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. mokan bon-a
   house.M.Sg.Nom be made-Perf.M.Sg
   ‘The house was built.’
   ‘Das Haus entstand.’

b. anjam-ne mokan bon-ya
   Anjum,F=Erg house.M.Sg.Nom be made-Caus-Perf.M.Sg
   ‘Anjum built a house.’

c. anjam-ne (maizdura=se) mokan bon-va-ya
   Anjum,F=Erg laborer.M.PI= Inst house.M.Sg.Nom be made-Caus-Perf.M.Sg
   ‘Anjum had a house built (by the laborers).’

M. Butt: The Morpheme That Wouldn’t Go Away

Another way of causitivizing/transitivizing “strengthening” the root (e.g., mar‘die//mar‘ hit’, kaf‘be cut’/kaf‘cut’, dik‘appear’/dik‘see’).

(2) a. saddaf miki
   Saddaf,F,Nom emerge-Perf.F.Sg
   ‘Saddaf came out.’

b. anjam-ne saddaf=ko nikal-a
   Anjum,F=Erg Saddaf,F=Acc emerge-Caus-Perf.M.Sg
   ‘Anjum extracted Saddaf.’

c. anjam-ne (adnan=se) saddaf=ko nikal-va-ya
   Anjum,F=Erg Adnan,M=Inst Saddaf,F=Acc emerge-Caus-Perf.M.Sg
   ‘Anjum had Saddaf extracted (by Adnan).’

Kochua [1980:54-55] under the assumption of a basic transformational approach posits three levels of causation—these each increase the valency of the predication by one.

(3) broken broken+Caus broken+Caus2
broken Z cause X [broken Z] 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 ‘strengthening’ ) and Caus2 to -va-.

- (4b) represents the first level of causation (simple causation), where the cause appears in the accusative.

- (4c) shows an example of the second causative, where an additional causer is introduced and the second causer appears in the instrumental.

(4) a. rita-ne ongar k’-a-e
   Rita=Erg grape,M.Nom eat-Perf.M.PI
   ‘Rita ate some grapes.’

b. rita-ne sima-ko ongar k’-i-a-e
   Rita=Erg Sima=Acc grape,M.Nom eat-Caus-Perf.M.PI
   ‘Rita fed Sima some grapes.’

c. kala-ne rita-se sima-ko ongar k’i-va-e
   Kala=Erg Rita=Inst Sima=Acc grape,M.Nom eat-Caus-Perf.M.PI
   ‘Kala made Rita feed Sima some grapes.’
Historical Evidence

- Masica (1993:318-320) concerns with this analysis.
- He points the historical development of a Second Causative via a doubling of two causatives.
- The function of this Second Causative -a is seen as enabling "the formation of (functional) indirect causatives from secondary transitives made with the First Causative (Hindi of/ with 'lift/lifted by someone')."

Questions:

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

5. a. mokan *bun-a
   house.M.Sg.Nom be made-Perf.M.Sg
   'The house was built.'
   'Das Haus ist gebaut.'
   b. anjanu=me mokan *bun-a-ya
   Anjum.P=Erg house.M.Sg.Nom be made-Caus-Perf.M.Sg
   'Anjum built a house.'
   c. anjanu=me (mokan=su) mokan *bun-ya-ya
   'Anjum had a house built (by laborers).'

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

6. bōn 'be made' → bōn-a 'make' → bōn-a-ya 'cause to make'
   nākul 'emerge' → nākul 'extract' → nākul-a-ya '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 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 Prākṛtas, Apabhṛṃśa—Avadhi
   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 transitivity Marking morpheme (e.g., Jamison 1992; Hock 1981) because it mainly seems to causativize intransitives.

6. Vedic

<table>
<thead>
<tr>
<th>Transitive</th>
<th>Causative</th>
</tr>
</thead>
<tbody>
<tr>
<td>dabhauti 'he damages somebody'</td>
<td>dabhauti 'he damages somebody'</td>
</tr>
<tr>
<td>māṛī 'he cleans somebody'</td>
<td>māṛī 'he cleans somebody'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transitive</th>
<th>Causative</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Thieme 1927:19]</td>
<td>[Thieme 1927:19]</td>
</tr>
</tbody>
</table>

6. a. indraḥ * ... ājan at ... sūryam
   Indra.Nom begot sun.Acc
   'Indra begot the sun.' (Ṛgveda III.31.15, from Jamison 1976)

6. b. indraḥ * ... ājan at ... sūryam
   Indra.Nom begot 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: Panini’s Ashtadhyayi (ca. 6th century BCE).

