The Morpheme That Wouldn't Go Away

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1 Some Basic Facts

- **Geography:** Urdu and Hindi are South Asian languages spoken primarily in Pakistan and India, but also world-wide due to the South Asian diaspora.
- **Comparison:** Urdu and Hindi differ in vocabulary but are structurally almost identical (though there is considerable dialectal variation within both).
- **Case:** Fairly rich case marking which interacts with both syntax and semantics, including an ergative (associated with perfect morphology and agentive subjects). Nominative is unmarked.
- **Subject and object agreement.** Verbs do not agree with overtly marked nouns. Object agreement results if subject agreement is blocked. Default agreement results if both subject and object agreement are blocked.
- **Word Order:** Unmarked SOV, relatively free word order and rampant pro-drop.

2 Double Causatives in Hindi?

There are two causative morphemes in Urdu/Hindi: *-a-* and *-va-*.

(1) a. mɑkan bɑn-a
house.M.Sg.Nom be made-Perf.M.Sg
'The house was built.'
'Das Haus entstand.'

b. ɑnjʊm=ne mɑkan bɑn-**a**-ya
Anjum.F=Erg house.M.Sg.Nom be made-Caus-Perf.M.Sg
'Anjum built a house.'

c. ɑnjʊm=ne (mazdurõ=se) mɑkan bɑn-**va**-ya
Anjum.F=Erg laborer.M.Pl=Inst house.M.Sg.Nom be made-Caus-Perf.M.Sg
'Anjum had a house built (by the laborers).'

Another way of causitivizing/transitivizing: "strenghthening" the root (e.g., *mar* 'die'/*mar* 'hit', *kaṭ* 'be cut'/*kaṭ* 'cut', *dɪkʰ* 'appear'/*dekʰ* 'see').

(2) a. sɑddɑf nɪkl-i
Saddaf.F.Nom emerge-Perf.F.Sg
'Saddaf came out.'

b. ɑnjʊm=ne sɑddɑf=ko nik**a**l-a
Anjum.F=Erg Saddaf.F=Acc emerge.**Caus**-Perf.M.Sg
'Anjum extracted Saddaf.'

c. ɑnjʊm=ne (adnan=se) sɑddɑf=ko nikəl-**va**-ya
Anjum.F=Erg Adnan.M=Inst Saddaf.F=Acc emerge-**Caus**-Perf.M.Sg
'Anjum had Saddaf extracted (by Adnan).'

Kachru (1980:54–55) under the assumption of a basic transformational approach posits two levels of causation—these each increase the valency of the predication by one.

(3)

broken	broken+Caus1	broken+Caus2
broken Z	cause X [broken Z]	cause X [cause Y [broken Z]]
eat	eat+Caus1	eat+Caus2
Y eat Z	cause X [Y eat Z]	cause W [cause X [Y eat Z]]

Caus1 corresponds to *-a-* (or "strenghtening") and Caus2 to *-va-*.

- (4b) represents the first level of causation (simple causation), where the causee appears in the accusative.
- (4c) shows an example of the second causative, where an additional causer is introduced and the second causee appears in the instrumental.

(4) a. rita=ne ɑngur kʰa-e
Rita=Erg grape.M.Nom eat-Perf.M.Pl
'Rita ate some grapes.'

b. rita=ne sima=ko ɑngur kʰɪl-**a**-e
Rita=Erg Sima=Acc grape.M.Nom eat-**Caus**-Perf.M.Pl
'Rita fed Sima some grapes.'

c. kala=ne rita=se sima=ko ɑngur kʰɪl-**va**-e
Kala=Erg Rita=Inst Sima=Acc grape.M.Nom eat-**Caus**-Perf.M.Pl
'Kala made Rita feed Sima some grapes.'

Historical Evidence

- Masica (1991:318–320) concurs with this analysis.
- He posits the historical development of a *Second Causative* via a doubling of two causatives.
- The function of this Second Causative *-va* is seen as enabling "the formation of (functional) indirect causatives from secondary transitives made with the First Causative (Hindi *ʊṭʰa-/ ʊṭʰva-* 'lift/have lifted by someone')."

