Against a low subject analysis of causatives of unergatives

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Abstract. Contrary to the long-standing assumption that the causative alternation is limited to unaccusative verbs, direct causatives of unergatives have recently been attested in a variety of languages (Massam 2009; Legate 2014; Nash 2017, 2021; Tollan 2018; Tollan & Oxford 2018; Kouneli 2021; Myler 2022; Krishnan & Sarma 2023). The question raised by these causatives is how the causee is realized syntactically and semantically. I argue that in Hindi-Urdu, Turkish and Sason Arabic, direct causatives of unergatives are regular transitives in which the causee is merged as an internal argument assigned a patient θ-role. I propose that such structures are built by coercing the normally unergative verb into an unaccusative use in causative environments, reflected in a deagentivized construal of the causee. I show that this analysis is preferable to a competing proposal according to which the subject of the intransitive unergative and the causee of the causativized variant are both merged in Spec$v$P.

Keywords. causatives; unergatives; variable unaccusativity; low subject; syntax-lexicon interface; Hindi-Urdu; Turkish; Arabic

1. Introduction. Contrary to long-standing claims that only unaccusatives are able to causativize (Schäfer 2009), much recent research has uncovered that direct causatives of unergatives are regularly attested in many languages, demonstrated for Hindi-Urdu (1), Turkish (2) and Sason Arabic (3) in the examples below:[1]

(1) 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-CAUS** PROG.F be.PRS.3MSG
‘Shama is making Rohan dance/twirling him around (the dance floor).’

(Bhatt & Embick 2017:124)

(2) a. Bebek **uyu**-du.
baby **sleep**-PAST
‘The baby slept.’

b. (Ben) bebe-i **uyu-t**-tu-m.
I baby-ACC **sleep-CAUS**-PAST-1SG
‘I put the baby to sleep.’

(3) a. kelb i-**fqez**.
dog 3M-**run**
‘The dog runs/is running.’

[1] Glossing conventions: ACC = accusative, ADJ = adjective, ADV = adverb, AOR = aorist, CAUS = causative, CAUS2 = indirect causative, DAT = dative, DOM = differential object marker, ERG = ergative, F = feminine, FUT = future, IMPERS = impersonal, INF = infinitive, INST = instrumental, INTR = intransitive, IPFV = imperfective, M = masculine, NEG = negation, NMLZR = nominalizer, NOM = nominative, PASS = passive, PAST = past, PFV = perfective, PL = plural, PROG = progressive, PRS = present, SG = singular, SUBJ = subjunctive.

b. kemal ku   i-**faqqez**   kelb.
   Kemal be.3M 3M-**run.CAUS** dog
   'Kemal is making the dog run.'   (Yakut 2012:14)

Besides Hindi-Urdu, Turkish and Sason Arabic, which are the focus of the present paper, direct causatives of unergatives have also been reported in Niuean (Massam 2009), Acehnese (Legate 2014), Georgian (Nash 2017, 2021), Samoan (Tollan 2018), Algonquian (Tollan & Oxford 2018), Kipsigis (Kouneli 2021), Quechua (Myler 2022) and Malayalam (Krishnan & Sarma 2023).

Direct causatives are commonly assumed to have a simple transitive structure with a sole external argument position. Against this background, the existence of direct causatives of unergatives is puzzling; concretely, it is unclear how the causee is realized syntactically and semantically. Given the unergative nature of the intransitive verb, the causee (in (1b), *Rohan*) is expected to be merged in the external argument position assigned an agentive θ-role, but this position is arguably already occupied by the causer (in (1b), *Shama*). In response to this predicament, the following idea – referred to in the following as the low subject approach – has been championed repeatedly in recent years: subjects of unergatives are base-generated not in SpecVoiceP, like subjects of transitives, but in a lower position, Spec$v$P (Massam 2009, Tollan 2018, Tollan & Oxford 2018, Kouneli 2021, Tollan & Massam 2022, Myler 2022, Krishnan & Sarma 2023). As a result, unergatives can straightforwardly be causativized by adding a causer in SpecVoiceP.

In this paper, I will present a counterproposal to this account, instead arguing that in Hindi-Urdu, Turkish and Sason Arabic, direct causatives of unergatives are regular transitives: the causer is realized in SpecVoiceP and the causee in the verbal complement position, thus in a different position from the subject of the intransitive unergative.[2] Semantically, I propose that the causer is assigned an agent and the causee a patient θ-role. I argue that what makes such structures possible is that the normally unergative verb is coerced into an unaccusative use in causative environments, whereby the causee is deagentivized and realized as an internal argument. Comparing my analysis to the low subject proposal, I show that the latter fails to account for several properties of causatives of unergatives in Hindi-Urdu, Turkish and Sason Arabic, which easily fall out from my analysis. I conclude that while I cannot assess the merits of the low subject approach in general, for at least some languages an alternative analysis of direct causatives of unergatives – which does not need to posit a novel argument position – is available and preferable.

