On some putative unaccusativity diagnostics*

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Abstract

This paper is concerned with a set of diagnostics – agent-oriented adverbs, instruments and passivization – that are commonly used to detect the presence of a thematic Voice head. It analyzes a hitherto undocumented construction in Turkish, *involvee causatives* (InvCs). While InvCs surface with standard causative morphosyntax, they do not receive a causative interpretation and also fail the above diagnostics. In previous work, this profile has been taken as evidence for an unaccusative syntax. For InvCs, however, a wide range of evidence contradicts an unaccusative analysis. InvCs do contain a thematic Voice layer, but their argument does not receive an agent interpretation, which accounts for the failure of the diagnostics. Overall, this study problematizes the use of only agent-oriented adverbs, instrument phrases and passivization as tests for thematic Voice and advocates for a more nuanced approach to unaccusativity diagnostics.

1 Introduction

This study is concerned with the general question of how to interpret the failure of a certain set of agent-oriented diagnostics, commonly also known as thematic Voice diagnostics, with a focus on a hitherto unnoticed mismatch between causative morphology and causative semantics in Turkish.

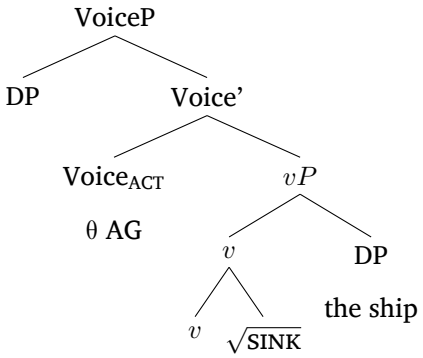
At least since Gruber (1965), an extensive number of linguistic studies have adopted agent-oriented diagnostics to determine the thematic interpretation of arguments as well as their syntactic status. Building on the agent-Voice pairing proposed by Kratzer (1996) (see also Pylkkänen 2008 and many following works), syntacticians have relied heavily on the idea that if an argument passes agent-oriented diagnostics, it is introduced in Spec,VoiceP. Moreover, these diagnostics have also been used to test whether a thematic Voice projection exists when the external argument is phonologically null or not projected.

*Glossing follows Leipzig conventions with these additions: EVID = evidential. Acknowledgments to be added.

Three particularly prominent diagnostics used to this effect are agent-oriented adverbs, instrumentals and passivization (cf. Perlmutter & Postal 1984; for some recent adaptations, see Anagnostopoulou 2003, 2017; Reinhart & Siloni 2005; Pylkkänen 2008; Schäfer 2008; Bruening 2013; Legate 2014; Alexiadou 2014; Alexiadou et al. 2015; Wood 2015; Alexiadou & Anagnostopoulou 2020; Sigurðsson & Wood 2021; Šereikaitė 2021; Myler & Mali 2021; Akkuş 2022; Paparounas 2023).

Concretely, the presence and absence of a Voice projection, as well as whether or not it projects a specifier position, distinguishes between three major syntactic configurations. The structures for actives and passives (following Alexiadou et al. 2015) are roughly illustrated in (1b) and (2b), respectively, using the classic *sink the ship* example from Roeper (1987). In actives, the agent is projected syntactically in Spec,VoiceP. In passives, the agent remains part of the semantics of Voice, but is not projected syntactically (e.g., Bruening 2013; Legate 2014; Legate et al. 2020; Akkuş 2021; Alexiadou et al. 2015; Sigurðsson & Wood 2021; Paparounas 2023). Abstracting away from this difference, both crucially involve the presence of a thematic VoiceP with agentive semantics, as indicated by the agent θ-role on the Voice head.

(1) a. I sank the ship (intentionally / with a torpedo).

b.


(2) a. The ship was sunk (intentionally / with a torpedo).

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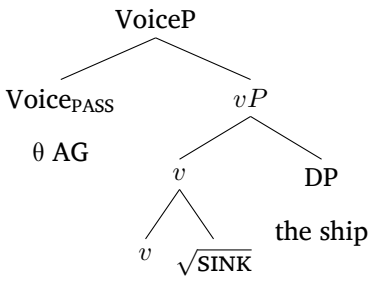
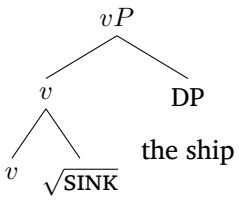


In contrast, constructions that fail to pass agent-oriented diagnostics are commonly analyzed as unaccusatives which lack a VoiceP layer, (3b) (e.g., Pylkkänen 2008; Bruening 2013; Legate 2014; Alexiadou et al. 2015; Schäfer 2008, 2025; Alexiadou & Anagnostopoulou 2020; Landau 2010; Belvin & Den Dikken

1997; see also Perlmutter & Postal 1984).

(3) a. The ship sank (*intentionally / *with a torpedo).

b. 

Beyond standard actives, passives and unaccusatives, the recent literature has proposed a larger inventory of Voice heads (see e.g., Schäfer 2017; Šereikaitė 2021; Sigurðsson & Wood 2021; Akkuş 2022), including expletive Voice (Schäfer 2008, 2012, 2025; Wood 2015). We address these additional analytical possibilities below where appropriate.

Against this background, the present paper is concerned with a construction in Turkish that we label *involvee causatives* (InvCs). A first example is given in (4). The subject argument can be interpreted as being involved in the event or experiencing it, rather than as being causally responsible for it.

(4) Biz güneş-i bat-ır-dı-k.
we sun-ACC set-CAUS-PST-1PL
'The sun set, and we were involved/around when it happened.' (Lit: 'We set the sun.')

Crucially, InvCs do not pass agent-oriented diagnostics, namely, agent-oriented adverbs, instrumentals and passivization. The failure of these diagnostics for many constructions has previously been taken as evidence for an unaccusative-like syntax, as in (3b). Hence, the question arises whether InvCs equally ought to be analyzed as underlyingly unaccusative, despite their regular causative morphosyntax.

In this paper, we subject agent-oriented diagnostics to close scrutiny. We provide extensive evidence that an unaccusative analysis of InvCs is not warranted, and we further demonstrate that in Turkish, instrument and inanimate causer subjects equally fail these diagnostics. Taken together, our findings make a strong case that agent-oriented adverbs, instruments and passivization are not valid unaccusativity diagnostics. As for InvCs, we conclude that they contain a thematic VoiceP that introduces an external argument in its specifier position, as in (1b). The non-standard properties of this construction are motivated semantically, in that the external argument is interpreted not as an agent in the narrow sense, but as an involvee, possessing only a subset of proto-agent properties (Dowty 1991). Overall, our main goal in this paper is to problematize the use of unaccusativity diagnostics and emphasize that the failure of agent-oriented diagnostics does not necessarily point to an unaccusative syntax.

In addition, a secondary concern of this paper is to explore the consequences that InvCs have for theories of causative semantics, causative morphology and causation more broadly. We suggest that In-

vCs cast doubt on the idea that causatives constitute a well-defined grammatical primitive, and that they should rather be understood as clusters of overlapping properties. In InvCs, which are morphologically causative but – at least in some sense – not semantically causative, these properties come apart.

A brief note on data collection and potential inter-speaker variation. The Turkish data for the study come from multiple sources; these include examples attested in online sources, examples from published studies and judgments of the native speaker co-author, all of which have been consistently confirmed with three other native speaker linguists, and a large number of Turkish speakers at multiple academic venues, some of which were Turkic-focused. In fact, some examples were provided to us by Turkish-speaking attendees in these venues, and others were improved thanks to their feedback. That said, we also discuss cases of inter-speaker variation that we encountered.