Questions:

1. Why is the causee in (5) not accusative?
2. Why is the instrumental causee in (5) optional?

(5) a.

mɑkan	bɑn-a
house.M.Sg.Nom	be made-Perf.M.Sg

'The house was built.'
'Das Haus entstand.'

b.

ɑnjʊm=ne	mɑkan	bɑn-**a**-ya
Anjum.F=Erg	house.M.Sg.Nom	be made-Caus-Perf.M.Sg

'Anjum built a house.'

c.

ɑnjʊm=ne	(mazdurõ=se)	mɑkan	bɑn-**va**-ya
Anjum.F=Erg	laborer.M.Pl=Inst	house.M.Sg.Nom	be made-Caus-Perf.M.Sg

'Anjum had a house built (by laborers).'

3. Why does one not seem to get double causative marking on the verb?

(6) *bɑn* 'be made' ⟶ *bɑn-a* 'make' ⟶ *bɑn-va/*bɑn-a-va* 'cause to make'
nɪkl 'emerge' ⟶ *nɪkal* 'extract' ⟶ *nɪkəl-va/ *nɪkal-va* 'cause to extract'

Answer: The above scenario is not quite correct.

- Different Lexical Semantic Classes give rise to differing causation patterns.
- Some argument alternations are conditioned by semantic parameters of "affectedness" and "control".
- The historical evidence does not support a layering of causatives.
- Instead, the overall patterns of causativization appear to have been relatively stable over the ages—though the modern languages differ in the individual strategies of encoding the underlying basic pattern.

3 Pertinacity

The Urdu causative morphemes can be traced back in an unbroken line to Old Indo-Aryan.

A (Rough) Time Line

A. Old Indo-Aryan
1200 BCE — 600 BCE (Vedic)
600 BCE — 200 BCE (Epic and Classical Sanskrit)

B. Middle Indo-Aryan (Aśokan inscriptions, Pāli, different Prākrits, Apabhraṃśa—Avathṭṭha)
200 BCE — 1100 CE

C. New Indo-Aryan (Bengali, Hindi, Urdu, Marathi, Punjabi, Gujarati, etc.)
1100 CE — Present

3.1 Vedic

- In Vedic the morpheme *-aya* has a clear causativizing function.
- However, it is generally referred to as a transitivizing morpheme (e.g., Jamison 1976, Hock 1981) because it mainly seems to causativize intransitives.

(7)

Intransitive	**Causative**
varṣati 'he rains'	varṣayati 'he makes him rain'
gacchati 'he goes'	gamayati 'he makes him go'
roditi 'he cries'	rodayati 'he makes him cry'
[Thieme 1927:18]	

- With underlying transitives, there seems to have been little or no change in meaning.

(8)

Transitive	**Causative**
dabhnoti 'he damages somebody'	dambhayati 'he damages somebody'
māṛṣti 'he cleans somebody'	marjayati 'he cleans somebody'
[Thieme 1927:19]	

(9) a.

indraḥ	... ajanat ...	sūryam
Indra.Nom	begot	sun.Acc

'Indra begot the sun.' (Ṛgveda III.31.15, from Jamison 1976)

b.

indraḥ	... ajanayat	sūryam
Indra.Nom	begot.Caus	sun.Acc

'Indra begot the sun.' (Ṛgveda II.19.3, from Jamison 1976)

- The origin of Vedic *-aya-* is unclear (though PIE *eje/ejo).

3.2 Sanskrit

With respect to Sanskrit we are in the fortunate position that an elegant and compact grammar exists: Pāṇini's Aṣṭādhyāyī (ca. 6th century BCE).

- Pāṇini analyzes the underlying causative morpheme as an /i/.

  Rule 3,1,26: hetumat-i ca
  '-i' is affixed to roots when one wishes to express that the action denoted by the root was caused by another person.

