

1 Ways of Causative Formation

Causative are formed synthetically in most Indo-Aryan languages.

(1) (Nepali, from Wallace (1979))

a. Transitive:

mā kān gar-chu
I work do-Prs.1Sg

'I do the work.'

b. Causative of Transitive:

mā kām gar-āū-chu
I work do-Caus-Prs.1Sg

'I have the work done.'

Some Indo-Aryan languages also have periphrastic causatives.

(2) a. (Nepali, from Wallace (1979))

mā kām gar-na lag-āū-chu
I work do-Inf LAG-Caus-Prs.1Sg

'I have the work done.'

b. (Gujarati, from Hook (1999))

mE tem-ne aa kaam kar-taa kar-i didhaa
I.Erg them-Dat this work do-Impfv do-NF GIVE-Pfv

'I made them do this work.'

1.1 Transitivity Alternations

1.1.1 The NULL Class

An initial class is the *ablauting* or *vowel-change* type. In this class of verbs, there is no overt causative affix. The phonological form of the intransitive is derived from the phonological form of the transitive via shortening.

(3) NULL-class

a. Jaayzaad bāt rahii hai.
property divide PROG-FEM be-PRES
'The property is dividing.'

b. Ram-ne jaayzad bāāt dii.
Ram-ERG property divide GIVE-PERF
'Ram divided the property.'

I.e. intransitive *bāt*, transitive *bāāt*.

1.1.2 The AA Class

A second class involves an overt affix, *-aa*. In this class, an intransitive with no overt affix is paired with a transitive showing the suffix *-aa*. The presence of *-aa* triggers phonological shortening processes that readjust the intransitive stem form.

(4) AA-Class

a. Makan jal raha hai.
house.M burn PROG.M be.Prs
'The house is burning.'

b. Dakaitō-ne makaan jalaa diyaa.
bandits-ERG house.M burn GIVE-PERF.M
'Bandits burned the house.'

1.1.3 Transitivity via the *be/do* alternation

(5) Adjective + Light Verb

a. kamraa saaf thaa
room.MSg clean be.Pst.MSg
'The room was clean.'

b. kamraa saaf hō rahaa hai
room.MSg clean be Prog.MSg be.Prs.MSg
'The room is becoming clean.'

- c. Lalji kamraa **saaf** kar rahaa hai
 Lalji room clean do Prog.MSg be.Msg
 'Lalji is cleaning the room.'

With some nouns more than one option is available. Thus with the noun *prayog* 'use', both (6) and (7) are possible.

- (6) Noun + Light Verb
- a. Hiroshima-mē aṇu-bam **prayog** huaa thaa
 Hiroshima-in atom-bomb use_N be-Pfv be.Pst
 'An atomic bomb was used in Hiroshima.'
- b. Amrikaa-ne Hiroshima-mē aṇu-bam **prayog** kiyaa thaa
 America-Erg Hiroshima-in atom-bomb use_N do-Pfv be.Pst
 'The United States used an atomic bomb in Hiroshima.'

These options differ in how the case on the subject and the object is licensed. In the examples in (6), the case of the relevant argument is licensed by a functional head such as finite T⁰ (in 6a) and transitive v⁰ (in 6b). (7), however, involves case-licensing of the relevant argument by the nominal.

- (7) Noun Phrase + Light Verb
- a. Hiroshima-mē [aṇu-bam-kaa **prayog**] huaa thaa
 Hiroshima-in atom-bomb-Gen use_N be-Pfv be.Pst
 'An atomic bomb was used in Hiroshima.'
 (Lit. The use of an atom bomb happened in Hiroshima.)
- b. Amrikaa-ne Hiroshima-mē [aṇu-bam-kaa **prayog**] kiyaa thaa
 America-Erg Hiroshima-in atom-bomb-Gen use_N do-Pfv be.Pst
 'The United States used an atomic bomb in Hiroshima.'
 (Lit. The United States did the use of an atom bomb in Hiroshima.)

Not all nouns permit both the options in (6) and (7). For example, *prashanshaa* 'praise' seems to only allow the version in (7).

- (8) a. NP + Light Verb: adjective
 Hiroshima-mē [aṇu-bam-kaa pahlāa **prayog**] huaa thaa
 Hiroshima-in atom-bomb-Gen first use_N be-Pfv be.Pst
 'An atomic bomb was first used in Hiroshima.' (Lit. The first use of an atomic bomb happened in Hiroshima.)
- b. N + Light Verb: adverb, *adjective
 Hiroshima-mē aṇu-bam [pahlīi baar]/*pahlāa **prayog** huaa thaa
 Hiroshima-in atom-bomb first.f time.f/first use_N be-Pfv be.Pst
 'An atomic bomb was used in Hiroshima for the first time.'

• the light verbs as articulated versions of the structures seen with alternating verbs.

1.2 Indirect Causatives

In addition to these two types of derivation, which involve a lower or so-called 'lexical' causativization, there are causatives with the affix *-vaa*, which have an *indirect causative* interpretation.

- (9) zamiindaar-ne (dakaitō-se) makaan jalvaa diyaa.
 landlord-Erg bandits-Instr house.M burn GIVE-PERF.M
 'The landlord had the house burned (by the dacoits).'

Question: are indirect causatives part of the general system of causativization seen so far, or should they be given a separate treatment?

1.2.1 Marking of Indirect Causation

Many Indo-Aryan languages do not have a distinct Indirect Causative marker. In these languages, Indirect Causatives are marked by a combination of two direct causative markers (e.g. Kashmiri, Awadhi, Bhojpuri, Maithili, Gujarati etc.) (cf. Masica (1991):320-321).

- (10) (Kashmiri, from Hook and Koul (1984a):97)
- a. ra:m chu hisa:b **par-a:n**
 Ram is math study-Imprf
 'Ram is studying math.'
- b. bI chusan ra:mI hisa:b **par-Ina:v-a:n**
 I am-I-him Ram math teach-Imprf
 'I am teaching Ram math.'
- c. bI chusan ma:ṣṭaras-athi ra:mI hisa:b **par-Ina:v-Ina:v-a:n**
 I am-I-him teacher.Dat-through Ram math teach-Caus-Caus-Imprf
 'I am having Ram taught math by a teacher.'

According to Masica, the distinctive markers of Indirect Causation have historically emerged from a similar combination of two markers of direct causation that underwent phonological reduction.

1.2.2 Marking of the Intermediate Agent

In many Indo-Aryan languages, the intermediate agent in an indirect causative appears with instrumental case.

- (11) (Nepali, from Wallace (1979))
- a. Transitive
 shyām-le dhoka khol-a
 Shyam-Erg door open-Pst.3Sg
 'Shyam opened the door.'
- b. Indirect Causative
 rām-le shyām-bata dhoka khol-ā-yo
 Ram-Erg Shyam-by door open-Caus-Pst.3Sg
 'Ram made Shyam open the door.'

In Kashmiri, however, the intermediate agent can appear in either the instrumental or the dative (cf. discussion of Chichewa in Alsina (1992)).