We will proceed as follows. In Section 2, we introduce InvCs more in detail and contextualize the discussion against the background of previous work. Section 3 provides multiple pieces of evidence against an unaccusative analysis for Turkish InvCs, and Section 4 sets out our analysis according to which InvCs do contain a thematic Voice head. Section 5 discusses some implications for theories of causatives and causation, and Section 6 concludes.

2 Background

We begin by outlining the semantic and syntactic properties of Turkish InvCs (2.1). We then briefly survey various constructions cross-linguistically that, like InvCs, are morphosyntactically causative, but have nonetheless been analyzed in the literature as underlyingly unaccusative on the basis of agent-oriented diagnostics (2.2).

2.1 Data from Turkish involvee causatives

Turkish InvCs come in two variants. The first, already briefly introduced above, is shown in (5). The causative in (5b) of the intransitive in (5a) allows for two distinct readings: besides the expected direct causative interpretation – here pragmatically infelicitous – that we caused the sun to set, the sentence can also convey the meaning that we were involved in or experienced the setting of the sun.

(5) a. Güneş bat-tı.
sun set-PST.3SG
'The sun set.'

b. Biz güneş-i bat-ır-dı-k.
we sun-ACC set-CAUS-PST-1PL
YES: #‘We set the sun.’
YES: ‘The sun set, and we were involved/around when it happened.’

The second variant of InvCs is shown in (6). The causative in (6b) of the transitive in (6a) can either receive a regular indirect causative reading according to which Leyla made the thief steal the purse, or the alternative interpretation that Leyla witnessed the stealing of the purse:

(6) 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 (5b) and (6b), the subject can thus be interpreted either as an agent who causes the event or as someone who is merely involved in the event but not causally responsible for it. We describe arguments that receive the latter reading as involvees, and we refer to causatives containing an involvee argument as *involvee causatives* (InvCs). We distinguish between *simple InvCs* such as (5b) that correspond to direct causatives, and *complex InvCs* such as (6b) that correspond to indirect causatives.

All InvCs surface with standard causative morphology, which in Turkish is always ambiguous between direct and indirect causatives. Some alternating change-of-state verbs form causatives with a suffix that surfaces in various allomorphs (*-Ar*, *-Art*, *-DIr*, *-Ir*, *-It* and *-t*), while others causativize by means of light verbs (Kornfilt 1997; Keskin 2009; Key 2025): the transitive member of a causative/inchoative alternating pair uses the active light verb *eD-* ‘do’, while the intransitive/inchoative member is marked with the light verb *ol-* ‘become’ (a crosslinguistically unremarkable pattern, see e.g., Persian complex predicates (Folli et al. 2005)). An example of a canonical causative-inchoative pair with light verb morphology is illustrated in (7), with the same alternation for the InvC in (8).

(7) a. Çanta kayb ol-du.
purse lost become-PST
‘The purse got lost.’

b. Biz çanta-yı kayb et-ti-k.
we purse-ACC lost do-PST-1PL
‘We lost the purse.’

(8) a. Sabah ol-du.
morning become-PST
‘It became morning.’

b. Biz sabah-ı et-ti-k.
we morning-ACC do-PST-1PL
‘We saw through the morning.’

In short, InvCs display the same morphology as genuinely causative uses of the same verbs.

Looking more in detail at the interpretation of InvCs, involvee arguments are semantically similar to experiencer and affectee arguments in that they lack causal power but require sentience. A sentence with an inanimate subject can only receive a regular causative reading since the argument cannot be affected by or involved in the event (9). Similarly, for most speakers, a dead person cannot function as the involvee argument, as in (10). This example is odd in a context where after my father's passing, for some reason related to him, the thief snatched the purse, although it can be uttered in a scenario where the thieves entered the house because my father left the door open before he died.

(9) {Çaresizlik / açlık} hırsız-a çanta-yı çal-dır-mış.
hopelesness / hunger thief-DAT purse-ACC steal-CAUS-PST
YES: 'Hopelesness/hunger caused the thief to steal the purse.'
NO: 'Hopelesness/hunger had the purse stolen by the thief (on it).'

(10) #Rahmetli baba-m hırsız-a çanta-yı kap-tır-dı.
late father-1SG.POSS thief-DAT purse-ACC snatch-CAUS-PST
'My late father had the thief snatch the purse (on him).'

Despite affinities to other roles attested in the literature, we here retain the specific term 'involvee.' The affectee role is often used to describe benefactive or malefactive arguments that suffer positive or negative consequences as a result of the event; and the term experiencer is best reserved for the arguments of verbs of perception (e.g., *see, hear, feel, smell, taste*), emotion (*frighten, fear*, etc.) and cognition (*know, understand*, etc.), where the experience itself is a critical part of the meaning of the verb.[1] As Bosse et al. (2012) have shown, fine-grained semantic differences between roles in this broader cluster have wide-ranging grammatical effects, which makes an equally fine-grained terminology necessary. We discuss the status of involvees in the thematic inventory further in Section 4.

While InvCs are productive in Turkish, causatives can only receive an involvee interpretation if the event qualifies as noteworthy. For instance, while (11b) is acceptable in the context given, it is infelicitous if the speakers merely happens to see some anonymous ship sink. Whether or not a given sentence is interpreted as an involvee causative or a regular causative appears to be determined by world knowledge and the lexical semantics of the verb; for the purposes of this paper, we leave this question aside.

(11) a. Gemi bat-tı.
ship sink-PST.3SG
'The ship sank.'

[1]Note also that all else being equal – e.g., provided that the direct object bears structural accusative case –, experiencer arguments thus understood can passivize in Turkish, unlike involvees.

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 also sink-CAUS-PST-1PL

'We experienced the sinking of the ship too.' (lit: we sank the ship too)

Besides the non-standard interpretation of the subject argument, which lacks the semantic hallmarks of a canonical agent or causer, InvCs have three other notable properties that connect to the main point of our study. First, InvCs do not license instrument phrases, which can surface in standard causatives. In (12), the presence of the PP 'with sledgehammers' blocks the involvee reading from (11b), leaving only the regular direct causative interpretation. Similarly, the instrumental PP 'with threats' is only compatible with the regular indirect causative reading, not the complex InvC in (13).

(12) *pro* gemi-yi balyoz-lar-la bat-ır-dı-k.
ship-ACC sledgehammer-PL-with sink-CAUS-PST-1PL
YES: 'We sank the ship with sledgehammers.'
NO: 'We were involved with sledgehammers in the event of the ship sinking.'

(13) Leyla hırsız-a çanta-yı tehdit-ler-le çal-dır-mış.
Leyla thief-DAT purse-ACC threat-PL-with steal-CAUS-PST
YES: 'Leyla, with threats, caused the thief to steal the purse.'
NO: 'Leyla, with threats, had the purse stolen by the thief (on her).'

Secondly, unlike standard causatives, InvCs disallow agent-oriented adverbs, as shown in (14) and (15) for simple and complex InvCs, respectively:

(14) *pro* gemi-yi (şevkle) bat-ır-dı-k.
ship-ACC enthusiastically sink-CAUS-PST-1PL
YES: 'We sank the ship enthusiastically.'
NO: 'We were involved enthusiastically in the event of the ship sinking.'

