



# LOW APPLICATIVES AND OPTIONAL "SE" IN SPANISH NON-ANTICAUSATIVE INTRANSITIVE VERBS\*

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Abstract: This work revolves around a very peculiar set of Spanish verbs ('caer[se]', 'morir[se]', 'tropezar[se]', and 'encallar[se]', among others), which optionally allow the clitic 'se' without any significant change of meaning. These verbs do not enter the transitive-inchoative alternation (i.e. they are non-anticausative). Besides, the presence of the clitic has little semantic contribution, if any at all. They are problematic because they cannot be integrated in existing analyses that account for other instances of pronominal verbs like anticausatives and reflexives. What it is proposed in this work is that these verbs are optionally selected by a low applicative head. Moreover, the clitic 'se' is thought of as a nominal item. This allows the integration of these verbs in broader analyses of pronominal verbs that consider the clitic a nominal item (whether argumental or expletive-like).

Key words: low applicative, optional se, anticausative, pronominal verb.

## 1. INTRODUCTION: PRONOMINAL VERBS ACROSS LANGUAGES

The argument structure of a verb relates each argument refering to a participant of the event, to the event itself by means of a thematic relation (cf. Jackendoff, 1987; Levin & Rappaport-Hovav, 1995; Reinhart, 2002; Ramchand, 2007; among many others). Quite often, the correspondence of lexical items and arguments is one to one, but sometimes this is not borne out. One such case is constituted by pronominal verbs, which, according to Teomiro (2010), are "those verbs for which the syntactic realization of their argumental structure requires the insertion of a particle<sup>2</sup> that (seems to) lacks interpretation in the participant structure of the event." The terms pronominal verb and pronominal construction have long been used by Spanish grammarians (cf. Martín Zorraquiño, 1979; Real Academia Española, 1973). The required particle is called the 'pronominal particle', and it can be either a tonic pronoun like zich in Dutch and sich in German, or a clitic like si in Italian and se in Spanish. Examples of pronominal verbs in Spanish are shown in (1), Dutch in (2), German in (3), and Czech in (4).

[Subject Experiencer Verb] (1) a. Juan \*(se) asustó. Juan \*(se) got scared. 'Juan got scared.'

Ana (se) cayó de [cf. §2] b.

Ana (se) fell off from the chair.

'Ana fell off the chair.'

Jan verdacht [Subject Experiencer Verb] (2)\*(zich). a.

Jan changed his mind \*(zich).

'Jan changed his mind.'

Jan scheert \*(zich) elke morgen. [Inherent Reflexive Verb] h.

Jan shaves \*(zich) every morning.

'Jan shaves every morning.'

The pronominal particle: se in Spanish and zich in Dutch.



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Along the syntactic derivation (I assume the pronominal particle is not in the numeration).

Die Tür öffnete \*(sich). [Inchoative; from Schäfer, 2008] (3)a.

The door opened \*(sich).

'The door opened.'

Der Tankwart entzündete \*(sich). [Inchoative; from Schäfer, 2008] h.

> The petrol ignited \*(sich).

'The petro ignited'.

(4) Sklo \*(se) rozbilo. [Inchoative] a.

> Glass \*(se) broke.

'The glass broke.'

b. Jan \*(se) překvapil. [Subject Experiencer Verb]

John \*(se) became surprised.

'John became surprised.'

Jan \*(se) myje [Inherent Reflexive Verb] c. každý den.

Jan \*(se) washes every day.

'Jan washes (himself) every day.'

Roughly speaking, four sources of variation can be distinguished when comparing pronominal verbs between Spanish and other languages.

The first source of variation consists in verbs that are pronominal in Spanish but not in other languages. Inchoative anticausative verbs are pronominal in Spanish (5a) but non pronominal in Dutch (5b).

(5)a. El vaso \*(se) rompió.

The glass \*(se) broke.

'The glass broke.'

b. De vaas brak (\*zich).

> The glass broke (\*zich).

'The glass broke.'

The second source of variation consists in verbs that are non-pronominal in Spanish, like 'sudar' (sweat) (6a) but are pronominal in other languages like Czech (6b).