For reasons of space, this paper is limited in several respects. First, I will only sketch briefly the phenomenon of variable unaccusativity. Second, I cannot address the cross-linguistic differences in the availability of direct causatives of unergatives, and I refer the reader to Neu (to appear) for a brief discussion. Third, I steer away from a discussion of causative morphology. Terminologically, it should be noted that 'causatives of unergatives' is in the following to be understood as a shorthand for 'direct causatives of unergatives.'

I will proceed as follows. In a first, preliminary step, in section 2 I confirm that Hindi-Urdu, Turkish and Sason Arabic indeed allow direct causatives of unergative verbs. In section 3, I propose and defend an analysis of causatives of unergatives, and in section 4, I compare it to the low subject proposal. Section 5 concludes.

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[2] This syntactic analysis of direct causatives of unergatives has been previously assumed, although not defended or discussed in detail, in Legate (2014). It is also the basis of currently ongoing work by Marantz (2022) who, however, adopts a different perspective on the semantic interpretation of causatives of unergatives than put forward here.

2. Preliminaries: Evidence for direct causatives of unergatives. To establish the existence of direct causatives of unergatives in Hindi-Urdu, Turkish and Sason Arabic, I will now first show that some causativizing verbs pass standard unergativity diagnostics and then provide evidence that the resulting causatives are direct causatives.

2.1. DIAGNOSTICS FOR UNERGATIVE VERBS. In this section, I will briefly present for each of the three languages several diagnostics according to which some causativizing verbs should be classified as unergatives. For Hindi-Urdu, Bhatt & Embick (2017) lay out three unergativity diagnostics. First, only unergatives can form impersonal passives (4):

(4) a. calo, dauṛ-aa jaa-ye
     come run-PFV PASS-SUBJ
     'Come, let it be run' (i.e., come, let us run)
   b. *calo, kaṭ-aa   jaa-ye
     come cut.INTR-PFV PASS-PFV   (Bhatt & Embick 2017:123)

Secondly, unaccusatives but not unergatives can appear in reduced relatives (5):

(5) a. *hãs-aa   huaa   laṛkaa
     laugh-PFV be-PFV boy
     'the laughed boy'
   b. khul-aa huaa   darwaazaa
     open-PFV be.PFV door
     'the opened door'   (Bhatt & Embick 2017:121)

Finally, in the so-called inabilitative construction used to express that the subject is unable to perform a certain action, unergatives can only appear with passive (6), unaccusatives only with active syntax (7):

(6) a. Nina-se   dauṛ-aa nahĩ: ga-yaa.
     Nina-INSTR run-PFV NEG PASS-PFV
     'Nina couldn't run.'
   b. *Nina-se   Mona dauṛ rahii   hai.
     Nina-INSTR Mona.F run   PROG.F be.PRS.SG

(7) a. *dhabbõ-se   miṭ-aa   nahĩ: ga-yaa.
     stains-INSTR wipeINTR-PFV NEG PASS-PFV
     Intended: 'The stains weren't able to bring themselves to erase themselves.'
   b. Nina-se   dhabbe nahĩ: miṭ-e.
     Nina-INSTR stains.M NEG wipeINTR-PFV.MPL
     'Nina wasn't able to wipe away the stains.'   (Bhatt & Embick 2017:122)

The vast majority of Hindi-Urdu verbs which pass these unergativity diagnostics causativizes.[3]

As for Turkish, I will draw on the following three diagnostics. First, only unaccusatives can combine with the adjectival participle ending *-ık* (see Acartürk & Zeyrek 2010), as in (8):

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[3] Note that some normally unergative verbs in Hindi-Urdu show unaccusative behavior when combining with an inanimate argument (Ahmed 2010). From the perspective of variable unaccusativity as presented in section 3.2, this is as expected: inanimate arguments possess reduced agentivity and thus lead to an unaccusative behavior of the verb. In the following, I will steer away from examples containing inanimate arguments to avoid potential confounds.

(8) a. kır-**ık** bardak   b. *uyu-**k** bebek
     break-**ADJ** glass   sleep-**ADJ** baby
     'broken glass'   Intended: 'slept baby'

Second, only unergatives can form agentive nominals with the suffix *-ucu* (see Acartürk & Zeyrek 2010), as in (9):

(9) a. koş-**ucu**   c. *düş-**ücü**
     run-**NMLZR**   fall-**NMLZR**
     'runner'   Intended: 'faller'
    b. uyu-**yucu**
     sleep-**NMLZR**
     'sleeper'

Third, while both unergatives and unaccusatives can form impersonal passives, those based on unaccusatives can only receive a habitual but not an episodic interpretation (10b), whereas those based on unergatives show no such restriction (10a) (see Akkuş 2021; Legate et al. 2020):

(10) a. Dün   burada uyu-**n**-du.
     yesterday here   sleep-**IMPERS**-PAST
     'People/one slept here yesterday.'
    b. *Dün   burada ölü-**n**-dü.
     yesterday here   die-**IMPERS**-PAST
     Intended: 'People/one died here yesterday.'

