

# Causation in Hindi-Urdu: Instruments and Subjects

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- The productive causativization paradigm of Hindi-Urdu involves direct and indirect causation
- These two types of causatives have been distinguished on the basis of their (in)ability to license an intermediate agent
- There are other differences between these two types of causatives especially in the domain of instruments
- Indirect causatives license additional instruments in *-se* phrases compared to direct causatives
- Indirect causatives impose restrictions on what can be a possible subject especially, again, with respect to instruments
- These restrictions can be straightforwardly derived in a bi-eventive analysis of indirect causation wherein structure building goes hand in hand with adding event arguments.

## 1 Introduction

- Hindi-Urdu has a productive morphological causativization paradigm
- This involves suffixation of causativizing morphemes to intransitive, transitive and ditransitive verbs (Kachru 2006, Kellogg 1876 inter alia).
- Two types of causatives are identified:
  - The **direct causative (DC)**<sup>1</sup> realized with the suffix *-aa* or vowel alternation<sup>2</sup>
  - the **indirect causative (IC)** realized with the suffix *-vaa*<sup>3</sup>

<sup>1</sup>I am restricting myself to the those transitives which participate in the transitive-inchoative alternation, corresponding to *burn* and *break* and will not be looking at underived/base transitives ('ingestives' of Masica 1976) corresponding to *eat*, *drink* and *study*.

<sup>2</sup>Vowel alternation in the root:

i. **baNT**,            **baaNT**,            **baNTvaa**  
'divide (intr.), divide (DC), cause      to divide (IC)'

<sup>3</sup>A small class of verbs allow indirect causatives to be realized with *-aa* or *-vaa* (ii):

– Thus, we have a three way alternation:

- (1) jal, jal-*aa*, jal-*vaa*  
 burn, cause to burn, cause to get burnt
- a. Intransitive  
 makaan **jal-aa**  
 House burn-PERF  
 ‘The house burned.’
- b. Direct causative  
 zamindaar-ne makaan **jal-aa-yaa**  
 Landlord-ERG house burn-DC-PERF  
 ‘The bandits burned the house.’
- c. Indirect causative  
 zamindaar-ne makaan **jal-vaa-yaa**  
 Landlord-*erg* house burn-IC-PERF  
 The landlord had the house burned.

- In addition to their ‘core’ arguments predicates permit a range of ‘optional’ arguments (*-se phrases*) bearing the instrumental case marker *-se*
- These *-se* phrases may introduce:
  - *Instruments* - The lowest valency verb which is a member of the 3 way alternation, the direct causative and the indirect causative all allow an instrument *-se* phrase
  - *Intermediate agent/ causee* - only the indirect causative allows an intermediate agent (Saksena 1982)
- Arguably, it is this distinction regarding the licensing of the intermediate agent that is almost definitional of indirect causatives

- (2) a. Direct causative  
 zamindaar-ne (**\*Dakait**-*se*) *mashaal-se* makaan jal-aa-yaa  
 Bandits-ERG thief-INST torch-INST house burn-DC-PERF  
 ‘The landlord burned the house with the torch.’  
 ‘NOT: The landlord had the house burned by the bandits with a torch.’
- b. Indirect causative  
 zamindaar-ne **Dakait**-*se* *mashaal-se* makaan jal-vaa-yaa  
 Landlord-ERG thief-INST torch-INST house burn-IC-PERF  
 ‘The landlord made the bandits burn the house with a torch.’  
 ‘The landlord had the house burned by the bandits with a torch.’

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ii. kaT, kaaT, kaTaa/ kaTvaa  
 ‘cut (intr.), cut (DC), cause to cut (IC)’

## 2 Asymmetry 1: Multiple Instruments

- Direct causatives do not permit multiple instrument -se phrases

(3) \*zamindaar-ne **dhamkiyoN**-se **mashaal**-se makaan jal-aa-yaa  
 landlord-ERG self threats-INST torch-INST house burn-DC-PERF  
 ‘The landlord burned the house with a torch with threats.’

- Since the intransitive form of the verb permits an instrument and the direct causative doesn’t permit any additional instruments, I am going to assume that the single instrument in the DC is one which is directly involved in bringing about the result state - *instrument of the result*.

(4) ye makaan **mashaal**-se hi jal-e-ga  
 this house torch-INST ONLY burn-SUBJ-FUT  
 ‘This house will be burned only with a torch.’

- In contrast, in addition to the *instrument (of the result)*, the indirect causative also permits an **instrument of causation**

(5) zamindaar-ne apni **dhamkiyon**-se Dakait-se **mashaal**-se makaan jal-vaa-yaa  
 Landlord-ERG SELF threats-INST bandit-inst torch-INST house burn-IC-PERF  
 ‘**Using his threats**, the landlord had the house burned by the bandits with a torch.’