(6)Juan (\*se) suda mucho en verano. a.

> Juan (\*se) sweats a lot in summer.

'Juan sweats a lot in summer.'

b. Jan \*(se) velmi potí.

> Juan \*(se<sub>ACC</sub>) in sommer<sub>locativo</sub> a lot sweats.

'Juan sweats a lot in summer.'

The third source of variation is conformed by verbs that are alternating pronominal in Spanish, like (7a) and (8a) but not in other languages such as Dutch (7b) and (8b), and Czech (7c) and (8c). Alternating pronominal verbs are those verbs that allow (but do not require or prevent) the presence of the pronominal particle. Although the occurrence of the pronominal particle seems free and optional, there are nonetheless some interpretative differences related to causation, mental involvement and aspect (Teomiro, 2010).

a. Juan (se) cayó.

Juan (se) fell.

[accomplishment]

'Juan fell.'

h Jan is (\*zich) gevallen.

Jan has (\*zich) fallen.

'Han fell.'

Jan \*(se) spadl / upadl. c.

Jan \*(se) fell / fell.

'Juan fell.'



[animacy restriction]

(8)Juan (se) murió. a. Juan (se) died. 'Juan died.' Jan is

(\*zich) gestorven. Jan has (\*zich) died.

'Jan died.'

Jan \*(se) včera zemřel. c. Jan \*(se) yesterday died. 'Jan died yesterday.'

Finally, the fourth source of variation refers to verbs that are alternating pronominal in other languages, like the Dutch verbs in (9a) and (10a), whereas they are obligatorily pronominal in Spanish (9b) and (10b).3

Jan bewoog (zich). (9)a. Jan moved (zich). 'Jan moved.'

> b. Juan \*(se) movió. Juan \*(se) moved.

'Juan moved.'

(10) a. Jan herstelde (zich). Jan recovered (zich).

'Jan recovered.'

Juan \*(se) recuperó. h Juan \*(se) recovered. 'Juan recovered.'

In this work, we will focus on the third source of variation, and more concretely, on a set of verbs ('caerse' fall, 'morirse' die, 'encallarse' run aground, 'tropezar' stumble) for which the semantic and the syntactic contribution of the pronominal particle is not clear-cut.

In the next section, we will introduce the verbs that will be studied in this work. Subsequently, their syntactic properties will be described in §3. In §4 we will move on to their lexical nature and argue that they are denominal verbs. Afterwards, we will develop the analysis of these verbs in §5. Finally, §6 shows the conclusions.

### 2. OPTIONAL SE WITH NON-ANTICAUSATIVE INTRANSITIVE VERBS

This paper is concerned with verbs that are alternating pronominal in Spanish like 'caer(se)' (fall) in (7a) and 'morir(se)' (die) in (8a), but are non-pronominal in other languages like Dutch (7b) and (8b), and Czech (7c) and (8c). More concretely, we focus on intransitive verbs in Spanish that meet the following conditions: (i) they do not enter the causative-inchoative alternation and (ii) they optionally allow the occurrence of the clitic 'se' without any apparent semantic shift (although see below). We have found four verbs that fulfil the two aforementioned conditions: 'caer' ("fall") (11), 'encallar' ("run aground"), (12) 'morir' ("die") (13), and 'tropezar' ("stumble"/"trip over") (14).

(11) a. Juan (se) cayó. Juan (se) fell. 'Juan fell.' Juan %( le / les / lo / los / la / las) h. cavó. Juan (CL<sub>3SG.DAT / 3PL.DAT / 3SG.ACC / 3PL.ACC.MAS / 3SG.ACC.FEM / 3PL.ACC.FEM)</sub> fell 'Juan made him / it / her fall.'

De tafel bewoog (#zich) The table moved (#zich) 'The table moved by itself.

[animacy restriction]

In some cases, some semantic restriction may appear, as with the verb 'bewegen' (move) in Dutch, which requires an animate subject when the pronominal particle zich

%Juan cayó el jarrón. C. Juan fell the vase. 'Juan made the vase fall (unintentionally).'

