

On some putative diagnostics for thematic Voice*

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March 22, 2026

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, *pseudo-causatives*, which surface with standard causative morphosyntax, but do not receive a causative interpretation and also fail the above diagnostics. In previous work, this profile has been taken as evidence for the absence of thematic Voice. For pseudo-causatives, however, a wide range of evidence contradicts such an analysis. We argue that pseudo-causatives do contain a thematic Voice head introducing an external argument, and that the failure of agent-oriented diagnostics is due to the semantic properties of this argument. Overall, this study problematizes the use of agent-oriented adverbs, instrument phrases and passivization as tests for thematic Voice and advocates for a more nuanced approach to argument-structural 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.

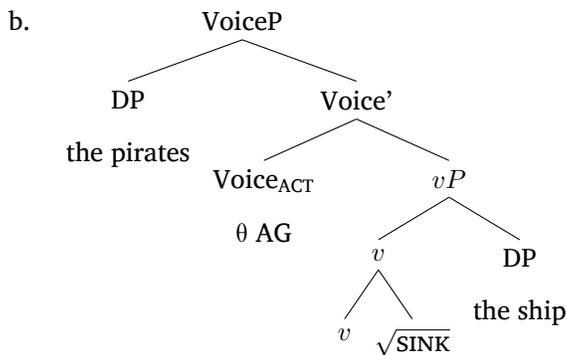
At least since Gruber (1965), an extensive number of linguistic studies have adopted agent-oriented diagnostics to determine the thematic interpretation of arguments as well as their syntactic status. Building on the agent-Voice pairing proposed by Kratzer (1996) (see also Pylkkänen 2008 and many following 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.

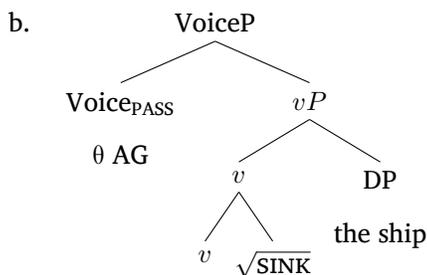
Three particularly prominent diagnostics used to this effect are agent-oriented adverbs, instrumentals and passivization (cf. Perlmutter & Postal 1984; for some recent adaptations, see Anagnostopoulou 2003, 2017; Reinhart & Siloni 2005; Pylkkänen 2008; Schäfer 2008, 2025; Legate 2014; Alexiadou 2014; 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 VoiceP, 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., Embick 1997; 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. The pirates sank the ship (intentionally / with a torpedo).



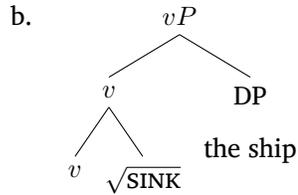
- (2) a. The ship was sunk (intentionally / with a torpedo).



In contrast, constructions that fail to pass agent-oriented diagnostics are commonly analyzed as lacking a VoiceP layer, seen for a simple or unmarked unaccusative in (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).



Beyond these three basic constructions – active Voice, passive Voice and no Voice –, 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 set of data from Turkish that we label *pseudo-causatives*. A first example is given in (4). The distinctive feature of these constructions is that, despite the verb bearing standard causative morphology (here, the suffix *-ır*), the subject argument is not interpreted as causing the event, but as merely experiencing it or being present while it unfolds.

- (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, pseudo-causatives do not pass agent-oriented diagnostics, namely, agent-oriented adverbs, instrumentals and passivization. For many constructions, the failure of these diagnostics has previously been taken as evidence for a syntax without thematic Voice. Hence, the question arises whether this analysis also holds true of pseudo-causatives such as (4), despite their regular causative morphosyntax.

In this paper, we subject agent-oriented diagnostics to close scrutiny. We provide extensive evidence that their incompatibility with pseudo-causatives does not entail the absence of thematic Voice, 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 ironclad diagnostics for or against the presence of thematic Voice. We conclude that pseudo-causatives do contain a thematic VoiceP that introduces an external argument in its specifier position, as in (1b), and that their non-standard properties are motivated semantically, in that the external argument is interpreted not with the full set of proto-agent properties (Dowty 1991). Overall, our main goal in this paper is to problematize the use of agent-oriented diagnostics and emphasize that their failure does not necessarily point to the absence of thematic Voice.