- How can this be explained?
- This is explicable under *Role Exhaustion* (Williams 2015) or the *Thematic uniqueness principle* (Kratzer 2003):

(6) Role Exhaustion (Williams 2015)  
 When a dependent is assigned a relation to some (*group of*) *event(s)*, it identifies *all and only* the individuals in that relation to *that (those) event(s)*.

- The co-occurrence of two instruments in indirect causatives would be in clear violation of the Role Exhaustion principle unless we have two (groups of) events at play in indirect causatives which are independently modifiable.

→ **The availability of two instruments in indirect causatives, but not in the direct causatives, points towards two (groups) of events - the causing event and caused event.**

→ **Whatever eventuality the Direct Causative denotes forms a singular coherent whole in the relevant sense here.**

### 3 Asymmetry 2: Good and bad subjects

#### 3.1 Subjects of direct causativeness

- Direct causatives permit agents (7a) as well as inanimate causers (7b) to be their *subjects*<sup>4</sup>.

(7) Direct causative

a. Agent

john-ne taalaa khol-aa  
John-ERG lock open.DC-PERF

‘John unlocked the lock.’

b. Instrument causer

caabi-ne taalaa khol-aa  
key-ERG lock open.DC-PERF

‘The key unlocked the lock.’

- This is part of the larger observation regarding causers as subjects.
- It is well documented that in addition to *agents*, other *non-agentive causers* can be subjects as well (Parsons 1990)

(8) a. Agent

John sank the boat.

b. Instrument

The key unlocked this lock.

c. Eventive

The explosion sank the boat.

d. Force of Nature

The flood ravaged Srinagar.

- In addition to instruments and agents, direct causatives in Hindi-Urdu also permit eventive and force of nature causers in the subject position giving the full paradigm in (9) below:

(9) a. Agent

john-ne taalaa khol-aa  
John-ERG lock open.DC-PERF

‘John unlocked the door.’

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<sup>4</sup>I take the following characteristics to identify ‘subjects’ in the relevant sense:

- Participation in the nominative/ergative alternation
- Binding of subject oriented anaphoric possessives
- Anti-subject orientation effects for pronominal possessives

- b. Instrument  
caabi-ne taalaa khol-aa  
key-ERG lock open.DC-PERF  
'The key unlocked the lock.'
- c. Eventive  
vispot-ne naav-ko dub-aa diyaa  
explosion-ERG boat-dat sink.DC-PERF give.PERF  
'The explosion sank the boat.'
- d. Force of Nature  
baaRh-ne sab kuch bahaa diyaa  
flood-ERG all some flow.DC-PERF give.PERF  
'The flood caused everything to be swept away.'
- Restricting our attention to the alternation that *instruments* participate in, we see that participants bearing the instrument role are introduced in -se phrases OR subject positions, but not in both.
- (10) a. john-ne *cabi-se* taalaa khol-aa  
John-ERG key-INST lock open.DC-PERF  
'John unlocked the door with a key.'
- b. **cabi-ne** taalaa khol-aa  
key-ERG lock open.DC-PERF  
'The key unlocked the lock.'
- c. \***Instrument subject**+ *instrument -se phrase*  
**cabi-ne** *sui-se* taalaa khol-aa  
key-ERG hairpin-INST lock open.DC-AA  
'The key unlocked the door with a hairpin.'

### 3.2 Subjects of indirect causatives

- Ramchand (2010) notes that Indirect causatives do not have the same freedom as direct causatives with respect to their 'initiators'.
- (11) a. Instrument causer in Indirect Causative  
\*kettle-ne paani (jaldi-jaldi) **ubal-vaa-yaa**  
kettle-ERG water (quick-quick) boil-**IC**-PERF  
'The kettle boiled the water quickly.'
- b. Instrument causer in Direct causative  
kettle-ne paani (jaldi-jaldi) **ubaal-aa**  
kettle-ERG water (quick-quick) boil.**DC**-PERF  
'The kettle boiled the water quickly.'  
(based on Ramchand 2010)

- The contrast in (11) has been taken to suggest:
  - that inanimate and stative causers are systematically impossible as subjects of indirect causatives;
  - the subjects of direct causatives can be pure initiators, while those of indirect causatives cannot be.
- However, since eventive and force of nature causers continue to be acceptable subjects in indirect causatives we have a surprising separation between instruments and other causers!

