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Causatives without causation: Involvee causatives in Turkish

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1. Introduction

This study is concerned with a non-standard use of causative morphology in Turkish. The transitive in (1b), corresponding to the intransitive in (1a), can give rise to two different interpretations. Besides the regular, (pragmatically odd) direct causative reading – the subject caused the sun to set –, the sentence can also convey the meaning that the subject was merely involved in or experienced the setting of the sun. By the same token, (2b), corresponding to the transitive (2a), can either be read as a regular indirect causative – that is, that Leyla caused the thief to steal the purse – or receive the interpretation that Leyla was involved in the event of the thief stealing the purse.

(1) a. Güneş bat-tı. sun set-pst.3sg 'The sun set.'

b. *pro* güneş-i bat-**ır**-dı-k. sun-ACC set-CAUS-PST-1PL

YES: 'We set the sun.'

YES: 'The sun set, and we were involved/around when it happened.'

 a. Hırsız çanta-yı çal-mış. thief purse-ACC steal-PST
 'The thief stole the purse.'

> b. Leyla hırsız-a çanta-yı çal-**dır**-mış. Leyla thief-dat purse-ACC steal-CAUS-PST

YES: 'Leyla caused the thief to steal the purse.'

YES: 'Leyla had the purse stolen by the thief (on her).'

In both examples, the matrix subject can thus be interpreted either as causing or bringing about the event described by the verb or as somehow being involved in this event. We label the latter reading 'involvee causative' (InvC). We will refer to InvCs such as (1b) which pattern with direct causatives as *simple* InvCs and those such as (2b) which pattern with indirect causatives as *complex* InvCs.

Involvee interpretations of causatives are generally productive in Turkish but subject to pragmatic restrictions; concretely, the event must qualify as noteworthy and significant. By way of example, (3b) is only felicitous if, for instance, the sinking of the ship is an event staged for an audience.

(3) a. Gemi bat-tı. ship sink-pst.3sg 'The ship sank.'

b. (In an amusement park, we enjoy a lot of fun activities one by one, and next is the sinking of the famous Titanic ship:)

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pro gemi-yi de bat-ır-dı-k. ship-ACC de sink-CAUS-PST-1PL
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'We experienced the sinking of the ship too.' (lit: we sank the ship too)

Besides the fact that InvCs do not receive a causative reading, they also differ from regular causatives in three other respects. First, they do not license agent-oriented adverbs (4):

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(4) a. *pro* gemi-yi (şevkle) bat-ır-dı-k. ship-ACC enthusiastically sink-CAUS-PST-1PL

'We sank the ship enthusiastically.'

b. *pro* güneş-i (#şevkle) bat-ır-dı-k. sun-ACC enthusiastically set-CAUS-PST-1PL

#'We were involved enthusiastically in the event of the sun setting.'

Secondly, involvee arguments cannot take instrument phrases (5):

(5) Leyla hırsız-a çanta-yı tehdit-ler ile çal-dır-mış. Leyla thief-dat purse-acc threat-pL with steal-caus-pst

NO: 'Leyla, with threats, had the purse stolen by the thief (on her).'

YES: 'Leyla, with threats, caused the thief to steal the purse.'

Thirdly, InvCs cannot be passivized. In both simple (6) and complex (7) InvCs, the involvee reading is limited to the active whereas in the passive, only the regular causative interpretation is available.

(6) a. Çanta Leyla tarafından hırsız-a çal-dır-ıl-mış.

purse Leyla by thief-dat steal-caus-pass-pst

NO: The purse was stolen by the thief, and Leyla was involved in/affected by this.'

YES: 'The purse was made by Leyla [for the thief to steal _].'

b. Leyla hırsız-a çanta-yı çal-dır-mış.

Leyla thief-DAT purse-ACC steal-CAUS-PST

YES: 'Leyla was somehow involved in the thief stealing the purse (e.g., by carelessly leaving the purse on the ground)'

YES: 'Leyla caused the thief to steal the purse.'

(7) a. Biz hava-yı karar-t-tı-k.

we weather-ACC darken-CAUS-PST-1PL

YES: 'We were involved/part of the event when the daylight went away.'1

YES: #'We caused the daylight to go away.'

b. Hava biz-im tarafımızdan karar-t-ıl-dı.

weather we-gen by darken-caus-pass-pst

NO: 'The daylight went away, and we were somehow involved/part of it.'

YES: #'The daylight was caused (by us) to go away.'

