

Middle Voice vs. reflexive pronouns: evidence from Rigvedic Sanskrit

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1 Introduction

Rooryck and Vanden Wyngaerd (2011): Two related reflexive constructions:

- (1) SE-anaphors (direct reflexives):

Jan heeft **zich** bezeerd (Dutch)
Jan has SE hurt

‘Jan hurt himself’

- (2) Inalienably possessed body part DPs:

Jan heeft **zijn voet** bezeert (Dutch)
Jan has his foot hurt

‘Jan hurt his foot’

The connection between inalienably possessed body part NPs and the diachronic development of reflexive pronouns is frequently mentioned in the literature (e.g. Safir 2004, Reuland 2011), but the precise mechanisms are rarely elaborated.

Rooryck & Vanden Wyngaerd: Unaccusative analysis of (1) and (2) – internal argument contains both the possessor and the possessum:

- (3) [_{VP} bezeer [_{RP} [_{DP} zich/zijn voet] R [_{PP} P [_{DP} Jan]]]]

Vedic Sanskrit (data from the Rigveda, ca. 1,400-1,200 BCE): non-informant language with an active – middle voice distinction and emergent reflexive pronouns. Apparent **double marking** (cp. (1) and (2)):

- (4) ánu mṛkṣīṣ-ṭa tanvām
PRVB injure.AOR.OPT-3SG.MID SELF.ACC
‘May he injure himself’

Reflexivity marked on verb (middle endings) *and* through a reflexive pronoun (*tanū*)? Not predicted by standard approaches (e.g. Reinhart and Reuland 1993).

2 Questions

In languages with an active – non-active voice opposition and no reflexive pronouns,

- can non-active voice alone express (1) (‘direct reflexives’) and if yes, is this valency reduction?
- what is the relationship between (1) and (2)?
- how do reflexive pronouns develop diachronically?

3 The middle voice in Vedic

Active – middle endings of the 3 pers. sg. & pl.:

	Active		Middle	
	Sg.	Pl.	Sg.	Pl.
3 pers. non-past	-ti	-nti	-te, -e	-nte, -re
3 pers. past	-t	-n	-ta, -a	-nta, -ra

Functions of the middle voice:

- Naturally reflexive/reciprocal predicates: *páva-te* ‘cleans him/herself’, *spárdha-nte* ‘are competing with each other’
- Anticausative/inchoative: *váha-te* ‘moves’, *várdha-te* ‘grows’
- Self-benefactive:

- (5) *hari* *gr̥bhṇ-e*
 bright.ACC.DU seize-1SG.MID
 ‘I am seizing two horses for myself.’

4 Body part reflexives

Body part reflexives as part-whole relation: Rooryck and Vanden Wyngaerd (2011) (SE-anaphors = ‘spacio-temporal slices’), Reuland (2011) body part DPs = are referentially deficient **relational nouns**:

- (6) B(ody)P(art)<*x,y*>, where *x* is the inalienable body of *y*

Examples from Vedic:

- (7) *bāhú* *anu-mármṛj-āno*
 arms.ACC.DU PRVB-brushing-MID.PTCP.NOM
 ‘Brushing (your) arms, ...’
- (8) *savitā* *bāhú* *ayaṃs-ta*
 Savitar.NOM arms.ACC.DU raise.AOR-3SG.MID
 ‘Savitar raised (his) arms’
- (9) *diví* *mūrdhānaṃ* *dadhi-ṣe*
 sky.LOC head.ACC place.PERF-2SG.MID
 ‘You have placed (your) head in the sky’

Intransitive:

- (10) a. *māmṛj-e* (mid.) ‘brushes oneself’
 b. *yamā-te* (mid.) ‘extends, stretches oneself’
 c. *dadh-e* (mid.) ‘places oneself’

A puzzle: How is (10) related to (7) – (9)?

5 *tanū́-* ‘body’

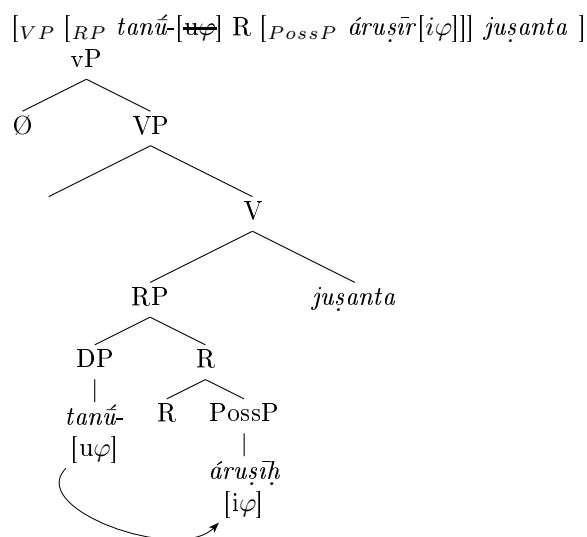
tanū́- f. 1. ‘body’, 2. SELF → 3. reflexive pronoun. Starting point: constructions parallel to (7) – (9):

- (11) *tanvāḥ śúmbha-mānāḥ*
 bodies.ACC adorn-MID.PTCP.NOM.PL
 Ambiguous: ‘adorning (our) bodies’ or ‘adorning ourselves’

Applying Rooryck and Vanden Wyngaerd (2011)’s analysis to *tanū́*-reflexives:

- (12) *áruṣīr ... tanvò juṣanta*
 reddish.NOM SELF.ACC enjoy-3PL.MID
 ‘The red (flames) ... are enjoying themselves.’

1. AGREE takes place in RP:



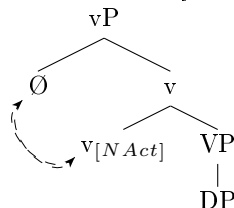
2. Possessor raising out of RP gives SOV word order:

[_{TP} *áruṣīr*_{*i*} [_{VP} [_{RP} *tanū́-* R [_{PossP} *t_i*]]] *juṣanta*]

6 Why middle voice?

Embick (1998), (2000): non-active voice is assigned post-syntactically “when *v* is not in a local relationship with an external argument” (1998: 22):

(13) $V \rightarrow V\text{-VOC}[\text{NonAct}]/_ \text{ No external DP argument:}$



BP-reflexives (*tanŭ́*-reflexives and (7) – (9)) only have an internal argument \rightarrow middle voice is assigned:

(14) $[_{vP} \emptyset v [_{VP} [_{RP} V]]] \rightarrow [_{vP} \emptyset v_{NAct} [_{VP} [_{RP} V]]]$

7 Implications

- Diachronic development: BP reflexive construction ((7) – (9)) \rightarrow direct reflexive construction (12). Final stage: *tanŭ́*- loses φ -features (here: NUMBER):

(15) *yá devésu tanvàm aíraya-nta*
 who gods.LOC SELF.ACC.SG move-3PL.MID
 ‘... who gave themselves to the gods.’ (cp. (11) – (12))

- Neither type of reflexive merges an external argument in *v* \rightarrow middle voice is assigned
- Middle voice is not valency-reducing: Examples in (10) have unexpressed relational variable *x* in RP:

(16) *mām̄rj-e* ‘He brushes himself’:
 $[_{vP} \emptyset v [_{VP} [_{RP} x [_{PossP} \text{he}]]] \text{ brushes}_V]]$

Prediction: Languages with an active – non-active voice distinction will have non-active morphology in reflexive constructions if their reflexive pronouns developed out of body part DP

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