(12) a. Eventive

paagalpan ke daure-ne ravi-se na jaane kya-kya kar-vaa-yaa  
 madness GEN bout-ERG ravi-INST not know what-what do-IC-PERF  
 ‘The bout of madness caused Ravi to do all sorts of things.’

b. Force of nature

tapti dhuup-ne kisaano-se jaldi-jaldi fasal kaT-vaa-yi  
 scorching sunlight-ERG farmers-INST quick-quick harvest cut-IC-PERF  
 ‘The scorching sunlight caused the farmers to harvest the crop quickly.’

- As (13) shows not all inanimate and non-eventive causers are ruled out as subjects of indirect causatives.

(13) a. ek gilaas paani-ne kar-vaa-ya talaag  
 One glass water-ERG do-IC-PERF divorce  
 ‘One glass of water caused there to be a divorce.’  
 (Peter Hook, p.c. via Rajesh Bhatt)

- Given (13), how can we explain the fact that instruments don’t seem to be possible in the subject position of the indirect causative?

(14) a. \*kettle-ne pani (jaldi-jaldi) ubal-vaa-yaa  
 kettle-ERG water quickly boil-IC-PERF  
 ‘The kettle boiled the water quickly.’ (based on Ramchand 2010)

b. \*caabii-ne taalaa khul-vaa-yaa  
 key-ERG lock open-IC-PERF  
 The key unlocked the lock.

**Claim:** The restrictions on possible subjects of indirect causatives are not based on differences between the subject slot in indirect and direct causatives.

Rather these fall out from the differential syntax-semantics of the two types of causatives.

- *An interpretive restriction:* the instrument subject of an indirect causative cannot be understood to be an *instrument* directly involved in the final result state - the boiling or the unlocking in (14).

- The only way to interpret the instrument in the subject position of an indirect causative is as a causer of the causing event.
- This causer can be understood to be affecting an overt intermediate agent (15a) or a covert one (15b).

(15) Reason causer

- a. (khoyi hui) **caabii**-ne (*karan*-se) taalaa khul-vaa-yaa  
 lost be.PERF key-ERG Karan-INST lock open-IC-PERF  
 The (lost) key caused Karan to unlock the lock.  
 NOT: The key was the means of the unlocking.
- b. **ek gilaa pani**-ne kar-vaa-ya talaag  
 One glass water-ERG do-IC-PERF divorce  
 One glass of water caused there to be a divorce.  
 NOT: The glass of water was the means of divorcing.

- Can *instruments of causation* be possible subjects?
- Yes!

- (16) a. zamindaar-ne apni **dhamkiyon**-se Dakait-se mashaal-se makaan jal-vaa-yaa  
 Landlord-ERG self threats-INST thief-INST torch-INST house burn-IC-PERF  
 ‘Using his threats, the landlord had the house burned by the bandits with a torch.’
- b. zamindar-ki **dhamkiyon**-ne Dakait-se mashaal-se makaan jal-vaa-yaa  
 Landlord-GEN threats-ERG thief-INST torch-INST house burn-IC-PERF  
 ‘The landlord’s threats caused the bandits to burn the house with a torch.’

→ **Instruments of the result can be subjects in direct causatives but not in indirect causatives.**

→ **Instruments of causation can be subjects of indirect causatives.**

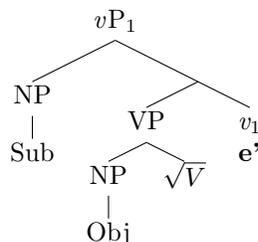
## 4 Accounting for the differences between Subjects of direct and indirect causatives

- There are several proposals on the table already with respect to the syntax of causatives of Hindi-Urdu (Bhatt and Embick 2003, Ramchand 2008)
- The common thread: Causativization is a structure building operation
- Bhatt and Embick (2003)
  - The DP agent of the transitive (direct causative) is licensed by an agentive *v*.
  - This argument is added to the structure via *Event Identification*<sup>5</sup> (Kratzer 1996).

<sup>5</sup>Event Identification makes it possible to chain together various conditions for the event described by a sentence  
 $f_{e,st} \circ g_{st} \rightarrow h_{e,st}$   
 $\lambda x_e \lambda e_s [ \text{Agent}(x)(e) ] \circ \lambda e_s [ \text{pred}(\text{Theme})(e) ] \rightarrow \lambda x_e \lambda e_s [ \text{Agent}(x)(e) \ \& \ \text{pred}(\text{Theme})(e) ]$

- This agentive  $v$  is morphologically realized by the suffix  $-aa$  or vowel alternation

