

The Morpheme That Wouldn't Go Away

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Linguistics Department Seminar Series
University of Manchester
March 11, 2003

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). Nominal 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. *mdkan* *bnn-a*
house.M.Sg.Nom be made-Perf.M.Sg
'The house was built.'
'Das Haus entstand.'
- b. *anjom=ne* *bnn-a-ya*
Anjum.F=Erg house.M.Sg.Nom be made-Caus-Perf.M.Sg
'Anjum built a house.'
'Anjum had a house built (by the laborers).'
- c. *anjom=ne* *(maazdurō=se)* *mdkan* *ban-va-ya*
Anjum.F=Erg laborer.M.Pl=Inst house.M.Sg.Nom be made-Caus-Perf.M.Sg
'Anjum had Rita feed Sima some grapes.'

Another way of causitivizing/transitivizing: “strengthening” the root (e.g., *mar* ‘die’/*mar* ‘hit’, *kat* ‘be cut’/*kat* ‘cut’, *dhk* ‘appear’/*dehk* ‘see’).

- (2) a. *saddaf* *mkl-i*
Saddaf.F.Nom emerge-Perf.F.Sg
'Saddaf came out.'

- b. *anjom=ne* *saddaf=ko* *nikal-a*
Anjum.F=Erg Saddaf.F=Inst Saddaf.F=Acc emerge-Caus-Perf.M.Sg
'Anjum extracted Saddaf.'

- c. *anjom=ne* *(adnan=se)* *sdddf=ko* *nikal-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 three 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 “strengthening”) 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 causee is introduced and the second causee appears in the instrumental.

- (4) a. *rita=ne* *ngur* *k^ha-e*
Rita=Erg grape.M.Nom eat-Perf.M.PI
'Rita ate some grapes.'
- b. *rita=ne* *sima=ko* *angur* *k^hl-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* *angur* *k^hl-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 (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 *oṭh-a* / *oṭh̥-va-* ‘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. mokan bun-a
house.M.Sg.Nom be made-Perf.M.Sg

‘The house was built,’
‘Das Haus entstand’

- b. anjum=ne bun-a
Anjum.F=Erg house.M.Sg.Nom be made-Caus-Perf.M.Sg

‘Anjum built a house.’
‘Anjum built a house.’

- c. anjum=ne mazduō=se indean
Anjum.F=Erg laborer.M.PI=Inst house.M.Sg.Nom be made-Caus-Perf.M.Sg

‘Anjum had a house built (by laborers).’
‘Anjum had a house built (by laborers).’

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

- (6) *ban* ‘be made’ → *ban-a* ‘make’ → *ban-va*/**ban-a-va* ‘cause to make’

- nkl* ‘emerge’ → *nkl-a* ‘extract’ → *nkl-va*/**nkl-a-va* ‘cause to extract’

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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 (Āśokan inscriptions, Pāli, different Prākrits, Apabhraṃśa—Avā-

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 morpheme (e.g., Jamison 1981) because it mainly seems to causativize transitives.

(7) Intransitive Causative

- vṛṣayati ‘he rains’ vṛṣayati ‘he makes him rain’
gacchati ‘he goes’ gamayati ‘he makes him go’
roditi ‘he cries’ rodhayati ‘he makes him cry’
[Thieme 1927:18]

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

(8) Transitive Causative

- dabhoti ‘he damages somebody’ dambhayati ‘he damages somebody’
māsti ‘he cleans somebody’ marjayati ‘he cleans somebody’
[Thieme 1927:19]

- 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 "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 Pāṇini), the -*i-* → *y-*.
- In addition roots ending in -*a* 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: -*ya-* and -*poya*.
- 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 hāsei 'make laugh')
- *paya* → *-ve* (Skt. nirvāpayati → Prākrit nivvāvedi).

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 -*ay/a-* 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 Semantic

- 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 millennia.