- Panini analyzes the underlying causative morpheme as an /i/.
  
  Rule 3.1.2b: hetumat-ica
  
  - '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 "strengthened" (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 Panini), the -i → -y.

- In addition roots ending in -a plus a class of listed verbs required a -p, which sometimes turned into a -v. (Prakrit).

- The combined effect of these processes were two basic surface morphemes for the causative: -aya and -apya.

- 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. kasyati → Pāḍikā kāṣe ‘male laugh’)

- -apa → -ve (Skt. nāvapayati → Pāḍikā nāvāvade).

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 the modern Indo-Aryan languages retained both:

- Bengali has -ā (Chatterji 1926:779 claims this comes from MIA -āvē/-āva).

- Marathi lost the -aya entirely and now uses a causative in -e, derived from the MIA -e 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 Semantic

- Causativization patterns come in differing flavors: case marking and interpretation differ according to the lexical semantics of the verb that is being causativized.

- These patterns appear to have been carried down the millennia.

4.1 Sanskrit

Panini 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, Intransitives: 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. yajñadātto devadattam grāman gamayati
    ‘Yajñadatta makes Devadatta go to the village.’

b. yajñadātto devadattam dharmam bodhaṇayati
    ‘Yajñadatta makes Devadatta understand the law.’

- The verbs kr ‘take’ and kr ‘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.

    ‘Yajñadatta makes Devadatta make a mat.’

b. yajñadātto devadattena kātum kārpayati
    ‘Yajñadatta 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.

- Jänsch (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) exam...ganaya antam
      
      Pron.3.Sg.Acc go.Caus end.Acc
      ‘Make him go to the end.’
      (Aṣṭāva Veda XI.3.34, from Jänsch 1976)

  - Verbs of Perception (see, hear)
    
    (13) sam ikasyaya graha naabhāmsi
      
      perceive.Caus sing.sers.Acc clouds.Acc
      ‘Make the singers perceive the clouds.’
      (Aṣṭāva Veda IV.15.3, from Jänsch 1976)

  - Ingestives (drink)
    
    (14) yañjatra...paya...madhāni
      
      awesome ones.Acc drink.Caus sweet drinks.Acc
      ‘Make the awesome ones drink the sweet drinks.’
      (Ṛgveda III.57.5, from Jänsch 1976)

  - Verbs of Enjoyment (enjoy)

The same classes of verbs allowed causative causatives 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. onjum=ne paoda katu
  
  Anjum.F= Erg plant.M Nom cut-Perf.M.Sg
  ‘Anjum cut a/the plant.’

b. onjum=ne sodaf=se*ko paoda katu ya
  
  ‘Anjum had Saddaf cut a/the plant.’

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 (Bhatt 1993)
  - non-specific objects are nominative, non-accusative causes are instrumental
• Most verbs appear with either -a or -va, but no stepwise increase in valency.

(19) a. māśe lāpkeko par-a-yā
1=Eng boy Obl=Acc study-Caus Perf.M.3.Sg
'I taught the boy.'
(Saksena 1982:57)

b. māśe lāpkeko par-vā-yā
1=Eng 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.

<table>
<thead>
<tr>
<th>Affectedness</th>
<th>Causation</th>
</tr>
</thead>
<tbody>
<tr>
<td>+affected cause</td>
<td>+involved causer —involved causer</td>
</tr>
<tr>
<td>Acc with -a</td>
<td>Acc with -va</td>
</tr>
<tr>
<td>Inst with -a</td>
<td>Inst with -va</td>
</tr>
</tbody>
</table>
(based on Saksena 1982:286)

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. pihā somaṃ
drink:Imp somaṃ Acc
'Drink soma.'
(Rgveda VIII.36.1, from Jamison 1976)

b. pihā somaṃsya
drink:Imp somaṃ Gen
'Drink of soma.'
(Rgveda VIII.37.1, from Jamison 1976)

5.1.2 Direct vs. Indirect Causation

• Hock (1981): instrumental-accusative cause alternations could already be found in Vedic (but rarely) for those verbs that allowed an accusative cause (cf. Thieme 1979:20-22).