Several Turkish verbs which qualify as unergatives based on these diagnostics causativize, such as 'sleep,' 'sit,' 'walk' and 'fly.'

     Finally, the following three unergativity diagnostics can be used for Sason Arabic. First, only unaccusatives license resultative predicates (11) (note that a depictive reading is available in (11b):

(11) a. sabi sar/var   **raxu**.   b. #sabi faqaz **raxu**.
     boy became/fell **sick**   boy ran   **sick**
     'The boy became/fell sick.'   Intended: 'The boy ran himself
                               sick.'

Moreover, only unergatives can form impersonal passives (12a). While unaccusatives can surface with the same affix (12b), the resulting construction does not license a *by*-phrase and is restricted to human referents, indicating that it is not a true passive:

(12) a. **in**-nam   nihane (mı zɣar).
     PASS.IPFV-sleep.IPFV.3M here   (by children)
     'It is slept here (by the children).'
    b. **in**-vır   nihane (*mı zɣar).
     IMPERS-fall here   (by children)
     'People fall here/one falls here.'

Finally, true cognate objects and path arguments which are merged in the verbal complement position can only surface with unergatives (Kuno & Takami 2004). While some unaccusatives

appear to equally license path arguments and cognate objects, those have been shown to syntactically have adjunct status (Nakajima 2006). Accordingly, cognate objects of unergatives are able to causativize (13) while those of unaccusatives are not (14):

(13) a. zake-ma kotti zak.
     laugh-a bad laughed.3M
     'He laughed a bad laugh.'
   b. zake-ma kotti ın-zak   (mı zɣar).
     laugh-a bad PASS.PFV-laugh.PFV by children
     'A bad laugh was laughed by the children.'

(14) a. badıncanad pat-ma   gıze kotti patto.
     tomatoes   rottening-a such bad rottened.3PL
     'The tomatoes rottened such a bad rottening.'
   b. *pat-ma   gıze kotti ın-pat   (mı badıncanad).
     rottening-a such bad PASS.PFV-rot.PFV by tomatoes
     Intended: 'Such a bad rottening was rottened by the tomatoes.'

As before, several verbs in Sason Arabic pass these unergativity diagnostics while also being able to form direct causatives, such as 'sleep,' 'jump' and 'run.' To summarize, all three languages have verbs that undergo the causative alternation but also pass unergativity diagnostics.

2.2. DIAGNOSTICS FOR DIRECT CAUSATIVES. The goal of this section is to demonstrate that unergatives can form direct, as opposed to indirect causatives. While indirect causatives are assumed to be built via recursion at the level of the vP and thus to involve a separate causing event encoded by the higher v, direct causatives are monoclausal transitives with a single verbal domain[4] and no separate causing event. Accordingly, indirect causatives can straightforwardly include two external argument positions, one for the causing and one for the caused event, whereas direct causatives are expected to make only one available. Confirming that the causatives of unergatives in question are direct is thus crucial; otherwise, no puzzle would arise.

   In the following, I will mainly draw on adverbial modification as a diagnostic. It has been observed that adverbs like 'grumpily' in (15) are obligatorily subject-oriented. Thus, they are only able to target the causee if the latter is the embedded subject of an indirect causative:

(15) a. John$_1$ awoke Bill$_1$ grumpily$_{1/*2}$.
   b. John$_1$ made Bill$_2$ awake grumpily$_{1/2}$.   (Martin & Schäfer 2014:219f.)

In the direct causative (15a), the adverb can modify only the causer, but in the indirect causative (15b), either causer or causee. Using this diagnostic, for each of our languages I now present the causativization strategies available and then show that some causatives of unergatives are direct.

   Hindi-Urdu has three morphologically distinct causatives, of which only two are relevant for our purposes: direct causatives ending on the suffix -*aa*, and indirect causatives ending on -*vaa* (Bhatt & Embick 2017). While the former describe a direct and physical causal connection, the latter require the relation between causer and causee to be mediated in some way. Accordingly, intermediate agents are only licensed with -*vaa* causatives (16):

(16) a. Shama **Mina-se**   Rohan-ko   **nach-vaa**-egii.
     Shama **Mina-INST** Rohan-DOM **dance-CAUS2**-FUT.F
     'Shama lets Mina make Rohan dance.'

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[4] I ignore the question whether there is a semantically represented result state, which is irrelevant for our purposes.

b. *Shama **Mina-se** Rohan-ko **nach-aa**-egii.
Shama **Mina-INST** Rohan-DOM **dance-CAUS**-FUT.F
Intended: 'Shama lets Mina make Rohan dance.'