(12) a. El barco (se) encalló. The ship (se) run aground. 'The ship run aground.'

> \*La tormenta / %Pedro encalló b. el barco. / Pedro run aground the ship. The storm Intended: 'The storm / Pedro made the ship run aground.'

Note that 'caer' (11b,c) and 'encallar' (12b) allow a kind of transitive alternation in some dialects (regions of Northern Extremadura and León in Spain). This alternation is, nevertheless, slightly different from the causative alternation (see 'pseudo-causative alternation' in Teomiro, 2010, p. 199. 'Morir' (13b) and 'tropezar' (14b) admit neither transitive alternation (causative or pseudo-causative).

(13) a. Juan (se) murió. Juan (se) died. 'Juan died.'

b. \*El hambre / \*Juan murió el perro. \*The hunger / \*Juan died the dog. Intended: 'The hunger / Juan made the dog die.' or 'The huger / Juan killed the dog.'

(14) a. Juan (se) tropezó.

Juan (se) stumbled. 'Juan stumbled.'

b. \*La piedra / \*Juan tropezó a \*The stone / \*Juan stumbled ACC Pedro. Intended: 'The stone / Juan made Pedro stumble.'

De Miguel & Fernandez Lagunilla (2000) argue that verbs in (11)-(14) (among many others they include in their analysis) convey complex predicates that have two phases: an accomplishment or an achievement plus a change of state. They analize the clitic 'se' as an aspectual operator that focalizes the cultimation of the first subevent iff it is followed by a change of state. They follow Pustejovsky (1991) and build on his work to enlarge his typology of events. Verbs that optionally allow 'se' are accomplishments (e.g. (11) and (13)) or achievements (e.g. (12) and (14)) that may or may not be followed by a change of state. So 'caer' and 'morir' denote just an accomplishment, whereas 'caerse' and 'morirse' denote a complex event made up of an accomplishment and a resultant state ('be on the floor' for 'caerse', 'be dead' for 'morirse'). In other words, regardless of whether the lexical entries of 'caer' and 'morir' encode a complex event, the change of state is 'visible' or relevant for syntax iff 'se' is realised (De Miguel & Fernandez Lagunilla, 2000, p. 32).

We agree with these authors that 'se' correlates with the presence of a state following an accomplishment or achievement in the verbs (11), (12), (13), (14). However, this analysis raises a number of empirical and theoretical issues when it is applied to other instances of 'se'. For example, stative verbs that allow 'se' (15) are problematic for this analysis:

aprendido la lección. (De Miguel & Fernandez Lagunilla, 2000, p. 28) (15) a. (Me) he

CL<sub>1SG</sub> have<sub>1SG</sub> learnt the lesson. 'I have learnt the lesson.'

(Me) estuve callada. (De Miguel & Fernandez Lagunilla, 2000, p. 28) b.

CL<sub>1SG</sub> was<sub>1SG</sub> silent. 'I remained silent'

(Me) lo c. CL<sub>1SG</sub> CL<sub>ACC,3SG</sub> belief<sub>1SG</sub> 'I belief it.'



d (Me) pienso que vendrá María.  ${\rm CL}_{\rm 1SG}$  think $_{\rm 1SG}$  that will come María. 'I think/suspect that María will come'

De Miguel & Fernández Lagunilla argue that (15a,b) do not raise a problem for their analysis because (15a) with 'me' implies that the subject has done previous work and as result he knows the lesson now. Likewise, they argue that (15b) with 'me' implies that something happened that made the subject become and remain silent. Although we agree with the interpretation of (15a), we do not do so with the interpretation of (15b) with 'me': something could have triggered the change of state (from being talking to become silent) but this is not implied, i.e. the subject could have simply stayed in silence from the begining of the situation to the end. Besides, the states in (15c) and (15d) do not necesarilly follow any previous eventuality. (15c) denotes a belief irrespective of whether the subject has reflected on it or he has suddenly come up with it. (15d) does not necesarilly imply that the subject has thought on María's coming. What (15c) implies is that the subject does not base his belief on any external evidence but it is an intuition. In other words, the verb 'pensarse' in (15d) means 'suspect' rather than 'think'.