- (12) (Kashmiri, from Hook and Koul (1984a):102)
- a. Instrumental
 su chu **no:kras-athi** kE:m kar-Ina:v-a:n
 he is servant.Dat-by work do-Caus-Impfv
 'He is having the work done by the servant.'
- b. Dative
 su chu **beni** kE:m kar-Ina:v-a:n tI bE:yi:s nI
 he is sister.Dat work do-Caus-Impfv and brother.Dat Neg
 'He is making sister do the work and not brother.'

Wali (1980)/Wali (1986), Pandharipande (1981) among others note that multiple intermediate agents may appear in an indirect causative.

- (13) a. (Hindi, from Pandharipande (1981):198)
 rām-ne śyām-se mohan-(ke)-dwārā kām kar-vā-yaa
 Ram-Erg Shyam-Instr Mohan-by work do-Caus2-Pfv
 'Ram made Mohan get the work done by Shyam.'
- b. (Marathi, from Pandharipande (1981):200)
 mī madh-kaḍūn mohan-(c̣yā)-dwārā kām kar-av-le
 I Madhu-by Mohan-Gen-by work do-Caus-Pst
 'I made Mohan get the work done by Mohan.'

- These two intermediate agents are marked by distinct postpositions. One indicates direct involvement of the intermediate agent and the other indirect involvement.
- Sometimes claimed that an unbounded number of such intermediate agents may appear (cf. Wali (1980), Saksena (1980)). However, anything more than two are hard to process.

With certain verbs in certain languages (e.g. Marathi, Kashmiri etc.), we find examples of two causative morphemes corresponding with two intermediate agents.

- (14) (Kashmiri, from Hook and Koul (1984a):104)
- ra:mI chu **kar-Ina:v-Ina:v-an** mohnIni-zEriyi śha:mas-(athi) s'aṭha: kE:m
 Ram is do-Caus-Caus-Impfv Mohan-Gen-through Shyam.Dat-by much work
 'Ram is having Mohan make Shyam work a lot.'

Such cases have led author's (cf. Wali (1980)) to propose a one-to-one correlation between causative morphemes and the number of intermediate agents. Hook and Koul (1984a) note that such a correlation is problematic.

- (15) (Kashmiri, from Hook and Koul (1984a):104)
- ra:mI chu **kar-Ina:v-an** mohnIni-zEriyi śha:mas-(athi) s'aṭha: kE:m
 Ram is do-Caus-Caus-Impfv Mohan-Gen-through Shyam.Dat-by much work
 'Ram is having Mohan make Shyam work a lot.'

1.3 Issues to Address

1. **Co-occurrence of Causative Exponents.** The *-vaa* causative and the *-aa* causative never co-occur, even in derivations involving transitives that show *-aa*:

- (16) a. B V_{intr}
 Ramesh bach ga-yaa
 Ramesh save GO-Pfv
 'Ramesh got saved.'
- b. A B V-aa
 Ram-ne Ramesh-ko bach-aa-yaa
 Ram-Erg Ramesh-Acc save-AA-Pfv
 'Ram saved Ramesh.'
- c. *A B V-aa-vaa
 *Ram-ne Mahesh-se Ramesh-ko bach-aa-vaa-yaa
 Ram-Erg Mahesh-by Ramesh-Acc save-AA-VAA-Pfv

d. A B V-vaa

Ram-ne Mahesh-se Ramesh-ko bach-vaa-yaa
Ram-Erg Mahesh-by Ramesh-Acc save-VAA-Pfv
'Ram had Ramesh saved by Mahesh.'

2. The Distribution of -aa.

(17) Synonymous -aa and -vaa causatives:

- a. Ram-ne Bill-se kaam kar-aa/vaa-yaa
Ram-ERG Bill-INST work do-CAUS2/CAUS2-PERF
'Ram had the work done by Bill.'
- b. Ram-ne Bill-se Sita-ko kitaab dil-aa/vaa-yii
Ram-ERG Bill-INST Sita-DAT book give-CAUS2/CAUS2-PERF.FEM
'Ram had the book given to Sita by Bill.'

All of the verbs that show this behavior are verbs that do not show -aa in the transitive form. However, the verbs that have synonymous -aa and -vaa causatives are a listed subset of the verbs that have no -aa in the transitive. This requires a certain type of information to be listed with -aa, in a way which has implications for the manner in which morphological spell out occurs.

3. The structures of the various causatives.

2 A Traditional Picture

- This approach is stated in directional terms. An operation applies to a basic form to yield a derived form.
- A different use of the term 'causative'
- Roughly the picture in Masica (1976), Wallace (1979), Hook and Koul (1984a) etc.

2.1 Basic Transitive → Antitransitive

(18) a. 'Basic' Transitive

Sikandar skuul ke-baahar ʈaufiyā: bā:ʈ rahaa hai
Sikandar school Gen.Obl-outside toffees distribute Prog.MSg be.Prs.Sg
'Sikandar is distributing toffees outside the school.'

b. 'Derived' Intransitive

skuul ke-baahar ʈaufiyā: bāʈ rahii hĒ
school Gen.Obl-outside toffees.f distribute_{intr} Prog.f be.Prs.Pl
'Toffees are distributing outside the school.'

2.2 Basic Intransitive → Derived Transitive

(19) a. 'Basic' Intransitive

jangal jal rahaa hai
forest burn Prog be.Prs.Sg
'The forest is burning.'

b. 'Derived' Transitive

sipa:hi: jangal jal-a: rahe hĒ:
soldiers.M forest burn-Caus Prog.MPl be.Prs.Pl
'The soldiers are burning the jungle.'

2.3 Ingestive Transitive → Derived Ditransitive

The ingestive class: verbs of physical or sensory ingestion e.g. *paṛh* 'read/study', *siikh* 'learn', *sun* 'hear', *dekh* 'see', *khaa* 'eat', *pii* 'drink', *chakh* 'taste' etc.

(20) a. 'Basic' Ingestive Transitive

Binu angrezii siikh rahaa hai
Binu.M English learn Prog.MSg be.Prs.Sg
'Binu is learning English.'

b. 'Derived' Ditransitive

Mona Binu-ko angrezii sikh-aa rahii hai
Mona.f Binu-Dat English learn-Caus Prog.f be.Prs.Sg
'Mona is teaching Binu English.'

2.4 (Di)Transitive → Derived Causative

(21) 'Basic' Transitive → Causative

a. 'Basic' Transitive

Malini ghar-kaa kaam kar rahii hai
Malini.f home-Gen work do Prog.f be.Prs.Sg

'Malini is doing housework.'

b. 'Derived' Causative

Malini naukraani-se ghar-kaa kaam kar-vaa rahii hai
Malini.f servant.f-Instr house-Gen work do-Caus2 Prog.f be.Prs

'Mailini is getting the housework done by the servant.'