- Generally the root was "strenghthened" (e.g., vowel lengthening).
- This causative morpheme was followed by an *-a*, an augment for active verbs.
- In certain phonological environments (described in detail by Paṇini), the *-i-* ⟶*-y-*.
- In addition roots ending in *-ā* plus a class of listed verbs required a *-p-*, which sometimes turned into a *-v-* (Prākrit).
- The combined effect of these processes were two basic surface morphemes for the causative: *-aya-* and *-paya*.
- These could be attached to any verb class and generally had a genuine causativizing function (more on this later).

3.3 Middle Indo-Aryan

In Middle Indo-Aryan, both allomorphs of the causative continued to be used (Pischel 1900, Woolner 1917). **But:**

- *-aya* ⟶*-e* (Skt. hāsyati ⟶Prākrit hāseī 'make laugh')
- *-paya* ⟶*-ve* (Skt. nirvāpayati ⟶Prākrit ṇivvāvedi).

The use of *-ve* was predominant and therefore was taken to be spreading.

3.4 Variation in the Modern Languages

Claim: Both of these causative allomorphs have been retained in modern Urdu/Hindi.

Not all of the modern Indo-Aryan languages retained both:

- Bengali has *-ā-* (Chatterji 1926:§759 claims this comes from MIA *-āve-/-āva-*).
- Marathi lost the *-aya-* entirely and now uses a causative in *-w-*, derived from the MIA *-ve-* form.

Observation: Given that the causative morpheme consists of just one vowel, it would have been reasonable to assume that this morpheme fall prey to general erosion. However, this has not happened. Why?

4 Historical Stability: The Role of Lexical Semantics

- Causativization patterns come in differing flavors: case marking and interpretation differs according to the lexical semantics of the verb that is being causativized.
- These patterns appear to have been carried down the millenia.

4.1 Sanskrit

Pāṇini very carefully differentiates between several differing verb classes and makes sure to list all exceptions to a pattern.

- Default Pattern for Causativization:
  - A nominative causer is added.
  - The former agent/causee surfaces as an instrumental adjunct.
- Verbs of Motion, Verbs of Perception, Ingestives, Verbs with sounds as an object and intransitives in general behave differently (Rule 1,4,52).
  - A nominative causer is added.
  - The former agent/causee surfaces as an accusative patient (object).

(10) a. yajñadatto devadattam grāman gamayati
Yajnadatta.Nom Devadatta.Acc village.Acc go.Caus.Ind.Pres.3.Sg
'Yajnadatta makes Devadatta go to the village.'

b. yajñadatto devadattam dharmam bodhayati
Yajnadatta.Nom Devadatta.Acc law.Acc know.Caus.Ind.Pres.3.Sg
'Yajnadatta makes Devadatta understand the law.'

- The verbs *hṛ* 'take' and *kṛ* 'do' allow for an option (Rule 1,4,53):
  - **Either** the causee may be an accusative patient.
  - **Or** the causee may surface as an instrumental agent.

(11) a. yajñadatto devadattam kaṭam kārayati
Yajnadatta.Nom Devadatta.**Acc** mat.Acc do.Caus.Ind.Pres.3.Sg
'Yajnadatta makes Devadatta make a mat.'

b. yajñadatto devadattena kaṭam kārayati
Yajnadatta.Nom Devadatta.**Inst** mat.Acc do.Caus.Ind.Pres.3.Sg
'Yajnadatta has a mat be made by Devadatta.'

  - This usage is an innovation in Sanskrit for these verbs.

4.2 Vedic

A closer examination of Vedic causativization actually reveals much of the same pattern.

- Jamison (1976:130) notes that several different kinds of verbs behave like "intransitives" and therefore do show up with the semantics of causativization.
  - Verbs of Motion (go, ascend)

(12) enam . . . gamaya antam
Pron.3.Sg.**Acc** go.**Caus** end.Acc
'Make him go to the end.'
(Atharva Veda XII.3.34, from Jamison 1976)

  - Verbs of Perception (see, hear)

(13) sam īkṣayasva gāyato nabhāṃsi
perceive.Caus singers.**Acc** clouds.Acc
'Make the singers perceive the clouds.'
(Atharva Veda IV.15.3, from Jamison 1976)

  - Ingestives (drink)

(14) yajatrān . . . pāyayā . . . madhūni
awesome ones.**Acc** drink.Caus sweet drinks.Acc
'Make the awesome ones drink the sweet drinks.'
(Ṛgveda III.57.5, from Jamison 1976)

  - Verbs of Enjoyment (enjoy)

The same classes of verbs allowed accusative causees in Sanskrit.