These three properties – agent-oriented adverbs, instrument phrases and passivization – are standardly associated with the presence of a thematic Voice head (see e.g., Pylkkänen 2008, Bruening 2013, Alexiadou et al. 2015, Legate 2014, Akkuş 2021, 2022). Accordingly, previous research has argued that constructions which fail to pass these diagnostics are underlyingly unaccusatives even if their overt morphosyntax suggests a transitive structure with an external argument. Examples include Japanese adversity causatives (Pylkkänen 2008, Wood & Marantz 2017), Class III experiencers (Landau 2010), transitive anticausatives (Schäfer 2022, 2023), *have*-experiencers in English (Belvin & Den Dikken 1997, but see Harley 1998 for an analysis parallel to ours) and transitives with inanimate causers (Alexiadou & Anagnostopoulou 2020). This line of research raises the question whether Turkish InvCs should equally be analyzed as unaccusatives, with the involvee argument not constituting a true external argument merged in SpecVoiceP.

In the following, we argue against such an approach. We present several diagnostics showing that an unaccusative analysis for InvCs cannot be maintained (Section 2). Instead, we propose that InvCs are syntactically identical to regular causatives and merely differ in the interpretation assigned to the external argument (Section 3). This interpretative difference accounts for the failure of the diagnostics above which, we argue, are not true unaccusativity diagnostics but are sensitive to the interpretation assigned to the external argument. Finally, we explore the broader consequences of the analysis for our understanding of causative semantics and morphology (Section 4). Section 5 concludes.

¹ The example is built on *Yürüdük*, *yürüdük*, *havayı kararttık* 'we walked and walked, and ended the day'. https://www.youtube.com/watch?v=Ir80bVBQq84&ab_channel=BurakDurgun, 14':50"

2. Against an unaccusative analysis

We now present three diagnostics that constitute evidence against an unaccusative analysis of InvCs and for the presence of a thematic Voice head introducing an external argument.

2.1. Purpose clauses

First, unaccusatives in Turkish, both adjectival (8a) and verbal (8b), disallow control into purpose clauses, contrasting in this respect with passives (8c):²

- (8) Unaccusative
 - a. İsa [*PRO biz-i kurtar-mak için] ölü.

 Jesus [we-ACC save-NMLZ for] dead

 'Jesus is dead [*to save us].'
 - b. Gemi [*PRO sigorta parası al-mak için] bat-tı. ship [insurance money take-NMLZ for] sink-PST
 - 'The ship sank [*to collect insurance].'
 - c. cf. Gemi [PRO sigorta parası al-mak için] bat-ır-ıl-dı. ship [insurance money take-nmlz for] sink-caus-pass-pst 'The ship was sunk [to collect insurance].'

The same holds for transitive anticausatives (Schäfer 2023):

(9) *Bulut-lar [PRO yağmur yağ-dır-mak için] şekil-ler-i-ni değiş-tir-di-ler. cloud-pl rain rain-caus-inf for shape-pl-poss-acc change-caus-pst-pl 'The clouds changed their shapes [PRO in order to bring rain].'

InvCs, on the other hand, do license control into purpose clauses, shown here for the simple InvC in (10a). Note that causative morphology in this example is expressed by the light verb et, as opposed to the light verb ot in the corresponding intransitive (10b).

(10) a. *InvC*

Biz [PRO sınav-ı geç-mek için] sabah-ı da et-ti-k. we exam-ACC pass-INF for morning-ACC too do-PST-1PL 'We saw through the morning [PRO in order to pass the exam].'

b. Sabah ol-du.
morning become-pst
'It became morning.'

This contrast is unexpected if InvCs are underlyingly unaccusatives and instead indicates that they contain a true external argument.

2.2. Gerundives in -ArAk

Next, verbal gerundives in -ArAk need to match the predicate of the embedding clause both in Voice and in the status of the subject as underlying or derived. Table 1 summarizes the licit and illicit combinations.

For English, Biggs & Embick 2022, A. Williams 2015 have argued that control into purpose clauses is possible in unaccusatives if there is an event participant which can be described as *Responsible Party* (see also E. Williams 1985). However, this confound does not apply in Turkish (Akkus 2021, Key 2024).