In addition, a secondary concern of this paper is to explore the consequences that pseudo-causatives have for theories of causative semantics, causative morphology and causation more broadly. We argue that pseudo-causatives 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 pseudo-causatives, 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 pseudo-causatives more in detail and contextualize the discussion against the background of previous work. Section 3 provides multiple pieces of evidence for the fact that Turkish pseudo-causatives contain a thematic Voice head. Section 4 lays out our analysis and discusses how it derives the failure of agent-oriented diagnostics. 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 pseudo-causatives (2.1). We then briefly survey various constructions cross-linguistically that, like pseudo-causatives, are morphosyntactically causative, but have nonetheless been analyzed in the literature as lacking thematic Voice on the basis of agent-oriented diagnostics (2.2).

2.1 Data from Turkish pseudo-causatives

Turkish pseudo-causatives 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 experienced the setting of the sun or were present during this event.

- (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 around when it happened.'

The second variant of pseudo-causatives 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 was present during 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 merely experiences the event but is not causally responsible for it. We distinguish between *simple pseudo-causatives* such as (5b) that correspond to direct causatives, and *complex pseudo-causatives* such as (6b) that correspond to indirect causatives.

All pseudo-causatives surface with standard causative morphology, which in Turkish is 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 pseudo-causative 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 stayed up all night.'
(Lit. 'We made it become morning.')

In short, pseudo-causatives display the same morphology as genuinely causative uses of the same verbs.

Next, we characterize more in detail the semantics of pseudo-causatives. The defining property that sets them apart from standard causatives is that the subject argument is not interpreted with causal power,¹ patterning in this respect with experiencer and affectee arguments. Moreover, like experiencers and affectees, pseudo-causative subjects are obligatorily sentient. A sentence with an inanimate subject can only receive a regular causative reading since the argument cannot be affected by or experience the event (9). Similarly, a dead person cannot function as a subject argument of a pseudo-causative, 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.
hopelessness / hunger thief-DAT purse-ACC steal-CAUS-PST
YES: 'Hopelessness/hunger caused the thief to steal the purse.'
NO: 'Hopelessness/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 the semantic affinities to experiencer and affectee arguments, we avoid these terms for Turkish pseudo-causatives. The affectee role is typically used to describe benefactive or malefactive arguments that suffer positive or negative consequences as a result of the event; and the term experiencer

¹ A reviewer raises the question whether pseudo-causatives can be subsumed under permissive *let*-causatives (Kural, 1997). This is not the case. In brief, permissive *let*-causatives still receive a causative interpretation: a participant brings about an event by failing to prevent it or by (actively) permitting it to take place. This is not the reading that obtains for pseudo-causatives. E.g., (i) allows for a pseudo-causative reading if Leyla owes money to the local mafia and they kidnap her son to put pressure on her to pay them back. There is of course no sense in which Leyla permits the kidnapping.

- (i) Leyla mafya-ya oğl-u-nu kaçır-t-mış.
Leyla mafia-DAT son-3SG.POSS-ACC kidnap-CAUS-PST
'Leyla had the mafia kidnap her son.'

Moreover, *let*-causatives allow the subject argument/causer to be associated with agent-oriented diagnostics, unlike the subject argument of pseudo-causatives, to be illustrated anon. Taking a *let*-causative example from Kural (1997) (*I let the children jump*), we observe that addition of an instrumental or adverb is perfectly licit. Consider (ii).

- (ii) (Although their parents asked me to not let their kids jump for safety reasons, as a caretaker...)

pro {yetki-m-le / şevkle} [çocuk-lar-ı sıçra]-t-ti-m.
power-1SG.POSS-with / enthusiastically child-PL-ACC jump-CAUS-PST-1SG

'I, {with my power/enthusiastically}, let the children jump.'

(adapted from Kural 1997:(5))

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.² As Bosse et al. (2012) have shown, fine-grained differences between argument interpretations in this broader semantic cluster have wide-ranging grammatical effects, and conflating them terminologically can be misleading.

