1 Ways of Causative Formation

Causative are formed synthetically in most Indo-Aryan languages.

(1) (Nepali, from Wallace (1979))
   a. Transitive:
      mā kām gar-chu
      I work do-Prs.1Sg
      'I do the work.'
   b. Causative of Transitive:
      mā kām gar-āu-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-āu-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
   LERg them-Dat this work do-Immpfv 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 bātt rahi hai.
      property divide PROG-FEM be-PRES
      'The property is dividing.'
   b. Ram-ne jaayzad bātt dii.
      Ram-ERG property divide GIVE-PERF
      'Ram divided the property.'

I.e. intransitive bātt, transitive bāttā.

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. Daikaít-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 ho raha hai
      room.MSg clean be Prog.MSg be.Prs.MSg
      'The room is becoming clean.'
c. Lalji kamraa saaf kar raahaa hai. 
   Lalji room clean do '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-mê anu-bam prayog huaa thaa
      Hiroshima-in atom-bomb use be-Pfv be.Pst
      'An atomic bomb was used in Hiroshima.'
   b. Amerikaa-ne Hiroshima-mê anu-bam prayog kiyaa thaa
      America-Erg Hiroshima-in atom-bomb use 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 T (in 6a) and transitive v (in 6b). (7), however, involves case-licensing of the relevant argument by the nominal.

(7) Noun Phrase + Light Verb
   a. Hiroshima-mê [anu-bam-kaa prayog] huaa thaa
      Hiroshima-in atom-bomb-Gen use be-Pfv be.Pst
      'An atomic bomb was used in Hiroshima.'
      (Lit. The use of an atomic bomb happened in Hiroshima.)
   b. Amerikaa-ne Hiroshima-mê [anu-bam-kaa prayog] kiyaa thaa
      America-Erg Hiroshima-in atom-bomb-Gen use 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-mê [anu-bam-kaa pahlaa prayog] huaa thaa
    Hiroshima-in atom-bomb-Gen first use 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-mê anu-bam [pahlii baar]/*pahlaa prayog huaa thaa
    Hiroshima-in atom-bomb first.f time.f/first use be-Pfv be.Pst
    'An atomic bomb was used in Hiroshima for the first time.'

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 (dakaito-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 hisaab par-an
      Ram is math study-Impfv
      'Ram is studying math.'
   b. bl chusan ra:m hisaab par-inav-an
      I am-I-him Ram math teach-Impfv
      'I am teaching Ram math.'
   c. bl chusan ma:st.aras-athi ra:m hisaab par-inav-inav-an
      I am-I-him teacher.Dat-through Ram math teach-Caus-Caus-Impfv
      '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-bat.a dhoka khol-ā-yo
   Ram-Erg Shyam-by door open-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 nokrās-athī kēm kar-īnāv-ān
   he is servant Dat-by work do-Caus-Impfv
   ‘He is having the work done by the servant.’

b. Dative
   su chu beni kēm kar-īnāv-ān ti bēyīs nī
   he is sister Dat work do-Caus-Impfv and brother Dat Neg
   ‘He is making sister do the work and not brother.’


(13) a. rām-ne shyām-se mohni-(ko)-dwrā 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):198)
   mī madh-κādūn mohni-(tyā)-dwrā kām kar-av-le
   I Madhu-by Mohan-Gen-by work do-Caus-Pst
   ‘I made Mohan get the work done by Mohan.’


(14) (Kashmiri, from Hook and Koul (1984a):104)

ra:mI chu kar-īnāv-īnāv-an mohnīnii-zēriyi ˇsha:m(atri) s’athā: kēm
   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-īnāv-an mohnīnii-zēriyi ˇsha:m(atri) s’athā: kēm
   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 Vₐₐr
   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
   ‘Ramesh 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

● 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.
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 skul ke-baahar ūnfiyā: bāt rahaa hai
   Sikandar school Gen.Obl-outside toffees distribute Prog.MSg be.Prs.Sg
   ‘Sikandar is distributing toffees outside the school.’

b. ‘Derived’ Intransitive
   skul ke-baahar ūnfiyā: bāt rahii hē
   school Gen.Obl-outside toffees be.Prs.Pl
   ‘Toffees are distributing outside the school.’

