share a common feature: they contain some elements of PRESENT forms. The problem is that for a causative reading a special marker is needed. Being derived according to common morphological rules (*yuyupimá, *pipyáthuh, *jijyáthuh), they could be interpreted as intransitive. Therefore they are derived from present stems (*yoplaya*, *jinv-*, *pinv-*) and not directly from roots. Thus, this case is rather similar to those discussed in the preceding sections: causative markers missing in the aorist / perfect system are borrowed from the PRESENT system.

6. Conclusion.

The formations discussed in the sections 3-5 were traditionally treated as violating some rules operating in the Vedic verbal system (cf. (a-d) in the section 0). I tried to demonstrate that these irregularities may be accounted for as traces of another system rules formulated in section 2 and referred to as split causativity. Forms like *ádadhanta*, *cikétati*, *yuyopimá*, etc. could be built in order to fill paradigmatic gaps (cf. table 1) as follows:

	'present', 'imperfect'	'perfect'
intransitive	<i>cikétati</i> ; pluperfect	[perfect]
transitive	[present, imperfect]	<i>yuyopimá,</i> <i>jijinváthuḥ,</i> <i>pipinváthuḥ</i>

It should be emphasized that this table represents only one of the possible ways of filling gaps; other ways (cf. for instance transitive use of perfect forms) are mentioned in the section 2.

Of course, I do not claim that 'intransitive imperfect' is the only function of pluperfect and the only reason for creating this formation; it is quite possible that there existed some additional nuances of meaning distinguishing pluperfect from imperfect. I do not claim also that all the pluperfect formations can appear only in intransitive constructions - counter-examples are easy to find. The purpose of the present paper is much more limited: I would like to demonstrate that syntactic properties of the perfect stem may be at least one of the "raisons d'être" of pluperfect.

Thus, such anomalies as pluperfect (and some others) may be accounted for as results **of interaction between two groups of rules**, i.e. morphological rules (as described in the section 0) and split causativity (R) as a principle determining correlation between tense and transitivity.

NOTES

1. The injunctive meaning is very difficult to determine; these formations may be used both as present and imperfect forms. For details, see Hoffmann 1967.

2. Renou 1925: 144 ff.

3. Cf.: "On constate une prédominance nette des formes du parfait dans le modèle 2 (= "étendre" - L.K.), alors que le modèle 2 (= "s'étendre" - L.K.) se rencontre surtout avec le présent *tanóti*, *tanuté*; cette observation suggère une situation connue, celle d'un verbe d'état dit "intransitif" *tatan*- "s'étendre" en face de son causatif *tanu*- "étendre" " (Haudry 1977: 312).

4. As in Hindi-Urdu and some other Indo-Aryan languages where an ergative construction is limited to perfective and preterite environments whereas its non-ergative counterpart is proper to imperfective or

non-preterite environments (see Dixon 1979: 93ff.; Hopper, Thompson 1980: 271ff.).

5. For a preliminary typological study of the split causativity, see Kulikov 1990.

6. Some scholars, although not studying this problem in detail, have noticed these correlations, as for instance. P.Chantraine (1927: 135): "la valeur transitive vs. intransitive d'une forme est souvent commandée par la structure du thème plutôt que par la qualité des désinences".

7. Here and below I use the term pluperfect both for pluperfect properly speaking and for perfect injunctive (i.e. for unaugmented pluperfect).

8. The both forms may also be treated as derived from quasi-roots *jinv-*, *pinv-*; nevertheless, the connection of these (quasi-)roots with the PRESENT system is also obvious.

ABBREVIATIONS

ACC	-	accusative
DAT	-	dative
IMPF	-	imperfect
INJ	-	injunctive
INSTR	-	instrumental
itr	-	intransitive
NOM	-	nominative
PF	-	perfect
PPF	-	pluperfect
PR	-	present
PRTC	-	participle
RV	-	Rigveda
tr	-	transitive
VOC	-	vocative

REFERENCES

- Chantraine, P. (1927) 'Les aoristes athématiques à voyelle longue en grec ancien.' **Mém. Soc. Ling. de Paris** t.23, fasc.2, 135 - 140.
- Dixon, R. M. W. (1979) 'Ergativity.' **Language** Vol 55, No 1, 59 - 138.
- Grassmann, H. (1976) **Wörterbuch zum Rig-Veda**. 5. Aufl. Harrassowitz.
- Haudry, J. (1977) **L'emploi des cas en védique: Introduction à l'étude des cas en indo-européen**. L'Hermès.
- Hoffmann, K. (1967) **Der Injunktiv im Veda**. Winter.
- Hopper, P. and S. Thompson (1980) 'Transitivity in grammar and discourse.' **Language** Vol 56, No 2, 251 - 299.

- Jamison, S.W. (1983) **Function and form in the -āya-formations of the Rig Veda and Atharva Veda.** Vandenhoeck & Ruprecht.
- Kulikov, L.I. (1990) 'K tipologii rass'eplennoj kauzativnosti' [On the typology of split causativity] **Vsesojuznaja konferencija po lingvističeskoj tipologii** Moscow, 91 - 93.
- Leumann, M. (1962) 'Der altindische kausative Aorist *ajījanat.*' **Indological Studies in honor of W. Norman Brown.** American Oriental Soc., 152 - 159.
- Neu, E. (1983) 'Das frühindogermanische Diathesensystem. Funktion und Geschichte.' **Grammatische Kategorien, Funktion und Geschichte. Akten der VII. Fachtagung der Indogermanischen Gesellschaft.** Reichert, 275 - 295.
- Renou, L. (1925) **La valeur du parfait dans les hymnes védiques.** Edouard Champion.
- Thieme, P. (1929) **Das Plusquamperfektum im Veda.** Vandenhoeck & Ruprecht.
- Tsunoda, T. (1981) 'Split case-marking in verb-types and tense / aspect / mood.' **Linguistics** Vol 19, No 5/6, 389 - 438.
- Whitney, W.D. (1955) **Sanskrit Grammar.** 2th ed. Harvard University Press.