The availability of a pseudo-causative interpretation is subject to further restrictions which we can touch on only briefly here. For instance, (11b) is only licensed if the sinking of the ship is staged as an event to be experienced, e.g., as a show in an amusement park:

- (11) a. Gemi bat-tı.
 ship sink-PST.3SG
 ‘The ship sank.’
- b. *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’)

On the other hand, if the speaker merely happens to witness some anonymous ship sinking, the example is odd. The same is true if the speaker tragically observes their loved ones’ ship sinking since in this case, it is not the sinking of the ship *as such* that is the focus of the speaker’s attention. We believe that the licensing of the non-causative readings is subject to pragmatic constraints, but we cannot investigate their nature any further in this paper. To conclude our description of the semantics of pseudo-causatives, we wish to emphasize that we do not claim that this construction necessarily constitutes a grammatical primitive in Turkish, e.g., as defined by a unique semantic feature. Rather, we use ‘pseudo-causative’ here as a heuristic term to describe a range of examples that are defined by their absence of a causative interpretation despite their causative morphology. What this paper is concerned with is how this non-causative interpretation affects the outcome of a wide range of argument-structural diagnostics, and what can and cannot be concluded from them for the underlying syntax of these sentences.

Turning to these diagnostics, pseudo-causatives have three other notable properties that connect to the main point of our study. First, they do not license instrument phrases, which can surface in standard causatives. In (12), the presence of the PP ‘with sledgehammers’ blocks the pseudo-causative reading, 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 pseudo-causative in (13).

²Note 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 the subject arguments of pseudo-causatives.

(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, pseudo-causatives disallow agent-oriented adverbs, as shown in (14) and (15) for simple and complex pseudo-causatives, 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, pseudo-causatives resist passivization. While the active in (16a) can have both a regular causative and a pseudo-causative interpretation, the latter disappears in the passive in (16b). The same effect obtains for most speakers for the simplex pseudo-causative 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.’³

- 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 pseudo-causatives, whereas others agree with the majority that complex pseudo-causatives fail these diagnostics, but have less sharp and consistent intuitions about simple pseudo-causatives. No clearer pattern emerged for those speakers. We briefly return to this inter-speaker variation at the end of Section 4.

Overall, pseudo-causatives thus provide an interesting testing ground: while they are identical to canonical causative uses of the verb in terms of their overt morphosyntax, 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 pseudo-causatives lack thematic Voice, 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 pseudo-causatives from a typologically distinct language, Arabic. For example, Sason Arabic exhibits a contrast between (18a) and (18b), parallel to Turkish pseudo-causatives:

- (18) a. xallıs-na {odav / fikir 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 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)}.’

³The example is built on *Yürüdüük, yürüdüük, havayı kararttık* ‘we walked and walked, and ended the day’. https://www.youtube.com/watch?v=Ir80bVBQq84&ab_channel=BurakDurgun, 14:50”

- b. xallis-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 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 (see Keyser & Roeper 1984; Roeper 1987; Reinhart & Siloni 2005; Bruening 2013; Alexiadou et al. 2015; Pylkkänen 2008; Anagnostopoulou 2003; Legate 2014; Landau 2010; Schäfer 2008, 2025; 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 pseudo-causatives, 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 the absence of thematic Voice, although the concrete analyses developed vary.

By way of example, we give a brief overview over two previous studies: 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. 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 the absence of thematic Voice 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.’

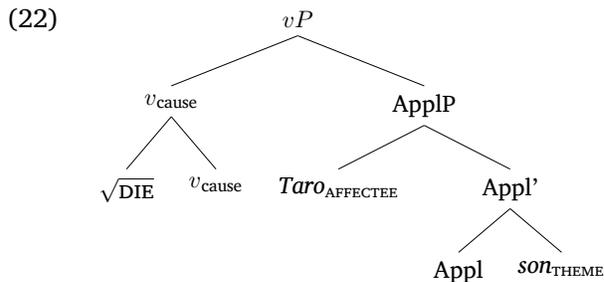
(Pylkkänen 2008:90,(19))

Adversity causatives have several properties in common with Turkish (simple) pseudo-causatives. 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 pseudo-causatives, 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).⁴



⁴Pylkkänen (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.

