

Causatives of unergatives in Hindi-Urdu*

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1 Introduction

It is a widely known generalization that in many languages, including English, direct causatives can be formed only from unaccusatives, as in (1), but not from unergatives, as in (2) (Schäfer 2009):¹

- (1) a. The door opens.
- b. Shama opens the door.

- (2) a. Rohan is laughing.
- b. *Shama is laughing Rohan.

Example (1) presents a standard causative-inchoative alternation: the unaccusative in (1a) can be causativized to form the transitive in (1b), with the newly introduced causer² being interpreted as bringing about the event described by the intransitive. On the other hand, the unergative in (2a) resists causativization: (2b) cannot be used to express that Shama is making Rohan laugh.

Given that direct causatives do not introduce a separate causing event, the ungrammaticality of (2b) is as expected. Example (2a) describes a laughing event which – since the verb is an unergative – must involve an agent, in this case *Rohan*. Causativizing this construction entails the addition of another agent argument, such as *Shama* in (2b). This results in an event description with two distinct agents, causing the derivation to crash semantically and/or syntactically.

This paper is concerned with apparent violations of the above generalization: some languages do, in fact, form direct causatives based on roots which commonly have an unergative use. In particular, I will present and discuss examples from Hindi-Urdu. Judging from preliminary investigations, the same facts can be observed in Turkish and Sason Arabic.

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¹Glossing conventions: AOR = aorist, DAT = dative, DOM = differential object marker, ERG = ergative, F = feminine, FUT = future, INST = instrumental, M = masculine, NOM = nominative, PASS = passive, PFV = perfective, PL = plural, PROG = progressive, PRS = present, SG = singular, SUBJ = subjunctive.

²I use the term ‘causer’ to refer to the agent of a causative. This is not to be confounded with inanimate causers (as opposed to animate agents), as in *The storm shattered the window*.

To begin with a brief overview over the relevant data, example (3) from Hindi-Urdu demonstrates a causative alternation involving an unergative:

- (3) a. Rohan **naach** rahaa hai.
 Rohan.M **dance** PROG.MSG be.PRS.3MSG
 ‘Rohan is dancing.’
- b. Shama Rohan-ko **nach-aa** rahii hai.
 Shama.F Rohan-DOM **dance-AA** PROG.F be.PRS.3MSG
 ‘Shama is making Rohan dance/twirling him around (the dance floor).’

(Bhatt and Embick 2017:124)

Other examples of this alternation include ‘jump’ – ‘make s.o. jump,’ ‘walk, wander’ – ‘cause to walk, walk s.o.,’ ‘laugh’ – ‘make s.o. laugh’ and ‘move’ – ‘remove’ (Bhatt and Embick 2017:121). Overall, the vast majority of unergatives in Hindi-Urdu causativizes.

Morphologically, these causatives of unergatives are formed with the suffix *-aa*, equally used to derive direct causatives of many unaccusatives, as in *jaag-aa-naa* (‘to wake someone up’), related to *jaag-naa* (‘to wake up,’ intransitive) (Bhatt and Embick 2017:112).³ Direct and indirect causatives in Hindi-Urdu are distinguished by their morphological marking: causatives ending on *-aa* receive a direct reading, meaning that the causer is interpreted as physically acting on the causee in an unmediated way,⁴ whereas causatives marked with the morpheme *-vaa* are interpreted as indirect, obligatorily involving an intermediate agent which can but does not have to be overt. Accordingly, an intermediate agent is only felicitous with indirect *-vaa* causatives, as demonstrated in (4):

- (4) a. Shama Mina-se Rohan-ko **nach-vaa**-egii.
 Shama Mina-INST Rohan-DOM **dance-VAA**-FUT.F
 ‘Shama lets Mina make Rohan dance.’
- b. *Shama Mina-se Rohan-ko **nach-aa**-egii.
 Shama Mina-INST Rohan-DOM **dance-AA**-FUT.F
 Intended: ‘Shama lets Mina make Rohan dance.’

More evidence for the fact that *-aa* causatives of unergatives are direct causatives comes from adverbial modification. In the direct causative in (5a), the modifier ‘in a strange way’ has a single reading and describes the way in which Shama is acting to make Rohan dance, indicating that the adverbial can only target a single event. This contrasts with the behavior of modifiers with *-vaa* causatives, which can either target the main clause event, as in (5b), or, with a different word order, the embedded event, as in (5c):

³Direct causatives of certain unaccusatives can also be formed by changing the vowel length of the root; since this causativization strategy is not relevant for our purposes, I will disregard it in the following.