2.2 Basic Intransitive → Derived Transitive

(19) a. ‘Basic’ Intransitive
   jangal jal rahe hai
   forest burn be.Prs.Pl
   ‘The forest is burning.’

b. ‘Derived’ Transitive
   sipa:hi: jangal jal-a: rahē hē:
   soldiers.M forest burn-Caus 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. parh ‘read/study’, siikh ‘learn’, sun ‘hear’, dekh ‘see’, bua ‘eat’, pii ‘drink’, chakh ‘taste’ etc.

(20) a. ‘Basic’ Ingestive Transitive
   Binu angrezii siikh raahaa hai
   Binu.M English learn Prog.MSg be.Prs.Sg
   ‘Binu is learning English.’

b. ‘Derived’ Ditransitive
   Mona Binu-ko angrezii siikh-aa rahii hai
   Mona.f Binu-Dat English learn-Caus Prog.M 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: rabe hE:
      soldiers.M forest burn-Caus Prog.MPl be.Prs.Pl
      ‘The soldiers are burning the jungle.’
   b. Causative
      raja: sipahiy−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 rahaa 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 khiil−aa rahaa 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 khiil−vaa rahaa
      Zoheb.m Nazia-Instr Ramona-Dat rice-pudding eat-Caus2 Prog.MSg
      ‘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

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Transitive</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>bāt−nāa</td>
<td>bāaṭ−nāa</td>
<td>‘be divided/divide’</td>
</tr>
<tr>
<td>bandh−nāa</td>
<td>baandh−nāa</td>
<td>‘connect’</td>
</tr>
<tr>
<td>bigar−nāa</td>
<td>baigar−nāa</td>
<td>‘spoil’</td>
</tr>
<tr>
<td>bikhar−nāa</td>
<td>bikher−nāa (bikhr−aa−nāa)</td>
<td>‘scatter’</td>
</tr>
<tr>
<td>chhap−nāa</td>
<td>chhaap−nāa</td>
<td>‘be printed/print’</td>
</tr>
<tr>
<td>chhil−nāa</td>
<td>chhed−nāa</td>
<td>‘be pierced/pierce’</td>
</tr>
<tr>
<td>chhun−nāa</td>
<td>chhin−nāa</td>
<td>‘be intangled/snatch’</td>
</tr>
<tr>
<td>dhal−nāa</td>
<td>dhal−nāa</td>
<td>‘be washed/wash’</td>
</tr>
<tr>
<td>dhul−nāa</td>
<td>dho−nāa</td>
<td>‘be washed/wash’</td>
</tr>
<tr>
<td>gir−nāa</td>
<td>ger−nāa (gir−a−nāa)</td>
<td>‘fall/cause to fall’</td>
</tr>
<tr>
<td>ghir−nāa</td>
<td>gher−nāa</td>
<td>‘be surrounded/surrounded’</td>
</tr>
<tr>
<td>ghul−nāa</td>
<td>ghul−nāa</td>
<td>‘dissolve’</td>
</tr>
<tr>
<td>jut−nāa</td>
<td>jor−nāa</td>
<td>‘be added/add’</td>
</tr>
<tr>
<td>kat−nāa</td>
<td>kaat−nāa</td>
<td>‘be cut/cut’</td>
</tr>
<tr>
<td>khich−nāa</td>
<td>khil−nāa</td>
<td>‘be pulled/pull’</td>
</tr>
<tr>
<td>khud−nāa</td>
<td>khol−nāa</td>
<td>‘be dug/dug’</td>
</tr>
<tr>
<td>kut−nāa</td>
<td>khol−nāa</td>
<td>‘be pulled/pull’</td>
</tr>
<tr>
<td>lad−nāa</td>
<td>laad−nāa</td>
<td>‘be loaded/load’</td>
</tr>
<tr>
<td>lut−nāa</td>
<td>luut−nāa</td>
<td>‘be robbed/rob’</td>
</tr>
</tbody>
</table>
Intransitive | Transitive | Gloss
---|---|---
maj-naa | māj-naa | 'be scored/scour'
mār-naa | maar-naa | 'die/kill'
mur-naa | mor .-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'
pit.-naa | piit .-naa | 'be hit/hit'
rok-naa | rok-naa | 'stop'
sūch-naa | sūch-naa | 'be irrigated/irrigate'
seč-naa | sek-naa | 'be heated/heat'
sil-naa | sii-naa (sil-naa) | 'be sewn/sew'
sudhar-naa | sudhār-naa | 'improve'
stan-naa | taan-naa | 'be taught/tighten'
tul-naa | tol-naa | 'be weighed/weight'
tal-naa | tal-naa | 'be delayed/delay'
taN-naa | taN-naa | 'hang'
ubal-naa | ubal-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 per kaat rahii hai
   company.f tree cut Prog.f be.Prs
   'The company is cutting trees.'