Transitive anticausatives Secondly, we discuss Schäfer’s (2025) work on a construction attested in a number of languages that he labels ‘transitive anticausatives.’ Like pseudo-causatives, 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):

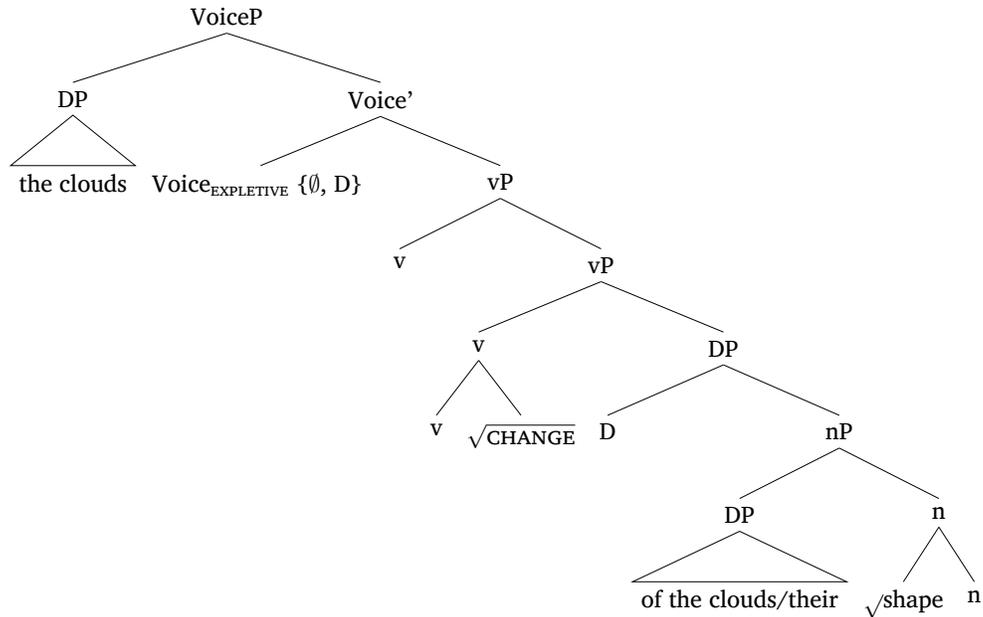
- (23) a. Bulut-lar-ın şekl-i değiş-ti.
 cloud-PL-GEN shape-POSS change-PST
 ‘The shape of the clouds changed.’
- b. Bulut-lar şekil-ler-i-ni değiř-tir-di-ler.
 cloud-PL shape-PL-POSS-ACC change-CAUS-PST-PL
 ‘The clouds changed their shapes.’ (Schäfer 2025:430,(13))

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 Temperatur 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
 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, see also Wood & Marantz 2017), as schematized roughly in (25). While this head is semantically null, signaled by the \emptyset 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 cashed 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 pseudo-causatives should equally be taken to lack thematic Voice despite being morphosyntactically transitive.