From a theoretical point of view, De Miguel & Fernández Lagunilla's characterization of 'se' as an aspectual operator has several shortcomings. First, to say that 'se' focalises a phase of the event is to say that two things happen at once: the presence of 'se' and a certain form of complex event. However it is unclear whether the change of state that follows the eventuality is triggered by the presence of 'se', or the other way around. Moreover, no other such operators exist in Spanish. The authors mention adverbials that function as operators ('aún', 'todavía'). However, 'se' does not seem to be an adverbial because it has f-features4, typical of nominal items, which agree with the subject. Besides, 'se' is a clitic with the same distributional pattern as other clitics that clearly are pronouns (lo, la, le, me, te, nos, os).

Finally, 'se' with other kinds of verbs such as anticausative verbs cannot be characterized as an aspectual operator necessary to focalise a change of state that follows another eventuality. The transitive counterpart (16a) of the anticausative verb (16b) disallows 'se' despite the fact that it also denotes a complex event (an accomplishment followed by a change of state). It is unclear that 'se' is necessary for the state to be relevant for the syntax in (16b) if it is ruled out in (16a).

(16) a. La tormenta (\*se) rompió la ventana. The storm CL broke the window.

'The storm broke the window.'

La ventana \*(se) rompió. h.

The window CL broke.

'The window broke.'

In this work we want to build on the analysis of De Miguel & Fernández Lagunilla, which gives a very acurate semantic characterization of the clitic 'se' with the verbs in (11)-(14), and develop a new approach to the syntax of 'se' with verbs (11)-(14). Other types of pronominal verbs are not going to be dealt with here since they are beyond the scope of this work.

It is De Miguel & Fernández Lagunilla's characterization of 'se' as an aspectual operator that we do not agree with. First, because of the aforementioned reasons (presence of f-features, same distributional properties as other clitics that are pronouns). Second, because the function of 'se' does not seem to be the same across all the syntactic configurations where 'se' appears (cf. (15c), (15d), and (16)). And third, because this characterization of 'se' makes it imposible to integrate it in other analyses of 'se' ocurring with inchoative verbs and anticausative verbs.

Therefore, we will provide the reader in §5 with a new analysis of 'se' with the verbs (11)-(14) that respects De Miguel & Fernández Lagunilla's semantic characterization but gives a more accurate account of the syntactic properties of the verbs (11)-(14) described in §3.

### 3. SYNTACTIC PROPERTIES: DISTRIBUTION OF PATHS, DURATIVE ADVERBIALS AND RESULT STATES

Semantic differences in pronominal alternations such as 'caer(se)' in (17) and 'morir(se)' in (18) are difficult to see, unlike in other pronominal alternations such as the transitive-reflexive (Reinhart & Siloni, 2005; Teomiro, 2011; among others) and the transitive-inchoative (Levin & Rappaport-Hovay, 1995; Reinhart, 2002; among others).

This work is framed within Generative Grammar (Chomsky, 2001, 2005, 2008). In this framework,  $\phi$ -features are grammatical features such as person (1st, 2nd, 3rd), number (singular, plural) and gender (feminine, masculine, neuter). These features are usually hosted on nominal items, as well as on verbs and adjectives in order to establish an agreement relation among these elements, which is the way in which their interdependency is formally represented.



(17) Juan (se) cayó. Juan (se) fell off.

'Juan fell off.'

(18) Juan (se) murió.

Juan (se) died.

'Juan died.'

Nevertheless, there are some distributional differences related to the duration of the event, as can be seen in (19), and to the presence of a path, as shown in (20). The particle se is incompatible with duration adverbials (19b) and with measure adverbials of paths (20b) (though see (20c) where se can appear with paths).

(19)a. Juan cayó (durante dos segundos). [duration]

> Juan fell (for two seconds).

b. Juan se cayó (\*durante dos segundos). [duration]

Juan se fell (\*for two seconds).

Juan cayó (5 metros). (20)[measure of path] a.