b. Intransitive:
   per kāt rahe he
   trees.M cut Prog.M.P be.Prs.Pl
   'Trees are being cut.' (lit. Trees are cutting)

In additional 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.

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

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 per kaat-e jaa rahe hê
   laughing laughing trees cut-Pfv.Pl PASS Prog.Pl be.Prs.Pl
   ‘The trees are being cut by someone who is laughing.’

b. Intransitive:
   *khaate khaate per kaat rahe hê
eating eating trees cut Prog.Pl be.Prs.Pl

(32) a. Passive:
   khaanaa khaa-kar per kaat aa raha hai
   food eat-having tree cut-Pfv PASS be.Prs
   ‘The tree is being cut by someone, that someone having eaten food.’

b. Intransitive:
   *khaanaa khaa-kar per kaat raha hai
   food eat-having tree cut Prog be.Prs

Both 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 nahi: 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 nahi: han-taa
      I-Instr while-eating food Neg make-F-Hab

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).
### 3.2 Transitives with -\text{aa}

(36) AA-Class Causatives

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Transitive</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>bach-naa</td>
<td>bach-aa-naa</td>
<td>'be saved/save'</td>
</tr>
<tr>
<td>bah-naa</td>
<td>bah-aa-naa</td>
<td>'flow/cause to flow'</td>
</tr>
<tr>
<td>bahl-naa</td>
<td>bahl-aa-naa</td>
<td>'be entertained/entertain'</td>
</tr>
<tr>
<td>baih-naa</td>
<td>baih-aa-naa</td>
<td>'sit/seat'</td>
</tr>
<tr>
<td>ban-naa</td>
<td>ban-aa-naa</td>
<td>*be made/make;</td>
</tr>
<tr>
<td>barh-naa</td>
<td>barh-aa-naa</td>
<td>'increase/cause to increase'</td>
</tr>
<tr>
<td>bhaaq-naa</td>
<td>bhaaq-aa-naa</td>
<td>'run away/cause to run away'</td>
</tr>
<tr>
<td>bhiig-naa</td>
<td>bhiig-aa-naa</td>
<td>(bhiig-o-naa) 'become wet/wet'</td>
</tr>
<tr>
<td>bichh-naa</td>
<td>bichh-aa-naa</td>
<td>'unroll'</td>
</tr>
<tr>
<td>bii-naa</td>
<td>bii-aa-naa</td>
<td>'elapse/cause to elapse'</td>
</tr>
<tr>
<td>bikhar-naa</td>
<td>bikhar-aa-naa</td>
<td>(bikhar-aa-naa) 'scatter'</td>
</tr>
<tr>
<td>bujh-naa</td>
<td>bujh-aa-naa</td>
<td>'go/put out'</td>
</tr>
<tr>
<td>chamak-naa</td>
<td>chamak-aa-naa</td>
<td>'shine'</td>
</tr>
<tr>
