2024. *Proc Ling Soc Amer* 9(1). 5703. https://doi.org/10.3765/plsa.v9i1.5703.

Involvee causatives in Turkish

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Abstract. In this study, we investigate a morphologically but not semantically causative construction in Turkish, which we label 'involvee causative' (InvC). In contrast to regular causative, the external argument in InvCs is not interpreted as an agent or causer but as merely being involved in or experiencing the event. Additionally, InvCs also differ from regular causatives in not licensing agent-oriented adverbs, instrument phrases and passivization. In previous research, failure of these diagnostics to apply has been taken as evidence for an unaccusative structure. However, we argue against such an analysis for InvCs and show that the latter contain a thematic Voice head. The above diagnostics, we conclude, are sensitive not only to the syntactic status of the external argument but also to its semantic properties, and are licensed only if the argument receives an agentive interpretation.

Keywords. argument structure; causative alternation; Turkish; Voice-over-Voice

1. Introduction. This paper is concerned with a non-canonical use of the causative morpheme in Turkish. We investigate a previously unnoticed construction, which we label 'involvee causative' (InvC), in which the subject argument is not interpreted as a causer of the event described by the verbal root but as merely being involved in the event. At the same time, InvCs surface with standard causative morphology.

To introduce the basic data, the transitive (1b), corresponding to the intransitive (1a), is ambiguous between two readings: besides the regular, in this case pragmatically odd direct/lexical causative interpretation that the subject caused the sun to set, there is an alternative interpretation available according to which the subject was involved in or experienced the setting of the sun.

(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.'

Equally, (2b), based on the transitive (2a), can either mean that *Leyla* made the thief steal the purse or that she was somehow involved in the event of the thief stealing the purse.

(2) 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).'

* We would like to thank Kyle Johnson, Rajesh Bhatt, Özge Bakay, Duygu Göksu, and the audiences at the 2024 LSA Annual Meeting and the UMass Syntax Workshop. Authors: Eva Neu, University of Massachusetts Amherst (eneu@umass.edu) & Faruk Akkuş, University of Massachusetts Amherst (fakkus@umass.edu).

We will refer to InvCs such as (1b) which pattern with lexical causatives as *simple* InvCs, those like (2b) which pattern with indirect causatives as *complex* InvCs.

While InvCs are formed productively, their use is subject to pragmatic restrictions, in that the event in which the subject is involved must qualify as significant or newsworthy. For instance, in (3), the transitive only allows for an Involvee reading if the sinking ship is famous (e.g., the Titanic) or if the sinking is staged in front of a large 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):*
pro gemi-yi de bat-ır-dı-k.
ship-ACC de sink-CAUS-PST-1PL
'We experienced the sinking of the ship too.' (lit: we sank the ship too)

Besides the non-causative interpretation of the subject argument, InvCs have three other properties which distinguish them from regular causatives. First, the Involvee cannot be associated with agent-oriented adverbs, (4b), which are normally licensed by the subject of causatives, as illustrated in (4a):

(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, in contrast to regular causatives (5a), neither simple (5b) nor complex (5c) InvCs permit instrumental phrases. In the former, the PP cannot receive an instrumental reading; in the latter, only the regular, indirect causative interpretation is available.

(5) a. *pro* gemi-yi balyoz-lar ile bat-ır-dı-k.
ship-ACC sledgehammer-PL with sink-CAUS-PST-1PL
'We sank the ship with sledgehammers (i.e., using sledgehammers).'

b. #*pro* kaban-lar ile kış-ı bit-ir-di-k.
coat-PL with winter-ACC end-CAUS-PST-1PL
NO: 'We {saw through the winter/were involved in the winter happening} using coats.'
YES: 'We saw through the winter with coats (on us).'

c. 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 resist passivization. While the active forms make both a regular causative and an Involvee interpretation available, the latter disappears under passivization, shown for simple InvCs in (6)[1] and for complex InvCs in (7).

(6) 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.'
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.'

(7) a. 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.'

b. 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 _].'

The ability to take agent-oriented adverbs, instrumental phrases and to passivize has previously been taken as evidence for thematic Voice (Bruening 2013; Alexiadou et al. 2015; Legate 2014; Akkuş 2021, 2022). Accordingly, structures which fail to pass these diagnostics have been analyzed as containing an unaccusative structure, including 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 suggests that InvCs should equally be considered unaccusatives.

