Hybrid subjects in Spanish and Catalan: Halfway between agents and patients

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Abstract We analyze an intransitive construction involving verbs like Spanish matarse 'kill' whose subjects appear to have both internal and external argument properties. Examples include Juan se mató en un accidente de coche 'Juan got himself killed in a car accident', in which the subject's referent shows hybrid behavior between agent and patient as it needs to be engaged in an action leading to its accidental death. We propose that the subject's internal and external argument properties can be accounted for if subjects can bear two semantic roles by virtue of being associated with more than one distinct head in the syntax (Pineda & Berro 2020). We argue that such intransitive uses involve a distinct argument structure from transitive reflexives despite sharing the same surface form, cf., El sospechoso del homicidio se mató al estar rodeado por la policía 'The suspect killed himself when he was surrounded by the police'. The present account provides evidence that agents and external arguments do not always correlate since some verb classes can have identical surface form, despite involving underlyingly distinct argument alignment.

Keywords: syntax, argument structure, external argument, agent, patient

1 Introduction

Since Kratzer (1996)'s influential proposal that the external argument is truly external as it is introduced in the syntax independently of the verb, by means of a functional head that Kratzer labelled Voice, a considerable

amount of distinct approaches have pursued the idea that a more finegrained classification is needed regarding the nature of this functional head (cf., D'Alessandro et al. 2017). Evidence in favor of this view mainly comes from observing that there appear to be distinct types of external arguments which exhibit distinct syntactic and semantic properties.

In this paper, we attempt to provide additional novel evidence in favor of such a view by observing that the subjects of some Spanish and Catalan reflexive verbs like matarse 'kill', electrocutarse 'electrocute' or herirse 'hurt', when appear in an intransitive construction, have both internal and external argument properties. The data we concern ourselves with comes from Spanish and Catalan and involves examples like *Juan se mató en un accidente* de coche 'Juan got himself killed in a car accident' in which the subject's referent appears to behave as both an agent and as a patient since it needs to be engaged in an action, in this case Juan's driving, that in turn leads to its accidental death. In order to account for the subject's hybrid nature, we follow Pineda & Berro (2020) in proposing that mixed thematic interpretations are the result of subjects being assigned more than one semantic role by virtue of being associated with more than one distinct head in the syntax. More specifically, we argue that, in the intransitive construction, the subjects of these verbs initially merge in the specifier position of a small clause subpredicate (Hoekstra 1992), complement of v, and are co-indexed with an unpronounced specifier of a thematic, but syntactically intransitive Voice head (Schäfer 2008; Alexiadou et al. 2015), lexicalized in turn by the pronoun se in Spanish or es in Catalan, which we gloss as SE for descriptive ease. The fact that the subjects have both internal and external argument properties is therefore accounted for since Voice assigns its agent argument to the referent of the internal argument, i.e., the subject, as it is co-indexed with the unpronounced specifier of Voice (Pineda & Berro 2020). We note our proposal is capable of accounting for the subject's internal and external argument properties as the co-indexation makes it possible for the subject to bear an agent and patient semantic role since it is an argument of both Voice and the small clause predicate. Essentially, the present paper provides a replication of the existing proposal for a class of verbs in Basque laid out in Pineda & Berro (see next section for details). We show that Pineda & Berro's existing account is viable for a class of reflexive verbs in Spanish and Catalan, and therefore provide additional independent evidence from Romance that supports their proposal.

In order to provide evidence in favor of the present analysis, we further consider transitive reflexive uses of the same verbs, e.g., *kill oneself*, which share the same surface form as the intransitive uses, e.g., *El sospechoso del*

homicidio se mató al estar rodeado por la policía 'The suspect killed himself when he was surrounded by the police' (Web). In this respect, we propose that the intransitive and reflexive uses of verbs like *matarse* in Spanish and Catalan involve a distinct semantic and syntactic configuration, despite involving identical surface form. Main evidence comes from considering a battery of semantic and syntactic diagnostics that probe for the presence of external and internal arguments. These diagnostics show that the subject of these verbs in the intransitive construction behaves as both an external and internal argument, whereas the subject of transitive reflexive uses involves a canonical external argument. For instance, we observe that only intransitive uses entail accidental death, and therefore lack of intentionality, are naturally compatible with bare plural postverbal subjects and allow en cliticization with a patient interpretation of the subject in Romance languages that have cliticization of this sort such as Catalan (Solà 1973; Burzio 1986; Rigau 1990; Levin & Rappaport Hovav 1995). In short, we note that whereas reflexive uses of a verb like matarse generate a suicide interpretation, the intransitive uses generate an interpretation that the subject's referent does something that ends up killing them, without the intention of actually committing suicide. The data from Spanish and Catalan ultimately allows us to raise the point that agents and external arguments do not always correlate since some verb classes can have identical surface form, despite involving underlyingly distinct argument alignment.

We proceed as follows. In Section 2, we provide a general overview of Kratzer's (1996) proposal that the external argument is to be severed from the argument structure of the verb. We further discuss the recent view that pushes Kratzer's agenda even further by arguing that external arguments do not show uniform behavior regarding how they are introduced syntactically. In Section 3, we first provide a description of the grammatical properties of the Spanish and Catalan verbs that appear in the intransitive construction at stake. This allows us in turn to make clear predictions regarding what sort of reflexive verbs in Spanish and Catalan may exhibit this use. We then move on to propose that the intransitive construction has distinct syntactic and semantic properties than transitive reflexives, despite both sharing the same surface form. In Section 4, following Pineda & Berro (2020), we lay out the present formal analyses of both the intransitive and transitive reflexives uses of verbs like *matarse* in Spanish and Catalan. Section 5 concludes the paper.

2 Introducing the external argument

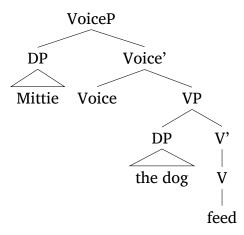
Theories of argument structure assuming a syntactic decompositional view of verb meaning have long defended the idea that external arguments are not to be considered true arguments of the verbs themselves as they are claimed to be introduced independently of the verbs by functional heads in the syntax such as Voice or little ν (Chomsky 1995; Kratzer 1996; Embick 2004; Folli & Harley 2008; Pylkkännen 2008; Ramchand 2008; Harley 2013; Merchant 2013; Alexiadou 2014; Alexiadou et al. 2015; Harley 2017; Schäfer 2017; Sundaresan & McFadden 2017, among many others. Further see D'Alessandro et al. 2017 for a general overview). This assumption is based mostly on Marantz's (1984) original observation that verbs only appear to impose semantic restrictions on their internal argument, and never on their external argument. Marantz (1984: 25) illustrated this by considering idiomatic meaning of verbs, which are only triggered by internal arguments (1), and never by external arguments (2).