(22) 'Derived' Transitive → Causative

a. 'Derived' Transitive (= *causative* of intransitive)

sipa:hi: jangal jal-a: rahe hĒ:
soldiers.M forest burn-Caus Prog.MPl be.Prs.Pl

'The soldiers are burning the jungle.'

b. Causative

ra:ja: sipahiyō-se jangal jal-vaa rahaa hai
king.m soldiers.Obl-Instr forest burn-Caus2 Prog.MSg be.Prs.Sg

'The king is getting the forest burned by the soldiers.'

(23) 'Basic' Ditransitive → Causative

a. 'Basic' Ditransitive

Nazia Ramona-ko tohfaa de rahii hai
Nazia.f Ramona-Dat gift.m give Prog.f be.Prs.Sg

'Nazia is giving a gift to Ramona.'

b. 'Derived' Causative

Zoheb Nazia-se Ramona-ko tohfaa dil-vaa rahaa hai
Zoheb.m Nazia-Instr Ramona-Dat gift give-Caus2 Prog.MSg be.Prs.Sg

'Zoheb is getting Ramona be given a gift by Nazia.'

(24) 'Derived' Ditransitive → Causative

a. 'Derived' Ditransitive (= *causative* of ingestive transitive)

Nazia Ramona-ko khiir khil-aa rahii hai
Nazia.f Ramona-Dat rice-pudding eat-Caus Prog.f be.Prs.Sg

'Nazia is feeding Ramona the rice pudding.'

b. 'Derived' Causative

Zoheb Nazia-se Ramona-ko khiir khil-vaa rahaa
Zoheb.m Nazia-Instr Ramona-Dat rice-pudding eat-Caus2 Prog.MSg
hai
be.Prs.Sg

'Zoheb is getting Ramona be fed the rice pudding by Nazia.'

3 Causatives and Transitivity Alternations

3.1 Transitives with Ablaut

(25) Vowel Length Differences a-l

Intransitive	Transitive	Gloss
bāt-naa	bāāt-naa	'be divided/divide'
bandh-naa	baandh-naa	'connect'
bigar-naa	bigaar-naa	'spoil'
bikhar-naa	bikher-naa (bikhr-aa-naa)	'scatter'
chhap-naa	chhaap-naa	'be printed/print'
chhid-naa	chhed-naa	'be pierced/pierce'
chhil-naa	chhiil-naa	'be peeled/peel'
chhin-naa	chhiin-naa	'be sntached/snatch'
dhal-naa	dhaal-naa	'shape/sculpt'
dhul-naa	dho-naa	'be washed/wash'
gir-naa	ger-naa (gir-aa-naa)	'fall/cause to fall'
ghir-naa	gher-naa	'be surrounded/surrounded'
ghul-naa	ghol-naa	'dissolve'
jur-naa	joṛ-naa	'be added/add'
kaṭ-naa	kaaṭ-naa	'be cut/cut'
khīch-naa	khīich-naa	'be pulled/pull'
khud-naa	khod-naa	'be dug/dug'
khul-naa	khol-naa	'open'
kuṭ-naa	kuuṭ-naa	'be ground/grind'
lad-naa	laad-naa	'be loaded/load'
luṭ-naa	luuṭ-naa	'be robbed/rob'

(26) Vowel Length Differences m-u

Intransitive	Transitive	Gloss
māj-naa	māāj-naa	'be scored/scour'
mar-naa	maar-naa	'die/kill'
mur-naa	moṛ-naa	'turn'
nichur-naa	nichor-naa	'be squeezed/squeeze'
nikal-naa	nikaal-naa	'come out/bring out'
pal-naa	paal-naa	'be brought up/bring up'
pighal-naa	pighaal-naa (pighl-aa-naa)	'melt'
pis-naa	piis-naa	'be pulverized/pulverize'
piṭ-naa	piit-naa	'be hit/hit'
ruk-naa	rok-naa	'stop'
sich-naa	sīich-naa	'be irrigated/irrigate'
sik-naa	sēk-naa	'be heated/heat'
sil-naa	sii-naa (sil-naa)	'be sewn/sew'
sudhar-naa	sudhaar-naa	'improve'
tan-naa	taan-naa	'be taught/tighten'
tul-naa	tol-naa	'be weighed/weigh'
ṭal-naa	ṭaal-naa	'be delayed/delay'
ṭaN-naa	ṭaaN-naa	'hang'
ubal-naa	ubaal-naa	'boil'
ukhar-naa	ukhaar-naa	'uproot'
ujar-naa	ujaar-naa	'destroy'
utar-naa	utaar-naa	'get down/bring down'

The intransitives formed by vowel alternation are all unaccusatives. They differ from the corresponding transitive in lacking syntactically represented agentivity.

(27) a. transitive:

kampani per̄ kaṭ rahii hai
 company.f tree cut Prog.f be.Prs
 'The company is cutting trees.'

b. intransitive:

per̄ kaṭ rahe hē
 trees.M cut Prog.MPl be.Prs.Pl
 'Trees are being cut.' (lit. Trees are cutting_{intr.})

In addition to lacking a syntactically projected external argument, the intransitive also lacks any agentivity.

While the passive does not syntactically project an external argument, it does involve agentivity.

(28) a. Transitive:

Amit paanii ubaal rahaa thaa
 Amit.M water.M boil Prog.M be.Pst.M
 'Amit was boiling the water.'

b. Passive:

paanii ubaal-aa jaa rahaa thaa
 water boil-Pfv PASS Prog.M be.Pst.M
 'The water was being boiled.'

c. Intransitive:

paanii ubal rahaa thaa
 water boil Prog.M be.Pst.M
 'The water was boiling.'

For the passive (28b) to be judged true, someone has to be boiling the water. There is no such requirement in (28c).

This semantic absence of agentivity in the intransitive is also supported by a variety of other syntactic diagnostics.

• Licensing of *-dwaaraa* 'by'-phrases: passives allow for *dwaaraa* 'by' phrases, intransitives do not.¹

(29) a. Passive:

paanii (Ram-dwaaraa) ubaal-aa jaa rahaa thaa
 water Ram-by boil-Pfv PASS Prog.M be.Pst.M
 'The water was being boiled by Ram.'

b. Intransitive:

paanii (*Ram-dwaaraa) ubal rahaa thaa
 water boil Prog.M be.Pst.M
 '*The water was boiling by Ram.'

• Hindi allows for impersonal passives of unergatives but not unaccusatives.

(30) a. Passive of an Unergative:

calo, daur-aa jaaye
 come run-Pfv PASS-Sbjv
 'Come, let it be run i.e. let us run.'

b. *Passive of an Unaccusative:

*calo, kaṭ-aa jaaye
 come cut_{intr.}-Pfv PASS-Pfv

¹There is also a related syntactic difference between passives and intransitives. The subjects of Hindi passives allow for retention of accusative case. This possibility is unavailable with intransitives.

- Certain adverbial modifiers that target the agent are possible in transitives and their passives but not with intransitives.