⁴A curious exception to this rule is the fact that certain transitives can combine with the *-aa* morpheme to yield indirect causatives semantically identical to the corresponding *-vaa* causatives, demonstrated by their ability to surface with an intermediate agent (Bhatt and Embick 2017:139). While this is a morphological puzzle for which I do not have a solution, it does not affect the fact that, as seen in (4), *-aa* causatives of unergatives cannot have an indirect interpretation, categorically resisting intermediate agents.

- (5) a. Shama Rohan-ko **ajiiib tarah(-se) nach-aa** rahii hai.
 Shama Rohan-DOM **strange way-INST dance-AA** PROG.F be.PRS.3MSG
 ‘Shama is making Rohan dance in a strange way.’
- b. Shama-ne **ajiiib tarah(-se)** Mina-se Rohan-ko **nach-vaa-yaa**.
 Shama-ERG **strange way-INST** Mina-INST Rohan-DOM **dance-VAA-PFV**
 ‘Shama, in a strange way, lets Mina make Rohan dance.’
- c. Shama-ne Mina-se Rohan-ko **ajiiib tarah(-se) nach-vaa-yaa**.
 Shama-ERG Mina-INST Rohan-DOM **strange way-INST dance-VAA-PFV**
 ‘Shama lets Mina make Rohan dance in a strange way.’

In (5b), Shama is acting strangely, whereas in (5c), Mina is. I thus conclude from the contrast in (5) that *-aa* causatives of unergatives are direct and do not contain a separate causing event.

Finally, we can confirm that the verbs in question normally behave as unergatives, passing standard diagnostics. For instance, as exemplified in (6), they are unable to appear in reduced relatives, which do not tolerate external arguments; see also Bhatt and Embick 2017:121–123 for further evidence for the unergative status of these verbs):

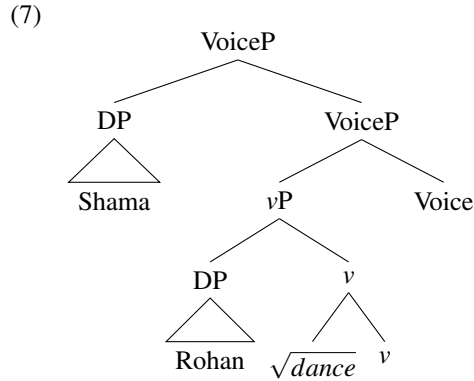
- (6) a. *hās-aa huua larḱaa
 laugh-PFV be-PFV boy
 *‘the laughed boy’
- b. khul-aa huua darwaazaa
 open-PFV be.PFV door
 ‘the opened door’

In sum, the data surveyed so far indicate that direct causatives of unergatives, unavailable in English, are in fact attested in Hindi-Urdu. My goal in this paper is thus to understand the syntax and semantics of these constructions and to account for the fact that they are licensed in Hindi-Urdu but not in English. After developing an analysis of direct causatives of unergatives in Section 2, I will then further motivate my proposal by putting it in the context of variable unaccusativity in Section 3. Section 4 discusses remaining questions and challenges, and Section 5 concludes.

2 The proposal: direct causatives of unergatives are transitives

The analysis I will defend in this paper is that causatives of unergatives such as (3b) are syntactically simple transitives, structurally identical to standard causatives such as *Shama opens the door*. Crucially, while in the intransitive unergative, the sole argument is merged as an external argument, in the causative variant, it is instead generated in the position of an internal argument. This frees up the slot in SpecVoiceP where the newly introduced causer can now be merged instead. Concretely, I thus assume the structure in (7):⁵

⁵I remain agnostic about the causative morpheme *-aa*, which might be the spell-out of *v* or of Voice.



This analysis is supported by a number of observations. First, the causee obligatorily receives a deagentivized interpretation, being depicted as not being in control of the event or even performing the activity against their will. For instance, in (3b), Rohan does not himself voluntarily initiate the dancing process but is passively being twirled around the dance floor. This is hardly compatible with the view that the causee is merged in SpecVoiceP, a position canonically associated with an intentional, volitional interpretation, but rather suggests that the causee is realized as a complement of the verb, thus receiving a patient-like interpretation.

Secondly, while plain unergatives cannot appear in reduced relatives, as already shown in (6), the causativized variants can, also indicating that the causee is realized as an internal argument:

- (8) a. ***daur**-aa laṛkaa
 run-PFV.MSG boy
 *‘the run boy’
- b. [Ravi-dwaaraa **daur**-aa-yaa gayaa] laṛkaa
 Ravi-by run-AA-PFV PASS.PFV boy
 ‘the boy run by Ravi’ (i.e., the boy chased by Ravi) (Bhatt and Embick 2017:124f.)