- (1) a. kill a cockroach.
 - b. kill a conversation.
 - c. kill an evening watching TV.
 - d. kill a bottle (i.e., empty it).
 - e. kill an audience (i.e., wow them).
- (2) a. Harry killed DP.
 - b. Everyone is always killing DP.
 - c. The drunk refused to kill DP.
 - d. Silence can certainly kill DP.
 - e. Cars kill DP.

Marantz observed that whereas the type of internal argument can alter the meaning of the verb, external arguments never do (but see Nunberg et al. 1994; Wechsler 2005 for criticisms on this view). For instance, when *kill* has the meaning of *spend time doing x* as in *The boy killed the afternoon watching TV*, Marantz notes that *kill* selects an internal argument that must denote time intervals. Drawing on Marantz's observation, what are generally known as configurational approaches to argument structure (e.g., Borer 2003; Folli & Harley 2005; Alexiadou et al. 2015) have claimed that external arguments are not true arguments of the verbs themselves, but are instead introduced independently of the verb by functional projections in the syntax. Most notably, Kratzer (1996) influentially proposed that external arguments are introduced by the functional head Voice, whereas internal

arguments are true arguments of the verbs themselves as they are generated in the specifier position of the VP. On this view, external arguments are truly external to the verb as it is the Voice head which provides an agent argument to the external argument that it introduces.

(3) Mittie fed the dog. (adapted from Alexiadou et al., 2015: 7)



Since Kratzer's influential proposal, a number of distinct approaches have defended the idea that external arguments are not introduced and interpreted uniformly. Instead, classes of external arguments, with distinct syntactic and semantic properties, can be differentiated depending on the position in the syntactic structure they are generated in (cf., D'Alessandro et al. 2017). For instance, Alexiadou (2014) has argued in favor of such a view by examining so-called internally caused change-of-state verbs in English, e.g., blossom, ferment, flower (Levin & Rappaport Hovav 1995; Rappaport Hovav 2020). Alexiadou proposes that these verbs do not form a uniform class since two general classes can be differentiated depending on the properties of their subjects. Namely, what Alexiadou calls the ferment class involves verbs whose subject is introduced by Voice, whereas the subject of what Alexiadou calls the blossom class is introduced in vP. Alexiadou notes that this difference in subject types depending on where they are generated is empirically motivated, e.g., the blossom class does not allow passivization, whereas the ferment class does, and only the subject of the blossom class is thematically restricted to the semantic role of causer.

Similarly, Tollan (2018) and Tollan & Oxford (2018) have proposed that the subjects of some verb classes in Polynesian languages and Algonquian are to be introduced by distinct heads as well. More specifically, along the lines of what Alexiadou (2014) proposed for internally caused change-of-state verbs in English, these authors propose that the subjects of unergatives

and transitives in these languages are generated in distinct positions. In the case of unergatives, the subjects are generated in νP , while the subjects of transitives are introduced by Voice. Tollan and Tollan & Oxford provide evidence in favor of this view by considering how case marking works along with the fact that the subjects of unergatives and transitives in these languages appear to show distinct semantic properties.

Recently, Pineda & Berro (2020) have analyzed a group of agentive process verbs in Eastern dialects of the Basque language, e.g., bazkaldu 'have lunch', solastatu 'talk', borrokatu 'fight' or jolastu 'play' and observed that they show mixed properties related to unergativity and unaccusativity. For instance, while verbs of this class typically behave as unergative (Levin 1983), the group of verbs analyzed by Pineda & Berro nonetheless select an absolutive subject and the auxiliary BE, the typical auxiliary verb selection for unaccusatives in languages that show a split auxiliary system for the perfect (cf., Sorace 2000). Pineda & Berro further note that this group of agentive verbs behave like unaccusatives in other respects since they do not allow cognate objects or partitive subjects. In order to account for their mixed properties regarding their status as unergative or unaccusative, Pineda & Berro propose that the subject of this class of agentive verbs is generated within the vP and subsequently co-indexed with a thematic but nonpronounced argument introduced as the specifier of Voice (Schäfer 2008; Alexiadou et al. 2015). Pineda & Berro note that this explains why their subject has both external and internal argument properties, since the coindexation makes it possible for the subject to be assigned two distinct semantic roles.

In what follows, we first provide a detailed description of the characteristics of the reflexive verbs in Spanish and Catalan that participate in the intransitive construction, which we show form a natural class. As we discuss, this allows us to make predictions about what sort of reflexive verbs in Spanish an Catalan are expected to participate in this construction.

3 Hybrid subjects in Spanish and Catalan

As briefly mentioned above, this paper is concerned with an intransitive use of some reflexive verbs in Spanish and Catalan which involves subjects that show hybrid behavior between agent and patient.¹ Intuitively, the subjects' referents need to be engaged in an action that accidentally leads to the

¹ The examples in the present paper mainly come from basic web searches (Web), from Corpus de referencia del español actual (CREA) (Real Academia Española on line) and

change that they undergo, e.g., Haider's drunk driving ends up killing him in (4-a). Similar comments apply to the other example.

- (4) a. Haider conducía ebrio cuando **se mató** en un Haider drive.3sg.IPFV drunk when se kill.3sg.PFV in a accidente de coche. accident of car. "Haider got himself killed as he was driving under the influence." (Web)
 - b. El joven, de 15 años, **se electrocutó** cuando [...] the youngster of 15 years SE electrocute.3SG.PFV when [...] intentaba subirse al techo de un tren. try.3SG.IPFV climb = SE at.the roof of a train "The fifteen-year-old youngster got himself electrocuted when he was trying to get on the roof a train." (Web)

The Spanish and Catalan reflexive verbs that appear in this intransitive construction all share one key property. Namely, they must encode a result state that comes about accidentally as a result of the action the referent of the subject is engaged in. For instance, in the example above in (4-a), the reflexive verb *matarse* encodes the result state of *being dead* which comes about accidentally as an unexpected consequence from the driving action the referent of the subject is currently engaged in.