Adverbial modification confirms that direct causatives, such as (17a), do not contain a separate causing event: the adverbial 'in a strange way' can only describe Shama's actions, not Rohan's. In indirect causatives, on the other hand, the adverbial can either target the causing event (17b) or, with a different word order, the caused event (17c):

(17) a. Shama Rohan-ko **ajiib** **tarah(-se) nach-aa** rahii hai.
Shama Rohan-DOM **strange way-INST dance-CAUS** PROG.F be.PRS.3MSG
'Shama is making Rohan dance in a strange way.'

b. Shama-ne **ajiib** **tarah(-se)** Mina-se Rohan-ko **nach-vaa**-yaa.
Shama-ERG **strange way-INST** Mina-INST Rohan-DOM **dance-CAUS2**-PFV
'Shama, in a strange way, lets Mina make Rohan dance.'

c. Shama-ne Mina-se Rohan-ko **ajiib** **tarah(-se) nach-vaa**-yaa.
Shama-ERG Mina-INST Rohan-DOM **strange way-INST dance-CAUS2**-PFV
'Shama lets Mina, in a strange way, make Rohan dance.'

This shows that unergatives can form not only indirect, but also direct causatives.

These facts replicate in Turkish, which has a single causative morpheme realized with various allomorphs (*DIr*, *t*, *Ir*, *Ar*, *It* and *Art*; Akkuş 2021). Causatives of unaccusatives must receive a direct, causatives of transitives an indirect reading, whereas causatives of unergatives are ambiguous between the two interpretations. E.g., the causative of 'sit' as in (18) under a direct reading describes the speaker physically picking up and placing the child on the couch, whereas under the indirect reading, the speaker might persuade the child to sit or bring about this state of affairs in some other unspecified way:

(18) (Ben) çocuğ-u koltuğ-a otur-t-tu-m.
I child-ACC couch-DAT sit-CAUS-PAST-1SG
'I sat the child on the couch. / I made the child sit on the couch.'

Accordingly, when adding two different adverbials to the sentence in (19), the direct causative requires both to associate with the speaker. In the indirect causative, on the other hand, they can modify two distinct events, such that the speaker may act calmly and the baby, slowly:

(19) (Ben) **sakince** bebeğ-i koltuğ-a **yavaşça** otur-t-tu-m
I **calmly** baby-ACC couch-DAT **slowly** sit-CAUS-PAST-1SG
'Calmly and slowly, I sat the baby on the couch. / Calmly, I made the baby sit on the couch slowly.'

Turning to our final language, Sason Arabic has two analytic causatives, morphologically realized with ablaut and gemination, respectively, and two periphrastic causatives. Since the latter are obligatorily indirect, I will limit myself to the former. Ablaut causatives must be interpreted as direct, whereas geminate causatives display the same ambiguity as seen above for Turkish: those based on unaccusatives are direct, those based on transitives indirect, and those based on unergatives ambiguous between the two readings. By way of example, the direct interpretation of (20) entails that the speaker physically lifts the causee over the wall whereas the indirect interpre-

tation merely describes the speaker causing them to jump in some unspecified way:

(20) pattık-tu-a   mı haydan.
      jumped.CAUS-1SG-her from wall
      'I jumped her over the wall. / I made her jump over the wall.'

Example (21) contrasts adverbial modification with direct ablaut causatives (21a) and with indirect periphrastic causatives (21b). In the former, the adverb obligatorily describes the speaker's action whereas in the latter, the adverb 'slowly' describes the speaker, 'peacefully' the causee:

(21) a. **sakin**   nem-tu-a.
          peacefully slept-1SG-her
          'I slept her peacefully.'
      b. **hedi hedi** si-te   nom   **sakin**.
          slow slow made-2SG.F sleep.INF **peacefully**
          'You.F slowly made someone sleep peacefully.'

As before, this confirms that the causative of an unergative in (21a) is a direct causative. To conclude, I have shown that in Hindi-Urdu, Turkish and Sason Arabic, several verbs which pass unergativity diagnostics can form direct causatives. The following section will now propose and defend an analysis of these constructions.

3. Analysis: The causee is an internal argument. I argue that direct causatives of unergatives are semantically and syntactically identical to direct causatives of unaccusatives. Concretely, they project a simple transitive structure in which the causer is merged as the external, the causee as the internal argument, as shown in (22):

(22)
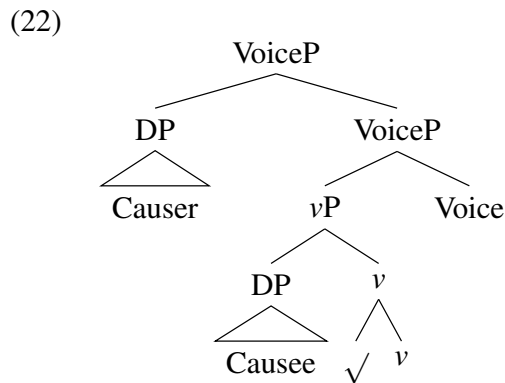
The causee of the transitive is thus base-generated in a different position than the subject of the intransitive unergative. Semantically, I propose that the causer receives an agent, the causee a patient θ-role, again as in standard causatives of unaccusatives. I will now first provide evidence for this structure and then discuss some challenges it appears to face.