(15) Leyla hırsız-a çanta-yı şevkle çal-dır-mış.
Leyla thief-DAT purse-ACC enthusiastically steal-CAUS-PST
YES: 'Leyla, enthusiastically, caused the thief to steal the purse.'
NO: 'Leyla, enthusiastically, had the purse stolen by the thief (on her).'

Finally, InvCs resist passivization. While the active in (16a) can have both a regular causative and an involvee interpretation, the latter disappears in the passive in (16b). The same effect obtains for most speakers for the simplex InvC in (17).

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

b. Çanta Leyla tarafından hırsız-a çal-dır-ıl-mış.
purse Leyla by thief-DAT steal-CAUS-PASS-PST
YES: 'The purse$_i$ was made by Leyla [for the thief to steal t$_i$].'
NO: 'The purse was stolen by the thief, and Leyla was involved in/affected by this.'

(17) a. Biz hava-yı karar-t-tı-k.
we weather-ACC darken-CAUS-PST-1PL
YES: #'We caused the daylight to go away.'
YES: 'We were involved/part of the event when the daylight went away.'[2]

b. Hava biz-im tarafımızdan karar-t-ıl-dı.
weather we-GEN by darken-CAUS-PASS-PST
YES: #'The daylight was caused (by us) to go away.'
NO: 'The daylight went away, and we were somehow involved/part of it.'

Note that while these patterns held up for most of our speakers, we also encountered some inter-speaker variation in the diagnostics. For a few speakers, adverbials in (14) and passivization in (17b) were (marginally) acceptable, with a further variation. For a subset of them, these judgments apply both to simplex and complex InvCs, whereas others agree with the majority that complex InvCs fail these diagnostics, but have less sharp and consistent intuitions about simple InvCs. No clearer pattern emerged for those speakers. Focusing on the grammar of speakers who have the above contrasts in this paper, we address points of variation from a more theoretical angle at the end of Section 4.

Overall, InvCs thus provide an interesting testing ground: while they are formally identical to canonical causative uses of the verb – including in that they bear standard causative morphology –, they do not pass agent-oriented diagnostics, thereby differing from their canonical causative counterparts. At first glance, the latter finding might be taken to indicate that InvCs have an unaccusative syntax, as has been posited for similar or related constructions that exhibit (a subset of) the above-mentioned properties.

Before turning to such constructions, we enhance the empirical picture with additional examples of InvCs from a typologically distinct language, Arabic. For example, Sason Arabic exhibits a contrast

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

between (18a) and (18b), parallel to Turkish InvCs:

(18) a. xallıs-na {odav / fıkır ıjdid}.
finish.PST-1PL homework / idea new
'We completed {the homework / the new idea}.'

b. xallıs-na {om / lele / sayf}.
finish.PST-1PL day / night / summer
'We finished {the day / the night / the summer}. (Sason Arabic)

In both sentences, the verb is morphologically active and surfaces with a nominative subject and an accusative direct object. Nonetheless, only (18a) passes the agent-oriented diagnostics, seen for agent-oriented adverbs and instruments in (19) (passivization also shows the same contrast).

(19) a. xallıs-na odav {wara şavk / wara qalam}.
finish.PST-1PL homework with enthusiasm / with pencil
'We finished the homework {enthusiastically / with pencils (using pencils)}.'

b. xallıs-na lele {#wara şavk / #wara lamba}.
finish.PST-1PL night with enthusiasm / with lamp
'We finished the night {#enthusiastically / #with lamps (using lamps)}. (Sason Arabic)

Given that this phenomenon is thus also attested in Arabic, it is likely that similar contrasts could be found in other unrelated languages. In the interest of space, we limit our discussion and diagnostics to Turkish InvCs in the rest of this study.

2.2 Previous uses of thematic Voice diagnostics

This section contextualizes our work by reviewing some related data from the previous literature. Evidence from agent-oriented adverbs, instrument phrases and passivization has in general been widely used across research on argument structure for a variety of purposes (e.g., Keyser & Roeper 1984; Roeper 1987; Reinhart & Siloni 2005; Bruening 2013; Alexiadou et al. 2015; Pylkkänen 2008; Anagnostopoulou 2003; Legate 2014; Landau 2010; Schäfer 2008; Alexiadou & Anagnostopoulou 2020; Akkuş 2022; Sigurðsson & Wood 2021; Šereikaitė 2021, a.m.o.). Of particular interest to us is the use of these diagnostics for constructions that, like InvCs, may bear the morphosyntactic hallmarks of causatives, but differ from more prototypical cases both in their semantic interpretation and in not passing all of the three diagnostics discussed above (agent-oriented adverbs, instrument phrases and passivization). These constructions include, among others, Japanese adversity causatives (Pylkkänen 2008; Wood & Marantz 2017), transitive anticausatives (Schäfer 2022, 2025), Class III and some Class II experiencers (Landau 2010), inanimate causers (Alexiadou 2014) and *have*-experiencers in English (Belvin & Den Dikken 1997, but

see Harley 1998 for an analysis parallel to ours). For all of them, the failure of some agent-oriented tests has been taken as evidence for an unaccusative syntax, although the concrete analyses developed vary.

In the following, we briefly review the two case studies for space reasons: Pylkkänen (2008) on Japanese adversity passives and Schäfer (2025) on transitive anticausatives. Both crucially draw on evidence from passivization to corroborate their analysis. We emphasize from the outset that in the following, we do not specifically argue for or against these previous analyses, which might or might not be correct in positing an unaccusative syntax for the data with which they are concerned. Moreover, we concur with both authors that the presence of causative morphology in itself does not establish the presence of an external argument. The point we aim to make in this paper is merely that the failure of (a subset of) agent-oriented diagnostics by itself is not sufficient to infer an unaccusative syntax and that a more thorough set of tests or properties of the language is needed.

Japanese adversity causatives Our first case study are Japanese adversity causatives, (20), as analyzed in Pylkkänen (2008):

(20) Taroo-ga musuko-o sin-ase-ta.
Taro-NOM son-ACC die-CAUS-PST
YES: 'Taro caused his son to die.'
YES: 'Taro's son died on him.' (Pylkkänen 2008:90,(19))

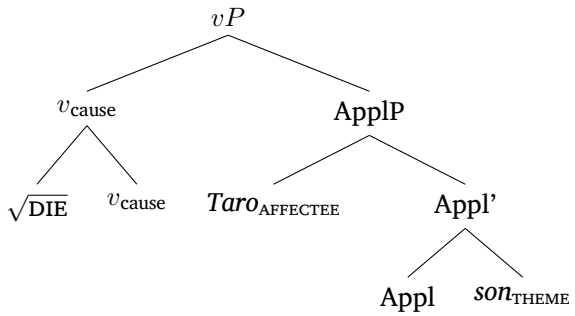
Adversity causatives have several properties in common with Turkish (simple) InvCs. First, morphosyntactically, they equally look like plain lexical causatives. Second, semantically, they are ambiguous between a regular causative and an affectee-like interpretation. Under the latter reading, the nominative argument is interpreted not as a causer, but as a participant affected by the event described by the noncausative verb. Unlike in Turkish InvCs, Japanese only allows this reading if the 'affectee' subject is understood as the possessor of the internal argument. Finally, when passivized, the adversity reading disappears and only the coercive causative interpretation is retained (21).