We understand the notion *result state* in the sense of Rappaport Hovav & Levin (2010) (see also Rappaport Hovav & Levin 1998; Beavers 2011a; Rappaport Hovav 2014; Beavers & Koontz-Garboden 2020). On this view, a result state involves a change in some attribute or property of a patient after the event described by the verb is over. For instance, the result verb *die* describes the property of *being dead* which necessarily holds of a patient after they participate in a *dying* event. Put differently, a result state necessarily involves an altered degree of some property or value of a patient at the end of the event (see Rappaport Hovav & Levin 2010; Rappaport Hovav 2014). In this respect, one diagnostic that probes for result states involves the *something is different about x* diagnostic laid out by Beavers (2011b). The logic behind this diagnostic relates to the idea that if a verb encodes a result state, and hence a change in some value or property, then denying that nothing is different about the patient should generate clear contradictions. This is illustrated below for the result verbs *die*, *shatter* and *kill*.

Corpus del español NOW corpus (CE) (Davies on line). Examples with no source have been constructed by us.

- (5) a. #Kim just died, but nothing is different about her.
 - b. #Kim just shattered the vase, but nothing is different about it.
 - c. #Kim just killed the prisoner, but nothing is different about him.

Similarly, another way to probe for result states involves explicitly denying the specific result state that is purportedly encoded by the verb (Rappaport Hovav & Levin 2010). For instance, intuitively, the verb *die* necessarily results in the death of a participant. Hence, denying that the patient does not die after a *dying* event results in a clear contradiction. Similar comments apply to the other verbs that encode result states involving distinct attributes.

- (6) a. #Kim just died, but she is not dead.
 - b. #Kim just cleaned the table, but it is not clean.
 - c. #Kim just destroyed the computer, but it is not destroyed.

On Rappaport Hovav & Levin's approach, result verbs contrast with verbs that encode a manner of carrying out an action, but do not specify that any result state follows from that action. For instance, while *wiping* events often result in some surface becoming cleaner, the becoming cleaner is not part of the lexical entailments of the verb *wipe*, as it is actually a pragmatic inference drawn from speakers' knowledge of the world when it comes to *wiping* events (Rappaport Hovav & Levin 2010). Evidence that supports this comes from observing that sentences like *Kim just wiped the table, but the table is just as dirty as it was before* or *I scrubbed the tub for hours, but it didn't get any cleaner* (Rappaport Hovav & Levin 2010: 22) are not contradictory. In other words, as Rappaport Hovav & Levin (2010: 22) discuss in detail, verbs like *wipe* "lexically specify [...] actions [which] are typically used with the intention of removing stuff from a surface, and in particular contexts, this removal will be strongly implicated; however, since it can be explicitly denied, it is not lexically encoded [...] in the verb."

Manner verbs therefore should not generate contradictions when subject to *something is different about x* diagnostic as proposed by Beavers (2011b). This is because these verbs do not encode any result state from the action they lexically specify and therefore it should be possible to explicitly deny that any result state has occurred, despite the fact that it may be (strongly) implicated in some contexts, as Rappaport Hovav & Levin discuss. This is illustrated below for the manner verbs *wipe*, *hit* and *work*.

- (7) a. Kim just wiped the table, but nothing is different about it.
 - b. Kim just hit the wall, but nothing is different about it.

c. Kim just worked out hard, but nothing is different about her.

As mentioned before, Spanish and Catalan reflexive verbs that appear in the intransitive construction at stake all encode a result state that comes about accidentally as a result of an action the referent of the subject is engaged in. Some verbs in this respect involve *matarse* 'kill', *electrocutarse* 'electrocute', *herirse* 'hurt', *lesionarse* 'injure', among others, which we call *matarse* verbs in a broad sense and for descriptive ease. These verbs qualify as result verbs on Rappaport Hovav & Levin's view since explicitly denying that nothing is different about the patient generates clear contradictions.

- (8) a. María se ha electrocutado, #pero no
 María SE have.3SG.PRS electrocute.PTCP, but no
 hay nada diferente en ella.
 there.is.3SG.PRS nothing different in her
 Intended: "María just got herself electrocuted, but there's nothing different about her."
 - b. Juan se ha lesionado en el partido, #pero no Juan SE have.3SG.PRS injure.PTCP in the game, but no hay nada diferente en él. there.is.3SG.PRS nothing different in him Intended: "Juan just got himself injured in the game, but there's nothing different about him."
 - c. Juan se ha matado en un accidente de coche,
 Juan SE have.3SG.PRS kill.PTCP in a accident of car,
 #pero no hay nada diferente en él.
 but no there.is.3SG.PRS nothing different in him
 Intended: "Juan just got himself killed in a car accident, but
 there's nothing different about him."

Crucial evidence for the generalization that we wish to advance here comes from considering other types of reflexive verbs like *lavarse* 'wash', which at first blush appear to be quite similar to *matarse* verbs. In this respect, an anonymous reviewer correctly points out that reflexive verbs of the *lavarse* sort do not appear in the intransitive construction at stake, since the following example involving *lavarse* can only have a run-of-the-mill reflexive interpretation where the referent of the subject carries out a *washing* action on themselves.

(9) El niño se ha lavado en la ducha. the kid REFL have.3SG.PRS wash.PTCP in the shower

Transitive reflexive: "The kid has washed himself in the shower." Intransitive use: "#The kid got himself washed in the shower."

On the present account, the fact that a verb like *lavarse* only has a reflexive interpretation is actually accounted for, since such a verb appears to behave like a canonical manner verb. In other words, above we proposed that for a verb to participate in the intransitive construction, it needs to encode a result state that has to come about accidentally as a result of the action the referent of the subject is engaged in. Yet, a reflexive verb of the *lavarse* sort does not appear to encode any result state when subject to relevant diagnostics as those developed by Rappaport Hovav & Levin (2010); Beavers (2011b). Intuitively, while it is true that *washing* events often result in something or someone becoming cleaner, this does not appear to be a lexical entailment of a Romance verb like *lavarse*, since such a result state can be explicitly denied in both Spanish (10) and Catalan (11) (cf. Rappaport Hovav & Levin 2010: 22).