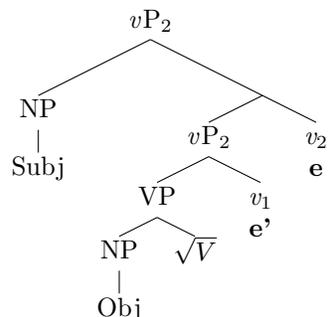
(17) Direct causative



- Indirect causatives

- The DP agent of the indirect causative is also licensed by an agentive  $v$ . This  $v$  embeds a passive complement, which is a  $vP$  that contains an agentive  $v$ , but no case feature and no DP in the specifier of this head.
- In the indirect causative each agentive  $v$  head introduces a new event, which cannot be identified with an event introduced by another agentive  $v$  head
- A causation relation holds between the two event arguments introduced by these two  $v$ 's
- $[[\text{CAUSE}]] = \lambda f_{st} \lambda e_s \exists e'_s [ \text{CAUS}(e, e') \ \& \ f(e') ]$
- $v_1$  - the lower agentive  $v$  - is morphologically realized by  $-v$  and the higher agentive  $v$  -  $v_2$  is realized by the suffix  $-aa$

(18) Indirect causative

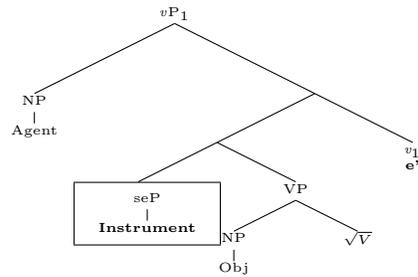


## 4.1 Bringing it together

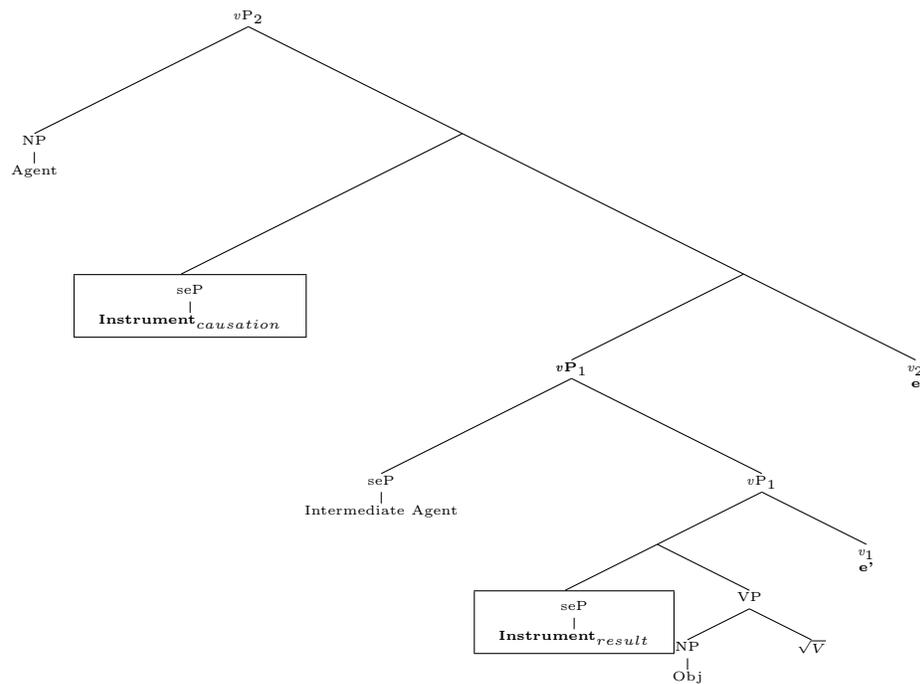
### Adding in $-se$ phrases

- Direct Causative: only one instrument can be introduced by a  $-se$  phrase
- Indirect Causative: an instrument of causation, an instrument of the result and an intermediate agent can be introduced by  $-se$  phrases