In this paper, we argue that InvCs, despite their non-standard properties, do not have an unaccusative structure but feature a thematic Voice head. Unlike in regular causatives, however, their external argument is not interpreted as an agent but as an involvee.[2] The main contribution of this paper, besides the concrete analysis proposed for InvCs, is thus methodological: we establish that agent-oriented adverbs, instruments and passivization are sensitive not only to the syntactic presence of an external argument but also to its semantic interpretation. Moreover, InvCs demonstrate that causative morphology is independent of causative semantics. Complex InvCs in particular offer evidence that a single event can take two external arguments as long as their interpretation is sufficiently distinct, as we will show in Section 3.2.

We will proceed as follows. We first establish that InvCs are not unaccusatives (Section 2), then develop our own proposal based on the claim that InvCs contain thematic Voice (Section 3) and end by briefly considering the morphology of InvCs (Section 4). Section 5 concludes.

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

[2] We avoid the term experiencer to distinguish involvees from the arguments of psych verbs.

2. Against an unaccusative structure. In this section, we offer three pieces of evidence for the claim that InvCs are not unaccusatives, that is, do contain a thematic Voice head:[3] control into purpose clauses, adverbial gerundives in *-ArAk* and minimum size of the embedded constituent.

2.1. CONTROL INTO PURPOSE CLAUSES. In Turkish, unaccusatives do not allow control into purpose clauses (8).[4] This also holds for transitive anticausatives, analyzed by Schäfer (2022, 2023) as unaccusatives (9).

(8) *Unaccusative*

*Güneş [PRO dünya-yı ısıt-mak için] doğ-du.
sun earth-ACC heat-INF for rise-PST

'The sun rose [PRO in order to heat the earth].'

(9) *Transitive anticausative* (based on Schäfer 2023)

*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 (10a) and must thus contain thematic Voice. Example (10a) is the InvC counterpart of the anticausative in (10b); the contrast in voice and valency is reflected here not by a causative morpheme but by a different light verb, active *et* 'do' instead of non-active *ol-* 'become' (Key to appear, see also Harley 2017 for Persian):

(10) a. 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.'

2.2. ADVERBIAL GERUNDIVES IN *-ArAk*. Gerundives formed with *-ArAk* are only licensed if the gerundive and the clause containing it match in voice and in the status of the subject as underlying or derived (Özkaragöz 1980, Knecht 1985, Biktimir 1986, Kornfilt 1997, Legate et al. 2020, Paparounas & Akkuş 2024). The results of this diagnostic are summarized in Table 1; for the full set of examples, see Paparounas & Akkuş 2024.

[3] InvCs also cannot be analyzed as high applicatives, which are both semantically and morphosyntactically clearly distinct in Turkish.

[4] For English, Biggs & Embick (2022); 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 Williams 1985). However, this confound does not apply in Turkish (Akkuş 2021; Key to appear).

Transitive/unergative + transitive/unergative	✓
Unaccusative + unaccusative	✓
Unergative + unaccusative	✗
Passive + passive	✓
Passive + transitive/unergative	✗
Passive + unaccusative	✗
InvC + transitive/unergative	✓
InvC + passive	✗
InvC + unaccusative	✗

Table 1. *Patterns of combinations with -ArAk*

InvCs can only combine with unergative/transitive *-ArAk* gerundives (11), confirming that they equally qualify as unergative/transitive. Unaccusative (12) and passive (13) gerundives, on the other hand, are ungrammatical with InvCs.

(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.'

2.3. MINIMUM SIZE OF THE EMBEDDED CONSTITUENT. Indirect causatives in Turkish have been shown to embed at least a thematic VoiceP, with the overt Causee of a transitive or unergative base predicate occupying Spec,VoiceP (Akkuş 2021, 2023). Embedding of smaller structures such as *v*P is ruled out. InvCs, both simple (14) and complex (15), can be embedded in an indirect causative structure, again corroborating the claim that they contain a thematic VoiceP.

(14) Final-ler [biz-e sabah-ı et]-tir-di.
final.exam-PL [we-DAT morning-ACC do]-CAUS-PST
'Final exams made [us see through the morning].'