(21) Musuko-ga sin-ase-rare-ta.
son-NOM die-CAUS-PASS-PST
YES: 'The son was caused to die.'
NO: 'Somebody's son died on them.' (Pylkkänen 2008:90,(20))

Pylkkänen (2008) takes the fact that adversity causatives cannot passivize as evidence that their subject argument is not a true external argument, but a derived subject as in passives or unaccusatives (see Perlmutter & Postal 1984; Legate et al. 2020). Accordingly, she analyzes Japanese adversity causatives as unaccusative causatives, arguing that the presence of causative semantics is in principle independent

from the presence of an external argument, with adversity causatives possessing the former but not the latter. Concretely, in her system, the adversity causative in (20) would have the low-applicative unaccusative structure of (22).[3]

(22)



Transitive anticausatives Secondly, we discuss Schäfer's (2025) work on a construction attested in a number of languages that he labels 'transitive anticausatives.' Like InvCs, transitive anticausatives are morphosyntactically regular transitives with two arguments, a nominative DP that triggers verbal agreement and an accusative DP. Moreover, they surface with causative morphology in languages that have it, never with anticausative marking.

Crucially, Schäfer (2025) argues that transitive anticausatives are semantically anticausative/inchoative and thus truth-conditionally identical to their canonical anticausative counterparts, shown for Turkish in (23):

(23) a. Bulut-lar-ın şekl-i değiş-ti.
cloud-PL-GEN shape-POSS change-PST
'The shape of the clouds changed.'

b. Bulut-lar şekil-ler-i-ni değiş-tir-di-ler.
cloud-PL shape-PL-POSS-ACC change-CAUS-PST-PL
'The clouds changed their shapes.' (Schäfer 2025:430,(13))

Schäfer provides several pieces of evidence for this claim; we focus here on passivization. As seen in (24) for German, the transitive anticausative in (24a) cannot be passivized (24b):

(24) a. Mit steigender Temparatur vergrößerte das Gas sein Volumen.
with rising temperature increased the gas.NOM its volume.ACC
'With the temperature rising, the gas increased its volume.'

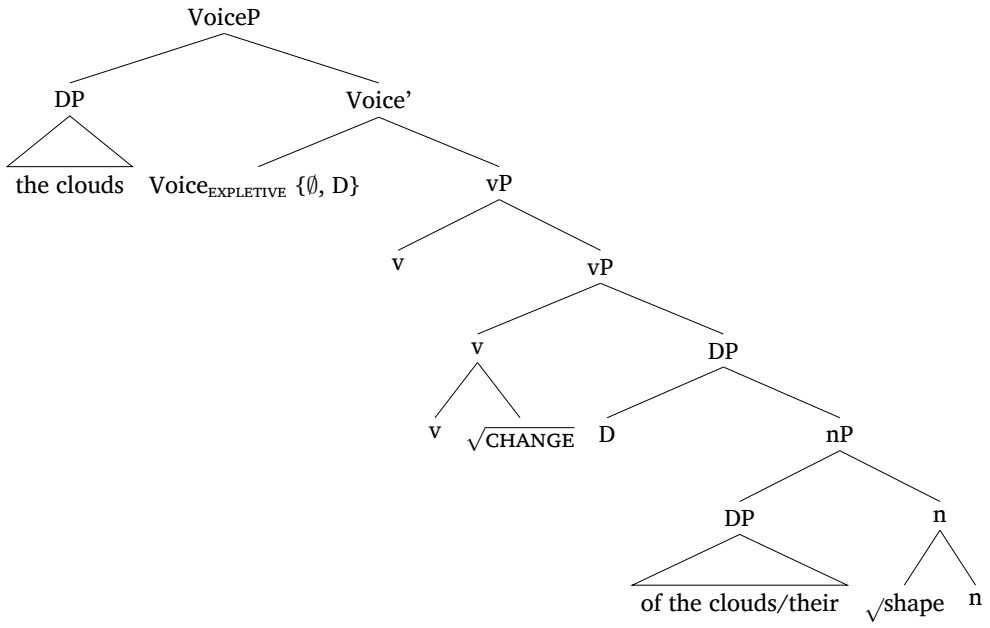
b. #Mit steigender Temperatur wurde von dem Gas$_i$ sein$_i$ (eigenes) Volumen.NOM
with rising temperature was by the gas its own volume

[3] Pylkkänen (2008) thus treats adversity causatives as a variety of the ordinary double object constructions, except that the relationship between the two arguments is one of affectedness (or, in some cases, of source), rather than of transfer-of-possession. We abstract away from the details of Pylkkänen's (2008) analysis as our primary point does not hinge on it.

vergrößert.
increased
#‘With the temperature rising, its volume was increased by the gas.’(Schäfer 2025:433,(18))

In conjunction with other diagnostics, Schäfer takes this finding as evidence that transitive anticausatives lack a thematic Voice projection. To still derive their overt transitive morphosyntax, he proposes that they feature an expletive Voice head (Schäfer 2008, 2017; Wood 2015), as schematized roughly in (25). While this head is semantically null, signaled by the ∅ symbol, it nonetheless has a D feature triggering the merge of the DP ‘the clouds’ in its specifier position. Instead of being assigned an interpretation by Voice, the syntactically external argument binds the possessive pronoun (*of the clouds/their*) embedded in the internal argument, thus resulting in an interpretation identical to that of standard anticausatives.

(25)



To summarize, as has been briefly illustrated via two case studies, previous literature has taken the unavailability of agent-oriented diagnostics – here, passivization – as evidence for the absence of a thematic Voice projection. This conclusion has been cached out in different ways, either as indicating the absence of a VoiceP in the syntax altogether (Bruening 2013; Pylkkänen 2008; Belvin & Den Dikken 1997; Landau 2010; Alexiadou & Anagnostopoulou 2020) or as suggesting a semantically vacuous VoiceP (Schäfer 2008, 2025). Against this background, we now evaluate whether Turkish InvCs simply constitute another instance of unaccusativity despite being morphosyntactically transitive.

3 Against an unaccusative syntax

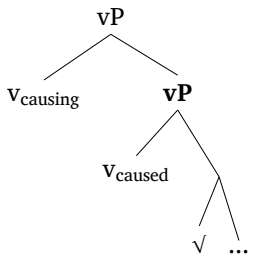
In this section, we introduce several diagnostics that militate against an unaccusative/anticausative analysis for Turkish InvCs. First, in Section 3.1, we present evidence that InvCs contain a thematic Voice head. In doing so, we also contrast InvCs with Turkish transitive anticausatives (Schäfer 2025) to clarify the differences between the two constructions. Section 3.2 then additionally demonstrates that InvCs can be distinguished from high applicatives in Turkish.

3.1 Diagnostics for thematic Voice

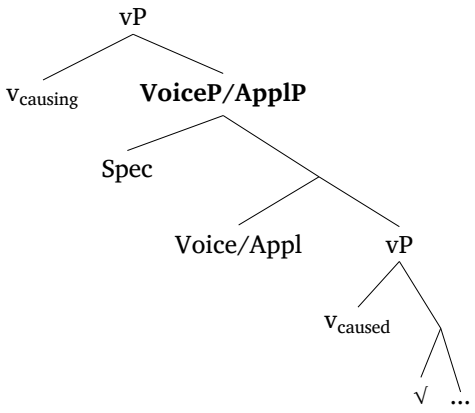
Embedding in indirect causatives The first diagnostic uses embedding in indirect causatives to determine the syntactic status of involvee arguments. According to the framework put forward by Pylkkänen (2008), all languages form causatives with an embedding *v* head, but which complements this head can take varies cross-linguistically. In this typology, Turkish indirect causatives must embed at least a thematic VoiceP/ApplP, and not *v*P (Akkuş 2021, 2023). Thus, structures such as (26a) in which *v* directly embeds a *v*P are ruled out, whereas thematic VoiceP and ApplP complements are permitted (26b).