- (10) a. El chico se ha lavado en la ducha, pero the boy REFL have.3sg.prs wash.ptcp in the shower, but continua igual de sucio.
 continue.3sg.prs same of dirty
 "The boy has washed himself in the shower, but he is just as dirty as before."
 - b. El chico ha lavado la ropa, pero the boy have.3sg.prs wash.ptcp the clothes, but continua igual de sucia. continue.3sg.prs same of dirty "The boy has washed the clothes, but they are just as dirty as before."
- (11) a. El noi s' ha rentat a la dutxa, però the boy REFL have.3sg.prs wash.ptcp in the shower, but continua igual de brut.
 continue.3sg.prs same of dirty
 "The boy has washed himself in the shower, but he is just as dirty as before."
 - b. El noi ha rentat la roba, però the boy have.3sg.prs wash.ptcp the clothes, but continua igual de bruta. continue.3sg.prs same of dirty

"The boy has washed the clothes, but they are just as dirty as before."

We therefore predict that reflexive verbs in Spanish and Catalan can appear in the intransitive construction iff they encode a result state that comes about accidentally as a result of an action the referent of the subject is engaged in. This is further illustrated below, where a reflexive verb like *herirse* 'hurt', which qualifies as a result verb when subject to relevant result diagnostics (12-a), does appear in the intransitive construction (12-b), as well as showing a run-of-the-mill reflexive interpretation in the right contexts (12-c).

- (12) a. María se ha herido, #pero no hay
 María se have.3sg.prs hurt.ptcp, but no there.is.3sg.prs
 nada diferente en ella.
 nothing different in her
 Intended: "María just got hurt, but there's nothing different
 about her."
 - b. Los bomberos rescatan a una mujer que se the firefighters rescue.3PL.PRS DOM a women that SE hirió cuando realizaba una ruta.

 hurt.3SG.PFV when do.3SG.IPFV a route

 "The firefighters rescue a woman that got herself hurt when she was hiking." (Web)
 - c. Mattie Larson se hirió para evitar entrenar
 Mattie Larson REFL hurt.3SG.PFV to avoid.IFV train.IFV
 con Nassar.
 with Nassar
 "Mattie Larson hurt himself in order to avoid having to train
 with Nassar." (Web)

A final piece of evidence for the present generalization regarding reflexive verbs in Spanish and Catalan comes from considering a reflexive verb like *asesinarse* 'murder', which does entail a result state of *being dead* but crucially requires the referent of the subject to act intentionally (Talmy 1975; Dowty 1991; Van Valin & Wilkins 1996; Rooryck 2011; Grano 2016; Solstad & Bott 2017; Tubino-Blanco 2020). A verb like *asesinarse* therefore contrasts with *matarse* 'kill', which entails the same result state yet it does not impose any intentionality requirement. This is illustrated below.

(13) a. El médico mató al paciente the doctor kill.3SG.PFV DOM = the patient accidentalmente.

accidentally

"The doctor killed the patient be accident."

"The doctor killed the patient by accident."

b. #El terrorista asesinó al presidente the terrorist murder.3SG.PFV DOM = the president accidentalmente. accidentally

Intended: "The doctor murdered the patient by accident."

The fact that a verb like *asesinarse* requires the referent of the subject to act intentionally when bringing about the result state it encodes explains why this reflexive verb cannot appear in the intransitive construction, as *asesinarse* and the intransitive construction have contradictory entailments.²

(14) a. Haider conducía ebrio cuando **se mató** en un Haider drive.3SG.IPFV drunk when SE kill.3SG.PFV in a accidente de coche. accident of car.

"Haider got himself killed as he was driving under the influence." (Web)

b. #Haider conducía ebrio cuando **se asesinó** en Haider drive.3sg.ipfv drunk when se murder.3sg.pfv in un accidente de coche.

a accident of car.

Intended: "Haider got himself murdered as he was driving under the influence." (Web)

² Although the transitive reflexive use of *asesinarse* is not frequently attested, insofar as speakers' knowledge of real-world events of *murdering* do not generally involve the referent of the subject to carry the murdering on themselves, but on an independent second participant, there are still naturally-occurring examples of this sort, both in English and Spanish: e.g., *There is one argument for the view that Socrates murdered himself* (Web) or *Si alguna vez logramos quedar en los libros de historia, será por la destrucción masiva de una especie que se asesinó a sí misma* "If we ever make the history books, it will be because of a species that murdered themselves." (Web)

3.1 Halfway between agents and patients

In this section, we observe that the subjects of *matarse* verbs in Spanish and Catalan, when found in the intransitive construction, appear to have both internal and external argument properties. In order to make our case, we observe intransitive uses of *matarse* verbs have distinct syntactic and semantic properties than reflexive uses, despite sharing the same surface form.

3.1.1 Semantic properties

Similarly to what Pineda & Berro (2020: 1) note for a class of agentive verbs in Basque, the subject of *matarse* verbs in the intransitive construction is "interpreted as both the force initiating the process and the entity undergoing it." The claim that the subject's referent needs to be the force initiating the process, i.e., it has external argument properties, for the construction to be felicitous is illustrated below in (15). In this case, the context makes it clear that the only possible thematic interpretation of the subject is that of a canonical patient, i.e., an argument that simply undergoes change. Consequently, *matarse* verbs cannot felicitously describe this scenario since the subject's referent is not engaged in an action that ultimately ends up killing them. Only verbs whose subjects involve canonical patient arguments such as *morir* 'die' can (see Tubino-Blanco 2020 for similar contrasts).

(15) CONTEXT: Juan was unconscious on the ground, a big stone fell on his head, so ...

Juan #se mató/_{OK}murió en el suelo.

'Juan #got himself killed/died on the ground.'

Crucially, though, if the contexts allow for a reading in which the subject's referent is indeed interpreted as the force initiating the process, then *matarse* verbs can felicitously describe them, even if they are quite similar to those in (15). Compare this in the example below.

(16) CONTEXT: Juan was climbing without a security rope when he fell, hit his head on the ground, and lay unconscious for a while before he died.

Juan se mató escalando.

'Juan got himself killed when climbing.'