<td>charh-naa</td>
<td>charh-aa-naa</td>
<td>'climb/cause to climb'</td>
</tr>
<tr>
<td>chir-p-naa</td>
<td>chir-p-aa-naa</td>
<td>'stick'</td>
</tr>
<tr>
<td>chok-naa</td>
<td>chok-aa-naa</td>
<td>'be startled/startle'</td>
</tr>
<tr>
<td>chhip-naa</td>
<td>chhip-aa-naa</td>
<td>'hide'</td>
</tr>
<tr>
<td>dar-naa</td>
<td>dar-aa-naa</td>
<td>'fear/scare'</td>
</tr>
<tr>
<td>dubh-naa</td>
<td>dubh-aa-naa</td>
<td>(dubh-o-naa) 'drown'</td>
</tr>
<tr>
<td>gal-naa</td>
<td>gal-aa-naa</td>
<td>'melt'</td>
</tr>
<tr>
<td>gir-naa</td>
<td>gir-aa-naa (ger-naa)</td>
<td>'fall/cause to fall'</td>
</tr>
<tr>
<td>hil-naa</td>
<td>hil-aa-naa</td>
<td>'rock'</td>
</tr>
<tr>
<td>jaag-naa (jag-naa)</td>
<td>jaag-aa-naa</td>
<td>'wake up'</td>
</tr>
<tr>
<td>jal-naa</td>
<td>jal-aa-naa</td>
<td>'burn'</td>
</tr>
<tr>
<td>jam-naa</td>
<td>jam-aa-naa</td>
<td>'freeze'</td>
</tr>
<tr>
<td>jiia-naa</td>
<td>jiia-aa-naa</td>
<td>'be alive/cause to be alive'</td>
</tr>
<tr>
<td>lag-naa</td>
<td>lag-aa-naa</td>
<td>'be planted, attach/plant?'</td>
</tr>
<tr>
<td>let-naa</td>
<td>let-aa-naa</td>
<td>'lie/cause to lie, lay'</td>
</tr>
<tr>
<td>mil-naa</td>
<td>mil-aa-naa</td>
<td>'meet/introduce'</td>
</tr>
<tr>
<td>mil-ya-naa</td>
<td>mil-ya-naa</td>
<td>'be wiped/wipe'</td>
</tr>
<tr>
<td>pak-naa</td>
<td>pak-aa-naa</td>
<td>'arrive/escort'</td>
</tr>
<tr>
<td>phaile-naa</td>
<td>phaile-aa-naa</td>
<td>'spread'</td>
</tr>
<tr>
<td>pighal-naa</td>
<td>pighal-aa-naa (pighaal-naa)</td>
<td>'melt'</td>
</tr>
<tr>
<td>ro-naa</td>
<td>ro-aa-naa</td>
<td>'cry/cause to cry'</td>
</tr>
<tr>
<td>saj-naa</td>
<td>saj-aa-naa</td>
<td>'be decorated/decorate'</td>
</tr>
<tr>
<td>sar-naa</td>
<td>sar-aa-naa</td>
<td>'rot'</td>
</tr>
<tr>
<td>soo-naa</td>
<td>soo-aa-naa</td>
<td>'sleep/put to bed'</td>
</tr>
<tr>
<td>sulag-naa</td>
<td>sulag-aa-naa</td>
<td>'be lit, smoulder/light'</td>
</tr>
<tr>
<td>sulah-naa</td>
<td>sulah-aa-naa</td>
<td>'get simplified/simplify'</td>
</tr>
<tr>
<td>suukh-naa</td>
<td>suukh-aa-naa</td>
<td>'dry'</td>
</tr>
<tr>
<td>ulajh-naa</td>
<td>ulajh-aa-naa</td>
<td>'get complicated/complicate'</td>
</tr>
<tr>
<td>ujih-naa</td>
<td>ujih-aa-naa</td>
<td>'rise/raise'</td>
</tr>
</tbody>
</table>

### 4 Some Structures

(37) Transitive Structure?