Transitive/unergative + transitive/unergative	\checkmark	
Unaccusative + unaccusative		
Unergative + unaccusative	X	
Passive + passive		
Passive + transitive/unergative	X	
Passive + unaccusative	X	
InvC + transitive/unergative	\checkmark	
InvC + passive	X	
InvC + unaccusative	X	

Table 1: Patterns of combinations with -ArAk

Crucially, InvCs can be embedded in transitive and unergative clauses (11) but not in unaccusative (12) or passive clauses (13):

(11) transitive/unergative + InvC

Kız {(su) iç-/gül-/koş-}arak gün-ü bitir-di. girl {water drink-/laugh-/run-}arak day-acc finish-pst

'The girl ended the day (while) {drinking (water) / laughing / running}.'

(12) unaccusative + InvC

*Kız {hastalan-/düş}-erek gün-ü bitir-di. girl {get.sick-/fall}-arak day-acc finish-pst

'The girl ended the day (while) {geting sick / falling}.'

(13) passive + InvC

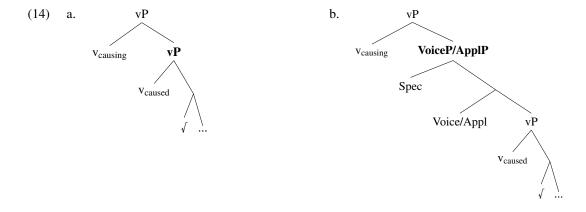
*Esir [döv-ül-erek] gün-ü bitir-di. prisoner beat-pass-arak day-acc finish-pst

'The prisoner ended the day (while) being beaten.'

According to this diagnostics, InvCs thus pattern not with unaccusatives but with structures that contain a thematic Voice head.

2.3. Embedding in indirect causatives

Our final diagnostic comes from indirect causatives, which in Turkish can only be formed by embedding transitives or unergatives, not unaccusatives. Thus, only (14b), not (14a) is a licit structure (see Pylkkänen 2008):



Crucially, both simple (15) and complex (16) InvCs can be embedded in indirect causatives:

- (15) Final-ler [biz-e sabah-1 et]-tir-di. final.exam-pL [we-DAT morning-ACC do]-CAUS-PST 'Final exams made [us see through the morning].'
- (16) Dikkatsizlik [Leyla-ya çanta-yı hırsız-a çal]-dır-mış. carelessness Leyla-dat purse-ACC thief-dat steal-caus-pst 'Carelessness caused [Leyla to have the purse stolen by the thief (on her)].'

This is incompatible with the view that InvCs realize a mere vP-sized constituent, which should be unable to be embedded in these contexts. Rather, it indicates that they correspond to a full VoiceP.³

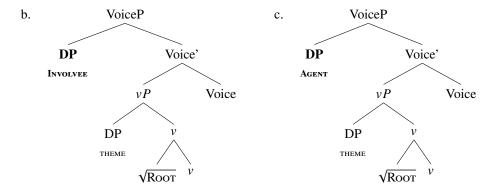
3. Proposal

The previous section has provided clear evidence that InvCs cannot be classified as unaccusatives but contain a thematic Voice head introducing an external argument. We thus propose that simple InvCs such as (1b), repeated below as (17a), have the structure in (17b), differing from regular direct causatives as in (17c) merely in the semantics of the external argument. Concretely, we argue that the external argument in InvCs is assigned an involvee interpretation, which can be implemented formally by positing that InvCs contain a flavour of Voice which assigns an involvee θ -role to its specifier. This θ -role realizes a subset of proto-agent properties in the sense of Dowty 1991: involvees are animate and sentient, like prototypical agents, but lack intentionality and causal power. We do not claim that there is a finite inventory of θ -roles associated with SpecVoiceP cross-linguistically, nor that they necessarily lend themselves to a tidy taxonomy.

(17) a. *pro* güneş-i bat-ır-dı-k. sun-ACC set-CAUS-PST-1PL

YES: 'We set the sun.'

YES: 'The sun set, and we were involved/around when it happened.'



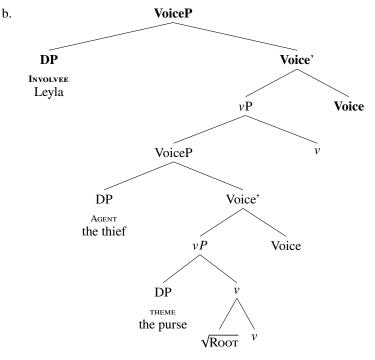
By the same token, complex InvCs such as (2b), repeated below as (18a), are syntactically identical to regular indirect causatives except for the interpretation of the higher SpecVoiceP argument (18b).

(18) a. Leyla hırsız-a çanta-yı çal-dır-mış. Leyla thief-dat purse-acc steal-caus-pst

YES: 'Leyla caused the thief to steal the purse.'