(19) a. Direct causative

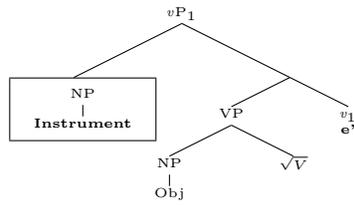
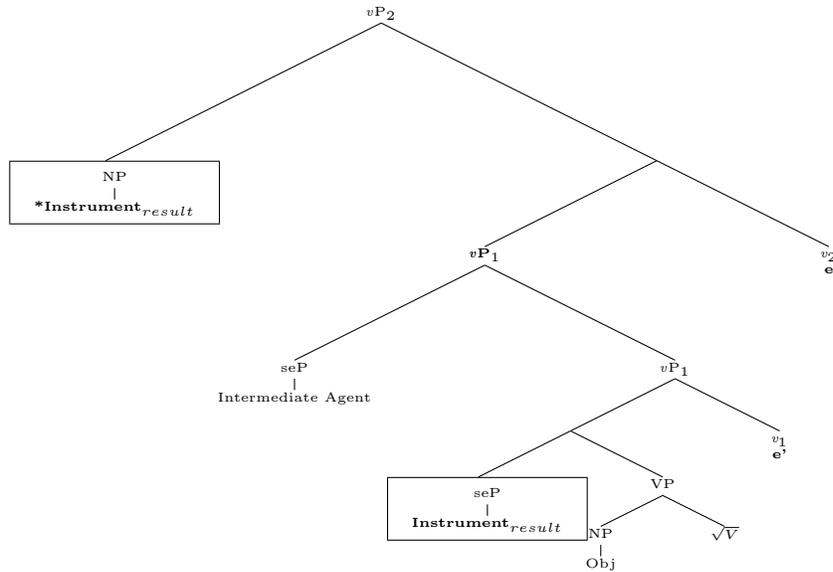
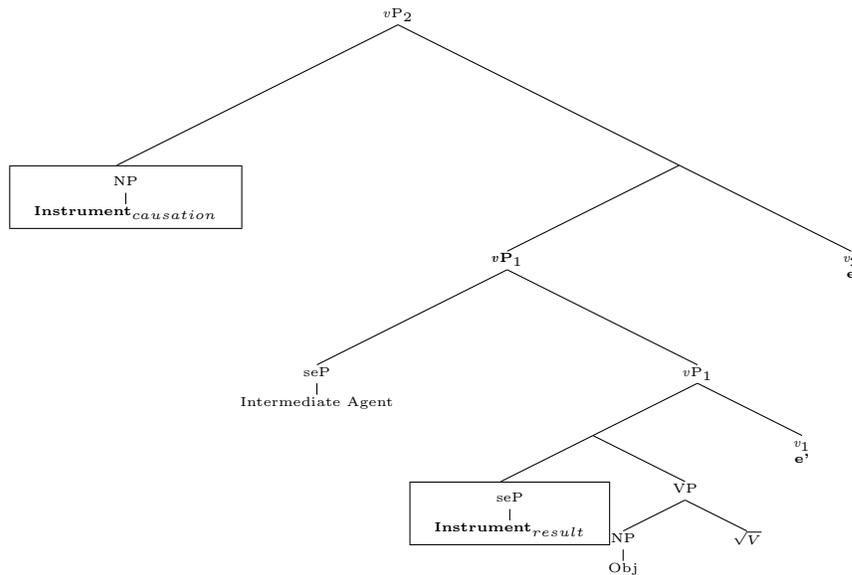


b. Indirect causative

**'Instruments' as subjects**

- Direct Causative: the instrument can be a subject
- Indirect Causatives: Only an instrument of causation can be a subject; an instrument of the result can't be a subject.

(20) a. Direct causative

b. Indirect causative - \*Instrument<sub>result</sub> as subjectc. Indirect causative - Instrument<sub>causation</sub> as subject

- **We have all the ingredients we need!**
  - Role exhaustion is relativized to events
  - More than one argument bearing the same role points towards the existence of more than one event
  - Since indirect causatives permit two agents: the (global) agent and the intermediate agent; and two instruments: the instrument of the result and the instrument of causation, there must be two events in play.
  - These two events are in a causation relation with one another  
[[CAUSE]] =  $\lambda f_{st} \lambda e_s \exists e'_s [ \text{CAUS}(e, e') \ \& \ f(e') ]$
  - For concreteness, assume that [cause] is a covert syntactic head
- The caused event of the indirect causative  $e'$  is existentially closed and is unavailable for further modification once the causation relation comes into play.
- All of the participant roles of that event - (intermediate) agent, instrument, affected object - are also existentially closed if they remain unsaturated, and cannot be modified further.
- Any individuals merged into the structure once the causation relation has been established will be evaluated only with respect to the causing event  $e$  and not  $e'$
- Thus, in (21) the only well-formed interpretation is one where *key* is understood to be modifying the causing event  $e$  i.e. as a causer of  $e$ , and interpreting the *key* to be modifying the caused event is illicit.

(21) caabi-ne taalaa khul-vaa-yaa  
key-erg lock open-IC-perf  
'The key caused the door to be unlocked.'  
NOT: The key unlocked the door.