Third, direct causatives cannot be formed of transitive verbs.⁶ This is as expected: in transitives, the position of the internal argument is already filled and cannot be occupied by the causee. Moreover, direct causatives are not possible with unergatives which take a path argument as in (9), equally because the internal argument position where the causee would be realized is blocked:

- (9) a. Rohan tango **naach** rahaa hai.
 Rohan.M tango **dance** PROG.MSG be.PRS.3MSG
 ‘Rohan is dancing the tango.’
- b. *Shama Rohan-ko tango **nach**-aa rahii hai.
 Shama.F Rohan-ACC tango **dance-AA** PROG.F be.PRS.3MSG
 Intended: ‘Shama is making Rohan dance the tango.’

⁶An exception to this claim is the class of so-called ingesto-reflexives, which are transitive verbs that do permit direct causatives. While considerations of space do not permit a more detailed analysis here, there is strong evidence that the resulting causatives are realized as ditransitives (Bhatt and Embick 2017:126–131), such that the causee – which receives dative case – is merged in an argument position introduced by an applicative head and receives the θ -role of a goal or experiencer. As a result, the causee does not compete with the direct object for the internal argument position. Causatives of ingesto-reflexives are thus fully compatible with the approach proposed here.

To conclude, there is solid evidence that direct causatives of unergatives are ordinary transitives, with the causee being merged as an internal argument. Besides being empirically adequate, this analysis has the benefit of being simple and economical. However, it also raises obvious questions: unergative verbs should by definition be unable to take a patient-type internal argument, and it is unclear how an event participant could be the patient of a dancing, jumping or laughing event. In the following section, I will make the case that these problems vanish once we consider causatives of unergatives as part of the broader phenomenon of variable unaccusativity.

3 The bigger picture: variable unaccusativity

I argue that we can make sense of direct causatives of unergatives by assuming that in Hindi-Urdu, unergatives are coerced into an unaccusative behavior in causative contexts. I will first introduce the phenomenon of variable unaccusativity in general and then return to the Hindi-Urdu data to show that they fit neatly into the picture.

It is cross-linguistically common for verbs to vary between an unergative and an unaccusative use, which is often associated with certain changes to the interpretation of the argument or the verb phrase as a whole (Levin and Rappaport Hovav 1995). In particular, Sorace (2011) has shown that the two decisive factors governing variable unaccusativity are telicity and agentivity: on the one hand, a verb phrase receiving a telic interpretation is more likely to have an unaccusative structure; on the other, the more agentive an argument is, the more likely it is to be realized in the external argument position, thus leading to an unergative structure. It is the latter case that will be relevant for our analysis of direct causatives of unergatives.

An example of the effect of agentivity on variable unaccusativity is given in (10). In the ergative language Tsova-Tush, some verbs that take a single argument are able to mark their argument either with ergative or with absolutive case depending on the degree of intentionality ascribed to the event participant:

- (10) a. (as) vuiž-n-as.
 1SG.ERG fell.AOR-1SG.ERG
 ‘I fell down, on purpose.’
- b. so vož-en-sO.
 1SG.NOM fell.AOR-1SG.NOM
 ‘I fell down, by accident.’
- (Holisky 1987:105)

In (10a), the sole argument bears ergative case, indicating that it is merged as an external argument. As a result, it receives an agentive, volitional interpretation of someone having performed the action of falling intentionally. In (10b), by contrast, the argument is marked with nominative case and thus has the status of an internal argument which is interpreted as a patient: someone who has undergone a falling against their will.

Hence, reduced or enhanced agentivity has been shown independently to allow verbs to vary between an unergative and an unaccusative use. I argue that the very same phenomenon can be observed in direct causatives of unergatives: in the causative variant, the causee receives a deagentivized interpretation and is thus realized as an internal instead of as an external argument. The resulting unaccusative structure can then regularly undergo the causative alternation. Thus, the view that verbs such as ‘dance’ can combine with a patient-type argument is only counterintuitive as long as we maintain a strict division between unergative and unaccusative verbs, known to be untenable.

Regarding direct causatives of unergatives as an instance of variable unaccusativity also allows us to understand the curious misalignment between the interpretation of the base unergative and the causativized variant: taking the verb ‘dance’ as an example, in the intransitive, it is the event participant denoted by the *external* argument who is interpreted as the dancer, but in the causative, it is the participant corresponding to the *internal* argument. However, as (10) demonstrates, there is nothing surprising about the fact that an event participant can be interpreted as performing the same action regardless of whether the relevant argument is merged in the external or the internal position. What matters is whether the action is performed in a more agent- or more patient-like way. Hence, while the base unergative of a verb like ‘dance’ denotes an event with a single agentive participant, namely the dancer, the causative denotes an event with two participants such that the dancer now has more patient-like properties compared to the volitional instigator of the dancing.

In sum, I propose that Hindi-Urdu unergatives can causativize by virtue of taking on an unaccusative use in causative contexts, such that the causee is deagentivized and receives a patient θ -role instead. This approach presupposes a view on argument structure, backed by independent evidence, according to which verbs are not intrinsically unergative or unaccusative, either allowing or not allowing certain kinds of arguments, but can vary between the two behaviors. However, my analysis of causatives of unergatives also raises further questions, which I discuss in the next section.