3.1. EVIDENCE FOR THE ANALYSIS. While the majority of this section will focus on the syntactic realization of the causee, I would like to begin by pointing out a crucial fact about its interpretation. In all three languages investigated here, the causee obligatorily receives a deagentivized interpretation, such that the participant is depicted as being passively affected, not being in control of the situation or even performing the activitiy against their will. Taking as an example the previously discussed Hindi-Urdu causative *Shama is dancing Rohan*, the sentence is

used to express that Rohan, far from actively initiating the dancing, is merely shoved and twirled around the dance floor by Shama. This reading corroborates the claim that Rohan receives a patient θ-role canonically associated with the internal argument position. I will discuss the semantic interpretation of causatives of unergatives in more detail in section 3.2, but the fact that the causee receives a patient- rather than agent-like interpretation lends initial plausibility to the proposal that it is realized as an internal argument.

The second piece of evidence for the analysis comes from reduced relatives in Hindi-Urdu. As demonstrated above in (5), reduced relatives, requiring the presence of an internal argument, can be formed from unaccusatives but not from unergatives. Causativized unergatives, however, can form reduced relatives, indicating that the causee is merged as an internal argument:

(23) a. *__daur̞-aa__   laṛkaa
          __run__-PFV.MSG boy
          Intended: 'the run boy'
      b. [Ravi-dwaaraa __daur̞-aa__-yaa   gayaa]   laṛkaa
          Ravi-by   __run-__CAUS-PFV PASS.PFV boy
          'the boy run by Ravi' (i.e., the boy chased by Ravi)   (Bhatt & Embick 2017:124f.)

Next, as seen for Sason Arabic in (11), another hallmark of internal arguments is their ability to license resultative secondary predicates. Crucially, causees of causatives of unergatives equally license resultatives. E.g., (24) can be used to describe a situation in which the speaker made the causee run outside in bad weather, as a result of which she caught a cold:

(24) faqqız-tu-a   __raxu-e__, yani cımd-e   barra.
      ran.CAUS-1SG-her __sick-F__ that-is got.cold-3F outside
      'I ran her sick, that is, she got a cold outside.'

Moreover, (certain) internal arguments have been shown to confer a telic interpretation on the verb phrase (Tenny 1987): while 'Zeno ate' is atelic, 'Zeno ate an apple' describes a telic event with a natural endpoint. The difference between telic and atelic interpretation is reflected in the type of temporal modifier licensed with the verb phrase, as shown for English in (25):

(25) a. Zeno ate an apple in/*for an hour.
      b. Zeno ran for/*in an hour.

In Turkish, the same contrast exists between *üç dakika içinde* ('in three minutes') for verbs with, and *üç saat boyunca* ('for three minutes') for verbs without an internal argument (26):

(26) a. Ya   üç   dakika __içinde / *boyunca__ eri-di.
          butter three minutes __in   / *for__   melt-PAST
          'Butter melted in/*for three minutes.'
      b. Kadın üç   saat __boyunca / *içinde__ ko-tu   / çalı-tı.
          woman three hours __for   / *in__   run-PAST / work-PAST
          'The woman ran/worked for/*in three hours.'
                    (Nakipoğlu-Demiralp 2002, cited and translated in Acartürk 2005:45f.)

Example (27) shows that the intransitive 'sleep' combines with *boyunca*/DP, as expected in the absence of an internal argument, while the causative can surface with both kinds of modifiers. Note that for my informant, such *içinde* PPs are in free variation with the locative suffix *-te*, and *boyunca* PPs with a bare DP:

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(27) a. Bebek **üç saat (boyunca)** uyu-du.
baby **three hour (for)** sleep-PAST
'The baby slept for three hours.'

b. Bakıcı bebeğ-i sadece **üç saat (boyunca)** uyu-t-tu.
caretaker baby-ACC only **three hour (for)** sleep-CAUS-PAST
'The caretaker let the baby sleep for only three hours.'

c. Bakıcı bebeğ-i sadece **üç saat-te / saat içinde** uyu-t-tu.
caretaker baby-ACC only **three hour-LOC / hour in** sleep-CAUS-PAST
'The caretaker (was able to) put the baby to sleep in only three hours.'

Example (27b) receives an indirect, (27c) a direct interpretation. This is reflected in the type of modifier licensed: the indirect causative (27b) embeds a true unergative structure without an internal argument and thus takes an atelic *boyunca*/DP modifier, giving rise to the interpretation that the cruel caretaker allowed the baby only three hours of sleep. On the other hand, (27c) licenses an *içinde*/*-te* modifier which signals a telic reading, namely, that it takes the caretaker only three hours to put the (apparently very unruly) baby to sleep. Since a telic interpretation is dependent upon the presence of an internal argument, these data support the view that in direct causatives of unergatives, the causee is merged as a verbal complement. Thus, to give an intermediate summary, the causee behaves as an internal argument for the purposes of reduced relatives, resultatives and telic interpretations.