(22) Denotations

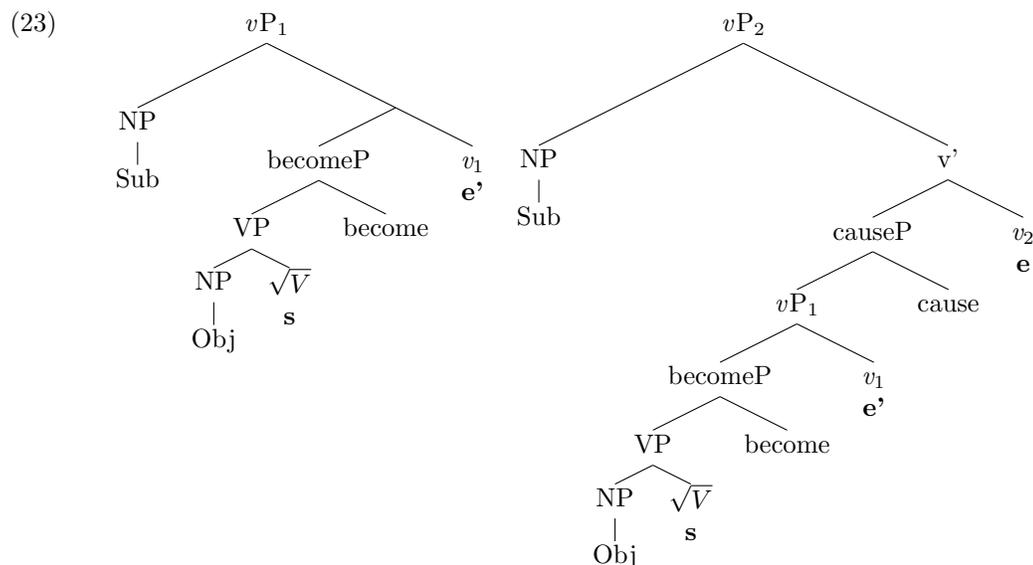
[[ $\sqrt{khul}$ ]] =  $\lambda x_e \lambda e_s \text{open}(x)(e)$   
[[*taalaa*]] =  $\text{lock}_e$   
[[*caabi - ne*]] =  $\text{key}_e$   
[[*-v*]] =  $\lambda x_e \lambda e_s \text{Agent}(x)(e)$   
[[*-aa*]] =  $\lambda x_e \lambda e_s \text{Agent}(x)(e)$   
[[CAUSE]] =  $\lambda f_{st} \lambda e_s \exists e'_s [ \text{CAUS}(e, e') \ \& \ f(e') ]$   
[[*taalaa khul*]] =  $\lambda e_s \text{open}(\text{lock})(e)$  (by *Functional Application*)  
[[*taalaa khul -v*]] =  $\lambda x_e \lambda e_s \text{Agent}(x)(e) \ \& \ \text{open}(\text{lock})(e)$  (by *Event Identification*)  
EC([[*taalaa khul -v*]]) =  $\lambda e_s \exists x_e \text{Agent}(x)(e) \ \& \ \text{open}(\text{lock})(e)$  (by *Existential closure*)  
[[*taalaa khul -v cause*]] =  $\lambda e_s \exists e'_s [ \text{CAUS}(e, e') \ \& \ \exists x_e [ \text{Agent}(x)(e') ] \ \& \ \text{open}(\text{lock})(e') ]$   
(by *Functional application*)  
[[*taalaa khul -v cause -aa*]] =  $\lambda x_e \lambda e_s \text{Agent}(x)(e) \ \& \ \exists e'_s [ \text{CAUS}(e, e') \ \& \ \exists x_s [ \text{Agent}(x)(e') ] \ \& \ \text{open}(\text{lock})(e') ]$   
(by *Event identification*)  
[[*caabi - ne taalaa khul -v cause -aa*]] =  $\lambda e_s \text{Agent}(\text{key})(e) \ \& \ \exists e'_s [ \text{CAUS}(e, e') \ \& \ \exists x_s [ \text{Agent}(x)(e') ] \ \& \ \text{open}(\text{lock})(e') ]$   
(by *Functional Application*)

→ A bi-eventive analysis can derive why subjects of indirect causatives can't be construed to be instruments of the result - the caused event is unavailable for modification.

→ The subject position of the indirect causative only allows direct causers of the causing event and not ones related to the existentially closed off caused event.

## 4.2 Verbs are complex beings

- Direct causatives, like English transitives *break* or *burn*, have been argued to express a causative meaning in the sense that the agent initiates an action which *leads to* the referent of the object nominal undergoing a change and thereby getting to a particular state i.e. become *broken* or *burnt*.
- This is not a property which is unique to transitives - Kratzer (2005) argues that inchoatives, causative transitives, and anticausatives are all causatives in this sense, and all these types of predicates only differ with respect to voice.
- This means that direct causatives have an internally complex event structure.