\[
\begin{aligned}
 & P \\
 & \downarrow \\
 & \text{DP} \\
 & \sqrt{\text{ROOT}} \\
 & \downarrow \\
 & \text{v} \text{[AG]} \\
 & \downarrow \\
 & \text{DP} \\
 & \sqrt{\text{ROOT}} \\
 & \downarrow \\
 & \text{v} \text{[B]} \\
\end{aligned}
\]

(38) 'Inchoative' Type

\[
\begin{aligned}
 & P \\
 & \downarrow \\
 & \text{DP} \\
 & \sqrt{\text{ROOT}} \\
 & \downarrow \\
 & \text{v} \text{[B]} \\
\end{aligned}
\]

(39) Alternative Type

\[
\begin{aligned}
 & P \\
 & \downarrow \\
 & \text{DP} \\
 & \sqrt{\text{ROOT}} \\
 & \downarrow \\
 & \text{v} \text{[AG]} \\
\end{aligned}
\]

(40) Transitive of an Inchoative

\[
\begin{aligned}
 & P \\
 & \downarrow \\
 & \text{DP} \\
 & \sqrt{\text{ROOT}} \\
 & \downarrow \\
 & \text{v} \text{[B]} \\
\end{aligned}
\]

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

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Transitive</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>chal-naa</td>
<td>chal-aa-naa</td>
<td>move, walk/to move, drive’</td>
</tr>
<tr>
<td>daur-naa</td>
<td>daur-aa-naa</td>
<td>‘run/to cause to run, chase’</td>
</tr>
<tr>
<td>ghuum-naa</td>
<td>ghum-aa-naa</td>
<td>‘wander/to cause to wander?’</td>
</tr>
<tr>
<td>häs-naa</td>
<td>häs-aa-naa</td>
<td>‘laugh/to cause to laugh’</td>
</tr>
<tr>
<td>hat-naa</td>
<td>hat-aa-naa</td>
<td>‘move’</td>
</tr>
<tr>
<td>jhuul-naa</td>
<td>jhul-aa-naa</td>
<td>‘swing/to cause to swing’</td>
</tr>
<tr>
<td>kuud-naa</td>
<td>kud-aa-naa</td>
<td>‘jump/to cause to jump’</td>
</tr>
<tr>
<td>naach-naa</td>
<td>nach-aa-naa</td>
<td>‘dance’</td>
</tr>
<tr>
<td>ur-naa</td>
<td>ur-aa-naa</td>
<td>‘fly’</td>
</tr>
</tbody>
</table>

Some tests for unergativity:
1. Unlike unaccusatives, the past participle of an unergative cannot be used as a reduced relative.

(44) a. Unergative:  
  ‘häs-aa (huāa) larkaa  
  laugh-Pfv be-Pfv boy  
  ‘the laughed boy’

b. Unaccusative:  
  kat-e (hue) phal  
  cut-Pfv MPI be-Pfv MPI fruit

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 miṭtaa-ye  
  Nina-Erg stains.MPl wipe-Pfv.MPl  
  ‘Nina scrubbed away the stains.’

b. Inabilitative 1 (based on active syntax):  
  ‘Nina-se Mona-ne dhabbe naḥi: miṭtaa-ye  
  Nina-Instr Mona-Erg stains.M Neg wipe-Pfv.MPl’

c. Inabilitative 2 (based on passive syntax):  
  Nina-se dhabbe miṭtaa-ye naḥi: gaye  
  Nina-Instr stains wipe-Pfv.PI Neg PASS-Pfv.MPl  
  ‘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 naḥi: gayaa  
  Nina-Instr runs-Pfv Neg PASS-Pfv  
  ‘Nina couldn’t run.’

(47) Unaccusative

a. Basic Unaccusative:  
  dhabbe miṭ rahe hē  
  stains wipe,Prog MPI be.Pvs MPI  
  ‘The stains are getting erased.’
b. Inabilitative 1 (based on active syntax):
Nina-se  dhabbe  nahı:
Nina-Instr stains.M Neg  wipe.Pfv.MPl
‘Nina wasn’t able to wipe away the stains.’
c. Inabilitative 2 (based on passive syntax):
dhabb˜o-se
stains-Instr
mit.-aa
‘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/DA 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/chir.iyaa  kitiib.f
fly
rahii
be.Prs.Sg
‘The kite/the bird is flying.’
b. Transitive
Anjali  patang/*?chir.iyaa
Anjali.f kite.f/bird.f  fly
‘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:

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).