(26) Size of the embedded structure (Pylkkänen's (2008) classification)

a.



b.



Transitive anticausatives also again behave as unaccusatives for the purposes of this diagnostic (in line with Schäfer's (2025) conclusion), and cannot be embedded in indirect causatives (27).

(27) *Yağmur [yüzey-ler-e iletkenlik-ler-i-ni art]-tır-dı.
rain surface-PL-DAT conductivity-PL-POSS-ACC increase-CAUS-PST
'The rain caused surfaces to increase their conductivity.'[4]

[4]Some speakers prefer a double causative marking with some examples, including (27), where the second causative morpheme is semantically vacuous (analyzed as vacuous reduplication of the causative morpheme by Key (2013)). For those speakers, the verbal complex would be thus *art-**tır-t**-tı*.

However, InvCs can be embedded in indirect causatives. Example (28) is an indirect causative with 'final exams' as the indirect causer. The embedded constituent is a simple InvC, 'we saw through the morning.' Analogously, (29) is an indirect causative with *carelessness* as the indirect causer; the embedded constituent is the complex InvC 'Leyla had the purse stolen by the thief (on her).'

(28) 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].'

(29) Dikkatsizlik [Leyla-ya çanta-yı hırsız-a çal-dır]-t-mış.
carelessness [Leyla-DAT purse-ACC thief-DAT steal-CAUS]-CAUS-PST
'Carelessness caused [Leyla to have the purse stolen by the thief (on her)].'

The fact that both indirect causatives are licensed is incompatible with the view that InvCs realize an unaccusative *v*P, which should not be able to merge as a complement of the embedding *v*.

Purpose clauses In Turkish, internal arguments are not able to control into purpose clauses, shown for adjectival predicates in (30a) and for verbal predicates in (30b). This contrasts with the demoted external argument of passives (30c).[5]

(30) a. İsa [*PRO biz-i kurtar-mak için] ölü.
Jesus [we-ACC save-INF for] dead
'Jesus is dead [*to save us].'[6]

b. Gemi [*PRO sigorta-dan para al-mak için] bat-tı.
ship [insurance-ABL money take-INF for] sink-PST
'The ship sank [*to collect insurance].'

c. Gemi [PRO sigorta-dan para al-mak için] bat-ır-ıl-dı.
ship [insurance-ABL money take-INF for] sink-CAUS-PASS-PST
'The ship was sunk [to collect insurance].'

Equally, transitive anticausatives (from Schäfer 2025) fail to control into purpose clauses (31):

[5]In some languages, control into purpose clauses is subject to a confound known as 'Responsible Party,' where certain entities or other objects may be contextually interpreted as responsible for an event, in a manner that can be distinguished from an asserted (agent or causer) thematic role (e.g., Williams 1985, 2015; Biggs & Embick 2022). However, Akkuş (2021) and Key (2025) have established that this confound does not apply in Turkish; see also Uygun (2009).

[6]The adjectival predicate also disallows agent-oriented adverbs, as in (i):

(i) Kemal şevkle {uyan-dı / #uyan-ık}.
Kemal enthusiastically wake-PST / wake-ADJ
'Kemal {woke up /#is awake} enthusiastically.'

In general, adjectival predicates circumvent the confound of allowing their sole arguments to be interpreted as external arguments, unlike their verbal predicate counterparts. For example, *öl-* 'to die' does allow its subject to be interpreted as an external argument, thus being compatible with agent-oriented adverbs and purpose clauses. This is indeed the point made by Uygun (2009), who suggests that control with unaccusatives is due to an agentive interpretation of the subject. See section 4.1 for further discussion that also connects to speaker variation.

(31) 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].'

On the other hand, involvee arguments can control into purpose clauses. This is demonstrated for simple InvCs in (32a) and for complex InvCs in (32b).

(32) 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. [PRO kendi-ni acındır-mak için] dolandırıcı-ya herşeyi-ni kap-tır-mış.
self-ACC arouse.pity-INF for con man-DAT everything-ACC snatch-CAUS-1PL
'S/he had all her savings stolen by the con man [PRO in order to create sympathy for himself/herself].'

Gerundives in *-ArAk* The next diagnostic comes from gerundives in *-ArAk*, which must match the clause containing them in Voice and in the status of the subject as underlying or derived. Concretely, unaccusative *-ArAk* gerundives can only be embedded in an unaccusative clause, transitive/unergative gerundives in a transitive/unergative clause and passive gerundives in a passive clause (see Özkaragöz 1980, Knecht 1985, Biktimir 1986, Kornfilt 1997, Legate et al. 2020, Paparounas & Akkuş 2024 for examples and generalizations). InvCs are compatible with transitive and unergative gerundives (33), but not with unaccusative (34) or passive gerundives (35):

(33) *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}.'

(34) *unaccusative + InvC*

*Kız {hastalan-/buna-/düş}-erek gün-ü bitir-di.
girl {get.sick-/get.senile-/fall}-ARAK day-ACC finish-PST
'The girl ended the day (while) {geting sick /getting senile / falling}.'

(35) *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.'

For the purposes of this diagnostic, InvCs thus pattern with transitives and unergatives which contain a thematic Voice head, instead of aligning with unaccusatives.

3.2 Distinguishing InvCs from high applicatives

To give an interim summary, we have presented several diagnostics which we argue detect the presence of a thematic VoiceP in InvCs. But so far, these data might still be taken to be compatible with an analysis as high applicatives. However, Turkish has a construction that more clearly bears the hallmarks of high applicatives and that differs from InvCs in several aspects, three of which we present in the following.

Case and agreement morphology Example (36) contains what is regarded as a true high applicative in Turkish (see Tonyalı 2015):

(36) Berna-ya piyango çık-tı.
Berna-DAT lottery.NOM emerge-PST
'Berna won the lottery.'

Lit. 'To Berna emerged the lottery.' (Tonyalı 2015:11,(23a))

The applied argument in (36) bears dative case marking whereas the involvee argument in InvCs is assigned nominative case. Moreover, in InvCs but not in (36), the verb bears causative morphology. In sum, there are clear morphosyntactic differences between high applicatives and InvCs.

Semantic interpretation Furthermore, the dative-marked argument of high applicatives receives a benefactive or malefactive reading which differs from the involvee interpretation. In (37c), we modify the simple InvC (5b), repeated below as (37b), by giving it the morphosyntactic properties of high applicatives outlined above. The (pragmatically odd) reading we arrive at is that the sun set for the speakers' benefit.

(37) 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
'The sun set, and we were involved/around when it happened.'

c. #Güneş biz-e bat-tı.
sun we-DAT set-PST.3SG
Intended: 'The sun set for us.'

Hence, the different morphosyntactic properties of high applicatives also come with different semantic repercussions.