- This increase in the number of manipulable event arguments parallels an increase in spatio-temporal complexity - something which has been argued to be a guiding principle with respect to distinguishing indirectness from directness.
- Levin & Rappaport-Hovav (1999) [via Ramchand 2010]:  
 Indirect: A causative event structure consisting of two subevents formed from the conflation of temporally-independent events  
 Direct: A simple event structure formed from the conflation of two temporally dependent coincident events.

## 5 Conclusion

- This paper focused on two differences between *direct* and *indirect* causatives in Hindi-Urdu which revolved around the behaviours of instruments.
- In addition to the licensing of an intermediate agent, which is the traditional identifier of indirect causation in the language, the indirect causative also allows an additional instrument *-se* phrase compared to direct causation.
- The direct causative permits its subject slot to be occupied by an instrument causer, while the indirect causative imposes restrictions on its possible subjects.
- The indirect causative permits its subject slot to be occupied by an instrument of causation but not an instrument that would ordinarily be construed to be modifying the result state.
- This set of restrictions is not related to possible differences in the agentivity requirements imposed on subjects of direct or indirect causatives.
- The complexity of the indirect causation event, in particular its bi-eventiveness, ensures that only participants of the structurally most prominent event - the causing event - can be non-agentive subjects of indirect causatives.

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## Appendix

### I. Non-Optionality of Intermediate agents

- Interestingly, there is one additional possible point of divergence between the causers of indirect causatives: the intermediate agent is far less optional with eventive causers as subjects than in the case of ICs with agents or instruments as subjects.

(24) Eventive causer

paagalpan ke daure-ne \*(ravi-se) na jaane kya-kya kar-vaa-yaa  
madness GEN bout-ERG ravi-INST not know what-what do-IC-PERF

‘The bout of madness caused Ravi to do all sorts of things.’

### II. Ordering of -se phrases

(25) har aadmi<sub>i</sub>-ne [apni<sub>i</sub> dhamkiyoN]-se [apne<sub>i</sub> bete]<sub>j</sub>-se [apne<sub>i/j</sub>/ us<sub>j/\*i</sub>-ke caakuu]<sub>k</sub>-se  
every man-erg self threats-inst self son-inst self/ dem-gen knife-inst

[us<sub>k</sub>-ki tez dhaar ki badaulat] sabzi jaldi-jaldi kaT-vaa-yi  
 dem-gen sharp edge gen with vegetable quick-quick cut-IC-perf  
 ‘Using his<sub>i</sub> threats, every man<sub>i</sub> got [his<sub>i</sub> son]<sub>k</sub> to cut the vegetables with his<sub>j</sub>/<sub>\*i</sub> knife quickly thanks to its<sub>k</sub> sharp blade.’

### III. Stacking of intermediate agents

- Multiple intermediate agents

(26) raam-ne zamindar-se [uske beTe]-se makaan jal-vaa-yaa  
 Ram-erg landlord-inst his son-inst house burn-IC-perf  
 ‘Ram made the landlord make his son burn the house.’

- Embedding of multiple (passive) vP’s?

### IV. Intermediate agents are always strict intermediaries, while instruments are not

- Rissman (2013): Variability within ‘instruments’

(27) a. Booth shot Lincoln with a gun. (Intermediary)  
 b. John ate the ice cream with a spoon. (Facilitating)

- Verbs encode information about an ‘agent endpoint’: a point in the causal sequence of an event after which the agent can no longer affect the outcome of the event
- The intermediary reading arises when the instrumental sub-event occurs at the agent endpoint and the facilitating reading is argued to arise if the instrumental subevent occurs prior to the agent endpoint.

(28) a. zamindaar-ne Dakait-ko caaku-se maar-aa  
 landlord-erg bandit-dat knife-inst hit.DC-perf  
 ‘The landlord hit/killed the bandit with a knife.’  
 b. zamindaar-ne cammac-se khaanaa khaa-yaa  
 landlord-erg spoon-inst food eat-perf  
 The landlord ate food with a spoon.

- **The intermediary and facilitating readings seem to travel with the direct causative (derived transitive) and ingesto-reflexives (underived transitives) respectively**
- There is no variability of the kind seen for instruments within the class of intermediate agents: they cannot be ‘facilitatory’ participants

(29) mira-ne kabir-se ali-ka kaam kar-vaa-yaa  
 Mira-erg Kabir-inst Ali-gen work do-IC-perf  
 ‘Mira had Kabir do Ali’s work.’  
 NOT: Mira did Ali’s work with Kabir’s help.