Finally, the analysis predicts that direct causatives should be ruled out if the internal argument position where the causee would have to be realized is already occupied. This prediction is borne out: not only are transitives unable to form direct causatives,[5] the same holds for unergatives with path arguments or cognate objects. For Hindi-Urdu, (28) shows that causativization of 'dance' is blocked when the verb combines with the path argument 'tango':

(28) 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-DOM tango **dance-CAUS** PROG.F be.PRS.3MSG
Intended: 'Shama is making Rohan dance the tango.'

This supports the view that the causee is merged as a verbal complement, thus competing with the path argument for the same spot.

To show that the same observation holds for Turkish, we must first clarify the basic case marking patterns in causatives in this language. In causatives of unergatives – both direct and indirect –, the causee is marked with accusative case, whereas in causatives of transitives, the causee receives dative, the embedded direct object accusative case. Causatives of unergatives with path arguments can surface with two different case markings (29):

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[5] An exception to this rule is a class of transitives such as 'see,' 'eat' or 'read' which can form direct causatives in both Hindi-Urdu and Sason Arabic. While I do not have the space for a more detailed discussion, there is clear evidence that these causatives project a ditransitive structure in which the causee is merged in an applicative argument position and receives the θ-role of an experiencer, recipient or benefactor, which is thus compatible with my analysis.

(29) a. Çocuğ-**a** 10m-**yi** yürü-t-tü-m.
  child-DAT 10m-ACC walk-CAUS-PAST-1SG
  '#I walked the child 10m. / I made the child walk the 10m.'
  b. Çocuğ-**u** 10m yürü-t-tü-m.
  child-ACC 10m walk-CAUS-PAST-1SG
  'I walked the child 10m. / I made the child walk 10m.'

Example (29a) aligns with causatives of transitives in that the causee receives dative, the path argument accusative case. In (29b), on the other hand, the causee is marked with accusative case while the path argument lacks overt case altogether. I argue that in (29a), the path argument is a true verbal complement, whereas in (29b), it is syntactically an adjunct. This morphosyntactic contrast is reflected in a difference in semantic interpretation. Example (29b) is ambiguous between a direct and an indirect reading: under the direct interpretation, the speaker takes the child, presumably a toddler, by both hands and helps them walk by providing balance, whereas under the indirect interpretation, the speaker simply causes the child to walk in some unspecified way. Crucially, (29a) can only receive an indirect interpretation. Under the assumption that direct causatives require the causee to be realized in the internal argument position, this is as expected: the true, accusative case-marked path argument in (29a) occupies the internal argument position and thus blocks the direct causative, whereas an adjunct path argument as in (29b) is compatible with direct causatives.

In Sason Arabic, path arguments equally block direct causatives. The causative of the verb 'run' normally shows a similar ambiguity to the Turkish causative of 'walk' discussed above. However, when combining with a path argument, as in (30), the direct reading disappears:

(30) faqqız-tu-a 10m.
  run.CAUS-1SG-her 10m
  '#I ran her 10m. / I made her run 10m.'

Again, this demonstrates that the causee is realized in the verbal complement position, as a result of which direct causatives of unergatives are impossible when this position is already occupied by another argument.

To conclude, we have seen evidence from a broad range of areas – interpretation of the causee, reduced relatives, resultatives, telicity and path arguments – all supporting the view that the causee is merged as a standard internal argument. Before comparing this analysis to the low subject approach, I will now discuss some apparent challenges to my proposal.

3.2. VARIABLE UNACCUSATIVITY. The claim that in causatives of unergatives, the causee is realized as a patient in the internal argument position is initially counterintuitive for two reasons. First, it is in the very nature of unergative verbs to be incapable of licensing an internal argument assigned a patient θ-role. Secondly, while I have shown the subject of the intransitive and the causee of the transitive to be both syntactically and semantically distinct, there is a clear sense in which they are identical, an intuition which we will also see motivating the low subject approach: e.g., in *Rohan is dancing* and *Shama is dancing Rohan*, Rohan does appear to perform the same activity. This makes it puzzling why such an event participant should receive two wholly distinct θ-roles in the two sentences. In response to these challenges, I argue that in those languages that permit causatives of unergatives, the normally unergative verb is coerced into an unaccusative use in causative environments, such that the causee is deagentivized and conceptualized as a patient instead of an agent. I will now first introduce the phenomenon of variable unaccusativity in general and then outline how it can be leveraged to account for causatives of unergatives.

It is well-known that within a given language, verbs often vary between an unergative and unaccusative use, typically associated with certain interpretative changes. It has been argued that the two factors governing variable behavior of verbs are telicity and agentivity (Sorace 2000, 2011; see also Perlmutter & Postal 1984), of which only the latter concerns us here. Concretely, construing the argument of a normally unergative intransitive as less agentive can lead the verb to behave as an unaccusative, and vice versa. This is shown in (31) for Tsova-Tush, a language which marks the external argument with ergative, the internal argument with nominative case:

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

In (31a), the sole argument is in the external position and accordingly receives an agentive reading, whereas in (31b), it is an internal argument interpreted as a patient. Thus, an argument performing the same activity can be merged in two different positions with only slight changes to its interpretation; what matters is how agentively the activity is performed.