YES: 'Leyla had the purse stolen by the thief (on her).'

³ The results of this diagnostic are still compatible with the view that InvCs realize an ApplP. However, high applicatives in Turkish are both semantically and morphosyntactically clearly distinct from InvCs; hence, we do not consider this possibility here in more detail.



The analysis of complex InvCs in (18b) correctly predicts that while the involvee argument cannot be demoted for the purposes of passivization (19a), as seen previously, the lower, agent SpecVoiceP argument can (19b):

 $(19) \quad a. \quad \zeta anta \; Leyla \; tarafından \; hırsız-a \quad \varsigma al-dır-ıl-mış.$

purse Leyla by thief-dat steal-caus-pass-pst

NO: The purse was stolen by the thief, and Leyla was involved in/affected by this.'

YES: 'The purse was made by Leyla for the thief to steal.'

b. Leyla çanta-yı çal-dır-mış.

Leyla purse-ACC steal-CAUS-PST

YES: 'Leyla was somehow involved in the purse-being-stolen event by someone.' (e.g., by carelessly leaving the purse on the ground)

YES: 'Leyla caused the purse to be stolen by someone.'

Complex InvCs do present one additional complication, which we address below in Section 4.

If InvCs are syntactically identical to regular causatives, the question remains how to derive their non-standard properties, that is, their failure to take agent-oriented adverbs, instrument phrases and be passivized. We argue that these properties fall out from the non-agentive interpretation of the external argument. To begin with, note that all three diagnostics equally fail in Turkish for other kinds of non-agent external arguments such as instruments (20) and inanimate causers (21). For obvious reasons, we do not present an example showing that instrument subjects cannot take instrument phrases.

(20) Instrument

a. Anahtar bu kapı-yı aç-ar.

key this door-ACC open-AOR

'The key opens this door.'

b. *Bu kapı anahtar tarafından aç-ıl-ır.

this door key by open-pass-aor

'This door is opened by the key.' (passivization)

c. *Anahtar bu kapı-yı kasten aç-ar.

key this door-ACC deliberately open-AOR

'The key deliberately opens this door.' (agent-oriented adverb)

(21) Inanimate causer

- a. Deprem bölge-yi yık-tı.
 earthquake region-ACC destroy-PST
 'The earthquake destroyed the region.'
- b. *Bölge deprem tarafından yık-ıl-dı.
 region earthquake by destroy-pass-pst
 'The region was destroyed by the earthquake.' (passivization)
- c. Bölge {deprem-de / deprem yüzünden} yık-ıl-dı.
 region earthquake-Loc / earthquake because.of destroy-pass-pst
 'The region got destroyed {in the earthquake / because of the earthquake}.'
- d. *Deprem bölge-yi kasten yık-tı.
 earthquake region-ACC deliberately destroy-PST

 'The earthquake deliberately destroyed the region.' (agent-oriented adverb)
- e. *Deprem bölge-yi kaya-lar ile yık-tı.
 earthquake region-ACC rock-PL with destroy-PST
 'The earthquake destroyed the region with rocks (i.e., using rocks).' (instrument)

It is perfectly intuitive that the felicity of agent-oriented adverbs and instrument phrases would be determined by the semantics of the external argument. Both diagnostics require, on semantic or pragmatic grounds, an argument which is interpreted as purposefully pursuing a plan of action, which does not hold for involvees, instruments or inanimate causers. It is less obvious why the same restrictions hold on passivization; however, similar data have been observed cross-linguistically. In English, for instance, passives are fully acceptable with inanimate causer subjects (22a) but degraded with instruments (22b):

- (22) a. The window was broken by a storm.
 - b. ?The window was broken by a hammer.

More in general, it is known that languages impose a wide variety of semantic restrictions on the argument demoted under passivization, e.g., definiteness/specificity and animacy (Kaiser & Vihman 2006, Primus 2011, Sigurðsson & Wood 2021, a.o.). This can hardly be captured by claiming that all arguments which resist demotion are simply not merged in SpecVoiceP. Overall, the inability to passivize does not entail the absence of an external argument; rather, some external arguments fail to be demoted for semantic reasons which vary cross-linguistically. Against this background, the fact that Turkish InvCs cannot be passivized does not constitute evidence that involvees are not syntactically true external arguments but, we argue, is due to their non-agentive semantics.