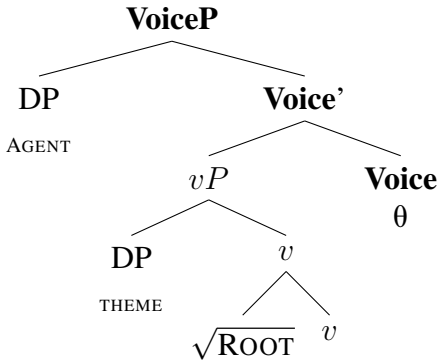
(15) Dikkatsizlik [Leyla-ya çanta-yı hırsız-a çal]-dır-mış.
carelessness Leyla-DAT purse-ACC thief-DAT steal-CAUS-PST
'Carelessness caused [Leyla to have the purse stolen by the thief (on her)].'

3. Proposal. To give a brief intermediate summary, we have shown that InvCs contain a thematic Voice head, as evidenced by their ability to control into purpose clauses, combine with unergative/transitive *-ArAk* gerundives and be embedded in indirect causatives. We now propose an analysis based on this finding, looking first at simple and then at complex InvCs.

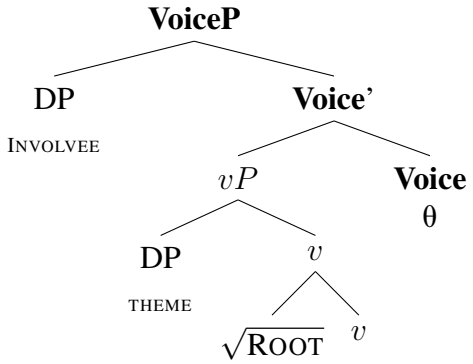
3.1. SIMPLE INVCS. We argue that simple InvCs such as (1b), repeated here as (16a), have the simple transitive structure given in (16c). The only difference to regular lexical causatives, with the structure in (16b), concerns the external argument, which in InvCs is interpreted as an involvee rather than as an agent.

(16) 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.'

b. *lexical causative*



c. *simple InvC*



To formalize this observation, we propose that lexical causatives and InvCs contain different flavors of Voice which assign an agent and an involvee θ-role, respectively, to their specifier positions. This involvee θ-role should not be understood as a fully novel and distinct role but simply realizes a subset of proto-agent properties as proposed by Dowty (1991) (see also Baker 1997 for the same view): like prototypical agents, involvees are sentient, but they lack intentionality and causal power.

This analysis leaves the question open why agent-oriented adverbs, instruments and passivization are not licensed with InvCs. We argue that this falls out from the non-agentive interpretation of the external argument. This claim is supported by the fact that the diagnostics in question equally fail in Turkish for other non-agent arguments such as instruments (17) and inanimate causers (18) (see also Kural 2000). Note that for obvious reasons, we do not give an example showing that instrument subjects cannot combine with instrumental modifiers.

(17) *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*)

(18) *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*)

Taken together, these data confirm that agent-oriented adverbs, instruments and passivization are not only sensitive to the syntactic presence of an external argument but also to its semantic interpretation, being licensed only with *agentive* Spec,VoiceP arguments. The broader question this raises is, naturally, why this generalization should hold. On the one hand side, the fact that agent-oriented adverbs and instruments are only licensed in the presence of an argument interpreted with intentionality and volition arguably does not come as a surprise but simply follows from the semantic and/or pragmatic requirements of this diagnostic. On the other hand, the fact that passivization requires an agentive argument in Turkish is less straightforward, and also does not seem to replicate in other languages such as English. If lexical causatives and InvCs are assumed to contain different flavors of Voice which have some syntactic reality,[5] passivization could be confined to agentive arguments by positing that only agentive Voice can have an empty specifier. We leave the further exploration of this question to future work.

So far, we have argued that InvCs are syntactically regular transitives but contain a non-agent external argument, similar to instruments and inanimate causers. However, this analogy might be taken to obscure a more fundamental difference: unlike any other kind of causative, regardless of the semantics of their external argument, InvCs are not interpreted as involving any causation. This raises the question whether pinpointing the difference between regular causatives and InvCs on the θ-role of the external argument is really sufficient or whether we should not rather develop a distinct eventive semantics for the latter.