(31) a. Passive:

haNste haNste peṛ kaṭ-e jaa rahe hē
laughing laughing trees cut-Pfv.PI PASS Prog.PI be.Prs.PI

'The trees are being cut by someone who is laughing.'

b. Intransitive:

*khaate khaate peṛ kaṭ rahe hē
eating eating trees cut Prog.PI be.Prs.PI

(32) a. Passive:

khaanaa khaa-kar peṛ kaṭ-aa jaa rahaa hai
food eat-having tree cut-Pfv PASS Prog be.Prs

'The tree is being cut by someone, that someone having eaten food.'

b. Intransitive:

*khaanaa khaa-kar peṛ kaṭ rahaa hai
food eat-having tree cut Prog be.Prs

- Both unaccusatives and passives participate in a construction that involves a capacity/inability reading. Typically such constructions seem to require a negative component in their meaning.

(33) (from Hook (1979), pg. 179)

a. Inabilitative Passive:

diidii-ko paudhe itne pasand hē ki us-se ukhaar-e
sister-Dat plants so-much like be.Prs.PI that she-Instr uproot-Pfv.PI
nahi: jaa-te
Neg PASS-Hab.PI

'My sister likes plants so much that she can't bring herself/can't bear to uproot them.'

b. Inabilitative Intransitive:

diidii itnii kamzor hai ki us-se paudhe nahii ukhaar-te
sister so-much.f weak be.Prs that she-Instr plants Neg uproot_{intr}-Hab.PI

'My sister is so weak that she can't uproot the plants.'

While inabilitative unaccusatives involve an overt *-se*-phrase, it can be shown that this is not an agent. Unlike in a passive, the *se*-phrase in an inabilitative unaccusative does not control the activity. This can be seen in the differences in meaning between (33a) and (33b).

Further evidence in support of this distinction comes from the fact that *se*-phrases in inabilitative passives are able to control agent-oriented adverbial phrases while *se*-phrases in inabilitative unaccusatives are not.

(34) (based on examples in Balachandran (1973), pg. 29, 30)

a. Inabilitative Passive:

mujh-se khaate-khaate khaanaa nahī: banaa-yaa jaa-taa
I-Instr while-eating food Neg make-Pfv PASS-Hab

'I am not able to cook food while I am eating.'

b. Inabilitative Intransitive:

*mujh-se khaate-khaate khaanaa nahī: ban-taa
I-Instr while-eating food Neg make_{intr}-Hab

(35) (based on examples in Balachandran (1973), pg. 30)

a. Inabilitative Passive:

mujh-se [ghar aa-kar] roṭiyā: achchhi: nahī: banaa-yii jaa-tii
I-Instr home come-having bread.FPI well not make-Pfv.F PASS-Hab.f

'Having come home, I can't (bring myself to) make bread well.'

b. Inabilitative Intransitive:

*mujh-se [ghar aa-kar] roṭiyā: achchhi: nahī: ban-tii
I-Instr home come-having bread.FPI well not make_{intr}-Hab.f

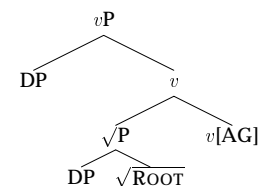
3.2 Transitives with -aa

(36) AA-Class Causatives

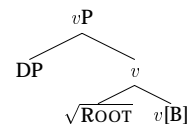
Intransitive	Transitive	Gloss
bach-naa	bach-aa-naa	'be saved/save'
bah-naa	bah-aa-naa	'flow/cause to flow'
bahal-naa	bahl-aa-naa	'be entertained/entertain'
baith-naa	bith-aa-naa	'sit/seat'
ban-naa	ban-aa-naa *	'be made/make;
barh-naa	barh-aa-naa	'increase/cause to increase'
bhaag-naa	bhag-aa-naa	'run away/cause to run away'
bhiig-naa	bhig-aa-naa (bhig-o-naa)	'become wet/wet'
bichh-naa	bichh-aa-naa	'unroll'
biit-na	bit-aa-naa	'elapse/cause to elapse'
bikhar-naa	bikhr-aa-naa (bikher-naa)	'scatter'
bujh-naa	bujh-aa-naa	'go/put out'
chamak-naa	chamk-aa-naa	'shine'
charh-naa	charh-aa-naa	'climb/cause to climb'
chipak-naa	chipk-aa-naa	'stick'
chOk-naa	chOk-aa-naa	'be startled/startle'
chhip-naa	chhip-aa-naa	'hide'
dar-naa	dar-aa-naa	'fear/scare'
duub-naa	dub-aa-naa (dub-o-naa)	'drown'
gal-naa	gal-aa-naa	'melt'
gir-naa	gir-aa-naa (ger-naa)	'fall/cause to fall'
hil-naa	hil-aa-naa	'rock'
jaag-naa (jag-naa)	jag-aa-naa	'wake up'
jal-naa	jal-aa-naa	'burn'
jam-naa	jam-aa-naa	'freeze'
jii-naa	jil-aa-naa	'be alive/cause to be alive'
lag-naa	lag-aa-naa	'be planted, attach/plant?'
leṭ-naa	liṭ-aa-naa	'lie/cause to lie, lay'
mil-naa	mil-aa-naa	'meet/introduce'
miṭ-naa	miṭ-aa-naa	'be wiped/wipe'
pahūch-naa	pahūch-aa-naa	'arrive/escort'
pak-naa	pak-aa-naa	'ripen/cause to ripen, cook'
phail-naa	phail-aa-naa	'spread'
pighal-naa	pighl-aa-naa (pighaal-naa)	'melt'
ro-naa	rul-aa-naa	'cry/cause to cry'
saj-naa	saj-aa-naa	'be decorated/decorate'
sar-naa	sar-aa-naa	'rot'
so-naa	sul-aa-naa	'sleep/put to bed'
sulag-naa	sulg-aa-naa	'be lit, smoulder/light'
sulajh-naa	suljh-aa-naa	'get simplified/simplify'
suukh-naa	sukh-aa-naa	'dry'
ulajh-naa	uljh-aa-naa	'get complicated/complicate'
uṭh-naa	uṭh-aa-naa	'rise/raise'

4 Some Structures

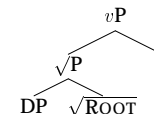
(37) Transitive Structure?



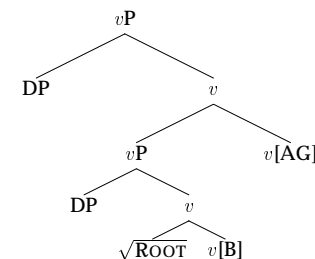
(38) 'Inchoative' Type



(39) Alternative Type

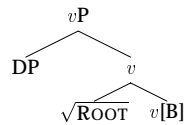


(40) Transitive of an Inchoative

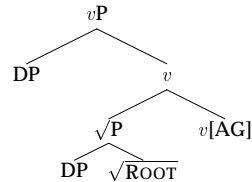


The minimal structures associated with *be* and *do* are a simple (predicative) intransitive structure and a simple transitive structure with *v[AG]*, as in (41) and (42) respectively:

(41) BE structure



(42) DO structure



5 Causatives of Unergatives and the ‘Ingestive’ Verbs

5.1 Unergatives

A number of verbs that appear with the *-aa* suffix as transitives seem to be essentially unergatives when intransitive.