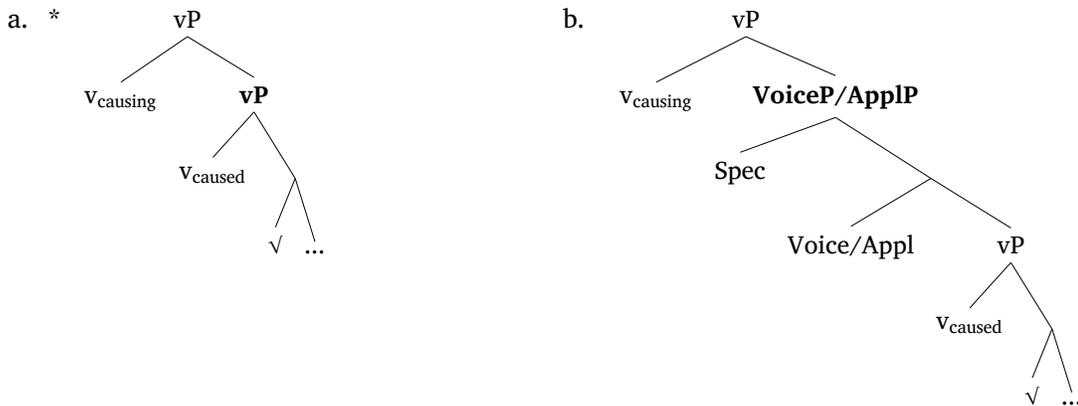
3 Evidence for the analysis

In this section, we introduce several pieces of evidence to the effect that Turkish pseudo-causatives contain a thematic Voice head introducing an external argument. First, in Section 3.1, we present three diagnostics that are directly sensitive to the presence of thematic Voice. In doing so, we also contrast pseudo-causatives with Turkish transitive anticausatives (Schäfer 2025) to clarify the differences between the two constructions. However, some of the diagnostics in Section 3.1 do not clearly distinguish between Voice and high Appl. Section 3.2 thus additionally demonstrates that pseudo-causatives can be teased apart 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 subject arguments of pseudo-causatives. 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 for Turkish (based on [Pylkkänen’s \(2008\)](#) classification)



Transitive anticausatives pattern with 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.’⁵

However, pseudo-causatives 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 pseudo-causative, ‘we stayed up all night’ (literally, ‘we made it become morning’). Analogously, (29) is an indirect causative with *carelessness* as the indirect causer; the embedded constituent is the complex pseudo-causative ‘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 stay up all night].’

⁵Some 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 \(2013\)](#), but see [Nie \(2025\)](#)). For those speakers, the verbal complex would be thus *art-tır-t-ti*.

- (29) Dikkatsizlik [Leyla-ya çanta-yı hırsız-a çal-dır]-t-miş.
 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 indicates that pseudo-causatives contain a thematic Voice or Appl head.

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).⁶

- (30) a. İsa [*PRO biz-i kurtar-mak için] ölü.
 Jesus [we-ACC save-INF for] dead
 ‘Jesus is dead [*to save us].’⁷
- 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):

- (31) Bulut-lar [*PRO yağmur yağ-dır-mak için] şekil-ler-i-ni deęiş-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, subject arguments of pseudo-causatives can control into purpose clauses. This is demonstrated for simple pseudo-causatives in (32a) and for complex pseudo-causatives in (32b).

⁶In 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). Note also that *embedded* external arguments in Turkish generally fail to control into purpose clauses (i):

- (i) Antrenör₁ sporcu₂-yu [PRO_{1/*2} yarış-ı kazan-mak için] koş-tur-du.
 trainer athlete-ACC race-ACC win-INF for run-CAUS-PST
 ‘The trainer₁ made the athlete₂ run [PRO_{1/*2} to win the race].’

⁷The 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 point is made by Uygun (2009), who suggests that control with unaccusatives is due to an agentive interpretation of the subject. See section 4 for further discussion that also connects to speaker variation.

- (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 stayed up all night [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 him-
 self/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 Özkarağöz 1980, Knecht 1985, Biktimir 1986, Kornfilt 1997, Legate et al. 2020, Papparonas & Akkuş 2024 for examples and generalizations). Pseudo-causatives are compatible with transitive and unergative gerundives (33), but not with unaccusative (34) or passive gerundives (35):

(33) *transitive/unergative + pseudo-causative*

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 + pseudo-causative*

*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) {getting sick / getting senile / falling}.’

(35) *passive + pseudo-causative*

*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, pseudo-causatives thus pattern with transitives and unergatives which contain a thematic Voice head, instead of aligning with unaccusatives.

3.2 Distinguishing pseudo-causatives from high applicatives

To give an interim summary, we have presented several diagnostics which we argue detect the presence of a thematic VoiceP in pseudo-causatives. 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 pseudo-causatives 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 subject argument in pseudo-causatives is assigned nominative case. Moreover, in pseudo-causatives but not in (36), the verb bears causative morphology. In sum, there are clear morphosyntactic differences between high applicatives and pseudo-causatives.

Semantic interpretation Furthermore, the dative-marked argument of high applicatives receives a benefactive or malefactive reading which differs from the pseudo-causative interpretation. In (37c), we modify the simple pseudo-causative (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 In high applicatives, it is the non-applied argument that can be controlled PRO as predicted of grammatical subjects (38), whereas in pseudo-causatives, it is the subject argument (39):

- (38) Ben₁ [PRO₁ şemsiye-yi yaşlı kadın-a tut-mak] isti-yor-um.
 I umbrella-ACC old woman-DAT hold-INF want-PROG-1SG
 ‘I want [PRO to hold the umbrella for the old woman].’