One way of conceiving of the unergative/unaccusative distinction is as a contrast between internally and externally caused verbs (Levin & Rappaport Hovav 1995). Standardly unergative verbs such as 'dance' tend to describe internally caused events, meaning that the sole argument is presented as the event participant inherently responsible for the event happening. In event descriptions involving typically unaccusative verbs such as 'break,' on the other hand, responsibility is not ascribed to the primary argument but instead to an additional, external causer.

Against the background of variable unaccusativity, external and internal causation can be understood as two ways of construing events, linked probabilistically to concrete lexical items (see Levin & Krejci 2019 and Krejci 2020 for similar accounts). While the lexical semantics of the verbal root do constrain to some extent whether the event described is conceptualized as internally caused and thus expressed by an unergative syntax, or as an externally caused event expressed by an unaccusative syntax, events often invite two different construals, giving rise to variable behavior of verbs. E.g., in (31), the event of falling can either be understood as internally or as externally caused and thus be described by two different syntactic structures.

Returning to our causatives of unergatives, I argue that these constructions involve conceptualizing an event which is prototypically regarded as internally caused as externally caused instead. Let us take as an example the previously discussed Turkish causative *I walked the child*, describing the speaker supporting a toddler just learning how to walk. While walking is normally an activity largely under the control of the walker, it is clear that in this scenario, it is also perfectly intuitive to regard the adult holding the child by the hands as primarily responsible and more strongly agentive. The child, on the other hand, is conceptualized as a patient and mapped on the internal argument position, in line with the syntactic evidence in the previous section.

To conclude, I have argued that there is nothing special about the syntax or semantics of direct causatives of unergatives. What makes them unusual, and arguably cross-linguistically rare, is how a real-life event is conceptualized: an event normally conceived of as being in control of the person performing the activity is ascribed to an external causer instead. This analysis presupposes a view on argument structure according to which 'unergative' and 'unaccusative' are not inherent properties of lexical items but rather different usages more or less felicitous with dif-

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ferent roots. While this view certainly still leaves many questions open, I hope to have made it plausible that causatives of unergatives can indeed have a simple transitive structure.

4. Comparison: The low subject approach. Having presented a syntactic and semantic analysis of causatives of unergatives in Hindi-Urdu, Turkish and Sason Arabic, I will now discuss whether the data could equally, or better, be explained by a competing account labelled here the low subject proposal. Abstracting away from the details of the individual analyses, the core idea of this approach is that while subjects of transitives are merged in SpecVoiceP, subjects of unergatives are generated in a lower position, Spec*v*P (Massam 2009, Tollan 2018, Tollan & Oxford 2018, Kouneli 2021, Tollan & Massam 2022, Myler 2022, Krishnan & Sarma 2023). Internal arguments of transitives and unaccusatives are located, as usual, in the verbal complement position.[6]

In part, this structure has been motivated by certain patterns in case marking (Massam 2009, Nash 2017, 2021, Tollan 2018, Tollan & Massam 2022), voice morphology (Nash 2017, 2021, Tollan & Oxford 2018) and plural markers (Kouneli 2021), all well outside the scope of this paper. The arguably main piece of evidence for it, however, has been the fact that Niuean (Massam 2009),[7] Georgian (Nash 2017, Nash 2021),[8] Samoan (Tollan 2018), Algonquian (Tollan & Oxford 2018), Kipsigis (Kouneli 2021), Quechua (Myler 2022) and Malayalam (Krishnan & Sarma 2023) all allow causatives of unergatives but not of transitives, as seen also for Hindi-Urdu, Turkish and Sason Arabic. Under the low subject proposal, this is attributed to the fact that in unergatives, the SpecVoiceP position is vacant and can be filled by the causer, which is not the case for transitives. The derivations of the Hindi-Urdu examples *Rohan is dancing* and *Shama is dancing Rohan* under the low subject approach are shown in (32) and (33), respectively:

(32)
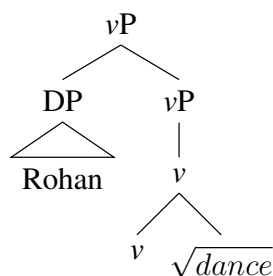
(33)
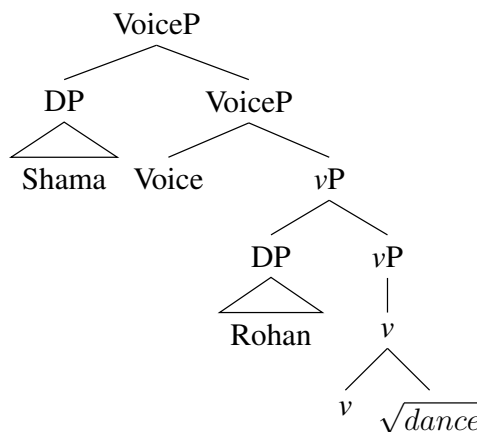
Unlike under the present proposal, the subject of the intransitive and the causee of the transitive are thus assumed to occupy the same position, Spec*v*P.