(43) Putative Unergatives

Intransitive	Transitive	Gloss
chal-naa	chal-aa-naa	‘move, walk/cause to move, drive’
daur-naa	daur-aa-naa	‘run/cause to run, chase’
ghuum-naa	ghum-aa-naa	‘wander/cause to wander?’
hās-naa	hās-aa-naa	‘laugh/cause to laugh’
haṭ-naa	haṭ-aa-naa	‘move’
jhuul-naa	jhul-aa-naa	‘swing/cause to swing’
kuud-naa	kud-aa-naa	‘jump/cause to jump’
naach-naa	nach-aa-naa	‘dance’
ur-naa	ur-aa-naa	‘fly’

Some tests for unergativity:

1. Unlike unaccusatives, the past participle of an unergative cannot be used as a reduced relative.

(44) a. Unergative:
*hās-aa (huaa) larḱaa
laugh-Pfv be-Pfv boy

‘*the laughed boy’

b. Unaccusative:
kaṭ-e (hue) phal
cut_{intr}-Pfv.MPI be-Pfv.MPI fruit

‘the fruits in the cut-state, the fruits that have been cut’

2. Impersonal passives can be formed on unergatives but not on unaccusatives (cf. 30).
3. Unergatives pattern with transitives and not unaccusatives with respect to how they enter into the inabilitative construction: both transitives and unergatives can only appear in the inabilitative construction with passive syntax. Unaccusatives appear in the inabilitative with active syntax.

(45) Transitive

a. Basic transitive:

Nina-ne dhabbe mitaa-ye
Nina-Erg stains.MPI wipe-Pfv.MPI

‘Nina scrubbed away the stains.’

b. Inabilitative 1 (based on active syntax):

*Nina-se Mona-ne dhabbe nahī: miṭaa-ye
Nina-Instr Mona-Erg stains.M Neg wipe-Pfv.MPI

c. Inabilitative 2 (based on passive syntax):

Nina-se dhabbe mitaa-ye nahī: gaye
Nina-Instr stains wipe-Pfv.PI Neg PASS-Pfv.MPI

Nina couldn’t (bring herself to) wipe away the stains.’

(46) Unergative

a. Basic Unergative:

Nina daur rahii hai
Nina.f run Prog.f be.Prs.Sg

‘Nina is running.’

b. Inabilitative 1 (based on active syntax):

*Nina-se Mona daur rahii hai
Nina-Instr Mona.f run Prog.f be.Prs.Sg

c. Inabilitative 2 (based on passive syntax):

Nina-se daur-aa nahī: gayaa
Nina-Instr run-Pfv Neg PASS-Pfv

‘Nina couldn’t run.’

(47) Unaccusative

a. Basic Unaccusative:

dhabbe miṭ rahe hĒ
stains wipe_{intr} Prog.MPI be.Prs.MPI

‘The stains are getting erased.’

b. Inabilitative 1 (based on active syntax):

Nina-se dhabbe nahī: miṭ-e
 Nina-Instr stains.M Neg wipe_{intr}-Pfv.MPI
 'Nina wasn't able to wipe away the stains.'

c. Inabilitative 2 (based on passive syntax):

*dhabbō-se miṭ-aa nahī: gayaa
 stains-Instr wipe_{intr}-Pfv Neg PASS-Pfv
 'The stains weren't able to (bring themselves to) erase themselves.'

It is, of course, possible to force an agentive interpretation out of many of the intransitives in the lists above. In some cases this is quite straightforward, as, for example, with those verbs that are 'autocausatives' like *move* in English.

Question– Does this type of pattern actually require a recursion on agentive *v* structure? In most (if not all) of these cases, the interpretation of the transitive does not involve an agentive reading for the causee, suggesting that they are like simple transitives.

(48) a. Unergative

patang/chiriyaa uṛ rahii hai
 kite.f/bird.f fly Prog.f be.Prs.Sg
 'The kite/the bird is flying.'

b. Transitive

Anjali patang/*chiriyaa uṛaa rahii hai
 Anjali.f kite.f/bird.f fly Prof.f be.Prs.Sg
 'Anjali is flying a kite/*a bird.'

Similar observations hold for the other transitives based on unergatives.

5.2 Ingesto-Reflexives

Verbs denoting ingestive concepts, either literal or not so literal:²

²No verbs of this type have anticausative forms, as far as we are aware. Some, however, participate in alternations typical of psychological predicates (e.g. *dikh/dekh*).

- i. a. Ram-ko Sita dikh-ii
 Ram-Dat Sita see-Pfv.f
 'Ram saw Sita (lit. Sita appeared to Ram).'
- b. Ram-ne Sita-ko dekh-aa
 Ram-Erg Sita-Acc see-Pfv
 'Ram saw Sita.'

The verb *bhuul* 'forget' which one might expect to be in the class of ingestives patterns with other ingestives in lacking an intransitive counterpart. However, its *-aa*-causative displays unusual properties.

(49) *-aa*-Causatives of Ingesto-Reflexive Verbs

Verb	Verb-aa	Gloss
chakh-naa	chakh-aa-naa	'taste/cause to taste'
dekh-naa	dikh(l)-aa-naa	'see/show'
khaa-naa	khil-aa-naa	'eat/feed'
pakar-naa	pakr-aa-naa	'hold, catch/hand, cause to hold'
parh-naa	parh-aa-naa	'read/teach'
pehen-naa	pehn-aa-naa	'wear/clothe'
pil-naa	pil-aa-naa	'drink/cause to drink'
samajh-naa	samjh-aa-naa	'understand/explain'
siikh-naa	sikh-aa-naa	'learn/teach'
sun-naa	sun-aa-naa	'hear/cause to hear, tell'

All these verbs have *-vaa*-causatives. The *-aa*-causatives are syntactically and semantically distinct from the *-vaa*-causatives.

- (50) a. Ram-ne *Bill-se Sita-ko angrezi sikh-aa-yii
 Ram-ERG *Bill-INST Sita-DAT English learn-CAUS-PERF.FEM
 'Ram taught Sita English.'
- b. Ram-ne Bill-se Sita-ko angrezi sikh-vaa-yii
 Ram-ERG Bill-INST Sita-DAT English learn-CAUS2-PERF.FEM
 'Ram had Sita taught English by Bill.'

Note: The *-ko* here is a true Dative marker, and cannot be omitted as can the *-ko* related to animacy.

The causativized ingestives seem to have the internal syntax of prototypical ditransitives such as *de* 'give'. Like ditransitives, they participate in a process of obligatory object shift.