- (39) a. Ben₁ [PRO₁ gün-ü sahil-de bat-ır-mak] isti-yor-um.
 I today-ACC beach-LOC set-CAUS-INF want-PROG-1SG
 ‘I want [PRO to end the day on a beach].’
- b. *pro*₁ her gün buraya gel-iyor-muş-sun [PRO₁ 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].’⁸

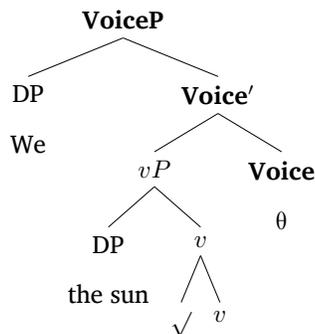
We conclude that pseudo-causatives in Turkish cannot be identified with high applicatives.

4 Analysis

Based on a range of diagnostics, the previous section has argued that pseudo-causatives contain a thematic Voice head. We now flesh out the details of this proposal and then show how it derives the failure of putative diagnostics for thematic Voice, i.e., agent-oriented adverbs, instruments and passivization.

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

- (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 / simple pseudo-causative*

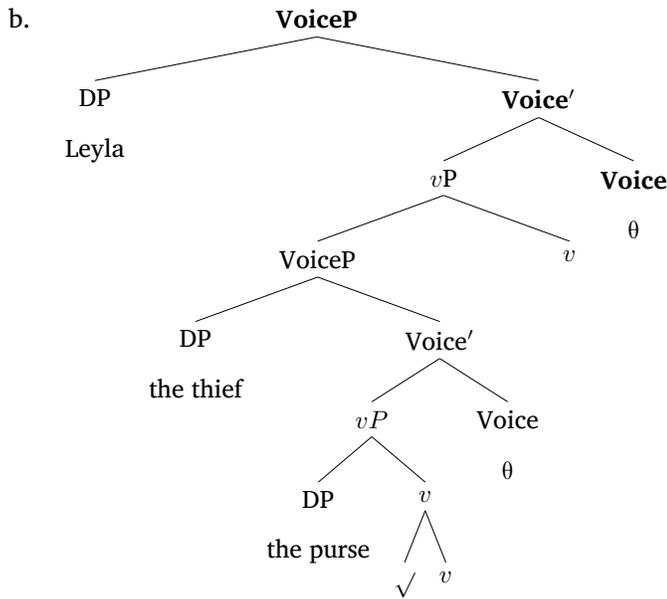


Analogously, complex pseudo-causatives such as (6b), repeated below as (41a) have a recursive syntax in (41b), like regular indirect causatives.⁹ There is one additional complication to this analysis, which we discuss in Section 5.

⁸https://www.youtube.com/watch?v=-6HfhR91nto&ab_channel=HaytaYollarda 1':55"

⁹The analysis in (41b) correctly predicts that while the higher Spec,VoiceP argument cannot be demoted via passivization as pointed out above, the lower Spec,VoiceP argument which is a regular agent can, thus allowing both readings in (i):

- (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).’



We argue that where pseudo-causatives differ from regular causatives is in the semantics of their external argument. We assume that the Spec, VoiceP position is associated with the θ -role of an agent, but we understand this θ -role as a prototype in the sense of Dowty (1991). That is, the external argument position is associated with a broad range of proto-agent properties such as animacy, sentience, volition, intentionality and causal power, but it can be occupied by arguments that possess only a subset of these properties. We do not claim that the resulting interpretations necessarily lend themselves to a tidy taxonomy or that they can be described using a finite set of discrete features cross-linguistically (see also Harley 1998). The subjects of pseudo-causatives are not agents in the narrow sense, but they fall under the broader category of arguments possessing a subset of proto-agent properties – e.g., animacy and sentience – but not others. Most notably, they lack causal power.