4.3 Modern Urdu/Hindi

Saksena (1980, 1982) points out that the causativization patterns do not conform to the rather neat picture of double causativization painted by Kachru in (3).

Saksena's classifications show that the modern language exhibits the same sensitivity to lexical semantic verb classes that was seen in OIA.

- As in Sanskrit, the default pattern for transitives is an instrumental causee.

(15) a. ɑnjʊm=ne paoda kɑṭ-a
Anjum.F=Erg plant.M.Nom cut-Perf.M.Sg
'Anjum cut a/the plant.'

b. ɑnjʊm=ne sɑddɑf=se/*ko paoda kɑṭ-**a**-ya
Anjum.F=Erg Saddaf.F=**Inst**/Acc plant.M.Nom cut-**Caus**-Perf.M.Sg
'Anjum had Saddaf cut a/the plant.'

- Again, Verbs of Motion, Ingestives, Verbs of Perception (see) and Verbs with sounds as objects (hear) are special: they take an accusative causee.

(16) a. sɑddɑf b^{h}ag-i
Saddaf.F.Nom run-Perf.F.Sg
'Saddaf ran.'

b. ɑnjʊm=ne sɑddɑf=ko b^{h}ag-**a**-ya
Anjum.F=Erg Saddaf.F=**Acc** run-**Caus**-Perf.M.Sg
'Anjum chased Saddaf away (made her run).'

(17) a. sɑddɑf=ne k^{h}ana k^{h}a-ya
Saddaf.F=Erg food.M.Nom eat-Perf.M.Sg
'Saddaf ate food.'

b. ɑnjʊm=ne sɑddɑf=ko/*se k^{h}ana k^{h}ɪl-**a**-ya
Anjum.F=Erg Saddaf.F=**Acc**/Inst food.M.Nom eat-**Caus**-Perf.M.Sg
'Anjum made Saddaf eat food (gave Saddaf food to eat).'

- Finally, as in Sanskrit, there are a few verbs which allow an alternation between instrumental and accusative causees (e.g., taste, read, write, sing).

(18) a. sɑddɑf=ne masala cɑk^h-a
Saddaf.F=Erg spice.M.Nom taste-Perf.M.Sg
'Saddaf tasted the seasoning.'

b. ɑnjʊm=ne sɑddɑf=ko masala cɑk^h-va-ya
Anjum.F=Erg Saddaf.F=**Acc** spice.M.Nom taste-**Caus**-Perf.M.Sg
'Anjum had Saddaf taste the seasoning.'

c. ɑnjʊm=ne sɑddɑf=se masala cɑk^h-va-ya
Anjum.F=Erg Saddaf.F=**Inst** spice.M.Nom taste-=bf Caus-Perf.M.Sg
'Anjum had the seasoning tasted by Saddaf.'

5 Direct vs. Indirect Causativization

- Saksena (1980, 1982) proposes the following distinction for modern Hindi:
  - direct causation (*-a-* morpheme)
  - indirect causation (*-va-* morpheme)
- This interacts with a general pattern of case alternations on objects:
  - affected/specific objects are marked with accusative *ko* (Butt 1993)
  - non-specific objects are nominative, non-affected causees are instrumental

- Most verbs appear with either *-a-* or *-va-*, but no step-wise increase in valency.