- (51) Object shift in prototypical ditransitives (from Bhatt and Anagnostopoulou (1996))
 - a. basic word order:
 Tina-ne Mina-ko vo kitaab di-i
 Tina-Erg Mina-Dat that book.f give-Pfv.f
 'Tina gave that book to Mina.'
 - b. with object shift:

 ii. a. Ram Sita-ko bhuul ga-yaa
 Ram Sita-Acc forget GO-Pfv
 'Ram forgot_{nonagentive} Sita.'
 - b. Ram-ne Sita-ko bhul-aa di-yaa
 Ram-Erg Sita-Acc forget-CAUS? GIVE-Pfv
 'Ram forgot_{agentive} Sita.' ('Ram put Sita out of his mind.')

Unlike *-aa*- of ingestives whose valence is one greater than that of the corresponding transitive, *bhuul* and *bhul-aa* have the same valence. They only differ with respect to agentivity.

Tina-ne [us kitaab-ko] Mina-ko t_i di-yaa
 Tina-Erg that book-Acc Mina-Dat give-Pfv
 'Tina gave that book to Mina.'

(52) Object shift in causatives of ingesto-reflexives

a. basic word order:

Ram-ne Sita-ko vo bhaashaa sikh-aa-yii
 Ram-Erg Sita-Dat that language learn-CAUS-Pfv.f
 'Ram taught Sita that language.'

b. with object shift:

Ram-ne [us bhaasha-ko] Sita-ko t_i sikh-aa-yaa
 Ram-Erg that.Obl language-Acc Sita-Dat learn-CAUS-Pfv
 'Ram taught Sita that language.'

• The class of ingesto-reflexive verbs seems to stay the same across many Indo-Aryan languages (Gujarati (Cardona (1965)), Kashmiri (Hook and Koul (1984a)), Nepali (Wallace (1979))).

5.3 Directionality

5.3.1 Phonology

On a phonological level, the evidence points to a difference between the Ablauting and the AA-Classes:

(53) Phonological Underlying Form:

- a. Ablauting Class: Transitive form is basic
- b. AA-Class: Intransitive form is basic'

(54) Correspondences: AA-class

Intransitive	Transitive	Gloss	Vowels
jaag-naa	jag-aa-naa	'wake up'	aa/a
biit-naa	bit-aa-naa	'elapse/cause to elapse'	ii/i
suukh-naa	sukh-aa-naa	'dry'	uu/u
ro-naa	rul-aa-naa	'cry/cause to cry'	o/u
leṭ-naa	liṭ-aa-naa	'lie/lay'	e/i

(55) Correspondences: Ablauting Class

Intransitive	Transitive	Gloss	Vowels
mar-naa	maar-naa	'die/kill'	a/aa
khul-naa	khoh-naa	'open'	u/o
luṭ-naa	luuṭ-naa	'be robbed'	u/uu
piṭ-naa	piiṭ-naa	'hit'	i/ii
ghir-naa	gher-naa	'surround'	i/e

Further evidence for this claim comes from a class of verbs which have the same form in both Intransitive and Transitive syntax. If these verbs are assumed to have a short vowel in the underlying form, then the identity follows from the fact that this vowel simply cannot be further shortened in the derivation of the Intransitive. If, on the other hand, the Intransitive form were basic and subject to lengthening in the Transitive, these verbs would simply be exceptions:

(56) No Change

Intransitive	Transitive	Gloss
badal-naa	badal-naa	'change'
bun-naa	bun-naa	'weave'
bhar-naa	bhar-naa	'fill'
ghis-naa	ghis-naa	'rub'
rang-naa	rang-naa	'get colored/color'
sil-naa	sil-naa (sii-naa)	'sew'

5.3.2 Semantics

- The question of whether or not this difference is relevant syntactico-semantically is somewhat vexed.
- is there any sense in which the AA-class verbs are 'basically intransitive', or in which the NULL-class verbs are 'basically transitive'?

(57) Encyclopedically agentive in the NULL-class:

bāt-naa 'divide', *bandh-naa* 'tie', *chhap-naa* 'print', *kaṭ-naa* 'cut', *lad-naa* 'load', *pis-naa* 'grind', *piṭ-naa* 'beat', *tul-naa* 'weigh' etc.

(58) Encyclopedically Non-agentive verbs in the NULL-class:

gir-naa 'fall', *ghul-naa* 'dissolve', *mar-naa* 'die', *muṛ-naa* 'turn', *nikal-naa* 'emerge', *ubal-naa* 'boil' etc.

Most verbs in the AA-class are Non Encyclopedically Agentive.

- (59) Non Encyclopedically Agentive verbs in the AA-class: *bah-naa* 'flow', *biit-naa* 'elapse', *chamak-naa* 'shine', *hil-naa* 'rock', *khil-naa* 'bloom', *pak-naa* 'ripen', *pighal-naa* 'melt', *sar-naa* 'rot' etc.

However, a small class of verbs in the AA-class do seem to be Encyclopedically Agentive.

- (60) AA-class, Encyclopedically agentive: *bach-naa* 'save', *bahal-naa* 'entertain', *ban-naa* 'make', *bichh-naa* 'unroll'

• While there do appear to be tendencies in the two classes, they are just that, tendencies, and not exceptionless generalizations.
 → implications for directionality based theories.

• That said, the tendency of the AA-class verbs to be Encyclopedically Non-agentive is quite strong and entertains only a few exceptions.

6 The Role of the Root and its associated structure

6.1 Inabilitives in Hindi

The fact that verbs that participate in the transitivity alternation share a root manifests itself in the inabilitative construction.

The inabilitative of the unaccusative and of the passive of the corresponding transitive share a common meaning.

(61) NULL-Class (from Hook (1979):153)

a. Inabilitative of Unaccusative

mujh akeli-se yeh saamaan nahī: bandh-egaa
I.Obl alone.f-Instr this luggage Neg tie_{intr}-Fut

'I can't tie up this luggage by myself.'

b. Inabilitative of the Passive of the Transitive

mujh akeli-se yeh saamaan nahī: baandh-aa jaa-egaa
I.Obl alone.f-Instr this luggage Neg tie_{tr}-Pfv Pass-Fut

'I can't tie up this luggage by myself.'

(62) AA-Class (modification of example from Hook (1979):153)

a. Inabilitative of Unaccusative

yeh saamaan kisi pehelvaan-se bhii nahī uth-egaa
this luggage some.Obl strong-person-Instr even Neg lift_{intr}-Fut

'Even a strong person cannot lift this luggage.'

b. Inabilitative of the Passive of the Transitive

yeh saamaan kisi pehelvaan-se bhii uth-aa-yaa nahī jaa-egaa
this luggage some.Obl strong-person-Instr even lift_{tr}-Caus-Pfv Neg Pass-Fut

'Even a strong person cannot lift this luggage.'

There are certain verbs that do not participate in the causative alternation. Based on their semantics, we can identify certain morphologically unrelated verbs as their 'causatives'.