We now turn to the fact that as outlined in the introduction of this paper, pseudo-causatives do not license agent-oriented adverbs, instrument phrases and passivization for many Turkish speakers. We have shown above that the failure of these diagnostics cannot be attributed to the absence of a syntactically defined external argument; instead, we argue that it is due to the semantics of this argument. As

(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)’

a first piece of evidence in support of this claim, note that these diagnostics equally fail in Turkish for other subject arguments of causatives that receive an interpretation other than that of an agent in the narrow sense, namely, instruments (42)¹⁰ and inanimate causers (43).

(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*)
- d. #Anahtar bu kapı-yı diş-ler-i-yle aç-ar.
key this door-ACC tooth-PL-POSS-with open-AOR
'The key opens this door with its teeth.' (*instrument*)

(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))¹¹

Moreover, we argue that the failure of agent-oriented adverbs and instruments in these contexts can be naturally accounted for on semantic grounds. 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 the subjects of pseudo-causatives which merely experience an event. By the same token, the use of an instrument equally

¹⁰(42d) becomes available under an anthropomorphizing reading; i.e., if the key is interpreted as an agent in the narrow sense.

¹¹To 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.

presupposes a goal-directed activity in which the instrument could be put to use. Nothing is gained by linking the failure of these diagnostics to a special syntax.

As for passivization, different languages have been observed to impose different conditions on what kinds of arguments can and cannot be demoted. In English, for instance, passivization is perceived as degraded by some speakers for instruments (44a) but is acceptable for inanimate causers (44b):

- (44) a. %The door was opened by the key.
b. The region was destroyed by the earthquake.

In other languages, definiteness/specificity and animacy/agency are known to affect passivizability (Kaiser & Vihman 2006, Primus 2011, Sigurðsson & Wood 2021, a.o.).¹² Overall, the idea that all arguments which resist demotion simply occupy some syntactic position other than Spec, VoiceP is hardly defensible. All of this is in further support of our claim that agent-oriented diagnostics are sensitive to the semantics of the external argument, not only to whether it is present at all.

As for the question of what exactly is the semantic profile of external arguments that pass these diagnostics in Turkish, we have seen so far that the latter are licensed only with agents in the narrow sense, excluding instruments, inanimate causers and the subjects of pseudo-causatives. However, the situation is even more complex. As briefly noted earlier, a minority of speakers we consulted accepted agent-oriented adverbs and passivization with (some) pseudo-causatives. This might have two sources. First, those speakers might assign a slightly different interpretation to the pseudo-causative examples they were presented. Much might hinge on the concrete example in question. Second, the semantic properties that agent-oriented diagnostics are sensitive to might be delineated somewhat differently for different speakers.

This ties in with an additional complication, which is that the three agent-oriented diagnostics investigated here do not necessarily pattern together. For Turkish pseudo-causatives, few speakers accepted agent-oriented adverbs and passivization, but not instruments. Similarly, in English, some agent-less stative constructions tolerate agent-oriented adverbs, attributed by Biggs & Embick (2022) to the presence of a ‘Responsible Party’ (see fn. 6), but not instruments (Akkuş, 2021). Consider (45).

- (45) 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))

¹²The 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).

On the flip side, Sigurðsson & Wood (2021) report for Icelandic that null causees in indirect causatives are compatible with instruments, (46a), but not with agent-oriented adverbs, (46b).

- (46) 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))

If agent-oriented diagnostics indeed all detected the presence of thematic Voice, this would be unexpected. Overall, Turkish pseudo-causatives further undermine some already shaky diagnostics. Being minimally distinct from regular causatives – differing only in whether or not the subject argument is interpreted with causal power –, they constitute particularly clear evidence that the outcome of agent-oriented diagnostics can be affected by subtle semantic factors, while other diagnostics indicate no change to the syntactic structure, as seen in Section 3. We believe that our data demonstrate that agent-oriented adverbs, instruments and passivization are not ironclad diagnostics for the presence of thematic Voice as such, and we hope that this finding will be of use for future work.

5 Whither causation?

Before concluding, we briefly discuss the implications that pseudo-causatives 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 pseudo-causatives 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 pseudo-causatives, being interpreted without causation, should have a different event structure from standard causatives. For simple pseudo-causatives, 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, 2025; 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 pseudo-causatives, whose external argument is interpreted without causal power (48c). Note that in (48c), we use the role label ‘Agent*’ as a shorthand for an argument that qualifies as an agent argument in the broad Dowtyian sense but lacks causal power.