Juan fell (5 meters).

b. Juan se cayó (\*5 metros). [measure of path]

Juan se fell (\*5 meters).

Juan (se) cayó por el barranco. c. [path]

Juan (se) fell by the ravine.

'Juan fell down the ravine.'

There are other differences that lie in the eventive structure. More concretely, the licensing of result states.5 'Caer' admits the presence of result states (21a) ('rendido' worn out) and (22a) ('hechizado' bewitched) iff the verb occurs without se. If se and the result state co-occur, the sentences are ungrammatical.

(21) a. (\*Me) caí rendido en la cama.

 $(^*Me_{_{1ST.SING}})$  fell $_{_{1ST.SING}}$  worn out in the bed.

'I flake out on the bed.'

¿Cómo (me) b. caí en la cama?

How (me<sub>1ST,SING</sub>) fell<sub>1ST,SING</sub> in the bed?

'How did I fall on the bed?

(22) a. El príncipe (\*se) cayó hechizado a los pies de Blancanieves.

The prince (\*se) fell bewitched to the feet of Snow White.

'The prince became bewitched at the feet of Snow White's.'

b. ¿Cómo (se) cayó el príncipe?

How (se) fell the prince?

'How did the prince fall?'

Note furthermore that questions (21b) and (22b) are unambiguous if the verb occurs with se (they ask about manner). However, if se does not appear, these questions are ambiguous between manner and state.

In (23) we can see more data that support the observation that the version without se (23a) denotes a result state, whereas the version with se (23b) denotes an event (an accomplishment in the case of 'caer', but an achievement in the case of 'tropezar'). (23d) is infelicitous because there are two incompatible result states (on his side and face down), whereas (23c) is felicitous because 'de costado' denotes the way of Juan's falling and face down denotes the result state. Again, question (23e) is unambiguous if se does not occur (result), whereas the ambiguity (manner vs. state) arises if se is present.

(23) a. Juan cayó de costado.

[⇒Juan ended up on his side]

Juan fell of his side.

'Juan fell on his side.'

The verb 'caer' in Spanish licenses states that are not real result states because there is no causal relationship between the eventuality of 'caer' (fall) and the state, i.e. the change of state is not necessarily brought about by the eventuality of 'caer'. The relationship is temporal, though. In other words, the state either follows the eventuality or comes up once the eventuality has started. Nonetheless, this temporal relationship is very often interpreted as causality due to contextual information and world knowledge.

b. Juan se cayó de costado. Juan **se** fell of his side.

'Juan fell sideways.'

Juan se cayó de costado y terminó boca abajo. Juan se fell of his side and ended up face down.

'Juan fell sideways and ended up face down'

d. #Juan cayó de costado y terminó boca abajo. #Juan fell of his side and ended up face down. 'Juan fell on his side and ended up face down.'

e. ¿Cómo (se) cayó Juan? How (se) fell Juan? 'How did Juan fall?'

Similar data can be found in (24): (24a) implies that the bear was alive when it began its falling, and concomitant to its falling, it passed away. On the other hand, (24b) implies that the bear was dead when it began its falling. (24c) is ambiguous between manner and result when se is omitted, whereas it is unambiguous (manner) when se appears.

(24) a. El oso cayó muerto.

The bear fell dead.

'The bear fell dead.'

h El oso se cayó muerto.

The bear se fell dead.

'The bear fell dead.'

¿Cómo (se) cayó el oso?

(se) fell the bear?

'How did the bear fall?'

Something worth noting is the fact that result states and adverbials measuring paths seem to be incompatible, as can be seen in (25b). Adverbs of duration are incompatible with result states too, as can be seen in (26b). That is due to the fact that the presence of the state renders the eventuality telic, and hence, incompatible with duration adverbials.

(25) a. Juan cayó (5 metros). [adverbial measure of path]

Juan fell (5 meters).

Juan cayó rendido (\*5 metros). [adverbial measure of path] b.

Juan fell worn out (\*5 meters).

[duration] (26) a. Juan cayó (durante horas).

Juan fell (for

b. Juan cayó rendido (\*durante horas). [duration]

Juan fell worn out (\*for hours).