(63) (from Hook (1979):147-148)

a. *jaa* 'go' ↔ *bhej* 'send'

b. *aa* 'come' ↔ *laa* 'bring'

c. *par* 'be put/poured in' ↔ *daal* 'put'

However, such 'causative' relationships do not display the identity of meaning seen above in the inabilitative with morphologically related causatives.

(64) a. Inabilitative with *jaa* 'go', Passive Syntax

Tina-se Dilli jaa-yaa nahī: gayaa
Tina-Instr Delhi go-Pfv Neg Pass.Pfv

'Tina couldn't (bring herself to) go to Delhi.'

b. *Inabilitative with *jaa* 'go', Active Syntax

*Tina-se Mona Dilli nahī: gayii
Tina-Instr Mona Delhi Neg go-Pfv.f

***Tina was unable to send Mona to Delhi.'

c. Inabilitative with passive of *bhej* 'send'

Tina-se Mona-ko Dilli bhej-aa nahī: gayaa
Tina-Instr Mona-Dat Delhi send-Pfv Neg Pass.Pfv

'Tina couldn't (bring herself to) send Mona to Delhi.'

6.2 'Case-Lifting' in Kashmiri

Hook and Koul (1984b) note the existence in Kashmiri of a curious process they call 'case-lifting'.

- conditioned by the person hierarchy

- In non-ergative tenses, an object that would appear in Hindi with the non-dative *-ko* appears in the absolutive when Person(Subj) < Person(Obj). Otherwise it appears in the dative.

(65) (Kashmiri, from Hook and Koul (1984b):128)

a. (I < II, case-lifting)

bI ch-u-s-ath tsI yo:r an-a:n
I.Nom be-M-1Sg-2Sg you.Nom here bring-Impfv

'I am bringing you here.'

b. (II < I, no case-lifting)

tsI ch-u-h-E:m (me) yo:r an-a:n
you.Nom be-M-2Sg-1Sg I.Dat here bring-Impfv

'You are bringing me here.'

Dative Goals in ditransitives cannot be case-lifted.

However, in causative structures the intermediate agents that appear in the dative can be case-lifted.

(66) bI chu-s-an ra:mI hisa:b par-Ina:v-a:n

I am-I-him Ram math teach-Caus-Impfv

'I am teaching Ram math.'

Finally verbs like *ha:vun* 'show' which is semantically the causative of *vuchun* 'see', but not morphologically related to it do not allow for 'case-lifting' of their dative arguments.

- (67) a. *ha:vun* 'show', not a morphological causative
 *bI ch-u-s-ath (tsI) philim ha:v-a:n
 I be-M-1Sg-2Sg you.Nom film show-Impfv
 'I am showing you a film.'
- b. *bo:z-Ina:v-un* 'hear-Caus' ('tell'), a morphological causative
 bI ch-u-s-ath (tsI) kath bo:z-Ina:v-a:n
 I be-M-1Sg-2Sg you.Nom story hear-Caus-Impfv
 'I am telling you a story.'

6.3 Passives in Kashmiri

In a passivized ditransitive, a dative argument cannot 'become' nominative.

- (68) (Kashmiri, from Hook and Koul (1984a):116)
- a. **IEdki a:v** tsot dInI
 boy.Nom Pass.Pst.M bread.f give-Inf.Abl
 '*The boy was given bread.'
- b. **IEdkas a:yi** tsot dInI
 boy.Dat Pass.Pst.F bread.f give-Inf.Abl
 'Bread was given to the boy.'

In passivized causatives (of at least ingestive transitives), the subject *can* 'become' nominative.

- (69) a. **IEdki a:v** tsot kh'a:v-InI
 boy.Nom Pass.Pst.M bread.f eat.Caus-Inf.Abl
 'The boy was fed bread.'
- b. **IEdkas a:yi** tsot kh'a:v-InI
 boy.Dat Pass.Pst.F bread.f eat.Caus-Inf.Abl
 'The bread was fed to the boy.'

Verbs like *ha:vun* 'show' which is semantically the causative of *vuchun* 'see', but not morphologically related to it do not allow for promotion of their dative argument.

- (70) a. *ha:vun* 'show', not a morphological causative
 *ra:mI chu philim ha:v-InI yIv-a:n
 Ram.Nom is film show-Inf.Abl Pass-Impfv
 'Ram is being shown a film.'
- b. *bo:z-Ina:v-un* 'hear-Caus' ('tell'), a morphological causative
 ra:mI chu kath bo:z-Ina:v-InI yIv-a:n
 Ram.Nom is story hear-Caus-Inf.Abl Pass-Impfv
 'Ram is being told a story.'

• The syntax of causativization in Kashmiri seems to differ considerably from Hindi. See Hook and Koul (1987) for additional facts.

7 The Indirect Causative

The intermediate agent of the Indirect Causative is marked by the instrumental case-marker *-se*.

- (71) zamiindaar-ne **dakaitō-se** makaan jalvaa diyaa
 landlord-Erg bandits-Instr house.M burn-CAUS GIVE-PERF.M
 'The landlord had the house burned by the dacoits.'

7.1 Passive Substructure

The instrumental case-marker also appears on the demoted agents of passives.

- (72) **tum-se** itnaa khaanaa kaise khaayaa jaataa hai?
 you-Instr so-much food.M how eat-PERF.M PASS-HAB.M be.Prs
 'How is it that so much food is eaten by you?' (i.e. How do you manage to eat so much food?)
- (73) Passive Fails → No Indirect Causative Structure

We take the *-vaa* causative, and more generally indirect causation, to involve a passive substructure.

- (74) a. Passive
 yeh kamraa kal khol-aa gayaa thaa
 this room yesterday open-PERF PASS-PERF be.Pst
 'This room had been opened yesterday.'
- b. Indirect Causative
 Madhu-ne yeh kamraa kal khul-vaa-yaa thaa
 Madhu-Erg this room yesterday open-VAA-PERF be.Pst
 'Madhu had the room opened yesterday.'

If the verb in question does not allow a passive, a *-vaa* causative is also not possible.

- (75) a. Rohit-ne [ghar jaa-naa] chaahaa
 Rohit-Erg home go-Ger want-PERF
 'Rohit wanted to go home.'
- b. *Passive
 *ghar jaa-naa chaah-aa gayaa
 home go-Ger want-PERF Pass-PERF
- c. *Indirect Causative
 *Rohit-ne (Nupur-se) [ghar jaa-naa] chah-vaa-yaa
 Rohit-Erg Nupir-Instr home go-Ger want-VAA-PERF

Verbs may also fail to have *-vaa* causatives for other reasons. e.g. *khatkhatāa* 'knock' can be passivized but does not allow for a *-vaa* causative. One generalization that is relevant here is that denominal verbs formed by combining a nominal root with *-aa* lack *-vaa* causatives.

7.2 -vaa Causatives and Transitives

It seems in most cases that the -vaa causative takes the stem alternant that is found in the transitive, although this often obscured by vowel-shortening rules like those found with -aa.