- (47) a. ‘The day darkened.’
 b. $\lambda e.\exists s.[\text{End}(e,s) \ \& \ \text{dark}(s) \ \& \ \text{Theme}(s,\text{day})]$
- (48) a. ‘Leyla darkened the day.’
 b. **Direct causative:** $\lambda e.\exists s.[\text{Agent}(e,\text{Leyla}) \ \& \ \text{End}(e,s) \ \& \ \text{dark}(s) \ \& \ \text{Theme}(s,\text{day})]$
 c. **Pseudo-causative:** $\lambda e.\exists s.[\text{Agent}^*(e,\text{Leyla}) \ \& \ \text{End}(e,s) \ \& \ \text{dark}(s) \ \& \ \text{Theme}(s,\text{day})]$

In short, we attribute the intuition that pseudo-causative 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, the external argument of pseudo-causatives is not. As a result, no distinct event structure for pseudo-causatives 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. For example, the English indirect causative (49a) contains two contradictory modifiers, *calmly* and *in a flash*, each combining 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) $\lambda P. \lambda e. \exists e' \text{ s.t. } P(e') \wedge \text{Cause}(e, e')$

Interestingly, complex pseudo-causatives 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 pseudo-causatives). The pseudo-causative reading, on the other hand, is unavailable, suggesting that complex pseudo-causatives 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 pseudo-causative reading is simply blocked because the subject 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 pseudo-causatives might not contain a separate event encoded on the higher ν 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 [Pytkänen \(2008\)](#) could be modified to account for this finding. We might either posit that the embedding little ν in complex pseudo-causatives is semantically vacuous and does not introduce a new event, or that there is no embedding ν 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 ν) become two independent variables which should be able to mix and match freely. One might argue that if ν is null and both the higher and the lower Spec,VoiceP argument are part of the same eventuality, their interpretation must be sufficiently distinct so as not to violate thematic uniqueness ([Carlson 1984, 1998](#)). Thus, they cannot both be agents in the narrow sense. However, it is not clear what blocks the opposite scenario for most speakers, i.e., an external argument interpreted without causal power and a contentful ν . In other words, the question is why an argument receiving a pseudo-causative interpretation would be unable to be contained in its own, separate event. There is a deeper puzzle here about how the thematic interpretation of arguments affects event-structural

decomposition which we cannot solve here.

Finally, a few words on morphology. We have seen throughout that pseudo-causatives 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} , 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 pseudo-causatives would, on the account presented above, wrongly predict causative marking on anticausatives as well. Pseudo-causatives 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 2026). 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 their pseudo-causative uses as well, and that it is not sufficient to simply declare causative morphemes to be the spell-out of ‘causative semantics.’

Overall, the perspective from pseudo-causatives 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) pseudo-causatives are identical to regular causatives, but also to anticausatives. In terms of the interpretation assigned to the external argument, pseudo-causatives differ from regular causatives, and trivially from anticausatives. In terms of morphology, pseudo-causatives pattern with regular causatives and diverge from anticausatives. Overall, pseudo-causatives 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 set of data from Turkish which we have labeled pseudo-causatives. Despite their standard causative morphology, pseudo-causatives do not receive a causative interpretation and also fail some commonly used agent-oriented diagnostics: agent-oriented adverbs, instrument phrases and passivization. Situating pseudo-causatives in the context of

the previous literature, we have shown that this profile has often been taken to suggest a structure lacking a thematic Voice layer. However, several pieces of evidence contradict this analysis. Instead, we have proposed that pseudo-causatives contain an external argument in Spec,VoiceP, but that this argument is interpreted with only a subset of proto-agent properties, excluding causal power. This, we have argued, accounts not only for the non-causative reading of pseudo-causatives, 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 pseudo-causatives lack a causative meaning has implications for theories of causatives and causation. We have argued that at least for simple pseudo-causatives, the absence of a causative reading is not due to their event structure, but to the interpretation assigned to the external argument. Moreover, pseudo-causatives 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 pseudo-causatives, 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*) to be 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.

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 argument-structural 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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