## V. Does the intermediate agent do any work for us even when implicit?

- Unrealized roles may be definite or existential (Williams 2014)
  - (30) Existential
    - a. There's a cupcake on the table.
    - b. Lee didn't bake this morning.
    - c.  $\neq$  Lee didn't bake it this morning.
  - (31) Definite
    - a. Lee placed a bet on number 17.
    - b. He didn't win.
    - c. = He didn't win it.
- Implicit intermediate agents pattern with existential implicit arguments and not definite ones.
  - (32) a. Context
 

miiraa-ne ali-ko batura mukhya vakil naukri-par rakh-aa  
Mira-ERG Ali-DAT as chief lawyer job-LOC keep-PERF  
'Mira appointed Ali to the post of chief lawyer.'
  - b. Negation of Existential
 

miiraa-ne jaaydaad nahii baT-vaa-yii  
Mira-erg property neg divide-IC-perf  
'Mira didn't get the property divided up.'
  - c. Negation of particular individual
 

mira-ne ali-se jaaydaad nahii baT-vaa-yii  
Mira-erg Ali-inst property neg divide-IC-perf  
'Mira didn't get the property divided up by Ali.'
- Both intermediate agents and instruments are existential arguments, but intermediate agents can control into *-kar* adjunct clauses - Clauss (2014), while instruments can't.
  - (33) a. kabir<sub>i</sub>-ne mira<sub>j</sub>-se john<sub>k</sub>-ko [PRO<sub>i/j/\*k</sub> cilla-kar] jag-vaa-yaa  
Kabir-erg Mira-inst John-dat scream-do wake-IC-perf  
'Kabir<sub>i</sub> got John<sub>k</sub> woken up by Mira<sub>j</sub> through his/her<sub>i/j/\*k</sub> shouting.'
  - b. kabir<sub>i</sub>-ne kainchi<sub>j</sub>-se [PRO<sub>i/\*j</sub> fisal-kar] kapRa cir-vaa-ya  
Kabir-erg scissors-inst slip-do cloth tear-IC-perf  
'By slipping, Kabir tore the cloth on the scissors.'
- Implicit intermediate agents are able to control into *-kar* clauses as well
  - (34) kabir<sub>i</sub>-ne X<sub>j</sub> john<sub>k</sub>-ko [PRO<sub>i/j/\*k</sub> cilla-kar] jag-vaa-yaa  
Kabir-erg  $\exists X$  Mira-inst John-dat scream-do wake-IC-perf  
Kabir<sub>i</sub> got John<sub>k</sub> woken up by Mira<sub>j</sub>/X<sub>j</sub> through his/her<sub>i/j/\*k</sub> shouting.
  - (35) The ship was sunk to collect the insurance. (Roeper 1987)

## VI. Instruments are not moved up

- Instruments which surface as subjects are merged low in the structure (Spec of VP) and then raised to a subject position where they get assigned nominative/ergative case
- For indirect causatives, Instruments of the result (in Spec VP) are too deeply embedded in the structure to be moved to the subject position, and the badness of this movement accounts for the ungrammaticality:

(36) \* $[_{TP}$  kettle-ne [  $[_{v(caus)P}$   $[_{v(AG)P}$  [  $[_{t_{kettle}}$  [ pani  $\sqrt{V}$ ] ] v(AG) ]  $v_{caus}$  ]  $_T$   
 kettle-ERG water  
 ubal-vaa-yaa] ] ]  
 boil-IC-PERF  
 ‘The kettle boiled the water.’

(37) kis-ki<sub>i</sub>, john-ne soca (ki) [  $[_{t_i}$  kettle]<sub>j</sub> t<sub>j</sub> saaraa paani ubaal-e-gi]  
 who-gen, john-erg thought that key all water boil.DC-subj-fut  
 ‘Whose key was it that John thought would unlock every lock?’

## VII. Agents are not causers!

- The grammar distinguishes between agents and non-agentive causers

(38) Conjunction

\*john-ne aur caabi-ne taale khol-e  
 John-erg and key-erg locks open.DC-perf

‘John and the key unlocked the locks.’

(39) Passivization

a. john-dwaaraa darvaazaa kholaa gayaa thaa  
 wind-by door open.DC-perf go-perf

‘The door was opened by John.’

b. \*hawaa-dwaaraa darvaazaa kholaa gayaa thaa  
 wind-by door open.DC-perf go-perf be.past

\*Force of Nature: ‘The door was opened by the wind.’

- See Alexiadou, Anagnostopoulou & Schäfer (2006) and Schäfer (2012) for further discussion of restrictions on causers in German, Greek, English and Italian transitives.