The contrast illustrated in (15) and (16) therefore provides evidence that the subject's referent of *matarse* verbs in the intransitive construction needs to be engaged in an action that ultimately leads to the change it undergoes, e.g., in (16) the subject's referent is the force initiating a *climbing* activity that ultimately leads to its accidental death. In other words, the subject's referent needs to hold some degree of responsibility for what occurs to them.³

Evidence for the claim that the subject also has internal argument properties, i.e., it qualifies as a patient in some respects, comes from various sources. First, it appears clear that the subject behaves as a canonical patient in that the subject's referent is the entity that undergoes the change of state that the verbs encode, as discussed above (8). This is further illustrated in the example below, in which explicitly denying this generates a clear contradiction (Rappaport Hovav & Levin 2010; Beavers & Koontz-Garboden 2012).

(17) Juan **se mató** en un accidente de coche ... #pero no Juan SE kill.3SG.PFV in a accident of car ... but no murió.
die.3SG.PFV
Intended: "Juan got himself killed in a car accident ... but he didnt die."

More importantly, we observe that intransitive uses of *matarse* verbs show a striking syntactic and semantic contrast with transitive reflexives, despite sharing the same surface form in Spanish and Catalan.⁴ Only reflexives involve canonical agents, i.e., an argument that acts intentionally, whereas intransitive uses entail accidental death, electrocution etc. We illustrate this below with Catalan examples which all explicitly specify that *death*, *electrocution* or *hurting* is an accidental result from the action the subjects' referents

³ See Homer & Sportiche (2011) who note the same contrasts for similar constructions in French.

⁴ For the sake of the discussion, it is worth mentioning again that, as briefly discussed above, in Spanish and Catalan, reflexives and what we have called intransitive uses of *matarse* verbs have the same surface form, yet this does not appear to be the case for all languages. For instance, in English, intransitive uses and reflexive interpretations are expressed by two distinct structures: the former are most naturally translated as *get oneself killed/electrocuted*, whereas the latter receive a canonical reflexive paraphrase of the *kill/electrocute oneself* sort. This suggests that intransitive and reflexives uses in Spanish and Catalan appear to involve distinct syntactic and semantic configurations, despite sharing the same surface form, since some languages have two structures with different surface form for each interpretation.

are engaged in. For instance, it is quite clear that in (18-a) *electrocution* is an unforeseen consequence of the stealing activity. Similar comments apply to the rest of the examples.

- (18) a. En estat greu un home que **es va electrocutar** in state grave a man that SE go.3SG.PRS electrocute.IFV quan intentava robar coure a Cambrils. when try.3SG.IPFV steal.IFV copper in Cambrils "A man is severely injured after he got himself electrocuted when he was trying to steal copper in Cambrils." (Web)
 - b. La qüestió és que l' home no **es va matar** quan the question is that the man no SE go.3SG.PRS kill.IFV when va caure.
 go.3SG.PRS fall.IFV
 "The point is that the man didn't get himself killed when he fell." (Web)
 - c. Rescatada una dona que **es va ferir** rescue.PTCP.F.SG a woman that SE go.3SG.PRS hurt.IFV quan realitzava senderisme a Calp. when do.3SG.IFV hiking in Calp "A woman who got herself hurt was rescued when she was hiking in Calp." (Web)

This lack of intentionality is explicitly illustrated below (Spanish examples from the Web), where intransitive uses are naturally compatible with adverbial expressions such as *sin querer* 'by accident' or *accidentalmente* 'accidentally'. This is relevant for the present purposes since these expressions are incompatible with interpretations where the subjects' referents intentionally cause the change that they undergo.

- (19) a. La misma chica **se mató** <u>sin</u> <u>querer</u>, al the same girl SE kill.3SG.PFV without want.INF at.the mezclar bebidas alcoholicas.

 mix.IFV drinks alcoholic

 "The same girl got herself killed by accident as she mixed alcoholic drinks."
 - b. Un hombre **se hirió** <u>accidentalmente</u> con el arma a man se hurt.3sg.pfv accidentally with the gun que usaba para cazar. that use.3sg.IPfv to hunt

- "A man got himself hurt accidentally with the gun he used to hunt."
- c. El hombre **se electrocutó** accidentalmente al the man SE electrocute.3SG.PFV accidentally at.the afeitarse en la ducha. shave.IFV=REFL at the shower "The man got himself electrocuted by accident when he was shaving in the shower."

In contrast, the same adverbial expressions generate clear contradictions with reflexive uses. This is expected since we suggest that the subject of reflexives involves a canonical agent argument that needs to act intentionally, as it is assigned an agent semantic role, as we discuss in detail in Section 4. Insofar as the interpretation generated by reflexives is that of e.g., committing suicide in the case of *matarse*, the fact that the subjects in this case need to qualify as intentional agents is therefore expected, since suicide is intentional by definition.

- (20) a. #El sospechoso del homicidio se mató
 the suspect of.the homicide REFL kill.3sg.PFV
 accidentalmente al estar rodeado por la policía.
 accidentally at.the be.IFV surrounded by the police
 Intended: "The suspect killed himself accidentally when he
 was surrounded by the police."
 - b. #Mattie Larson se hirió accidentalmente para
 Mattie Larson REFL hurt.3SG.PFV accidentally to
 evitar entrenar con Nassar.
 avoid.IFV train.IFV with Nassar
 Intended: "Mattie Larson hurt himself accidentally in order to
 avoid having to train with Nassar."
 - c. #El hombre que **se electrocutó** accidentalmente the man that REFL electrocute.3SG.PFV accidentally para probar una terapia genética antienvejecimiento. to test a therapy genetic anti-aging Intended: "The man that electrocuted himself accidentally to test an antigaging genetic therapy."

3.1.2 Syntactic properties

Further evidence for the claim that only the subject of matarse verbs in intransitive constructions has internal argument properties comes from considering the possibility of bare plural subjects appearing in postverbal position. This is relevant for the present purposes since this is often taken to be a canonical unaccusativity diagnostic that probes for the presence of internal arguments (e.g., Perlmutter 1978 for English, Burzio 1986 for Italian, Rigau 1990; Mateu & Massanell i Messalles 2015 for Catalan or Cifuentes Honrubia 1999 for Spanish). Namely, in Romance languages, it has been observed that only bare plural subjects of unaccusative verbs, i.e., those verbs whose subject is an internal argument, can naturally appear as unmarked in postverbal position (21-a)-(22-a), in contrast to bare plural subjects of unergative verbs, which by virtue of involving an external argument, resist appearing postverbally (21-b)-(22-b), or involve highly marked constructions at best. This is illustrated below for Spanish and Catalan respectively.