## 4. LEXICAL PROPERTIES: DENOMINAL NATURE

The verbs we focus on in this work ('caer', 'morir', 'tropezar' and 'encallar') are unusual verbs because they are intransitive verbs, with a theme-like subject, non-derived from a transitive entry (i.e. they are not anticausatives), and they have the possibility to appear with the particle se. No other such intransitive verb can appear with se. More concretely, for Levin & Rappaport-Hovav (1995) internally caused verbs like (27) are not derived from a transitive version (i.e. they are not anticausative), and can never appear with se in Spanish (Mendikoetxea, 1999b; Mendikoetxea, 1999a).

(27) a. La rosa (\*se) floreció.

The rose (\*se) blossomed.

'The rose blossomed.'



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b.
         Los precios (*se) aumentaron.
         The prices (*se) rose.
         'The prices rose.'
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The hypothesis we want to put forward is that 'caer', 'morir', 'tropezar' and 'encallar' can appear with se because they are denominal. The nature and function of se will be discussed later on. In this section, we limit ourselves to discussing the lexical properties of these verbs. More concretely, we will argue that they are denominal verbs as many Euskara egin-verbs discussed by Hale & Keyser (2002).

Hale & Keyser (2002) characterized unergative verbs with agentive subjects like run, play, cry and dance, as verbs that incorporated or conflated a nominal before entering the syntactic derivation. This is represented in (28). Euskara provides strong support for this hypothesis since in this language, this kind of verbs is formed by combining 'egin' (do) plus a nominal (tears, dance, etc.), as seen in (29).

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(28) a.
 b.
(29) a.
 b.
 C.
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Teomiro (2010, pp. 227-230) argues that the conflation of the object deletes de uninterpretable nominal features of the predicate, so that no internal argument other than the conflated nominal is needed. In other words, the D feature of the verb is checked against the conflated nominal. Hence, the remaining argument merges out of the vP. Therefore, (28) can be re-written as (30):