(76) Consonant Changing Alternations

Intransitive	Transitive	-vaa Causative	Gloss
bāt-naa	bāāt-naa	bāt-vaa-naa	'divide'
badal-naa	badal-naa	badal-vaa-naa	'change'
bhaag-naa	bhag-aa-naa	bhag-vaa-naa	'run'
chap-naa	chaap-naa	chap-vaa-naa	'print'
suukh-naa	sukh-aa-naa	sukh-vaa-naa	'dry'
ubal-naa	ubaa-naa	ubal-vaa-naa	'boil'

Evidence for the proposal that the -vaa causative is based on the transitive comes from a class of verbs that display in addition to vowel change, a change in the final consonant.

(77) Final Consonant + Vowel Change

chhuṭ-naa	chhoṭ-naa	'be free/free'
phaṭ-naa	phaar-naa	'be torn/tear'
phuṭ-naa	phoṭ-naa	'be burst/burst'
ṭuṭ-naa	toṭ-naa	'break'

The exceptional -vaa- causatives for these verbs are formed as follows:

(78) Consonant Changing Alternations

chhuṭ-naa	chhoṭ-naa	chhuṭ-vaa-naa
phaṭ-naa	phaar-naa	phaṭ-vaa-naa
phuṭ-naa	phoṭ-naa	phuṭ-vaa-naa
ṭuṭ-naa	toṭ-naa	ṭuṭ-vaa-naa

The stem-final consonant in the -vaa causative is that found in the transitive form, not the intransitive. While the vowel in the -vaa causative is the same as the vowel in the intransitive, this is the result of the regular shortening of vowels that precede -aa/-vaa.³

³There are two additional verbs which suggest that this generalization is not entirely correct.

(1) Further Irregular Morphophonology

bik-naa	bech-naa	bik-vaa-naa	'be sold/sell'
simat-naa	samet-naa	simat-vaa-naa	'be collected/collect'

Each of these verbs exhibits further irregularities: a change in the stem-final consonant in the first case, and two alternating vowels in the second. For the first verb, the stem form found in -vaa causative is that found in the intransitive, rather than that found in the transitive (**bich-vaa-naa*). For some speakers, however, the form *bek-naa* is used for the transitive (R. Kumar p.c.), in which case there is no problem. There are also speakers who permit *bich-vaa-naa* (Saksena (1980)).

7.3 -vaa-causatives of Ingesto-Reflexives

According to our proposal, -vaa causatives involve passive substructures based on the corresponding transitive. In the cases discussed above, there was only one corresponding transitive, hence only one passive substructure, and consequently only one structure for the -vaa-causative.

With the ingesto-reflexive class, there are two transitives - the ingesto-reflexive and the ditransitive based on the ingesto-reflexive. Both can be passivized. We find that the corresponding -vaa causatives are in fact ambiguous.

(79) a. ingesto-reflexive

mĒ-ne kitaab parh-ii
I-Erg book.f read-Pfv.f
'I read the book.'

b. ditransitive based on ingesto-reflexive

mĒ-ne Raam-ko kitaab parh-aa-ii
I-Erg Ram-Dat book.f read-CAUS-Pfv.f
'I had Ram read the book.'

(80) (ex. 33 from Saksena (1982))

a. Indirect Causative targetting the ingesto-reflexive

mĒ-ne Raam-se kitaab parh-vaa-ii
I-Erg Ram-Instr book.f read-VAA-Pfv.f
'I had the book read by Ram.'

b. Indirect Causative targetting the ditransitive based on ingesto-reflexive

mĒ-ne Nina-se Raam-ko kitaab parh-vaa-ii
I-Erg Nina-Instr Ram-Dat book.f read-VAA-Pfv.f
'I had Ram made to read the book by Nina.'

8 Allomorphy of Causative Heads

Generalizations about allomorphy:

1. The *-vaa* exponent always appears as the exponent of the Indirect Causative head *v*[IND]. Moreover, the head *v*[IND] can always be realized as *-vaa*.
2. The *-aa* allomorph of *v* appears in the following environments:
 - (a) As the realization of the *v*[AG] with a certain class of Roots (i.e. the AA-class)
 - (b) As the realization of a *v*[AG] taking a type of dative complement in the Ingestive class
 - (c) As the (optional) realization of *v*[IND] for a listed class of verbs, which are a subset of the verbs in the ablauting class

(81) *-aa/-vaa* Apparently Synonymous

(Di)transitive	Causative2	Gloss
chhuu-naa	?chhu-aa/vaa-naa	'touch'
de-naa	dil-aa/vaa-naa	'give'
dho-naa	dhul-aa/vaa-naa	'wash'
gin-naa	gin-aa/vaa-naa	'count'
kaaṭ-naa	kaṭ-aa/vaa-naa	'cut'
kah-naa	kahl-aa/kahal-vaa-naa	'say'
kar-naa	kar-aa/vaa-naa	'do'
khel-naa	khil-?aa/vaa-naa	'play'
likh-naa	likh-aa/vaa-naa	'write'
rakh-naa	rakh-aa/vaa-naa	'put'
sil-naa	sil-aa/vaa-naa	'stitch'
tor-naa	tur-aa/vaa-naa	'break'

3. A \emptyset exponent appears in the following environments:

- (a) As the realization of *v*[AG] in the transitives of the Ablauting class of verbs
- (b) As the realization of a *v* that is dominated by another *v*, whether in the Ingestives or in the Indirect Causatives

For the \emptyset :

- (82) a. $\emptyset \leftrightarrow v$ /LIST ____
 b. $v \rightarrow \emptyset$ /____] v^4

⁴In the related Modern Indo-Aryan language Kashmiri, this process does not seem to be at play. We find patterns of the following sort.

- i. (from Hook and Koul (1984a))

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Type	base	base-CAUS	base-CAUS-CAUS	Gloss
Unaccusative	grak	grak- <i>Ina</i> :v	grak- <i>Ina</i> :v- <i>Ina</i> :v	'boil _{INTR} /boil _{TR} /cause to boil'
Unergative	pak	pak- <i>Ina</i> :v	pak- <i>Ina</i> :v- <i>Ina</i> :v	'walk/move,drive/cause to drive'
Ingestive	par	par- <i>Ina</i> :v	par- <i>Ina</i> :v- <i>Ina</i> :v	'study/teach/cause to teach'
Transitive	kar	kar- <i>Ina</i> :v	kar- <i>Ina</i> :v- <i>Ina</i> :v	'do/cause to do/cause to'

This difference between Hindi and Kashmiri can be correlated to the fact that Hindi has different exponents *-aa* and *-vaa* associated with transitives and (indirect) causatives respectively, while Kashmiri has just one exponent *-Ina*:v.

Note also that *kar-*Ina*:v* 'do-CAUS' and *kar-*Ina*:v-*Ina*:v* 'do-CAUS-CAUS' seem to have the same meaning involving indirect causation. This is parallel to the apparent synonymy between *-aa* and *-vaa* causatives of certain verb in Hindi e.g. *kar-aa* 'cause to do' and *kar-vaa* 'cause to do' (cf. 81).

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