- (21)Llegaron trenes. arrive.3PL.PFV trains "There arrived trains."
 - b. ??Trabajaron personas. work.3pl.pfv people Intended: "There worked people."
- (22)Neixen nens cada dia. be.born.3sg.prs children every day "Children are born every day."
 - b. ??Riuen nens cada dia. laugh.3sg.prs children every day. Intended: "There laugh children every day."

In this respect, we observe that only bare plural subjects of intransitive uses of matarse verbs can naturally appear postverbally (23), in contrast to bare plural subjects of reflexive uses (24), which resist appearing in this position.⁵

⁵ The judgments of the following examples marked as ?? were collected by surveying five different speakers of Spanish and Catalan who agreed with the contrasts in acceptability.

- a. Todos los días se matan motociclistas [...] por la all the days SE kill.3SG.PRS motorcyclists [...] for the imprudencia de estos señores. recklessness of these men "Everyday there are motorcyclists that get themselves killed because of their recklessness." (CE)
 - b. El equipo se encuentra muy bien, pero infortunadamente the team SE find.3PL.PRS very well, but unfortunately se lesionaron jugadoras como Cindy Ramírez.

 SE injure.3PL.PFV players like Cindy Ramírez

 "The team is really well, but unfortunately some players like Cindy Ramírez got themselves injured." (CE)
 - c. **Se electrocutan** trabajadores que hacían
 SE electrocute.3PL.PRS workers that do.3PL.IPFV
 reparaciones en un comercio.
 repairs at a shop
 "Some workers got themselves electrocuted when they were making some repairs at a shop." (Web)
- (24) a. ??Para evitar ser capturados por el enemigo, to avoid.IFV be.IFV capture.PTCP.M.PL by the enemy, se mataron soldados americanos.

 REFL kill.3PL.PFV soldiers american

 "In order to avoid being captured by the enemy, American soldiers killed themselves."
 - b. ??Para no entrenar con lluvia, **se lesionaron** jugadores to no train.IFV with rain, REFL hurt.3PL.PFV players como Messi o Neymar. like Messi or Neymar "In order to avoid training while it rained, players like Messi or Neymar injured themselves."
 - c. ??Con el fin de cobrar el seguro, se
 with the goal of collect the insurance, REFL
 electrocutaron trabajadores.
 electrocute.3PL.PFV workers

"In an attempt to collect the insurance money, some workers electrocuted themselves."

Last, an additional piece of evidence for the claim that the subjects of reflexives and intransitive uses have distinct argument properties comes from considering *en* cliticization, which involves a patient interpretation of the subject in Catalan. As is well-known from the literature (Rigau 1990; 1991; 1994; Rosselló 2008; Acedo-Matellán & Mateu 2015), *en* is a Catalan pronoun that picks out indefinite internal arguments of transitive (25) and unaccusative verbs (26), but never external arguments of unergative verbs (27) (see Burzio 1986; Levin & Rappaport Hovav 1995 for Italian).

- (25) a. El Joan ha comprat **patates**. the Joan have.3sg.prs buy.ptcp potatoes "Joan has bought potatoes."
 - b. El Joan n' ha comprat, de patates. the Joan EN have.3sg.prs buy.ptcp, of potatoes "Joan has indeed bought potatoes."
- (26) a. Han arribat **estudiants italians** aquest any. have.3sg.prs arrive.ptcp students Italian this year "Italian students have arrived this year."
 - b. N' han arribat, d' estudiants italians aquest EN have.3SG.PRS arrive.PTCP, of students Italian this any.
 year
 "When it comes to Italian students, there have arrived some this year."
- (27) a. **Molts nens** han jugat avui. lots kids have.3SG.PRS play.PTCP today "A lot of children have played today."
 - b. *N' han jugat molts, de nens avui.

 EN have.3sg.prs play.ptcp lots, of children today
 Intended: "When it comes to children, there have played some today."

Insofar as *en* cliticization in Catalan always picks out internal arguments, and never external ones, as evidenced by the fact that the subjects of unergative verbs cannot be pronominalized by *en* (27), an additional prediction arises. Namely, only the subjects of *matarse* verbs in the intransitive construction should be compatible with cliticization of this sort. As illustrated by the Catalan examples below, this prediction appears to be borne out.

- (28)Ja no podem recórrer al tòpic, fins que a. already no be.able.1PL.PRS resort.IFV to.the cliche, until that perquè malauradament es mati, somebody SE kill.3SG.PRS.SBJV, because sadly se **n**' han molts. matat already SE EN have.3SG.PRS kill.PTCP lots "Sadly, lots of people already got themselves killed, so we can no longer say this won't stop until somebody gets themselves killed." (Web)
 - Els osonencs [...] acostumats a anar the people.from.Osona [...] accustom.PTCP.M.PL to go.INF amb el Simca1200 a fons quan va sortir with the Simca1200 to bottom when go.3SG.PRS leave.IFV el R5 turbo se' **n** van matar molts. the R5 turbo se en go.3pl.prs kill.ifv lots "Some people from Osona got themselves killed when the R5 turbo got released as they were used to the Simca1200." (Web)

In contrast, reflexive uses of the same verbs should resist it, as en cliticization involves a patient interpretation of their subjects. As illustrated by the examples below, this also appears to be borne out.⁶

(29)Durant la primera guerra mundial, molts soldats es during the first world, lots soldiers REFL war mataven per evitar ser capturats kill.3PL.IPFV to avoid.INF be.IFV capture.PTCP.M.PL by the enemic. enemy "During the first world war, a lot of soldiers killed themselves in order to avoid being captured by the enemy."

work in this factory'. As Pineda (2020: 150) discusses, in these examples, the unergative

verb is unaccusativized as it is integrated into an unaccusative construction.