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\begin{bmatrix} v_{\text{NAGG}} & v_{\text{V}} & \text{do} \end{bmatrix} + \begin{bmatrix} v_{\text{NP}} & \text{dance'} \end{bmatrix}_{\text{ACC}} \end{bmatrix}\begin{bmatrix} v_{\text{NAGG}} & v_{\text{V}} & \text{do} \end{bmatrix} + \begin{bmatrix} v_{\text{NP}} & \text{song'} \end{bmatrix}_{\text{ACC}} \end{bmatrix}
                                                                                 DANCE =
(30) a.
                                                                                 SING =
                             b.
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What we want to propose is that 'caer', 'morir', 'tropezar' and 'encallar' are also verbs that incorporate a nominal before the syntactic derivation proceeds. The verb denotes that an entity undergoes a process, and the noun denotes the process that the argument (the undergoer) undergoes. The lexical entry of these verbs is represented in (31):

```
(31) a.
                    CAER
                                                          [v_{V,ACC}]_{V,ACC} undergo] + [v_{NP} 'caida' (falling) [v_{ACC}]_{ACC}
                                                          [_{V,ACC}[_{V}] undergo] + [_{NP}] 'muerte' (death) ]_{ACC}]
                    MORIR
       b.
                    TROPEZAR
                                                          [_{V, ACC}[_{V} \text{ undergo}] + [_{NP} \text{ 'tropiezo' (stumbling) }]_{ACC}]
       c.
                                                          [v_{AGG}]_v undergo] + [v_{NP}]_v 'calle' (street) [v_{AGG}]_v
                    ENCALLAR
       d.
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The argument of these verbs is a theme (like verbs in [27]) rather than an agent (like verbs in [30]). However, these verbs do allow se, whereas verbs in (27) do not. I will argue in the next session that this is due to the denominal nature of verbs in (31) but not of verbs in (27). Note that verbs in (30) can also admit se, as in (32), although it seems to contribute to the semantics of the predicate, unlike se with verbs in (31) (cf. Campanini & Schäfer, 2011 and references therein). Despite the importance of these verbs with se, this falls beyond the scope of this work.

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(32) a.
             Juan se bailó un tango.
             Juan se danced a tango.
             'Juan danced a tango.'
             Juan se cantó una balada.
             Juan se song a ballad.
             'Juan song a ballad.'
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#### 5. OPTIONAL SE AND LOW APPLICATIVES

Something intriguing about verbs in (31) is that they admit se, which triggers syntactic differences (see §3). The idea that is going to be defended in this work is that the denominal nature of the verbs in (31) is what allows the

<sup>6 &#</sup>x27;Txio egin' is used with birds. When referring to humans, the verb 'kantatu' (sing) is used instead, which is intransitive though it admit cognate objects.

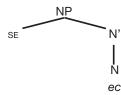
presence of se. The crucial issue at stake then is what se is, i.e. what its categorical status is, and what it does in the syntactic derivation in order to trigger the differences reported in §3.

The hypothesis that we want to put forward is that se is a pronoun, concretely a se-anaphor in the sense of Reinhart & Reuland (1993) and Reuland (2001)7, that is located in the specifier of a low applicative phrase in the sense of Pylkkänen (2002) and Pylkkänen (2008).

A se-anaphor is a se-element in the specifier position of an NP with a defective set of φ-features (Reinhart & Reuland, 1993, p. 658), schematically represented in (33). Reuland (2001) argues that number is the φ-feature that se-anaphors lack (at least for Dutch zich, see Teomiro (2010) for a similar argumentation for Spanish se). This allows this kind of pronouns to be locally bound by an antecedent by means of agreement and syntactic chain composition8 without resorting to A-binding9 at the C-I system10 (Reuland, 2006; Reuland, 2001). However, if se receives inherent Case, chain formation is prevented and the binding of SE is done by A-binding at the C-I system (Volkova, 2009). We will come back later to this issue since this will be crucial for the issue at stake here.

#### (33) Structure of se-anaphors:

(Reinhart & Reuland, 1993, p. 658)



According to Pylkkänen (2002; 2008), a low applicative phrase relates two arguments by implying transfer of possession from one to the other (34). It is headed by an applicative head that relates the argument in its specifier with the argument in its complement position (35).

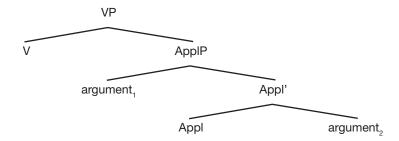
(34) Semantics of low applicatives:

(Pylkkänen, 2008)

 $\lambda x \lambda y \lambda f_{<E,<S,T>>} \lambda e.$  f(e,x) & theme (e,x) & TO-THE-POSSESSION (x,y)

(35) Syntax of low applicatives:

(Pylkkänen, 2008)