What makes this question difficult to address is the fact that causative semantics has been analyzed in a variety of ways in the literature, and even more often, assumptions are not usu-

[5] See, e.g., Martin 2020 for a semantically different Voice for causer subjects; $\text{Voice}_{\text{CAUS}}$.

ally made explicit. We propose here one answer based on what is arguably currently the standard approach to causative semantics, without regarding it as the last word in this matter. It has been argued that lexical causatives and anticausatives have the same event structure, containing a low stative projection and an event-introducing *v* head (19b–20b). Making use of the "Process" semantics (e.g., Pietroski 2004; Williams 2015, see also Biggs & Embick 2022), our analysis adopts the relation END featuring in both (19b) and (20b), rather than e.g., introducing a predicate *Cause*. The Process semantics is typically applied to the analysis of change-of-state verbs; the main intuition being an event *e* ENDs in a state *s*.[6] Against this background, InvC causatives can be interpreted along the same lines (20c), with the sole difference being that the subject argument is not interpreted as the agent but as an involvee of the event:

(19) a. 'The day darkened.'
b. λe.$\exists$s.[End(e,s) & dark(s) & Theme(s,day)]

(20) a. 'Leyla darkened the day.'
b. **Lexical causative:** λe.$\exists$s.[Agent(e,Leyla) & End(e,s) & dark(s) & Theme(s,day)]
c. **Involvee causative:** λe.$\exists$s.[Involvee(e,Leyla) & End(e,s) & dark(s) & Theme(s,day)]

In short, under this view, InvCs do not require a distinct event semantics: the fact that they are not interpreted as causative follows exclusively from the non-agentive interpretation of the external argument.

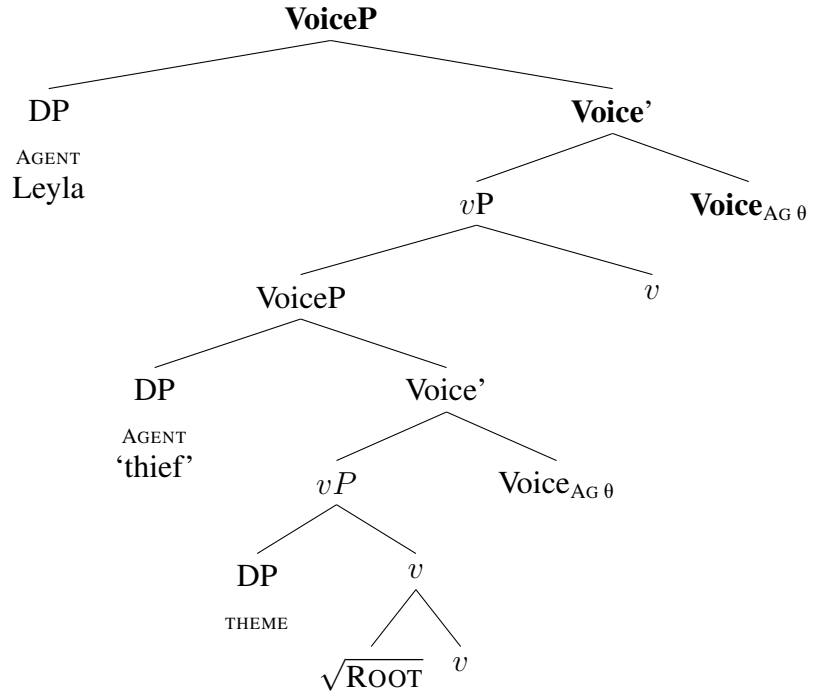
As an alternative view on causative semantics, it has been suggested that lexical causatives, unlike anticausatives, might contain a functional head which explicitly encodes causative semantics (e.g., Cuervo's (2003) and Folli & Harley's (2007) v_{DO} or $v_{\text{CAUS(E)}}$, contrasting with v_{BECOME}). In this case, InvCs would require a semantic variant of this head. While we believe that the first approach to the event semantics of InvCs outlined above holds more promise, we leave it to future work to provide a more definite answer.

3.2. COMPLEX INVCS. Having provided an analysis for simple InvCs, we now turn to complex InvCs such as (2b), repeated here as (21a). For the reader's reference, the structure of the regular indirect causative interpretation in the tradition of Pylkkänen (2008) is given in (21b).

(21) 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).'