To summarize, we have argued that InvCs in Turkish are not unaccusatives but contain a thematic Voice head introducing the external argument. Unlike in regular causatives, however, this external argument is assigned an involvee interpretation which realizes a subset of proto-agent properties, being animate and sentient but not purposeful or causally efficacious. As a result of this non-agentive reading of the argument, InvCs are unable to take agent-oriented adverbs, to combine with instrument phrases or to passivize. Methodologically, the upshot of our finding is thus that these three diagnostics are not only sensitive to the syntax but also to the semantics of an external argument, with obvious ramifications for future work.

4. Whither causation?

Having outlined our proposal for InvCs, we now briefly discuss some consequences as well as open questions that arise from it concerning causative semantics and morphology more broadly. To begin with, InvCs crucially feature a mismatch between semantics and morphology: while they do not receive

⁴ The flip side can be observed in person-driven passivization in languages like Lummi and Picurís: in combinations of local vs 3rd persons, when the agent is lower in person-hierarchy than the theme, a passive construction is required, avoiding an active construction (see e.g., Mithun 1999).

a causative reading – the involvee does not bring about the event described but is merely involved in it –, they do surface with standard causative marking. This indicates that causative morphology, at least in Turkish, cannot be analyzed as directly spelling out a dedicated head denoting a causal relation, such as v_{CAUS} (Ramchand 2008, Key 2013, Harley 2017). Rather, causative morphology and causative semantics must retain some relative autonomy (see Wood & Marantz 2017, Schäfer 2022). InvCs are still compatible with other standard analyses of causative morphology, namely, that causative morphemes spell out v in the context of thematic Voice (e.g., Legate 2014) or thematic Voice itself (Key 2024). We do not take a stance here on the choice between these two analyses.

The question remains how concretely InvCs come to lack causative semantics. One might argue that the analogy drawn in the previous section between involvees on the one hand side and other kinds of nonagentive external arguments on the other ignores the fact that causatives with instruments and inanimate causers still receive a bona fide causative interpretation, while InvCs do not. This could be taken to suggest that InvCs must also differ from regular causatives in their eventive semantics. In the following, we first argue that the same event structure can be maintained for both simple InvCs and regular direct causatives. We then show that complex InvCs, on the other hand, do differ from regular indirect causatives on the level of event structure, although open questions remain about the implementation of this finding.

To begin with simple InvCs, we adopt the view that direct causatives and anticausatives have the same event structure, in that both contain a low stative projection and an event-introducing v head (23b–24b), (Alexiadou et al. 2015). We here make use of the "Process" semantics (e.g., Pietroski 2004, A. Williams 2015, see also Biggs & Embick 2022) and adopt the relation END.⁵ That is, in both (23b) and (24b), an event e ends in a state s. Only in the causative, however, does e contain an agent argument.

- (23) a. 'The day darkened.'
 - b. $\lambda e. \exists s. [End(e,s) \& dark(s) \& Theme(s,day)]$
- (24) a. 'Leyla darkened the day.'
 - b. Direct causative: λe.∃s.[Agent(e,Leyla) & End(e,s) & dark(s) & Theme(s,day)]

Involvee causatives such as (25b) can be analyzed along the same lines, with the sole difference to regular direct causatives such as (24b) being that the participant of the event e is an involvee rather than an agent, and is thus interpreted without causal force.

- (25) a. 'Leyla darkened the day.'
 - b. Involvee causative: λe.∃s.[Involvee(e,Leyla) & End(e,s) & dark(s) & Theme(s,day)]

In a nutshell, the framework in (23–24) attributes the properly causative semantics of the direct causative to the presence of an agent argument which is interpreted as causally efficacious. Such an approach can easily be adapted to accommodate simple InvCs. This in turn lends further support to the idea that 'causation' in direct causatives is a property ascribed to arguments, instead of arising from a specific constellation of events. In short, no event-structural difference between simple InvCs and regular direct causatives needs to be posited.

Turning to complex InvCs, indirect causatives are commonly analyzed as containing two distinct events, a causing and a caused event, each encoded on a separate ν head (Pylkkänen 2008). This, however, does not appear to hold for complex InvCs, for which standard diagnostics fail to isolate two events. In (26), which combines two contradictory manner adverbs designed to target two different events, the involvee reading becomes unavailable, leaving only the regular indirect causative interpretation. Equally, (27), containing two distinct count phrases, is only felicitous under the indirect causative reading.

(26) Leyla sakince hırsız-a çanta-yı bi çırpıda çal-dır-mış. Leyla calmly thief-dat purse-acc one stroke steal-caus-pst

YES: 'Leyla calmly made [the thief steal the purse in a flash].'