(19) a. mãĩ=ne laṛke=ko paṛʰ-a-ya
I=Erg boy.Obl=Acc study-**Caus**-Perf.M.3.Sg
'I taught the boy.' (Saksena 1982:57)

b. mãĩ=ne laṛke=ko paṛʰ-va-ya
I=Erg boy.Obl=Acc study-**Caus**-Perf.M.3.Sg
'I had the boy study.' (Saksena 1982:57)

Thus, two interacting semantic factors are at issue: affectedness and direct vs. indirect involvement.

(20)

	Causation	
Affectedness	+involved causer	−involved causer
+affected causee	Acc with *-a*	Acc with *-va*
−affected causee	Inst with *-a*	Inst with *-va*

(based on Saksena 1982:86)

This is again an old pattern in the language.

5.1 Old Indo-Aryan

5.1.1 Object Alternations

- The general trend with object alternations as governed by affectedness (and telicity) is an old part of the language.

> It is probably the case that the alternation between AC [accusative case] and GC [genitive case] with verbs of consumption originally signalled a semantic difference. A food or drink in AC [accusative case] was entirely consumed, while only part of one in the genitive was.
> [Jamison (1976:131,135)]

(21) a. pibā somam
drink.Imp soma.**Acc**
'Drink soma.' (Ṛgveda VIII.36.1, from Jamison 1976)

b. pibā somasya
drink.Imp soma.**Gen**
'Drink (of) soma.' (Ṛgveda VIII.37.1, from Jamison 1976)

5.1.2 Direct vs. Indirect Causation

- Hock (1981): instrumental-accusative causee alternations could already be found in Vedic (but rarely) for those verbs that allowed an accusative causee (cf. Thieme 1927).
- Hock (1981:24–25) further points towards Speijer (1886:§49) for classical Sanskrit

> If one wants to say *he causes me to do something, it is by his impulse I act*, there is room for the type [accusative causee], but if it be meant *he gets soemthing done by me, I am only the agent or instrument through which he acts*, the instrumental is on its place. [Speijer (1886:§49)]

(22) a. mantrapūtam carum rājñīm prāśayat
consecrated.Acc porridge.Acc queen.Sg.**Acc** eat.Caus.Impf.3.Sg
munisattamaḥ
best-of-ascetic.Nom
'the best of ascetics made the queen eat a consecrated porridge.' (Sanskrit)
(Kathaāsaritsāgar 9.10)

b. tām śvabhiḥ khādayet rājā
Demon.F.Sg.Acc dog.Pl.**Inst** eat.Caus.Opt.3.Sg king.Nom
'Her the king should order to be devoured by dogs.' (Sanskrit)
(Mahābhārata 8.371)

5.1.3 Crosslinguistic Comparison

Compare the Indo-Aryan pattern of causative alternations with data from Romance (French) and Bantu (Chichewâ), cf. Alsina and Joshi (1991).

(23) a. Jean a fait manger des gâteaux aux enfants.
Jean has made eat the cakes to the children
'Jean made the children eat the cakes.' (French)

b. Jean a fait manger des gâteaux par les enfants.
Jean has made eat the cakes by the children
'Jean had the cakes eaten by the children.' (French)

(24) a. Nǔngu i-na-phík-ítsa kadzīdzi maûngu
porcupine SUBJ-PAST-cook-CAUS owl pumpkins
'The porcupine made the owl cook the pumpkins. (Chichewâ)

b. Nǔngu i-na-phík-ítsa maûngu kwá kádzīdzi
porcupine SUBJ-PAST-cook-CAUS pumpkins by owl
'The porcupine had the pumpkins cooked by the owl. (Chichewâ)

Old and Modern Indo-Aryan thus confirm to a pattern found generally across languages.

The pattern is so general, it has persisted over thousands of years.

6 Variation and Change

6.1 Synchronic Variation

The differentiated case marking on causees yields robust semantic contrasts (in line with other semantic case alternations in the language, cf. Butt and King 2002a,b).

The *-a-* vs. *-va* contrast, however, is not as robust.