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[6] Tollan (2018) and Tollan & Oxford (2018) argue that certain transitive subjects in Samoan and Algonquian, respectively, are also located in Spec*v*P. For Kipsigis, Kouneli (2021) claims that subjects of unaccusatives are equally generated in Spec*v*P, or rather, that the language lacks true unaccusatives altogether.
[7] Massam observes that Niuean can form direct causatives from roots which normally have a transitive use, but argues that the resulting causatives are ditransitives and that the causee is thus not in SpecVoiceP; see also fn. 5.
[8] Nash's work on Georgian has some similarities to the low subject approach. Due to the complexity of her analysis and the fact that it is designed for highly Georgian-specific data, I cannot discuss it here.

Due to limitations of space, I will not attempt to determine whether the low subject proposal is successful for the languages for which it has been originally proposed, and I have no ambitions to refute it in general. Instead, I will merely consider whether it could account for Hindi-Urdu, Turkish and Sason Arabic. To this end, I will now revisit the data presented above as evidence for my proposal and discuss whether they can be explained under the low subject approach.

First, we saw that the causee in causatives of unergatives in Hindi-Urdu, Turkish and Sason Arabic receives an obligatorily deagentivized reading clearly distinct from its interpretation in the intransitive. This does not fall out straightforwardly from the low subject approach: if the subject of the intransitive and the causee of the transitive are merged in the same argument position, it remains mysterious why they should consistently and regularly differ in interpretation. Previous analyses of causatives of unergatives which have put forward the low subject proposal make no mention of non-agentive causees, and I must leave it open whether this is due to an oversight or genuine cross-linguistic differences. The fact remains that the low subject approach does not deal well with languages in which the causee is obligatorily deagentivized.

Secondly, I have shown that the causee behaves as an internal argument for the purposes of reduced relatives, resultatives and telic readings, not licensed with intransitive unergatives.[9] Given that the proposed Spec$v$P position is novel, it is not altogether clear whether arguments in this position are predicted to pass these diagnostics. However, it is clear that if the subject of the intransitive and the causee of the transitive are syntactically identical, either both of them should license reduced relatives, resultatives and telic interpretations, or neither of them should. The fact that, on the contrary, we observe a contrast between the two types of arguments is a clear problem for the low subject approach.

The final piece of evidence adduced above was the fact that direct causatives are blocked for transitives and for unergatives with (true) path arguments or cognate objects. The low subject approach, while designed to capture the former, cannot account for the latter: if the intransitive licenses a path argument, it is unclear why the transitive, which merely adds an argument in SpecVoiceP, should not do so as well.

To sum up, the low subject approach, which rests on the assumption that the subject of the intransitive and the causee of the transitive are merged in the same position, cannot account for the fact that the two arguments differ in interpretation as well as in their ability to license reduced relatives, resultatives and telic readings. Moreover, if the causee is not realized in the verbal complement position, it is unclear why its presence co-varies with that of a path argument or cognate objects. I conclude that for causatives of unergatives in Hindi-Urdu, Turkish and Sason Arabic, the low subject approach fares poorly, while the present analysis clearly holds more promise.

5. Conclusion. This paper has argued that causatives of unergatives in Hindi-Urdu, Turkish and Sason Arabic are syntactically and semantically regular transitives. Thus, while the subject of intransitive unergatives is merged as an external argument and receives an agent θ-role, the causee of the transitive is merged as an internal argument and assigned a patient θ-role, a claim I have backed up with a broad range of evidence. To explain how unergative verbs could license a patient-type internal argument, I have proposed that the verb is coerced into an unaccusative use in causative environments. Concretely, an event typically regarded as internally caused – and thus

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[9] Strictly speaking, telic temporal modifiers *are* available for intransitive 'sleep' in Turkish; however, I argue that this is due to an unaccusative use of the verb which gives rise to a clearly distinct, inchoative interpretation (roughly, 'fall asleep'). Unfortunately, I cannot substantiate this claim further here due to reasons of space.

represented by unergative syntax – is construed as externally caused instead, such that an external causer is depicted as being more responsible for the event than the participant performing the activity. Finally, I have shown that this analysis is more successful in accounting for the Hindi-Urdu, Turkish and Sason Arabic data than the low subject approach.

I have emphasized throughout this paper that I do not presume to cast a judgment on the low subject proposal in general but merely investigate its applicability to Hindi-Urdu, Turkish and Sason Arabic. Given the clear verdict of the discussion above, however, it appears worth investigating whether the present analysis might not extend to those languages which have previously been taken as evidence for the low subject proposal. This is especially the case given that the present analysis is superior in terms of economy, positing no novel argument position. For future research, this paper has outlined a number of concrete diagnostics that could help adjudicate between the two competing proposals.

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