4.1 Sanskrit

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

- Default Pattern for Causativizations:
 - 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 *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.
 - (11) a. yajñadatto devadattam katam kārayati
Yajnadatta.Nom Devadatta.Acc mat.Acc do.Caus.Ind.Pres.3.Sg
'Yajnadatta makes Devadatta make a mat.'
 - b. yajñadatto devadattena katam 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 ikṣayasya gāyato* *nabhāmisi*
perceive.Caus singers.ACC clouds.ACC
‘Make the singers perceive the clouds.’

(Atharva Veda IV.15.3, from Jamison 1976)

– Ingestives (drink)

- (14) *yajatrāṇ* ... *pāyayā* ... *madhūni*
awesome ones ACC drink.Caus sweet drinks.ACC
‘Make the awesome ones drink the sweet drinks.’

(Rigveda III.57.5, from Jamison 1976)

– Verbs of Enjoyment (enjoy)

The same classes of verbs allowed accusative causes 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 OLA.

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

- (15) a. *anjum=ne* *paoda* *kat-a*
Anjum.F=Erg plant.M.Nom cut-Perf.M.Sg
‘Anjum cut a/the plant.’

- b. *anjom=ne* *soddaf=se/*ko* *paoda* *kat-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 sona as objects (heat) are special: they take an accusative causee.

- (16) a. *saddaf* *b^hag-i*
Saddaf.F.Nom run-Perf.F.Sg
‘Saddaf ran.’
- b. *anjum=ne* *soddaf=ko* *b^hag-a-ya*
Anjum.F=Erg Saddaf.F=Acc run-Caus-Perf.M.Sg
‘Anjum chased Saddaf away (made her run).’

- (17) a. *soddaf=ne* *k^ha-ana* *k^ha-ya*
Saddaf.F=Erg food.M.Nom eat-Perf.M.Sg
‘Saddaf ate food.’
- b. *anjum=ne* *soddaf=ko/*se* *k^han-a* *k^hl-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 causeses (e.g., taste, read, write, sing).
- (18) a. *soddaf=ne* *masala* *cdk^h-a*
Saddaf.F=Erg spice.M.Nom taste-Perf.M.Sg
‘Saddaf tasted the seasoning.’
- b. *anjum=ne* *soddaf=ko* *masala* *cdk^h-va-ya*
Anjum.F=Erg Saddaf.F=Acc spice.M.Nom taste-Caus-Perf.M.Sg
‘Anjum had Saddaf taste the seasoning.’
- c. *anjum=ne* *soddaf=se* *masala* *cdk^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 causes are instrumental

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

- (19) a. māī=ne larke=ko par^h-a-yā
I=Erg boy.Obl=Acc study-Caus-Perf.M.3.Sg
'I taught the boy.'
- b. māī=ne larke=ko par^h-va-yā
I=Erg boy.Obl=Acc study-Caus-Perf.M.3.Sg
'I had the boy study.'

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

		Causation	
Affectedness	+involved causer	-involved causer	
+affected causee	Acc with <i>-a</i>	Acc with <i>-va</i>	
-affected causee	Inst with <i>-a</i>	Inst with <i>-va</i>	(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 felicity) 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 soman
drink.Imp soma.Acc
'Drink soma.'
- b. pibā somasya
drink.Imp soma.Gen
'Drink (of) soma.'

- (Rgveda VIII.36.1, from Jamison 1976)
- (Rgveda VII.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 1975).
- Hock (1981:24–25) further points towards Speijer (1886:§19) for classical Sanskrit
- b. māī=ne larke=ko par^h-va-yā
I=Erg boy.Obl=Acc study-Caus-Perf.M.3.Sg
'I caused me to do something, it is by his impulse I act, something done by me, I am only the agent or instrument through which he acts,' the instrumental is on its place. [Speijer (1886:§19)]

- 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 something done by me, I am only the agent or instrument through which he acts,* the instrumental is on its place. [Speijer (1886:§19)]
- (22) a. mantrapitam carum rājñīm prāsayat
consecrated Acc porridge.Acc queen.Sg.Acc eat.Caus.Impf.3.Sg
munisattamah best-of ascetic.Nom
'the best of ascetics made the queen eat a consecrated porridge.'
(Kathaasaritsāgar 9.10)
- b. tām śvabhīḥ 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.'
(Mahābhārata 8.371)