(25) a. mãĩ=ne laṛke=ko masṭɑr-ji=se paṛʰ-**a**-ya
I=Erg boy.Obl=Acc teacher-Resp=Inst study-Caus-Perf.M.3.Sg
'I had the boy taught by the teacher.' (Urdu)

b. mãĩ=ne laṛke=ko masṭɑr-ji=se paṛʰ-**va**-ya
I=Erg boy.Obl=Acc teacher-Resp=Inst study-Caus-Perf.M.3.Sg
'I had the boy taught by the teacher.' (Urdu)

- As shown in Table (26), most verbs can take both causative morphemes.
- The forms marked with a '?' are either ones which have been reported in the literature, but which informants find questionable, or which have been reported as both good and bad within the same piece of writing, indicating variability in judgement.
- There are lexical gaps. The reason for these gaps is not clear.
  - Phonological? (can one find a systematic phonological characterization)
  - Speaker variation?
  - Accidental historical development?
- For instance, Old Indo-Aryan could standardly causativize 'come' and 'go', Modern Urdu/Hindi have no direct causative forms for these verbs. Why?

(26)

Intransitive	**Causative**		**Transitive**	**Causative**	
Stem form	*-a-*	*-va-*	**Stem form**	*-a-*	*-va-*
bɑn 'be made'	bɑn-a	bɑn-va	kɑṭ 'cut'	kɑṭ-a	kɑṭ-va
ʊṭʰ 'rise'	ʊṭʰ-a	ʊṭʰ-va	xarid 'buy'	—	xarid-va
beṭʰ 'sit'	bɪṭʰ-a	bɪṭʰ-va	kɑr 'do'	kɑr-a	kɑr-va
hɑṭ 'move away'	hɑṭ-a	hɑṭ-va	pɑkṛ 'catch'	pɑkṛ-a	pɑkṛ-va
har 'lose'	har-a	—	mil 'meet'	mil-a	mil-va
so 'sleep'	sul-a	sʊl-va	bec 'sell'	bɪk-a	bɪk-va
			(bɪk 'be sold')		
jɑl 'be aflame'	jɑl-a	jɑl-va	mar 'hit/kill'	mar-a	mar-va
			(mɑr 'die')		
hɑs 'laugh'	hɑs-a	hɑs-va (??)	le 'take'	—	li-va (??)
bʰig 'get wet'	bʰɪgo 'soak'		naha 'bathe'	nɑhl-a	nɑhl-va
ḍub 'go under'	ḍubo 'drown'		dʰo 'wash'	dʰul-a	dʰʊl-va
Verbs of Motion	**Causative**		**Ditransitive**	**Causative**	
Stem form	*-a-*	*-va-*	**Stem form**	*-a-*	*-va-*
ja/ga 'go'	—	—	de 'give'	dil-a	dil-va (??)
a 'come'	—	—			
cɑl 'walk/stir'	cɑl-a 'drive'				
bʰag 'run'	bʰag-a	bʰag-a			
caṛʰ 'climb'	caṛʰ-a	caṛʰ-va			
doṛ 'run'	doṛ-a	doṛ-va			
Verbs of Perception	**Causative**				
Stem form	*-a-*	*-va-*			
dekʰ	dɪkʰ-a	dɪkʰ-va (??)			
ḍɑr 'fear'	ḍɑr-a	—			
Sound Verbs	**Causative**				
Stem form	*-a-*	*-va-*			
sʊn 'hear'	sʊn-a	sʊn-va			
Ingestives	**Causative**				
Stem form	*-a-*	*-va-*			
kʰa 'eat'	kʰil-a	kʰil-va			
pi 'drink	pil-a	pil-va			
Special Ingestives	**Causative**				
Stem form	*-a-*	*-va-*			
cɑkʰ 'taste'	cɑkʰ-a (??)	cɑkʰ-va			
pɑṛʰ 'read'	pɑṛʰ-a	pɑṛʰ-va			
likʰ 'write'	likʰ-a	likʰ-va			
ga 'sing'	—	ga-va			

6.2 Deo 2002 — The Role of the Root

Deo (2002) notes that which causative form gets selected when also seems to depend on the original underlying root.

Hindi Verb Roots

- Hindi verbs are primarily monomorphemic (see (26)).
- Verbs which are not monomorphemic are generally the product of lexicalization:

(27) a.