Controlled PRO Lastly, in high applicatives, it is the non-applied argument that can be controlled PRO as predicted of grammatical subjects (38), whereas in InvCs, it is the involvee argument (39):

(38) [PRO şemsiye-yi yaşlı kadın-a tut-mak] isti-yor-um.
umbrella-ACC old woman-DAT hold-INF want-PROG-1SG
'I want [PRO to hold the umbrella for the old woman].'

(39) a. [PRO gün-ü sahil-de bat-ır-mak] isti-yor-um.
today-ACC beach-LOC set-CAUS-INF want-PROG-1SG
'I want [PRO to end the day on a beach].'

b. Her gün buraya gel-iyor-muş-sun [PRO gün-ü bat-ır-ma-ya].
every day here come-PROG-EVID-2SG today-ACC set-CAUS-INF-DAT
'You apparently come here everyday [PRO to end the day].'[7]

We conclude that InvCs in Turkish cannot be identified with high applicatives.

4 Analysis

Based on a range of diagnostics, the previous section has argued that InvCs cannot be analyzed as unaccusatives, including high applicatives, but contain a thematic Voice head. In the following, we flesh out the details of this proposal (Section 4.1) and then show how it derives the failure of putative unaccusativity diagnostics, i.e., agent-oriented adverbs, instruments and passivization (Section 4.2).

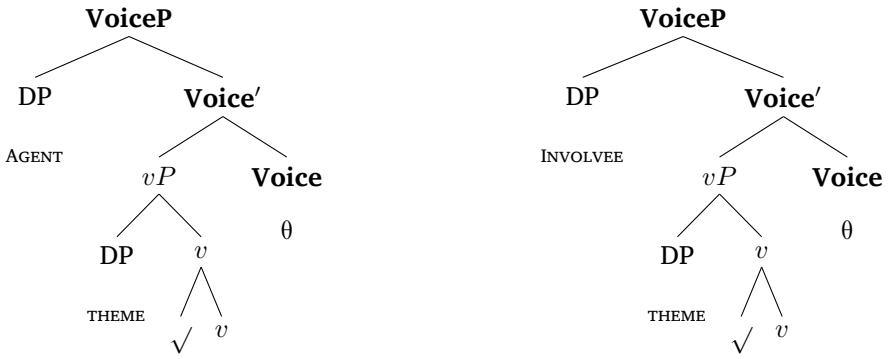
4.1 The syntax of InvCs

We argue that simple and complex InvCs are structurally identical to direct and indirect causatives, respectively, but differ in the interpretation assigned to their external argument. Concretely, simple InvCs such as (5b), repeated below as (40a), have a transitive syntax identical to that of regular direct causatives, as sketched in (40b) and (40c).

(40) 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. *direct causative*

[7] https://www.youtube.com/watch?v=-6HfhR91nto&ab_channel=HaytaYollarda 1':55"



c. *simple InvC*

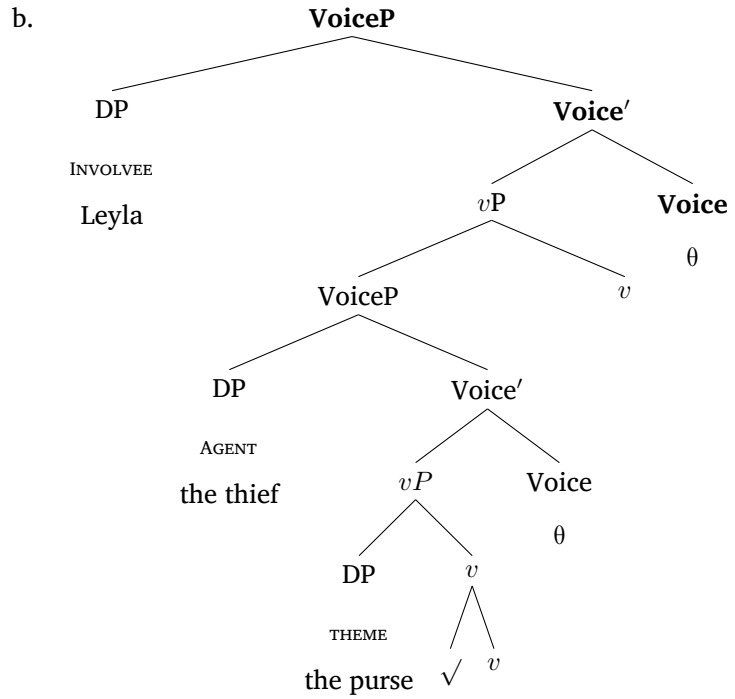
Analogously, complex InvCs such as (6b), repeated below as (41a) have the recursive syntax in (41b);[8] for reasons of space, we omit the parse of the corresponding indirect causative. Complex InvCs present one additional complication which we discuss in Section 5.

(41) 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).'

[8]Note that the analysis in (41b) correctly predicts that while the higher, involvee Spec,VoiceP argument cannot be demoted for the purposes of passivization as pointed out above, the lower Spec,VoiceP argument which is a regular agent can, thus allowing both readings in (i):

(i) Leyla çanta-yı çal-dır-mış.
Leyla purse-ACC steal-CAUS-PST
YES: 'Leyla caused the purse to be stolen by someone.'
YES: 'Leyla was somehow involved in the purse-being-stolen event by someone (e.g., by carelessly leaving the purse on the ground)'

b.



Where InvCs differ from regular causatives is in the semantics of their external argument. Following Dowty (1991), we assume that the Spec,VoiceP position is associated with a broad range of proto-agent properties and can be occupied by arguments that possess only a subset of the latter. Involvee arguments qualify for this position by virtue of being animate and sentient, but unlike prototypical agents, they lack volition and causal power.[9] In a fully compositional approach to semantics, our proposal can be formalized by positing two different denotations for Voice, one assigning an agent and one assigning an involvee θ-role to its specifier, besides arguably other flavours for instruments, inanimate causers, etc. However, we do not claim that there is a finite inventory of θ-roles associated with Spec,VoiceP cross-linguistically, nor that they necessarily lend themselves to a tidy taxonomy (see also Harley 1998).

To summarize, InvCs differ from regular causatives not in their syntactic structure but in the semantics of their external argument (see Harley 1998 for a parallel approach to English *have*-experiencers and causatives). Involvee arguments are interpreted with only a subset of proto-agent properties, lacking volition and causal power. The next section discusses how this analysis can account for the failure of agent-oriented adverbs, instrument phrases and passivization.

[9] We address the absence of causative semantics more in detail in Section 5.

4.2 Deriving the failure of putative unaccusativity diagnostics

As outlined in the introduction of this paper, for many Turkish speakers, InvCs do not license agent-oriented adverbs, instrument phrases and passivization, commonly regarded as hallmarks of VoiceP. We have shown above that the failure of these diagnostics cannot be attributed to the absence of an external argument; instead, we here argue that it is due to the non-agentive interpretation of the external argument.

To begin with, we note that other kinds of non-agentive arguments in Turkish, namely, instruments (42) and inanimate causers (43), do not pass these three diagnostics either. For obvious reasons, we do not give an example of an instrument subject failing to take an adjunct instrument phrase.