4 The remaining challenge: restricting variable unaccusativity

There are two ways in which the proposal outlined so far appears to overgenerate. First, the ability of Hindi-Urdu unergatives to be used as unaccusatives must be restricted to specific contexts such as causatives. Secondly, we must explain why other languages do not seem to license variable unaccusativity in causative environments. I will now discuss each of these challenges in turn.

Variable unaccusativity in Hindi-Urdu is limited to specific syntactic and semantic contexts. As demonstrated in Sections 1 and 2, unergatives lacking the causative morpheme *-aa* fail to pass unaccusativity diagnostics and show only standard unergative behavior, suggesting that outside of causatives, unergatives cannot be coerced into an unaccusative use. More precisely, however, causatives are not the only context licensing variable unaccusativity, as (11) demonstrates:

- (11) a. *ur-ii (hūu-ii) **ciryaa**
 fly-PERF.F.SG be-PERF.F.SG **bird.F.SG**
 Intended: 'the flown bird'
- b. ur-ii (hūu-ii) **patang**
 fly-PERF.F.SG be-PERF.F.SG **kite.F.SG**
 'the flown kite' (Ahmed 2010:8f.)

While the reduced relative in (11a) is, as expected, ungrammatical, (11b), containing an inanimate argument, is grammatical. This indicates that inanimate arguments, inviting a non-intentional, patient-like construal, prefer to be merged as internal arguments, thereby being able to shift the verb from an unergative to an unaccusative use. In sum, while it is in principle possible for Hindi-Urdu unergatives to behave as unaccusatives, this must be licensed by specific contextual triggers, such as causative contexts or inanimate arguments. The general question this raises is thus how the specific contexts which license variable behavior of verbs are encoded in the speakers' grammar.

Furthermore, these contexts also differ cross-linguistically. We have seen above that Tsova-Tush allows variable unaccusativity more freely than Hindi-Urdu. English, on the other hand, does not allow unergatives to behave as unaccusatives in causative contexts across the board, accounting for the ungrammaticality of **Shama is laughing Rohan*. However, one might argue that it does permit the very same variable behavior in a proper subset of contexts, as in the following examples:

- (12) a. Shama is dancing Rohan *(across the hall).
 b. The general marched the soldiers *(to the battlefield).

Directed motion verbs in English have long been argued to have both an unergative and an unaccusative use, with the latter being licensed only under certain circumstances (Levin and Rappaport Hovav 1995, Biggs 2019). While I cannot spell out the details of the relevant proposals here, what matters for our purposes is that Hindi-Urdu and English both allow normally unergative verbs to be used as unaccusatives (and presumably vice versa) but both restrict this variability to certain environments. Overall, while arguably all languages allow for variable unaccusativity, the conditions which license this fluidity differ cross-linguistically.

Hence, what a successful theory of argument structure needs to deliver is a way to encode in the knowledge of a speaker of a given language not only whether a verb is unergative or unaccusative but rather how felicitous each of the two usages is for each verb in which concrete contexts. Currently, we do not have a framework that lives up to this challenge. On the one hand, there is an emerging consensus in the literature that the unaccusativity/unergativity status of a verb cannot simply be listed in the lexicon, which would create rampant redundancy and also fails to account for the fact that, as exemplified above, the behavior of a verb is sensitive to its syntactic and semantic context. On the other hand, the neo-constructionist strategy of allowing all verbs to merge freely in the syntax and appealing to world knowledge to rule out ungrammatical structures cannot straightforwardly

deal with the fact that argument-structural restrictions are often language-specific: if a verb shows variable behavior in one language but not another, or simply behaves as an unaccusative in one language and as an unergative in another, then this is not reducible to a universal fact about the world or the basics of human cognition but is a fact about particular languages. How to model these facts within a grammatical theory is still an outstanding task.

To conclude, the analysis of causatives of unergatives outlined above leaves the question open how to restrict variable unaccusativity both within a single language and cross-linguistically. However, this puzzle is not specific to the present proposal but haunts research on argument structure in general. Solving it is, unfortunately, far beyond the scope of this paper.

5 Summary

This paper has argued that unergatives in Hindi-Urdu can form direct causatives by being coerced into an unaccusative use in causative contexts, with the causative variant thus having a simple transitive structure. This is supported by both semantic and syntactic diagnostics and fits well into the broader picture of variable unaccusativity cross-linguistically. In consequence, the generalization outlined at the beginning of this paper that only unaccusatives can form direct causatives remains valid: the reason why unergatives in Hindi-Urdu can causativize is precisely that in these environments, they behave as unaccusatives.

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