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  dikh-AA
Ram-Erg Sita-Acc see-Pfv
‘Ram saw Sita.’

The verb bhul ‘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

<table>
<thead>
<tr>
<th>Verb</th>
<th>Verb-aa</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>chakh-naa</td>
<td>chakh-aa-naa</td>
<td>‘taste/cause to taste’</td>
</tr>
<tr>
<td>dekh-naa</td>
<td>deikh(l)-aa-naa</td>
<td>‘see/show’</td>
</tr>
<tr>
<td>khaa-naa</td>
<td>khil-aa-naa</td>
<td>‘eat/feed’</td>
</tr>
<tr>
<td>pakar-naa</td>
<td>pakr-aa-naa</td>
<td>‘hold, catch/hand, cause to hold’</td>
</tr>
<tr>
<td>parh-naa</td>
<td>parh-aa-naa</td>
<td>‘read/teach’</td>
</tr>
<tr>
<td>pehen-naa</td>
<td>pehn-aa-naa</td>
<td>‘wear/clothes’</td>
</tr>
<tr>
<td>pii-naa</td>
<td>pil-aa-naa</td>
<td>‘drink/cause to drink’</td>
</tr>
<tr>
<td>samajh-naa</td>
<td>samjh-aa-naa</td>
<td>‘understand/explain’</td>
</tr>
<tr>
<td>sikh-naa</td>
<td>sikh-aa-naa</td>
<td>‘learn/teach’</td>
</tr>
<tr>
<td>sun-naa</td>
<td>sun-aa-naa</td>
<td>‘hear/cause to hear, tell’</td>
</tr>
</tbody>
</table>

All these verbs have -aa- 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  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  bhul  ga-yaay
Ram Sita-Acc forget GCP
‘Ram forgot Sita.’
b. Ram-ko  Sita-ko  bhul-ii
Ram Sita-Acc forget GCP
‘Ram forgot Sita out of his mind.’

Unlike -aa- of ingestives whose valence is one greater than that of the corresponding transitive, bhul and bhul-AA have the same valence. They only differ with respect to agentivity.
(52) Object shift in causatives of ingesto-reflexives
a. basic word order:
Ram-ne Sita-ko vo bhaasha sikh-aa-yii
Ram-Erg Sita-Dat that language learn-CAUS-Pfv
‘Ram taught Sita that language.’
b. with object shift:
Ram-ne [us bhaasha-ko], Sita-ko t 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:

- Ablauting Class: Transitive form is basic
- AA-Class: Intransitive form is basic'

(54) Correspondences: AA-class

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Transitive</th>
<th>Gloss</th>
<th>Vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>jaag-naa</td>
<td>jag-aa-naa</td>
<td>‘wake up’</td>
<td>aa/a</td>
</tr>
<tr>
<td>bit-naa</td>
<td>bit-aa-naa</td>
<td>‘elapse/cause to elapse’</td>
<td>i/i</td>
</tr>
<tr>
<td>suukh-naa</td>
<td>sukhar-aa-naa</td>
<td>‘dry’</td>
<td>uu/u</td>
</tr>
<tr>
<td>ro-naa</td>
<td>rul-aa-naa</td>
<td>‘cry/cause to cry’</td>
<td>o/u</td>
</tr>
<tr>
<td>lej-naa</td>
<td>lijt-aa-naa</td>
<td>‘lie/lay’</td>
<td>e/i</td>
</tr>
</tbody>
</table>

