

# Pāṇinīya tradition as a source for the study of the Middle Indo-Aryan labile verbs

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# Pāṇini and his school (*pāṇinīya*)

Pāṇini                      VI – IV cent. B.C.

Kātyāyana                III cent. B.C.

Patañjali                II cent. B.C.

(all dates uncertain)

# Pāṇini's syntactical device: *kāra*ka roles

<i>karṭṛ</i>	=	'agent'
<i>karman</i>	=	'patient'
<i>karāṇa</i>	=	'instrument'
<i>saṁpradāna</i>	=	'beneficiary'
<i>adhikarāṇa</i>	=	'location'
<i>apādāna</i>	=	'source'

# “Sub-actions” theory:

## basic sentence

*Devadattaḥ          sthālyām   odanam   kāṣṭhaiḥ          pacati.*

Devadatta-NOM   pot-LOC   rice-ACC   sticks-INSTR   cook-3sg

‘Devadatta cooks rice in a pot by the means of some firewood’.

...from this some other sentence are derived...

# “Sub-actions” theory:

*adhikaraṇa* ‘location’ as *karṭṛ*

*Sthālī*      *droṇam*      *pacati.*

pot-NOM    measure-ACC    cook-3sg

‘The pot cooks a *droṇa*’.

# “Sub-actions” theory:

*karāṇa* ‘instrument’ as *karṭṛ*

*Kāṣṭhāny*      *odanaṃ*      *pacanti.*

sticks-NOM      rice-ACC      cook-3sg

‘Wooden sticks cook rice’.

# “Sub-actions” theory:

## *karaṇa* ‘instrument’ as *karṭṛ*

*Paraśunā chinatti.*            ⇒            *Paraśuś chinatti.*  
axe-INSTR cut-3sg            axe-NOM cut-3sg  
‘He cuts with an axe’.        ⇒            ‘The axe cuts’.

*Devadatto dhanuṣā mṛgaṃ vidhyati*  
Devadatta-NOM bow-INSTR deer-ACC shoots-3sg  
‘Devadatta shoots a deer with a bow’.

↓

*Dhanur mṛgaṃ vidhyati.*  
bow-NOM deer-ACC shoot-3sg  
‘The bow shoots the deer’.

## “Sub-actions” theory:

*adhikaraṇa* ‘location’ and *apādāna* ‘source’ as *karṭṛ*:

*Balāhakād / balāhake*      *vidyotate*  
cloud-ABL / cloud-LOC      lighten-3sg.MID  
‘It is lightening from / in the cloud’.

*Balāhako*      *vidyotate*  
cloud-NOM      lighten-3sg.MID  
‘The cloud is lightening’.



## Canonical lability:

- both transitive and intransitive constructions are attested;
- the subject changes its semantic feature;
- the entire paradigms of the involved verbs are labile;
- the elliptic argument of the verb cannot be recovered from the context;
- no lexical synonymy can be adduced to explain the two variants of the verbs.

# No patient-preserving lability

valence decreasing derivation  
is morphologically marked:

<i>Devadattaḥ</i>	<i>pacaty</i>	<i>odanam.</i>	⇒	<i>Odanaḥ</i>	<i>pacyate.</i>
Devadatta-NOM	cook-3sg.ACT	rice-ACC		rice-NOM	cook-3sg.PASS
‘Devadatta cooks rice’.				‘The rice cooks by itself’.	

# Agent-preserving labiality

*Devadattaḥ          pacati.*

Devadatta-NOM    cook-3sg

‘Devadatta cooks’.

## Middle Indo-Aryan languages:

- Pāli (Buddhist canon, very similar to Sanskrit)
- Prakrits (spoken vernaculars, III cent. B.C. – 1000 A.D. ca.)
- Buddhist Hybrid Sanskrit (extremely “prakritized” version of late Sanskrit of the Buddhist literature, first centuries A.D.)