5.1.3 Crosslinguistic Comparison

Compare the Indo-Aryan pattern of causative alternations with data from Romance (French) and Bantu (Chichewā), cf. Alsinia 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.'
- 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. Nūngu i-na-phík-ísa kadžidzi mañgu
porcupine SUBJ-PAST-cook-CAUS owl pumpkins
'The porcupine made the owl cook the pumpkins.'
- b. Nūngu i-na-phík-ísa mañgu kwá kádzidzi
porcupine SUBJ-PAST-cook-CAUS pumpkins by owl
'The porcupine had the pumpkins cooked by the owl.'
- (Chichewā)

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 causes 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. mā̄=ne laj̄ke=ko mastor̄-ji=se par̄¹-a-ya
 I=Erg boy.Obl=Acc teacher-Resp=Inst study-Caus-Perf.M.3.Sg
 'I had the boy taught by the teacher.'

- b. mā̄=ne laj̄ke=ko mastor̄-ji=se pāt̄-va-ya
 I=Erg boy.Obl=Acc teacher-Resp=Inst study-Caus-Perf.M.3.Sg
 'I had the boy taught by the teacher.'

• 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 Stem form	Causative -a-	Transitive Stem form	Causative -a-
Verbs of Motion				
Stem form	-a-	-va-	-a-	-va-
jā/gā 'go'	jā/gā	—	de 'give'	—
a 'come'	—	—	dil-a	dil-a
cdl 'walk/stir'	cdl-a	'drive'	—	—
b̄ag 'run'	b̄ag-a	b̄ag-a	—	—
cāt̄ 'climb'	cāt̄-a	cāt̄-va	—	—
dor̄ 'run'	dor̄-a	dor̄-va	—	—
Verbs of Perception				
Stem form	-a-	-va-	-a-	-va-
dek̄ ² 'see'	dek̄-a	dk̄-va (?)	—	—
dor̄ 'hear'	dor̄-a	—	—	—
Sound Verbs				
Stem form	-a-	-va-	-a-	-va-
sun 'hear'	sun-a	sun-va	—	—
Ingestives				
Stem form	-a-	-va-	-a-	-va-
k̄a 'eat'	k̄a	k̄il-a	k̄il-va	k̄il-va
pi 'drink'	pi	pil-a	pil-va	pil-va
Special Ingestives				
Stem form	-a-	-va-	-a-	-va-
cak̄ 'taste'	cak̄-a (?)	cak̄-va	—	—
paī ³ 'read'	paī-a	paī-va	—	—
lik̄ 'write'	lik̄-a	lik̄-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	\longrightarrow	Verb
	ud		val	\longrightarrow	ubal
	up		turn		boil

b.	karak		kr	\longrightarrow	kardk
	thunder		do		thunder

Causativization of Lexicalized Roots

- Former Participle/Preverb Verbs are *causativized* via root “strengthening”.

(28) Sanskrit Modern Base Verb Causative

ut chal	uc ^h al	'bounce'
ut tar	otar	'descend'
ud val	obal	'boil'
vi glat	bigar	'spoil'

(Adapted from Deo 2002)

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

(29)	Sanskrit	Prakrit	Modern Base Verb	Causative
karda kr	karakai	kardk	'thunder'	karak-a
jhal kr	jhallakai	j ^h aldak	'shine'	j ^h alak-a
jhankai	jhanakkai	j ^h anak	'ring'	j ^h anak-a
dhat kr	dharakkei	d ^h arok	'beat'	d ^h arok-a
daha kr	dahakei	dahak	'burn'	dahok-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 transitivity 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

mar 'die'	mar 'hit/kill'
bik 'be sold'	bec 'sell'
ubal 'be boil'	ubal 'boil'

• Transitivity 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 predictions (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 w/ 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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