(55) Correspondences: Ablauting Class

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Transitive</th>
<th>Gloss</th>
<th>Vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>mar-naa</td>
<td>maar-aa-naa</td>
<td>‘die/kill’</td>
<td>a/aa</td>
</tr>
<tr>
<td>khul-naa</td>
<td>khuls-aa-naa</td>
<td>‘open’</td>
<td>u/o</td>
</tr>
<tr>
<td>lut-naa</td>
<td>luut-aa-naa</td>
<td>‘be robbed’</td>
<td>u/uu</td>
</tr>
<tr>
<td>pit-naa</td>
<td>pitt-aa-naa</td>
<td>‘hit’</td>
<td>i/i</td>
</tr>
<tr>
<td>ghur-naa</td>
<td>gher-aa-naa</td>
<td>‘surround’</td>
<td>i/e</td>
</tr>
</tbody>
</table>

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 was basic and subject to lengthening in the Transitive, these verbs would simply be exceptions:

(56) No Change

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Transitive</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>badal-naa</td>
<td>badal-naa</td>
<td>‘change’</td>
</tr>
<tr>
<td>bun-naa</td>
<td>bun-naa</td>
<td>‘weave’</td>
</tr>
<tr>
<td>bhar-naa</td>
<td>bhar-naa</td>
<td>‘fill’</td>
</tr>
<tr>
<td>ghis-naa</td>
<td>ghis-naa</td>
<td>‘rub’</td>
</tr>
<tr>
<td>rang-naa</td>
<td>rang-naa</td>
<td>‘get colored/color’</td>
</tr>
<tr>
<td>sil-naa</td>
<td>sil-naa (sii-naa)</td>
<td>‘sew’</td>
</tr>
</tbody>
</table>

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:

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

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

(59) Non Encyclopedically Agentive verbs in the AA-class:

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


While there do appear to be tendencies in the two classes, they are just that, tendencies, and not exceptionless generalizations.

- 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 Inabilitatives 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 nahı: bandh-egaa
   'I can’t tie up this luggage by myself.'

b. Inabilitative of the Passive of the Transitive
   mujh akeli-se yeh saamaan nahı: baandh-aa jaa-egaa
   '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 nahi uth-egaa
   this luggage some.Obl strong-person-Instr even Neg lift/Instr-Pfv
   '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 nahi jaa-egaa
   this luggage some.Obl strong-person-Instr even lift/-Caus-Pfv Neg Pass-Pfv
   '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’ ↔ lal ‘bring’
   c. pay ‘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-vaah nahi: 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 nahi: 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 nahi: 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)
   bl ch-u-s-ath tsI yor an-an
   I.Nom be-M-1Sg-2Sg (me) you.Nom an-an
   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 tsI yor an-an
   you.Nom be-M-2Sg-1Sg you.Nom an-an
   you.Nom be-M-2Sg-1Sg LDat 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) bl chu-s-an ramI hisa:b par-Inav-an
   I am-l-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.
6.3 Passives in Kashmiri

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

(68) (Kashmiri, from Hook and Koul (1984a):116)

   'The boy was given bread.'

   'Bread was given to the boy.'

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

   'The boy was fed bread.'

   'The bread was fed to the boy.'

Verbs like havun '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. havun 'show', not a morphological causative
   *raml chu philik hav-InI ylV-a:n
   Ram.Nom is film show-Inf.Abl Pass-Impfv
   'Ram is being shown a film.'

b. boz-lavat-un 'hear-Caus'('tell'), a morphological causative
   *raml chu kath boz-InV-InI ylV-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) zamiindar-ne dakti-sho makan-jal maha diya
   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 itna khaana-kaisa 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

Verbs may also fail to have -vaa causatives for other reasons. e.g. khat.khat-aa '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