[6] Alternatively, one could adopt the 'cause' predicate approach found in various studies under different labels: v_{PROC} in Ramchand 2008; v_{CAUS} in Alexiadou et al. 2015; $v_{\text{<e>}}$ 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.

b. *Structure for indirect causatives in Turkish*



Continuing the strategy to treat InvCs largely on a par with regular causatives, we argue that complex InvC differ from (21b) in two ways. First, as already seen for simple InvCs, their external argument is interpreted as an involvee as opposed to an agent. Secondly, whereas regular indirect causatives are commonly analyzed as containing two separate events, a causing and a caused event, each encoded on a distinct *v*, this does not seem to hold for complex InvCs. Example (22a) shows that the involvee reading does not license two adverbs to each be associated with a distinct event, which is possible for the regular indirect causative reading. Equally, as shown in (22b), targeting two separate events by count phrases is only licensed with regular indirect causatives, not with complex InvCs.

(22) a. 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).'

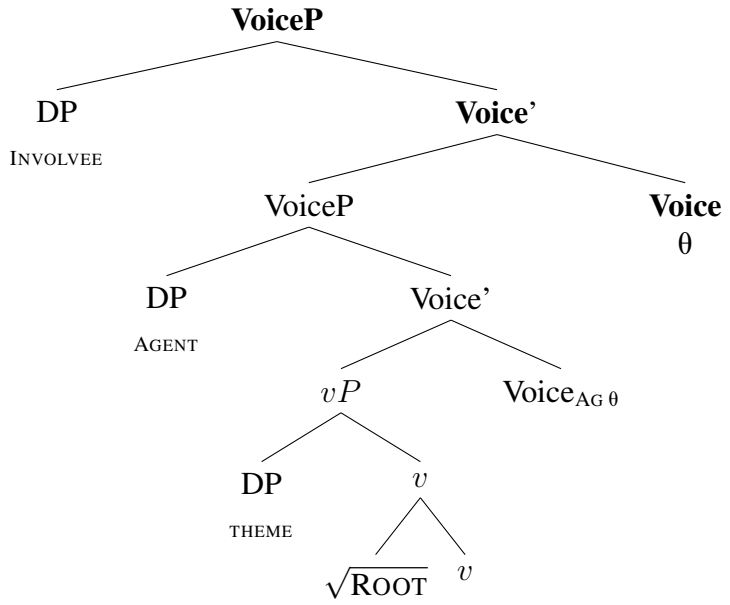
b. Leyla iki farklı defa hırsız-a çanta-yı üç kere çal-dır-mış.
Leyla two different time thief-DAT purse-ACC three time steal-CAUS-PST
YES: 'Leyla on two separate occasions made [the thief steal the purse 3 times].'
NO: 'Leyla on two separate occasions had the thief steal the purse 3 times (on her).'

In short, the evidence indicates that complex InvCs do not contain two distinct *v* heads each encoding an event.

This observation lends itself to two analyses, the choice between which makes no difference as far as we can tell. Complex InvCs might either feature a semantically vacuous *v* or no embedding *v* at all, which would give rise to the Voice-over-Voice structure in (23) (see also Nie 2020).[7]

[7] The presence of 'biclausal' structures in Turkish is another point that differentiates InvCs from the Japanese ad-

(23) *complex InvCs*



The fact that in this structure, agent is not the highest θ-role in the verbal domain, while perhaps unexpected, is in line with previous work by Bosse et al. (2012). Note also that while it is not possible to passivize on the involvee, as previously mentioned, it is possible to causativize on the embedded agent (in (21a), 'the thief') in complex InvCs, as correctly predicted by the structure in (23).

Overall, regardless of whether the embedding *v* is vacuous or absent altogether, both external arguments in complex InvCs are associated with the same event. This is a non-trivial finding. It is well-known that at least in the vast majority of languages, including Turkish, transitives cannot be causativized without the addition of a separate causing event,[8] suggesting that in those cases, the two external arguments – causer and causee – cannot be part of the same event (but see Nie 2020). Hence, it is not immediately clear why such a constellation should be licensed in the case of complex InvCs.

We argue that nothing per se rules out two Spec,VoiceP arguments as part of a single verbal domain but that their co-occurrence is restricted by thematic uniqueness (Carlson 1984, 1998; Parsons 1990), in that their θ-role must be distinct. Concretely, two agent arguments, as in indirect causatives, cannot be part of the same event whereas an agent and an involvee, as in complex InvCs, can. Under this view, InvCs demonstrate that at least in Turkish, the co-occurrence of arguments within the same event is not, or not only, restricted syntactically but semantically. Two arguments occupying the same syntactic position can be part of the same event as long as their interpretation is sufficiently distinct.