Preverb	+	Verb	⟶	Verb
ud		val	⟶	ʊbɑl
up		turn		boil

b.

Noun	+	Verb	⟶	Verb
kaṛak		kṛ		kaṛɑk
thunder		do		thunder

Causativization of Lexicalized Roots

- Former Particle/Preverb Verbs are causativized via root "strenghthening".

(28)

Sanskrit	**Modern Base Verb**	**Causative**
ut chal	ucʰɑl 'bounce'	ucʰ**al**
ut tar	ʊtɑr 'descend'	ʊt**ar**
ud val	ʊbɑl 'boil'	ʊb**al**
vi ghaṭ	bɪgɑṛ 'spoil'	bɪg**aṛ**

(Adpated from Deo 2002)

- Former N+V complex predicates are causativized via "strenghthening" the former root 'do'. This has the synchronic effect of causative *-a-* affixation.

(29)

Sanskrit	**Prākrit**	**Modern Base Verb**	**Causative**
karda kṛ	kaṛakkai	kaṛɑk 'thunder'	kaṛɑk-**a**
jhal kṛ	jhallakai	jʰɑlɑk 'shine'	jʰɑlɑk-**a**
jhan kṛ	jhanakkai	jʰɑnɑk 'ring'	jʰɑnɑk-**a**
dhaṭ kṛ	dhaṛakkei	dʰɑṛɑk 'beat'	dʰɑṛɑk-**a**
daha kṛ	dahakkei	dɑhɑk 'burn'	dɑhɑk-**a**

(Adapted from Deo 2002)

Speculative Note: The evidence from N-V lexicalizations might help to make the ingestive class (see table (26)) less odd.

6.3 Historical Scenario

Recall that Masica posited the development of *-va-* from a double causative formation. Due to the available historical evidence, this position must be considered untenable.

Saksena (1982:101) predicts that

- *-a-* will eventually be reanalyzed/lexicalized as a transitivizing suffix
- *-va-* will be left as the only productive causative suffix

7 Alternative Analysis and Conclusion

7.1 Transitivization vs. Causation

- The "strengthening" of the root has entered the language as a transitivizing strategy.

mɑr 'die'	mar 'hit/kill'
bɪk 'be sold'	bec 'sell'
ʊbɑl 'be boil'	ʊbal 'boil'
ʊtɑr 'descend'	ʊtar 'get down'

- Transitivization differs from causativization:
  - **The semantics differ:**
    1. Simply adding an agent (causer) leaves one in the same core event predication.
    2. Adding an agent (causer) to an event that already specifies an agent leaves one with two event predications (a complex event=a complex predicate).
  - **Supporting evidence:** causative morphemes are always added to the non-transitivized root

7.2 Layers or Parameters of Causativization

There is only one "layer" of causativization (not two), as is typologically standard.

- The two synchronic causative morphemes *-a-* and *-va-* are continuations of a transparent allomorphy at an earlier stage of the language.
- The transparency has been lost, so that there are now two separate morphemes.
- Given that a distinction between indirect and direct causation is an old part of the language, a likely scenario is that the two morphemes are indeed being identified with direct vs. indirect causation, as proposed by Saksena (1980, 1982).
- However, this identification is not hard and fast, leading to speaker variability.

There is no need for an assumption of parametric variation across causation (cf. Alsina and Joshi 1991, Alsina 1996).

(30) a. phik-itsa 'cause' < ag pt 'cook'< ag pt >> (OBJECT CAUSEE)
cook-CAUS

b. phik-itsa 'cause' < ag pt 'cook'< ag pt >> (OBLIQUE CAUSEE)
cook-CAUS

One only needs to posit one form of argument structure merger (Butt 1998) if one takes into account separately established semantic factors such as object "affectedness" (e.g., Krifka 1992, de Hoop 1992, Ramchand 1997) and a notion of "control" (cf. Kaufmann 2001).

(31) 'cause' < ag th 'pred'< ag ... >>

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