# Scalar presentation of the verbal system

valence num.:	1	2	3	4
semantic roles:	A/P	A+P or C+A/P	C+A+P	C+C+A+P
type of verb:	intransitive	transitive or causative of an intransitive	causative of a transitive	double causative

# Valency increasing derivation in Sanskrit

## Morphology:

suffix *-aya-* (later *-āpaya-*)

lengthening of the root vowel (usually)

## Example:

*patati* 'falls'       $\Rightarrow$       *pātayati* 'causes to fall'

# System of diatheses in Classical Sanskrit

- **active**, marked by so-called active endings (like 3sg. *-ti*)
- **middle**, marked by so-called middle endings (like 3sg. *-te*)
- **passive**, marked by the middle endings and a special suffix *-ya-*

# Valency decreasing derivation in Sanskrit:

## impersonal passive construction

*odanaḥ*      *pacyate*      *devadattena*

rice-NOM    cook-3sg.PASS    Devadatta-INST

‘The rice is cooked by Devadatta’ (**standard passive**)

**vs.**

*odanaḥ*    *pacyate*

rice-NOM    cook-3sg.PASS

‘The rice is cooking’ (**valence decreasing impersonal passive**)



# Valency decreasing derivation in Sanskrit:

## middle voice

*muñcati*

free-3sg.ACT

‘He frees’ (**active, transitive**)

vs.

*muñcate*

free-3sg.MID

‘He frees himself, becomes free’ (**valence decreasing middle**).

# Verb in Sanskrit

valences number:	1	2	3
semantic roles:	A/P	A+P or C+A/P	C+A+P
type of primary verb:	intransitive	transitive	
type of derived verb:	agentless passive, middle	causative of an intransitive	causative of a transitive

# Morphological ambiguities

Causative suffix = stems of the Xth class

Passive suffix = stems of the IVth class

# Decausativization of causatives in Sanskrit

*karoti* 'does' vs. *kārayati* 'causes to do' **but also** 'does'

(Buddhist and epigraphic texts)

*bhajati* 'divides' vs. *bhājayati* 'causes to divide' **but also** 'divides'

(mathematical meaning, in *Sūryasiddhānta*, a treatise in astronomy).

# Reasons for decausativization in Sanskrit:

## morphological

- the suffix of the causative was also shared by a class of verbs without any causative meaning;
- the root vowel was not lengthened in all the roots;

# Reasons for decausativization in Sanskrit:

## semantic

- in the middle voice the causative meaning was very weak;
- the causative of an intransitive verb turns to be almost identical to a simple transitive, both in meaning and valence structure;
- the causative formation from a transitive verb can easily lose the valence of the causee agent, and therefore can lexicalize as a simple transitive.

# Causatives in Pāli and Prakrits

outcome of the Sanskrit causative suffix:

disyllabic *-aya-* turned to a monosyllabic *-e-*

**interchangeable thematic vowels:**

*vadeti* vs. *vadati* ‘speaks’ (*-e-* instead of *-a-*)

*māراتi* vs. *māreti* ‘kills’ (*-a-* instead of *-e-*, ⇐ *mārayati* ‘causes to die’)

**New causative suffix:  
-āpaya-, later -āpe-, later -āve-**

**Pāli**

*Bhikkhū [...] rukkham chindanti pi chedāpentī pi.*

monk-NOM tree-ACC cut-3pl.ACT and cut-3pl.CAUS and

‘The monks cut trees and have them cut’.