The question this raises is, naturally, what precisely counts as sufficiently distinct. For instance, while there are substantial differences between the interpretation of agents, inanimate

versity causatives. Adversity causatives are generally only possible on transitive structures for which there also exists an intransitive unaccusative counterpart. As such, they are morphophonologically identical to lexical causatives, built directly on a verbal root, and not to syntactic causatives in the many cases where these are morphophonologically distinguishable (e.g., when the syntactic causative is built on top of a lexical causative) (Wood & Marantz 2017:274).

[8] An exception to this generalization are ingesto-reflexives which can causativize to form ditransitives; see Krejci (2012) for a typological overview.

causers and instruments, respectively, these arguments do not seem to be compatible with each other. In response to this, we hypothesize that two external arguments might be blocked from co-occurring if they are both interpreted with causal force. Multicausality arguably poses a cognitive challenge for humans, suggesting that linguistic representations featuring two independent loci of causal power could be ruled out on such grounds. This would correctly account for the fact that involvees, lacking causal force, can be part of the same event as causally efficacious arguments such as agents, inanimate causers and instruments, while the latter are incompatible with each other.

4. The morphology of InvCs. Finally, we briefly turn to the question of how the causative morphology on InvCs, both simple and complex, should be analyzed. Crucially, since InvCs lack causative semantics, they provide evidence that the latter is independent from causative morphology (see Wood & Marantz 2017; Schäfer 2022). This contradicts the claim that causative morphemes spell out a dedicated head denoting a causal relation, such as v_{CAUS} (Ramchand 2008; Key 2013; Harley 2017). Causative semantics and causative morphology, InvCs suggest, are correlated but not inextricably linked.

Instead, we propose two simple ways in which the causative marking on InvCs could be analyzed. In line with much previous research, the causative morpheme can either be regarded as the spell-out of *v* in the context of thematic Voice (Legate 2014; Wood 2015), or as realizing thematic Voice itself (Key to appear). In both cases, causative morphology is correctly predicted to be absent from the anticausative variants which lack a thematic Voice head. Note that both theories struggle with the fact that unergatives do not surface with causative morphology (Neu 2024); however, this is a general problem independent of InvCs.

Which of these two morphological analyses to adopt also depends on the question whether complex InvCs should be considered as containing a semantically vacuous *v* or no embedding *v* at all. In the latter case, the causative morpheme would have to spell out Voice whereas in the former case, both options remain on the table. In short, InvCs provide clear evidence against a strict coupling of causative semantics and causative morphology (in support of Wood & Marantz 2017; Schäfer 2022), but they are fully compatible with other standard approaches to the latter.

5. Conclusion. To summarize, InvCs exhibit several non-standard properties compared to regular causatives, namely, failure to license agent-oriented adverbs, instrument phrases and passivization. In contrast to previous research which has taken these properties as indicative of an unaccusative syntax, we have provided several diagnostics demonstrating that InvCs must in fact contain a thematic Voice head. On a methodological level, we thus conclude that agent-oriented adverbs, instrument phrases and passivization do not constitute valid unaccusativity diagnostics cross-linguistically. Rather, at least in some languages they are sensitive to the interpretation of the external argument. Our findings thus have a direct bearing on future work on non-canonical transitives, as well as on argument structure in general.

Three main questions are left for further research to address. First, while the fact that agent-oriented adverbs and instrument phrases require an agentive argument does not require an extensive explanation, we would like to have a better account for why the same holds for passivization in Turkish. To this end, it would also be useful to gain a clearer understanding of the typological facts, determining whether other languages place similar restrictions on passivization and how those restrictions compare with each other.

Secondly, we have provided only a tentative answer to the question of how to derive the non-

causative interpretation of InvCs. We believe that InvCs can provide a valuable testing ground for both past and future theories of causative event semantics. Such theories will need to account for the fact that what we intuitively perceive as the causative component of the semantics of transitives can be systematically absent without any associated morphosyntactic change.