• Hock (1981:24-25) further points towards Speijer (1886:549) for classical Sanskrit:

If one wants to say he causes me to do something, it is by his impulsion I act, there is room for the type [accusative cause], but if he meant he gets something done by me, I am only the agent or instrument through which he acts, the instrumental is on its place. [Speijer (1886:549)]

(22) a. mantrapātām cāraṃ rājāṃ prasāya
consecrated Acc porridge. Acc queen.Sg Acc eat.Caus Impf.3.Sg
muniḥ sa tamaḥ
best-of-ascetic Nom
the best of ascetics made the queen eat a consecrated porridge.
(Sanskrit (Kathāsārītīgar 9.10)

b. tām śvabhīṃ khṛdayaḥ rājā
'Her the king should order to be devoured by dogs.'
(Mahābhārata 8.371)

5.1.3 Crosslinguistic Comparison

Compare the Indo-Aryan pattern of causative alternations with data from Romance (Pem and Bantu (Chichewa), cf. Alana 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. Nangu i-na-phik-itsa kadhzi maingu
porcupine SUBJ-PAST-cook-CASU owl pumpkins
The porcupine made the owl cook the pumpkins.
(Chichewa

b. Nangu i-na-phik-itsa maingu kwā kadhzi maingu
porcupine SUBJ-PAST-cook-CASU pumpkins by owl
The porcupine had the pumpkins cooked by the owl.
(Chichewa

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 causatives 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. mā́n ne lā́q ni ko mā́ṣṭor-ji se par-a-ya
   ‘I had the boy taught by the teacher.’ (Urdu)

b. mā́n ne lā́q ko mā́ṣṭor-ji se par-a-ya
   ‘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 straightforwardly causativize ‘come’ and ‘go’, Modern Urdu/Hindi have no direct causative forms for these verbs. Why?

<table>
<thead>
<tr>
<th>Intransitive Causative Stem form</th>
<th>-a</th>
<th>-va</th>
</tr>
</thead>
<tbody>
<tr>
<td>bā́n ‘be made’</td>
<td>bā́-a</td>
<td>bā́-va</td>
</tr>
<tr>
<td>uft ‘tée’</td>
<td>uft-a</td>
<td>uft-va</td>
</tr>
<tr>
<td>beft ‘hit’</td>
<td>beft-a</td>
<td>beft-va</td>
</tr>
<tr>
<td>haft ‘move away’</td>
<td>haft-a</td>
<td>haft-va</td>
</tr>
<tr>
<td>har ‘lose’</td>
<td>har-a</td>
<td>—</td>
</tr>
<tr>
<td>so ‘sleep’</td>
<td>sul-a</td>
<td>sul-va</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transitive Causative Stem form</th>
<th>-a</th>
</tr>
</thead>
<tbody>
<tr>
<td>kā́t ‘cut’</td>
<td>kōt-a</td>
</tr>
<tr>
<td>xarid ‘buy’</td>
<td>—</td>
</tr>
<tr>
<td>kor ‘do’</td>
<td>kor-a</td>
</tr>
<tr>
<td>pokr ‘catch’</td>
<td>pokr-a</td>
</tr>
<tr>
<td>mil ‘meet’</td>
<td>mil-a</td>
</tr>
<tr>
<td>bec ‘sell’</td>
<td>bēc-a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verbs of Motion Causative Stem form</th>
<th>-a</th>
<th>-va</th>
</tr>
</thead>
<tbody>
<tr>
<td>ja/ga ‘go’</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>a ‘come’</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>cal ‘walk/stir’</td>
<td>cal-a ‘drive’</td>
<td></td>
</tr>
<tr>
<td>bagra ‘run’</td>
<td>bagra-a</td>
<td></td>
</tr>
<tr>
<td>car ‘climb’</td>
<td>car-a</td>
<td>car-va</td>
</tr>
<tr>
<td>dor ‘run’</td>
<td>dor-a</td>
<td>dor-va</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verbs of Perception Causative Stem form</th>
<th>-a</th>
<th>-va</th>
</tr>
</thead>
<tbody>
<tr>
<td>dek′ ‘bear’</td>
<td>dek′-a</td>
<td>dek′-va</td>
</tr>
<tr>
<td>dor ‘fear’</td>
<td>dor-a</td>
<td>—</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sound Verbs Causative Stem form</th>
<th>-a</th>
<th>-va</th>
</tr>
</thead>
<tbody>
<tr>
<td>sun ‘hear’</td>
<td>sun-a</td>
<td>sun-va</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingestives Causative Stem form</th>
<th>-a</th>
<th>-va</th>
</tr>
</thead>
<tbody>
<tr>
<td>kā́ ‘eat’</td>
<td>kā́-a</td>
<td>kā́-va</td>
</tr>
<tr>
<td>pi ‘drink’</td>
<td>pi-a</td>
<td>pi-va</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Ingestives Causative Stem form</th>
<th>-a</th>
<th>-va</th>
</tr>
</thead>
<tbody>
<tr>
<td>cok′ ‘taste’</td>
<td>cok′-a</td>
<td>cok′-va</td>
</tr>
<tr>
<td>por′ ‘read’</td>
<td>por′-a</td>
<td>por′-va</td>
</tr>
<tr>
<td>lik′ ‘write’</td>
<td>lik′-a</td>
<td>lik′-va</td>
</tr>
<tr>
<td>ga ‘sing’</td>
<td>ga-a</td>
<td>ga-va</td>
</tr>
</tbody>
</table>
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 monomorphic (see (26)).
- Verbs which are not monomorphic are generally the product of lexicalization:

\[
\begin{align*}
(27) & \quad \text{Preverb} + \text{Verb} \rightarrow \text{Verb} \\
& \quad \begin{array}{ccc}
\text{ud} & \text{val} & \rightarrow \text{ubal} \\
\text{up} & \text{turn} & \text{boil}
\end{array}
\end{align*}
\]

b. Noun + Verb \rightarrow Verb

\[
\begin{align*}
& \quad \text{karak} \rightarrow \text{kr} \rightarrow \text{karak} \\
& \quad \text{thunder} \rightarrow \text{do} \rightarrow \text{thunder}
\end{align*}
\]

Causativization of Lexicalized Roots

- Former Particle/Preverb Verbs are causativized via root ‘strengthening’.

\[
\begin{align*}
(28) & \quad \text{Sanskrit Modern Base Verb Causative} \\
& \quad \begin{array}{ccc}
\text{ut chal} & \text{uc\textsuperscript{2}al} & \text{wall} \\
\text{ut tar} & \text{utar} & \text{desd} \\
\text{ud val} & \text{ubal} & \text{boil} \\
\text{vi ghat} & \text{bagar} & \text{spool}
\end{array}
\end{align*}
\]

(Adapted from Deo 2002)

- Former N+V complex predicates are causativized via ‘strengthening’ the former root ‘do’. This has the synchronic effect of causative -\textnu-affixation.

\[
\begin{align*}
(29) & \quad \text{Sanskrit Pr\textacute{a}krit Modern Base Verb Causative} \\
& \quad \begin{array}{ccc}
\text{kada kr} & \text{karak} & \text{kotak ‘thunder’} \\
\text{jhal kr} & \text{jalak} & \text{Kalak ‘shine’} \\
\text{jhan kr} & \text{hanak} & \text{janak ‘ring’} \\
\text{dha\textacute{a} kr} & \text{dharak} & \text{doruk ‘beat’} \\
\text{dha kr} & \text{dahak} & \text{dhak ‘burn’}
\end{array}
\end{align*}
\]

(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 -\textnu from a double causative formation. Due to the available historical evidence, this position must be considered untenable.

Saksena (1982:101) predicts that

- -\textnu will eventually be reanalyzed/lexicalized as a transitivizing suffix
- -\textnu 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.
  - mor ‘die’  m\textnu ‘hit/kill’
  - brk ‘be sold’  b\textnu ‘sell’
  - ubal ‘be boil’  ubal ‘boil’
  - utar ‘descend’  utar ‘get down’

- Transitivization differs from causativization:
  - The semantics differ:
    1. Simply adding an agent (causer) leaves one in the same core event predications.
    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 -\textnu and -\textnu 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. Aksina and Joshi 1991, Aksina 1996).

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

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

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., Kriñka 1992, de Hoop 1992, Ramechand 1997) and a notion of "control" (cf. Kaufmann 2001).

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

References