⁶ For some speakers, *en* cliticization is possible with reflexives if the predicate involves the locative pronoun hi 'there'. This is expected since this pronoun is known to force an existential interpretation with an unaccusative flavor. As Pineda (2020: 150) notes, this is a well-known fact as it has been discussed extensively at least since the 1970s first by Solà (1973; 1987; 1994; 1999) and later by Rigau (1992; 1997a; b). Namely, canonical unergative verbs like treballar 'work' in Catalan can be compatible with en in such contexts, especially if they also involve locative inversion, since it favors the unaccusative flavor even further, e.g., En aquesta fàbrica n'hi treballen moltes, de dones 'Lots of women

- b. ??Durant la primera guerra mundial, se 'n mataven during the first war world, REFL EN kill.3PL.IPFV molts, de soldats, per evitar ser capturats lots, of soldiers, to avoid.IFV be.IFV capture.PTCP.M.PL per l'enemic. by the enemy
- (30) a. Quan diagnostiquen un càncer terminal, moltes persones when diagnose.3PL.SG a cancer terminal, lots people es maten per evitar sofrir.

 REFL kill.3PL.PRS to avoid.IFV suffer.IFV

 "When people are diagnosed with a terminal cancer, many kill themselves."
 - b. ??Quan diagnostiquen un càncer terminal, se' **n**when diagnose.3PL.SG a cancer terminal, REFL EN
 maten moltes, de persones, per evitar sofrir.
 kill.3PL.PRS lots, of people, to avoid.IFV suffer.IFV

3.1.3 Summary

In this section, we have provided evidence for the claim that the subjects of *matarse* verbs in Spanish and Catalan when found in what we have called an intransitive construction have both internal and external argument properties. In order to make our claim, we have further considered reflexive uses of the same verbs, since they share the same surface form. We have provided evidence that these two constructions involve distinct syntactic and semantic properties by considering a battery of semantic and syntactic diagnostics that probe for the presence of external and internal arguments. Similarly, the very fact that examples like Spanish *Juan se mató* or Catalan *El Joan es va matar* are ambiguous between a reflexive and an intransitive interpretation strongly suggests that there are two distinct argument structures that can be associated with the same linear form, as we discuss in detail in the next section.

Semantically, the subjects of intransitive uses show external argument properties since their referents need to be engaged in an action that ultimately leads to the change they undergo. Namely, the subjects' referents need to hold some degree of responsibility for what ultimately occurs to them as they are the force that initiates the process that they themselves undergo (Pineda & Berro 2020). We have observed that this is not a requirement for verbs that involve canonical patient arguments such as un-

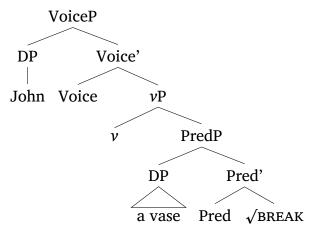
accusative verbs of the *morir* 'die' sort (15). Similarly, only the subjects of reflexives qualify as canonical agents that act intentionally in causing the change encoded by the verb, in contrast to intransitive uses, which require the result of the event to arise accidentally. Syntactically, we have observed that only the subjects of intransitive uses, in contrast to the subjects of reflexives, behave as canonical internal arguments as they can naturally appear postverbally and be pronominalized by the pronoun *en* in Catalan.

We have therefore arrived at the conclusion that only the subjects of reflexives constitute canonical external arguments, whereas the subjects of intransitive uses have mixed external and internal argument properties. Syntactically they behave as internal arguments, but semantically they require that their referent be actively engaged in the action denoted by the event, which is an interpretation characteristic of external arguments. In the next section, following Pineda & Berro (2020), as well as Schäfer (2008) and Alexiadou et al. (2015), we lay out analyses that account for such differences in the grammatical properties of these two distinct constructions rooted in the claim that subjects exhibit distinct syntactic and semantic properties depending on the position in the syntax they are generated in (Alexiadou 2014; Tollan 2018; Tollan & Oxford 2018).

4 Analysis

We adopt a syntactic decompositional view of verb meaning and event structure in which verbs are created in the syntax by combining lexical roots with functional heads (von Stechow 1996; Marantz 1997; Mateu 2002; Harley 2003; 2005; 2013; Borer 2003; 2005; McIntyre 2004; Pylkkännen 2008; Ramchand 2008; Mateu & Acedo-Matellán 2012; Acedo-Matellán & Mateu 2014; Acedo-Matellán 2016, among many others). We assume the existence of a little v head with eventive semantics (Marantz 1997; 2013; Harley 2005; 2013; Pvlkkännen 2008; Acedo-Matellán 2016; Wood & Marantz 2017, among others), and a Pred head (Bowers 1993) which functions as a relator responsible for structuring small clauses that serve as complement to the v head in predicates involving change of state or location (Hoekstra 1988; 1992). The small clause introduces the undergoer of the event of change and the final state or location in the specifier and complement of Pred respectively. Agent external arguments are instead introduced by the functional head Voice (Kratzer 1996). The following predicate, denoting a resultative event of change of state, namely, an event of becoming broken, undergone by a vase, illustrates this.

(31) John broke a vase.



Following Pineda & Berro (2020), we propose that the hybrid behavior of the subjects of *matarse* verbs can be explained by appealing to the claim that subjects can be assigned more than one distinct semantic role by virtue of being associated with more than one distinct head in the syntax. Specifically, adopting Pineda & Berro's analysis of a class of agentive verbs in Basque, we argue that the subjects of *matarse* verbs in the intransitive construction initially merge ν P internally, in the specifier position of a small clause subpredicate, and are co-indexed with the unpronounced specifier of a thematic, but syntactically intransitive Voice head (Schäfer 2008; Alexiadou et al. 2015). We assume that the Voice head is phonologically realized by means of a *se/es* morpheme that is phonologically homonymous with the reflexive pronoun *se/es* (Fábregas 2021), therefore giving rise to ambiguity in the interpretation of surface forms like Spanish *Juan se mató* as either involving an intransitive, i.e., John got himself killed, or a reflexive use, i.e., John killed himself, of the verb. §

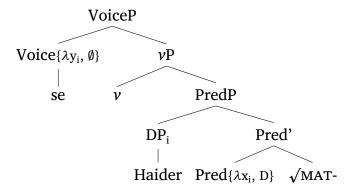
More specifically, subjects with a hybrid behavior have both internal and external argument properties because Voice assigns its agent argument to the referent of the internal argument. Assuming the analysis laid out in Pineda & Berro (2020), co-indexation therefore makes it possible for these

⁷ Even though Pineda & Berro (2020) do not provide a definition of co-indexation, following the logic of their account, one plausible definition would be to understand co-indexation as a mechanism that applies to cases in which the uninterpretable features of two distinct functional heads (in the sense of Chomsky 1995) are checked by the same argument in the absence of further operations (e.g., Move).