NO: 'Leyla calmly had the thief steal the purse in a flash (on her).'

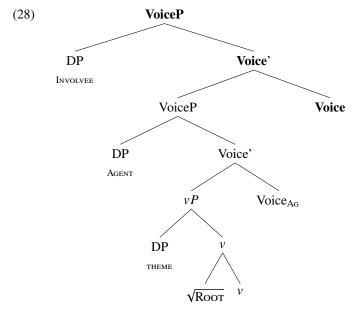
⁵ Alternatively, one could rely on a 'Cause' predicate, as used under different labels: v_{PROC} in Ramchand 2008; v_{CAUS} in Alexiadou et al. 2015; $v_{<e>}$ in Marantz 2007, Schäfer 2008, 2022. Nothing crucial hinges on the choice of END or Cause, as long as the latter is not taken to encode causation in the narrow sense but rather denotes the fact that the event brings about, results in or leads to the state.

(27) Leyla iki farklı defa hırsız-a çanta-yı üç kere çal-dır-mış. Leyla two different time thief-dat purse-acc three time steal-caus-pst

YES: 'Leyla on two separate occasions made [the thief steal the purse 3 times].'

NO: 'Leyla on two separate occasions had the thief steal the purse 3 times (on her).'

In purely technical terms, this finding can be accounted for by positing either that complex InvCs contain a semantically vacuous embedding v head which does not introduce a separate event or that they contain no embedding v at all, giving rise to the Voice-over-Voice structure in (28) (see also Nie 2020):



However, under either analysis, the two properties which distinguish complex InvCs from regular indirect causatives – the lack of a separate higher event and the fact that their higher external argument is interpreted as an involvee – would then be perfectly independent from each other, one being encoded on v (or by its absence) and one on Voice. This is hardly a satisfactory result, wrongly predicting that the different properties could combine freely, as summarized in Table 2:

	Agent Voice	Involvee Voice
Contentful v	Regular indirect causative	Ø
Null v	Ø (violates thematic uniqueness)	Complex InvCs

Table 2: Possible combinations of Voice and v

First, we would expect to find causatives which lack a separate higher event and in which the higher external argument is interpreted as an agent (null embedding v and agent Voice), which at least in Turkish is not attested. However, this is plausibly blocked due to violating thematic uniqueness (Carlson 1984), in that a single event cannot contain two arguments which are assigned the same θ -role, in this case that of an agent. More problematically, the inverse case, causatives with a separate higher event and in which the higher external argument is interpreted as an *involvee* (contentful embedding v and involvee Voice), is not attested either. So far, it is not clear what would rule out such a constellation. It is of course possible to condition the interpretation of Voice on the interpretation of v by means of allosemy or selection, thereby blocking the unattested construction. However, such an approach is hardly of explanatory value. We leave a more thorough exploration of this puzzle to future work.

5. Conclusion

This paper has discussed a morphologically causative construction in Turkish in which the external argument is interpreted not as causing the event described but as merely being involved in it. InvCs fail

to pass diagnostics which are standardly associated with the presence of a thematic Voice head, namely, agent-oriented adverbs, instrument phrases and passivization. Contra much previous work, we have argued that this nevertheless does not warrant an unaccusative analysis. Rather, what causes the diagnostics to fail is the non-agentive interpretation of the external argument of InvCs. A key consequence of our work is thus that agent-oriented adverbs, instrument phrases and passivization should not blindly be used as unaccusativity diagnostics, as has often been done in previous work.

The second set of broader theoretical repercussions of InvCs concerns the mismatch between causative morphology and causative semantics that they exhibit. We have highlighted that this mismatch is incompatible with the view that causative morphology directly realizes causative semantics and rather suggests a more complex and indirect relation between the two. Moreover, we have discussed why causative semantics is absent from simple InvCs without any morphosyntactic differences to regular direct causatives. This supports the view, we have argued, that 'causation' in direct causatives is a property of arguments rather than arising from a particular constellation of events. Finally, we have shown that complex InvCs do differ from regular indirect causatives on the level of event structure in that they lack a separate higher event, but what has remained open is why this difference in event structure correlates with a difference in the interpretation of the external argument. Overall, we hope to have shown that the quirky properties of InvCs make them a worthwhile object of study for issues pertaining to the mapping from syntax to semantics, the relation between causative morphology and causative semantics, the semantic representation of causation, and the link between event structure and θ -role assignment.

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