(42) *Instrument*

a. Anahtar bu kapı-yı aç-ar.
key this door-ACC open-AOR
'The key opens this door.'

b. *Anahtar bu kapı-yı kasten aç-ar.
key this door-ACC deliberately open-AOR
'The key deliberately opens this door.' (*agent-oriented adverb*)

c. *Bu kapı anahtar tarafından aç-ıl-ır.
this door key by open-PASS-AOR
'This door is opened by the key.' (*passivization*)

(43) *Inanimate causer*

a. Deprem bölge-yi yık-tı.
earthquake region-ACC destroy-PST
'The earthquake destroyed the region.'

b. *Deprem bölge-yi kasten yık-tı.
earthquake region-ACC deliberately destroy-PST
'The earthquake deliberately destroyed the region.' (*agent-oriented adverb*)

c. *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*)

d. *Bölge deprem tarafından yık-ıl-dı.
region earthquake by destroy-PASS-PST
'The region was destroyed by the earthquake.' (*passivization*) (Göksel 1993:304, (50b))[10]

[10]To further add to the inter-speaker variation that we address shortly, some speakers find (43d) acceptable, though not (42c). We do not aim to account for these grammars.

Of course, this might simply be taken to indicate that instruments and inanimate causers must differ from true external arguments in their underlying syntax as well. However, we argue that this line of argument would be mistaken. For two of the diagnostics, their failure can clearly be attributed to factors other than syntax. Agent-oriented adverbs such as *deliberately* require, simply by virtue of their semantics, an argument that is interpreted as purposefully pursuing a plan of action. This is not compatible with instruments and inanimate causers, nor with involvees which merely witness an event happening. By the same token, the use of an instrument equally presupposes a goal-directed activity in which the instrument could be put to use. Thus, we contend that there is no reason to stipulate a special syntax to explain the failure of these diagnostics with involvees, instruments and inanimate causers. Rather, they fall out from the semantic incompatibility of non-agentive arguments with modifiers that describe narrowly agentive – i.e., volitional and goal-oriented – behavior.

It is a much more difficult question why passivization would equally be ruled out for non-agentive arguments in Spec,VoiceP. Unlike with agent-oriented adverbs and instruments, this cannot easily be attributed to semantic incompatibility. In general, it has been observed that conditions on passivization vary widely cross-linguistically. In English, for instance, passivization is perceived as degraded by some speakers for instruments (44a) but is fully acceptable for inanimate causers (44b):

(44) a. %The door was opened by the key.

b. The region was destroyed by the earthquake.

Other languages impose different kinds of semantic restrictions on the argument demoted under passivization, e.g., definiteness/specificity and animacy/agency (Kaiser & Vihman 2006, Primus 2011, Sigurðsson & Wood 2021, a.o.).[11] This overall picture already raises serious doubts for the idea that all arguments which resist demotion simply occupy some syntactic position other than Spec,VoiceP.

We argue that the non-passivizability of InvCs, rather than revealing an underlying unaccusative syntax, constitutes further evidence that passivization is not only sensitive to the syntactic position of an argument, but to semantic factors as well. Specifically, in Turkish, it appears that passivization can only demote arguments that receive a narrowly agentive interpretation, thus excluding, among others, involvees (see also Harley 1998); other languages have somewhat different constraints. How exactly these restrictions are implemented – how passivization can 'see' the interpretation of the external argument – is an open question that we hope future research will address.

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

Note that while for the Turkish data discussed here, agent-oriented adverbs, instruments and passivization thus pattern together for most speakers, this is not necessarily always the case. For instance, Sigurðsson & Wood (2021) report that null causees in Icelandic indirect causatives are compatible with instruments (45a), but not with agent-oriented adverbs (45b):

(45) a. Jón lét mála húsið með mjög litlum penslum.
Jón let.PST paint.INF house.the.ACC with very small paintbrushes
'Jón had people paint the house with very small paintbrushes.' (Sigurðsson & Wood 2021:589,(15a))

b. Þeir létu byggja húsið (*af kappi).
they.NOM let.PST build.INF house.the.ACC (*enthusiastically)
'They made (someone) build the house (*enthusiastically).' (Wood 2011:21,(34b))

Similarly, some agentless stative constructions tolerate agent-oriented adverbs, attributed by Biggs & Embick (2022) to the presence of a 'Responsible Party' (see footnote 5) (46a). However, Akkuş (2021) has shown that instruments are still unacceptable in this construction (46b).

(46) a. The shop window has a big sale sign in it deliberately/intentionally/on purpose. (Biggs & Embick 2022:239)

b. #The store had clothes in the window with a wire. (Akkuş 2021:150,(306d))

Therefore, we do not argue that agent-oriented adverbs, instruments and passivization are always sensitive to narrow agentivity cross-linguistically. Rather, how to interpret the outcome of these diagnostics must be established carefully for each language individually.

On that note, we address the inter-speaker variation we reported earlier in the paper. Recall that for some speakers, InvCs do pass (some) agent-oriented diagnostics, in particular, adverbials and passivization. Thus, these speakers show a less clear contrast between regular causatives and InvCs. This additional variation can be interpreted in different ways. Most straightforwardly, we have argued that these diagnostics are conditioned on an agentive interpretation of the external argument, but agentivity is a gradient notion (Dowty 1991). Whether or not a participant acts volitionally/intentionally is not a binary choice, and we would expect speakers to have slightly different intuitions about this. In particular, these intuitions might interact in non-trivial ways with the concrete semantics of a given event description. A different interpretation of the inter-speaker variation with agent-oriented diagnostics is that some speakers simply lack InvCs as a well-established pattern in their language, or that they associate InvCs with a different syntax. We cannot rule out these possibilities altogether, but we believe that the pattern we find with the majority of speakers is sufficiently robust to allow for valid conclusions.

Overall, InvCs are structurally identical to regular causatives, and their non-standard properties should be attributed to the non-agentive interpretation of the external argument. The key methodological upshot of this discussion is that agent-oriented adverbs, instruments and passivization alone are not valid unaccusativity diagnostics but are sensitive to the interpretation of the external argument. This finding should be taken into consideration when applying these diagnostics in future work.

5 Whither causation?

Before concluding, we briefly discuss the implications that InvCs have for theories of causatives and causation. Our account in the following is tentative; our main goal is to stimulate further discussion on these constructions from a semantic and a morphological perspective. We first consider how to derive the absence of a causative reading in InvCs and end this section with some remarks on the relation between causative semantics and causative morphology.

Both in the context of direct and of indirect causatives, causation is often regarded as a relation between a causing and a caused event. If this were the case, then InvCs, being interpreted without causation, should have a different event structure from standard causatives. For simple InvCs, we argue that this conclusion is not necessarily warranted. Much previous work has proposed that direct causatives are event-structurally identical to anticausatives (e.g., Ramchand 2008; Alexiadou et al. 2015; Schäfer 2008, 2022; Wood 2015; Legate 2014) in that both contain a low stative projection and an event-introducing *v* head. According to a "Process" semantics approach, this event ends in or results in the state, rather than necessarily causing it in the narrow sense (Pietroski 2004; Williams 2015; see also Biggs & Embick 2022). The reason why causatives but not anticausatives receive a causative reading is that only in the former, the event contains an agent argument that possesses causal power (47–48). This analysis straightforwardly extends to simple InvCs, which contain not an agent but an involvee argument lacking causal power (48c).

(47) a. 'The day darkened.'

b. λe.$\exists$s.[End(e,s) & dark(s) & Theme(s,day)]

(48) a. 'Leyla darkened the day.'

b. **Direct 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, we attribute the intuition that InvC are not semantically causative to their thematic properties:

while the external argument in regular causatives – whether it is an agent, instrument or inanimate causer – is interpreted with causal force, involvees are not. As a result, no distinct event structure for InvCs needs to be posited.