Finally, complex InvCs have raised intriguing questions about the uniqueness conditions holding on the arguments of a single event. We have argued that a single event can be associated with two Spec,VoiceP arguments as long as their interpretation or θ-role is sufficiently distinct, such as agent and involvee arguments, and we have suggested that the relevant factor distinguishing the two might be the fact that involvees lack causal force. Finding support or counterevidence for this claim cross-linguistically and exploring its broader cognitive implications would be a promising avenue for future research.

References

Akkuş, Faruk. 2021. *(Implicit) argument introduction, voice and causatives*. Philadelphia, PA: University of Pennsylvania dissertation.

Akkuş, Faruk. 2022. On causee in Sason Arabic. *Syntax* 25(3). 299–334. https://doi.org/10.1111/synt.12233.

Akkuş, Faruk. 2023. Turkish causatives embed a thematic VoiceP, and the Causee is an argument. In Suet-Ying Lam & Satoru Ozaki (eds.), *Proceedings of the 53rd Annual Meeting of the North East Linguistic Society (NELS 53)*, 1–15. Amherst, MA: GLSA Publications.

Alexiadou, Artemis & Elena Anagnostopoulou. 2020. Experiencers and causation. In Elitzur A. Bar-Asher Siegal & Nora Boneh (eds.), *Perspectives on causation: Selected papers from the Jerusalem 2017 workshop*, 297–317. Springer. https://doi.org/10.1007/978-3-030-34308-8_9.

Alexiadou, Artemis, Elena Anagnostopoulou & Florian Schäfer. 2015. *External arguments in transitivity alternations: A layering approach*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199571949.001.0001.

Baker, Mark. 1997. Thematic roles and syntactic structure. In Liliane Haegeman (ed.), *Elements of grammar: Handbook in generative syntax*, 73–137. Springer.

Belvin, Robert & Marcel Den Dikken. 1997. *There*, happens, *to, be, have*. *Lingua* 101(3–4). 151–183. https://doi.org/10.1016/s0024-3841(96)00049-6.

Biggs, Alison & David Embick. 2022. On the Event-Structural Properties of the English *Get*-Passive. *Linguistic Inquiry* 53(2). 211–254. https://doi.org/10.1162/ling_a_00405.

Biktimir, Tuvana. 1986. Impersonal passives and the *-arak* construction in Turkish. In Dan Isaac Slobin & Karl Zimmer (eds.), *Studies in Turkish linguistics*, 53–75. Amsterdam/Philadelphia: Benjamins. https://doi.org/10.1075/tsl.8.04bik.

Bosse, Solveig, Benjamin Bruening & Masahiro Yamada. 2012. Affected experiencers. *Natural Language & Linguistic Theory* 30. 1185–1230. https://doi.org/10.1007/s11049-012-9177-1.

Bruening, Benjamin. 2013. *By* phrases in passives and nominals. *Syntax* 16. 1–41. https://doi.org/10.1111/j.1467-9612.2012.00171.x.

Carlson, Greg. 1984. Thematic roles and their role in semantic interpretation. *Linguistics* 22. 259–279.

Carlson, Greg. 1998. Thematic roles and the individuation of events. In Susan Rothstein (ed.), *Events and grammar*, 35–51. Dordrecht: Springer. https://doi.org/10.1007/978-94-011-3969-4_3.

Cuervo, María Cristina. 2003. *Datives at Large*. Cambridge, MA: MIT dissertation.

Dowty, David. 1991. Thematic proto-roles and argument selection. *Language* 67. 547–619. https://doi.org/10.2307/415037.

Folli, Raffaella & Heidi Harley. 2007. Causation, obligation, and argument structure: On the nature of little *v*. *Linguistic Inquiry* 38(2). 197–238. https://doi.org/10.1162/ling.2007.38.2.197.

Harley, Heidi. 1998. You're having me on: Aspects of *have*. *La grammaire de la possession* 195–226.

Harley, Heidi. 2017. The "bundling" hypothesis and the disparate functions of little *v*. In Roberta d'Alessandro, Irene Franco & Ángel Gallego (eds.), *The verbal domain*, 3–28. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780198767886.003.0001.

Key, Gregory. 2013. *The morphosyntax of the turkish causative construction*. Tucson, AZ: University of Arizona dissertation.

Key, Gregory. to appear. Voice in Turkish: Re-thinking *u*-syncretism. *Natural Language & Linguistic Theory*.