⁸ For discussion of the different uses of *se* in Spanish, see Armstrong (2011) and Fábregas (2021) and references therein.

subjects to bear two semantic roles, as they are interpreted as arguments of both Voice and the small clause.⁹

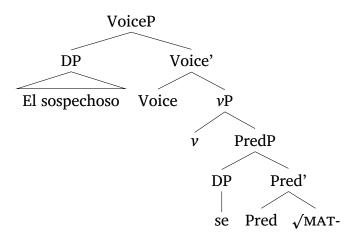
(32) Haider [...] **se mató** en un accidente de coche. Haider SE kill.3SG.PFV in a accident of car. "Haider got himself killed in a car accident."



In contrast, reflexive uses of *matarse* verbs involve a transitive configuration where subjects are externally merged in the specifier of the Voice head, while a reflexive pronoun (e.g., *se* in Spanish,) co-referent with the subject, occupies the internal argument position (Doron & Rappaport Hovav 2009; Martin et al. 2023; Sportiche 2014; 2020).

An anonymous reviewer asks how the claim that verbs are inherently specified as encoding result states or manners of actions (Rappaport Hovav & Levin 2010) factors into the derivation of the structures into which verbs can be integrated. We do not commit ourselves to claiming that an ontological-type classification of manner or result has direct correlations in the syntax (see Alexiadou et al. 2015 precisely for this view). However, assuming Marantz's (2005) proposal (also Acedo-Matellán 2016) that the objects of atelic, non-resultative transitive predicates based on 'manner' roots of the lavarse sort is merged syntactically within an adjunct of the vP, the fact that examples like Juan se lavó 'Juan washed himself' are not ambiguous between an intransitive and a reflexive use interpretation (cf. (9)), in contrast to examples that involve result verbs which are indeed ambiguous, e.g., Juan se mató 'Juan killed himself/Juan got himself killed', can be said to follow from the present approach since co-indexation in these cases does not appear to be possible. This is so because of the adjunct status of the object of manner verbs, as claimed by Marantz (2005), and adjuncts are considered an opaque domain for the probing of elements inside them (Ross 1967; Huang 1982; Boeckx 2003; Chomsky 2004; among many others). In any case, what is crucial for the present purposes is that a verb encoding a result state can appear in the intransitive construction iff the result state it encodes can come about accidentally as a direct consequence of the action the referent of the subject is engaged in, as discussed above.

(33) El sospechoso [...] **se mató** al estar rodeado the suspect REFL kill.3SG.PFV at.the be.IFV surrounded por la policía. by the police "The suspect killed himself when he was surrounded by the police."



We close by providing an additional piece of evidence for the claim that reflexives and intransitive uses have distinct grammatical properties. This comes from considering overt reflexives, e.g., *oneself*. In this respect, we observe that only reflexive uses of *matarse* verbs naturally combine with explicit reflexive expressions such as Spanish *a sí mismo*, whereas intransitive uses do not. Compare this below.

- (34) a. ??Juan **se mató** <u>a</u> <u>sí</u> <u>mismo</u> en un accidente de coche.

 Juan SE kill.PFV DOM REFL same in a accident of car

 "Juan got himself killed in a car accident."
 - b. Keith Young [...] se ha matado <u>a sí</u>

 Keith Young REFL have.3.SG.PRS kill.PTCP DOM REFL

 <u>mismo</u> y a sus cuatro hijos pequeños.

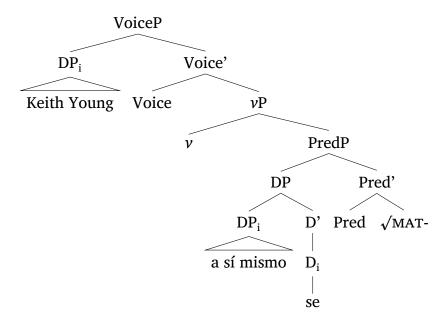
 same and DOM his four children little

 "Keith young has killed himself and his four little kids." (Web)

The contrast in (34) naturally follows if intransitive uses of *matarse* verbs involve the intransitive configuration in (32), in contrast to reflexives which involve the transitive one in (33). Assuming, following Uriagereka (1988; 2001); Torrego (1994); Cecchetto (2000); Belletti (2005), among others, that the doubling construction in (34-b) arises via an adjunct/specifier relation be-

tween the explicit reflexive expressions (e.g., a sí mismo) and the reflexive clitic se, the construction is licensed in the transitive reflexive use but not in the intransitive use because only in the transitive reflexive use, the clitic is merged in a phrasal position, which is additionally c-commanded by the subject argument that binds the anaphoric expressions, as illustrated in (35).

(35) Keith Young [...] **se ha matado** <u>a sí mismo</u>.



5 Conclusion

The present paper has provided independent novel evidence from Spanish and Catalan that supports the view originally defended by Pineda & Berro (2020) regarding the existence of what they refer to as hybrid verbs. We have concerned ourselves with an intransitive use of what we have called *matarse* verbs in Spanish and Catalan, and have observed that the subjects of these verbs when found in an intransitive configuration show mixed-behavior interpretations between agents and patients. We have proposed that the hybrid nature of the subjects of *matarse* verbs can be explained by appealing to Pineda & Berro's claim that subjects can be assigned two distinct semantic roles by virtue of being associated with more than one distinct head in the syntax. Ultimately, the data from *matarse* verbs in Spanish and Catalan has allowed us to show that agents and external arguments do

not always correlate since some verb classes can have an identical surface form, despite involving underlyingly distinct argument alignments.

Abbreviations

The glossing in this paper follows the conventions stated in the Leipzig Glossing Rules.

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Competing interests

The authors have no competing interests to declare.

Authors' contributions

Authors are ordered alphabetically according to their surnames, therefore they should both be considered co-authors.

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