Turning to indirect causatives, here too causation is often regarded as a relation holding between two distinct events, a causing and a caused event. Unlike with direct causatives, each of those two events can be individually targeted by modifiers and count phrases. By way of example, the English indirect causative (49a) contains two contradictory modifiers, *calmly* and *in a flash*, each of which can combine with a different event. Similarly, in (49b), the causing event occurs two times and the caused event three times per causing event, giving rise to the interpretation that the thief stole the purse six times in total.

(49) a. Leyla calmly made [the thief steal the purse in a flash].

b. Leyla twice made [the thief steal the purse three times].

Following Pylkkänen (2008), these findings are commonly formalized by assuming that indirect causatives contain an embedding CAUSE or v_{CAUSE} head which existentially closes the embedded event and introduces a second event standing in a causal relation to the latter (50):

(50) λP. λe. $\exists$e′ s.t. P(e′) $\wedge$ Cause(e, e′)

Interestingly, complex InvCs might not display the same event-structural complexity. In (51), we attempt to have each event be targeted by a different modifiers, such that the higher event containing Leyla proceeds calmly, the lower event containing the thief in a flash. Most speakers report that this is only possible for the regular indirect causative reading (again leaving aside the group of speakers noted above for whom there is not a clear pattern for InvCs). The involvee reading, on the other hand, is unavailable, suggesting that complex InvCs do not contain two distinct events which can be modified.

(51) 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).’

It could be objected that the involvee reading is simply blocked because the involvee argument, being non-agentive, does not license an adverb such as ‘calmly.’ However, the diagnostic from count phrases in (52) makes the same point. Again, the intended reading is only possible for the regular indirect causative reading:

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

This suggests that complex InvCs might not contain a separate event encoded on the higher *v* head, unlike standard indirect causatives.

If this is the case, there are in principle two simple ways in which the standard analysis of indirect causatives following Pylkkänen (2008) could be modified to account for this finding. We might either posit that the embedding little *v* in complex InvCs is semantically vacuous and does not introduce a new event, or that there is no embedding *v* at all, with the higher Voice head taking directly another VoiceP as a complement (see Nie 2020).

But in itself, this is not a satisfying solution. Under this view, the interpretation of the external argument (encoded on Voice) and the absence or presence of a separate event (encoded on *v*) become two wholly independent variables which should be able to mix and match freely. Combinations of agentive Voice and null *v* are plausibly ruled out on independent grounds: if there is no separate higher event, then a single event would contain both the higher and the lower agent, thus violating thematic uniqueness (Carlson 1984, 1998). However, it is not clear what blocks the opposite scenario for most speakers, i.e., an involvee Voice head and a contentful *v* that introduces a separate event. In other words, the question is why an involvee argument would be unable to be contained in its own, separate event. We do not have an answer to this puzzle.

Finally, a few words on morphology. We have seen throughout that InvCs surface with regular causative marking. This indicates that the link between causative morphology and what we intuitively perceive as causative semantics is more complex than sometimes assumed. For instance, it is not compatible with the idea that causative markers spell out a dedicated head denoting a causal relation, such as v_{CAUS}, which is present in causatives but not anticausatives (Hale & Keyser 1993; Folli & Harley 2005, 2007; Tubino Blanco 2010; Key 2013; Jung 2014; Harley 2017). At the same time, conditioning causative morphology on the event structure shared by regular causatives and InvCs would, on the account presented above, wrongly predicts causative marking on anticausatives as well. InvCs remain compatible with other proposals which posit that causative markers realize *v* in the context of thematic Voice (Legate 2014; Wood 2015) or thematic Voice itself (Key 2025), although both analyses face the challenge of why unergatives do not surface with causative morphology (Neu to appear). In the context of this paper, we cannot solve causative morphology. We only wish to point out that any analysis of

causative markers needs to be able to account for constructions like InvCs as well, and that it is not sufficient to simply declare causative morphemes to be the spell-out of 'causative semantics.'

To conclude, the perspective from InvCs raises the question of whether there is any such thing as a causative *tout court*. Even leaving aside the distinction between direct and indirect causation, prototypical causatives are a combination of various properties that are not necessarily always bundled together (see also Wood & Marantz 2017; Schäfer 2025). In terms of event structure, we have argued that (simple) InvCs are identical to regular causatives, but also to anticausatives. In terms of θ-roles, InvCs crucially differ from both. In terms of morphology, InvCs pattern with regular causatives and diverge from anticausatives. Overall, InvCs thus offer support for theories that allow these different properties to stand in complex mapping relationships, rather than elevating causatives to the status of a grammatical primitive.

6 Conclusion

This paper has been concerned with a previously undocumented construction in Turkish, InvCs. Despite a standard causative morphosyntax, InvCs are not interpreted as causative and also fail some commonly used agent-oriented diagnostics: agent-oriented adverbs, instrument phrases and passivization. Situating InvCs in the context of the previous literature, we have shown that this profile has often been taken to suggest an unaccusative structure lacking a thematic Voice layer. However, several pieces of evidence contradict this analysis. Instead, we have proposed that InvCs contain an external argument in Spec,VoiceP, but that this argument is interpreted with only a subset of proto-agent properties, excluding volition and causal power. This, we have argued, accounts not only for the non-causative reading of InvCs, but also for the failure of agent-oriented diagnostics.

The analysis is simple, but it is of broader relevance for two reasons. First, the fact that InvCs lack a causative meaning has implications for theories of causatives and causation. We have argued that at least for simple InvCs, the absence of a causative reading is not due to their event structure, but to the interpretation assigned to the external argument. Moreover, InvCs constitute a clear counter-example to the idea that causative morphology directly spells out what is intuitively perceived as causative semantics. Overall, we suggest that the term 'causative' should not be understood as a simple grammatical primitive, but as a cluster of overlapping event-structural, thematic and morphological properties which can sometimes, as in the case of InvCs, come apart.

The second and more important upshot of this paper is methodological. We have demonstrated

that agent-oriented adverbs, instrument phrases and passivization do not simply detect the presence of a thematic Voice head as such, but are sensitive to the semantic interpretation of the external argument, *contra* much previous work. Syntactically external arguments come in a variety of semantic flavors, and we should not take the properties of prototypical agent arguments (i.e., *John*) as representative of Spec,VoiceP arguments in general. More generally, our work highlights the challenges of relating syntactic diagnostics to syntactic positions. Focusing on a single, morphosyntactically standard construction, we have demonstrated that a wide variety of diagnostics that have been taken to be indicative of thematic Voice show diverging results. What is more, we have documented non-negligible inter-speaker variation in this respect. For passivization in particular, we have argued that any attempt to pinpoint a unique functional head introducing demotable arguments in a given language would be mistaken.

Diagnostics are an indispensable tool, but applying them is much easier than interpreting their outcome. With this paper, we hope to contribute to a more nuanced approach to unaccusativity diagnostics that tries to tease apart syntactic from semantic effects, compares diagnostic results across various constructions and draws on a wide range of different criteria in developing a syntactic analysis. Ultimately, there is no reason to expect diagnostics such as those discussed here to always, or even normally, be linked to a single, featurally defined argument-introducing head. Diagnostics can just as well pick out sets of heads or syntactic configurations, semantic interpretations, intersections of the two, or even properties that we are not yet aware of.

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