Knecht, Laura Ellen. 1985. *Subject and Object in Turkish*. Cambridge, MA: Massachusetts Institute of Technology dissertation.

Kornfilt, Jaklin. 1997. *Turkish*. London/New York: Routledge. https://doi.org/10.4324/9781315823652.

Krejci, Bonnie Jean. 2012. *Causativization as antireflexivization: A study of middle and ingestive verbs*. Austin, TX: The University of Texas at Austin MA thesis.

Kural, Murat. 2000. Detransitivizing passives. In Aslı Göksel & Celia Kerslake (eds.), *Studies on Turkish and Turkic languages: Proceedings of the Ninth International Conference on Turkish Linguistics*, 57–66. Wiesbaden: Harrassowitz Verlag.

Landau, Idan. 2010. *The locative syntax of experiencers*. Cambridge, MA: MIT Press. https://doi.org/10.7551/mitpress/8387.001.0001.

Legate, Julie Anne. 2014. *Voice and v: Lessons from Acehnese*. Cambridge, MA: MIT Press. https://doi.org/10.7551/mitpress/9780262028141.001.0001.

Legate, Julie Anne, Faruk Akkuş, Milena Šereikaitė & Don Ringe. 2020. On passives of passives. *Language* 96(4). 771–818. https://doi.org/10.1353/lan.2020.0062.

Marantz, Alec. 2007. Phases and words. In S. H. Choe (ed.), *Phases in the theory of grammar*, 191–220. Seoul: Dong In.

Martin, Fabienne. 2020. Aspectual differences between agentive and non-agentive uses of causative predicates. In Elitzur A. Bar-Asher Siegal & Nora Boneh (eds.), *Perspectives on causation: Selected papers from the Jerusalem 2017 Workshop*, 257–294. Springer. https://doi.org/10.1007/978-3-030-34308-8_8.

Neu, Eva. 2024. Direct causatives of unergatives: A view from variable unaccusativity. Manuscript. UMass Amherst. Under revision.

Nie, Yining. 2020. Morphological causatives are Voice over Voice. *Word Structure* 13. 102–126. https://doi.org/10.3366/word.2020.0161.

Özkaragöz, Inci. 1980. Evidence from Turkish for the Unaccusative Hypothesis. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* 6. 411–422.

Paparounas, Lefteris & Faruk Akkuş. 2024. Reflexivization and movement: Evidence from Turkish verbal reflexives. Presentation at the the 54th Annual Meeting of the North East Linguistic Society (NELS 54), MIT.

Parsons, Terence. 1990. *Events in the semantics of English: A study in subatomic semantics*. Cambridge, MA: MIT Press.
Pietroski, Paul M. 2004. *Events and semantic architecture*. Oxford: Oxford University Press.
Pylkkänen, Liina. 2008. *Introducing arguments*. Cambridge, MA: MIT Press. https://doi.org/10.1017/s0022226709990107.
Ramchand, Gillian. 2008. *Verb meaning and the lexicon*. Cambridge: Cambridge University Press. https://doi.org/10.1017/cbo9780511486319.
Schäfer, Florian. 2008. *The syntax of (anti-)causatives: External arguments in change-of-state contexts*. Amsterdam/Philadelphia: Benjamins. https://doi.org/10.1075/la.126.
Schäfer, Florian. 2022. Transitive anticausatives. In Breanna Pratley, Özge Bakay, Eva Neu & Peyton Deal (eds.), *Proceedings of NELS 52*, 85–98. Amherst, MA: GLSA Publications.
Schäfer, Florian. 2023. Anticausatives in transitive guise. Manuscript. Humboldt-Universität zu Berlin. Under revision.
Williams, Alexander. 2015. *Arguments in syntax and semantics*. Cambridge: Cambridge University Press. https://doi.org/10.1017/cbo9781139042864.
Williams, Edwin. 1985. PRO and subject of NP. *Natural Language & Linguistic Theory* 3(3). 297–315. https://doi.org/10.1007/bf00154265.
Wood, Jim. 2015. *Icelandic morphosyntax and argument structure*, vol. 90. Springer.
Wood, Jim & Alec Marantz. 2017. The interpretation of external arguments. In Roberta d'Alessandro, Irene Franco & Ángel Gallego (eds.), *The verbal domain*, 255–278. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780198767886.003.0011.