*(Sutta Nipāta 3.3)*



New causative suffix:  
-āpaya-, later -āpe-, later -āve-

Buddhist Hybrid Sanskrit

*mārāpemi* 'I cause to kill' = causative from *māreti* 'kill'

(*Mahāvastu* II.247.3)

# Double causative suffix: -āpāpe-

## Epigraphic Prakrit

*likhāpāpita* ‘caused to be engraved’ (participle)

(causative of *likhāpa-*, etymologically causative of *likh-* ‘to write’)

## Pāli

*ṭhapāpeti* ‘orders to establish’

(causative of *ṭhapeti* ‘establish’, etymologically causative of *ṭha* ‘stay’)

# Loss of the middle endings

Involved both **middle** and **passive** diatheses

**already in Epic Sanskrit, as a prakritism:**

*pacyati*

cook-PASS-3sg.ACT

‘is being cooked’ (*Mahābhārata* 5.107.14)

(**formally:** a passive with an active ending, instead of middle)

# Phonological reasons

[e], [o]        ⇒        [i], [u]

**consequence for the verbal paradigm:**

*-te*            ⇒            *-ti*

3sg.MID        ⇒        3sg.ACT

(etc)

# Passive in Prakrits

## Morphology

**suffix:** *-iyya-* (Pāli), *-ijja-* (later Prakrits)

**gemination** of the root final consonant

## Examples:

Prakrit *dijjāi* 'is given' (from the root *dā* + *-ijja-*)

Pāli *vuccati*, Prakrit *vuccāi* 'is said' (from the root *vac* + gemination)

# Ambiguities of the passive in Prakrit

## Oscillations in the gemination:

**Pāli** *suyyati* and *sūyati* ‘is heard’

**Prakrit** *dīsai* and *dissai* ‘is seen, appears’

## Roots ending in a geminate consonant

*jujjaī* ‘bounds’ (-jj- from -ñj-)

## Agentless passive in Pāli

*Kumārikā paṇṇasālāya nisīditvā kadamūlādīni **pacati**.* (active = **transitive**)

‘Sitting in a tree-leaves shelter the girl cooks roots and tubers’.

vs.

*Atha nam̐ sā nisīda yāva **paccati**.* (passive = **inchoative intransitive**)

‘Then she [says] to him «be seated while it is being cooked»’.

# Overview

productivity:	productive	non productive (lexicalized forms)			productive
valences:	1=P	1=A	2=A+P		3=C+A+P
transitivity:	passive	intransitive	transitive		
causativity:	non causative			causative	
				I	II
examples: (same root per line)		<i>tiṭṭhati</i> 'he stands'		<i>ṭhapeti</i> 'he puts'	<i>ṭhapāpeti</i> 'he causes to put'
	<i>diyyati</i> 'he is given'		<i>dadāti</i> 'he gives'	<i>dāpeti</i> 'he causes to give'	
	<i>kayirati</i> 'he is done'		<i>karoti</i> 'he does'	<i>kāreti</i> 'he causes to do' (> 'he rules, builds')	<i>kārāpeti</i> 'he causes to build'
		<i>patati</i> 'he falls'		<i>pāpeti</i> 'he causes to fall'	
column number:	1	2	3	4	5



# Decausativization in Prakrits

- New causative formations were generated continuously (column 5).
- Old causative forms were continuously lexicalized and collapsed with simple transitive verbs (columns 4 and 3).
- In some cases, causatives derived from intransitive verbs merged with the original intransitive (because their causative suffix weakened semantically, or totally disappeared), so a first instance of lability was created (columns 3 and 2).
- With the decay of the middle voice, and the phonetic ambiguity of a part of passive forms, the valence decreasing formation became less and less productive (column 1).
- As a consequence, the agentive intransitive verbs tended to merge with the agentless ones, thus creating labile verbal forms (columns 2 and 1).

# Lability in the Middle Indo-Aryan

*jujjaī* ‘bounds’, but also ‘is bound’ (**Prakrit**)

*allīyati* ‘comes’, but also ‘brings’ (**BHS, Prakrit**)

*bhañjati* ‘breaks’, but also ‘becomes broken’ (**BHS**)

*muñcati* ‘frees’, but also ‘becomes free’ (**BHS, Pāli**)

*vidhyati* ‘shoots’, but also ‘flies’ (**BHS, Pāṇinīya**)