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Transitive</th>
<th>-vaa Causative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>bāṭ-naa</td>
<td>bāṭ-naa</td>
<td>bāṭ-vaa-naa</td>
<td>‘divide’</td>
</tr>
<tr>
<td>badal-naa</td>
<td>badal-naa</td>
<td>badal-vaa-naa</td>
<td>‘change’</td>
</tr>
<tr>
<td>bhaag-naa</td>
<td>bhaag-naa</td>
<td>bhaag-vaa-naa</td>
<td>‘run’</td>
</tr>
<tr>
<td>chap-naa</td>
<td>chaap-naa</td>
<td>chap-vaa-naa</td>
<td>‘print’</td>
</tr>
<tr>
<td>suukh-naa</td>
<td>sukh-aa-naa</td>
<td>sukh-vaa-naa</td>
<td>‘dry’</td>
</tr>
<tr>
<td>ubal-naa</td>
<td>ubaal-naa</td>
<td>ubal-vaa-naa</td>
<td>‘boil’</td>
</tr>
</tbody>
</table>

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

| chhūt-naa   | chhor-naa | ‘be free’ |
| phat-naa    | phaar-naa | ‘be torn’ |
| phuut-naa   | phor-naa  | ‘be burst’ |
| tūt-naa     | tor-naa   | ‘break’   |

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

(78) Consonant Changing Alternations

| chhūt-naa   | chhor-naa | chhur-vaa-naa |
| phat-naa    | phaar-naa | phar-vaa-naa  |
| phuut-naa   | phor-naa  | phur-vaa-naa  |
| tūt-naa     | tor-naa   | tur-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’ |
| simat-naa | sameṭ-naa | simat-vaa-naa | ‘be collected’ |

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 bich-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.’

27

28
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

<table>
<thead>
<tr>
<th>(Di)transitive</th>
<th>Causative2</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>chhuu-naa</td>
<td>?chhu-aa/vaa-naa</td>
<td>'touch'</td>
</tr>
<tr>
<td>de-naa</td>
<td>dil-aa/vaa-naa</td>
<td>'give'</td>
</tr>
<tr>
<td>dho-naa</td>
<td>dhul-aa/vaa-naa</td>
<td>'wash'</td>
</tr>
<tr>
<td>giv-naa</td>
<td>giv-aa/vaa-naa</td>
<td>'count'</td>
</tr>
<tr>
<td>kaat-naa</td>
<td>kat-aa/vaa-naa</td>
<td>'cut'</td>
</tr>
<tr>
<td>kahl-naa</td>
<td>kahl-aa/kahl-vaa-naa</td>
<td>'say'</td>
</tr>
<tr>
<td>kar-naa</td>
<td>kar-aa/vaa-naa</td>
<td>'do'</td>
</tr>
<tr>
<td>khel-naa</td>
<td>khel-aa/vaa-naa</td>
<td>'play'</td>
</tr>
<tr>
<td>likh-naa</td>
<td>likh-aa/vaa-naa</td>
<td>'write'</td>
</tr>
<tr>
<td>rakha-naa</td>
<td>rakha-aa/vaa-naa</td>
<td>'put'</td>
</tr>
<tr>
<td>sil-naa</td>
<td>sil-aa/vaa-naa</td>
<td>'stitch'</td>
</tr>
<tr>
<td>tor-naa</td>
<td>tur-aa/vaa-naa</td>
<td>'break'</td>
</tr>
</tbody>
</table>

3. A -Ø 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 -Ø:
   (82) a. Ø v /LIST___
   b. v → Ø /___] v

   In 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))

References


<table>
<thead>
<tr>
<th>Type</th>
<th>base-CAUS</th>
<th>base-CAUS-CAUS</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaccusative</td>
<td>grak</td>
<td>grak-lna:v</td>
<td>boil,boil /boil, /cause to boil</td>
</tr>
<tr>
<td>Inergative</td>
<td>pak</td>
<td>pak-lna:v-lna:v</td>
<td>walk,move,drive /cause to drive</td>
</tr>
<tr>
<td>Ingestive</td>
<td>par</td>
<td>par-lna:v-lna:v</td>
<td>study,teach,causing to teach</td>
</tr>
<tr>
<td>Transitive</td>
<td>kar</td>
<td>kar-lna:v-lna:v</td>
<td>do /cause to do /cause to do'</td>
</tr>
</tbody>
</table>

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-lna:v 'do-CAUS' and kar-lna:v-lna: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).