The English double object construction, such as the one in (36), is an example of a low applicative where the applicative head relates him with cake by establishing a transfer of possession<sup>11</sup>.

See Cuervo (2003) for an extensive study of datives, the double object construction and applicatives in Spanish.



According to Reinhart & Reuland (1993), there are two kinds of anaphors (expressions that require an antecedent present in the sentence): on the one hand, self-anaphors are complex anaphors made up of a particle ("se" in Spanish, "zich" in Dutch, "him" in English) plus a nominal element self ("sí mismo" in Spanish, "zichzelf" in Dutch, "himself" in English). These anaphors must obey Chomsky's (1981) Principle A of Binding Theory, i.e. they must be locally bound (usually within the same clause). On the other hand, se-anaphors are simple anaphors like "se" in Spanish or "zich" in Dutch (English lacks se-anaphors). In other words, they lack the nominal element self- Along with the morphological differences, se-anaphors are not subject to Principle A of Binding Theory, unlike self-anaphors (Reuland, 2001).

When two elements agree, they form a chain, which is the formal representation of the dependency established between those elements.

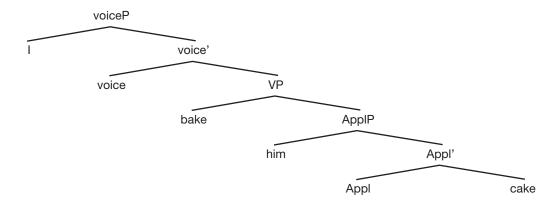
A-binding is a binding relation in which the antecedent is in an A-position, i.e. the antecedent is an argument of the predicate.

The Conceptual-Intentional system (C-I system) is responsible for the semantic interpretation of the sentence formed by the syntactic component of the Faculty of

#### (36) I bake him a cake.

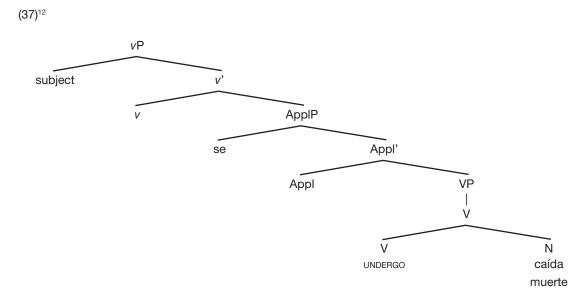
(Pylkkänen, 2008)

∃e(bake) & agent(e, I) & f(e,x) & theme(e, cake) & TO-THE-POSSESSION



The low applicative introduces a dative, which renders the predicate augmented. Pylkkänen (2008) states two conditions to license low applicatives: first, the predicate has a direct object and second, a transfer of possession between the direct object and the introduced dative argument is implied.

Our proposal is that se with verbs 'morir(se)' and 'caer(se)' in (31) is a se-anaphor that is in the specifier position of a low applicative phrase that takes the VP as complement, as represented in (37). Thus we can state that the position of the low applicative is other than complement of the verb as long as the two aforementioned conditions are met: the presence of a direct object and the implication of transfer of possession. We will argue that these conditions are met with verbs in (31).



Following the semantics of low applicatives argued by Pylkkänen (2008) in (34) above, the applicative in a configuration such as (37) relates the sE-anaphor se with the direct object of VP. Recall that in §4 we argued that verbs in (31) are denominal verbs, i.e. they are made up of a verbal head and a nominal that conflates. This conflated nominal is the direct object of the predicate. Also, this nominal is the one over which the applicative head takes scope. Hence, the result is that se, bound by the sentential subject (we will come back to this issue later), is related to the conflated noun by the applicative head by establishing a transfer of possession relation.

Whether the verbs 'caer', 'morir', 'tropezar' and 'encallar' are unaccusative or unergative, is not clear-cut. All the verbs behave fairly well in most unaccusative tests but 'caer' and 'encallar' do not do so in some. For example, a nominalization can be formed with the suffix '-ente' ('cayente', cf. DRAE), which is an unergative test. Also the canonical position of the subject seems to be preverbal with 'caer', 'encallar' and 'tropezar', in contrast to 'morir', whose subject seems be canonical postverbal. This correlates with the fact that 'caer' (11b) and 'encallar' (12b) can be used as transitive by some speakers (but not 'tropezar' (14b)), whereas 'morir' (13b) never admits a transitive use. Although I think this issue is crucial in order to determine the lexical nature of these verbs, as well as their syntactic behavior, this question falls beyond the scope of this work because whether the argument of the verb merges as an internal argument or in external position, it ends up in higher than se in either case, whence it can bind se at the C-I system (where precedence is the only requisite for A-binding). Therefore, I leave this question open for future research.



(38) Juan se cayó.

Juan se fell.

3e(caer) & f(e,x) & theme(e, Juan) & TO-THE-POSSESSION (caída, se)

& se=Juan

Note that in the cases of verbs in (31) the conflated noun can denote either an eventuality (falling, dying, stumbling, running aground) or a state, as can be seen in (39) where 'caer' (39a) and 'morir' (39b) combine with the copula 'estar' (be) that denotes stage-level predicates rather than with the copular 'ser' that denotes individuallevel predicates (Carlson, 1977):

(39) a. ΕI árbol \*es/está caído.

> The tree is fallen

'The tree is fallen.'

b. Juan \*es/está muerto.

> dead. Juan is

'Juan is dead.'

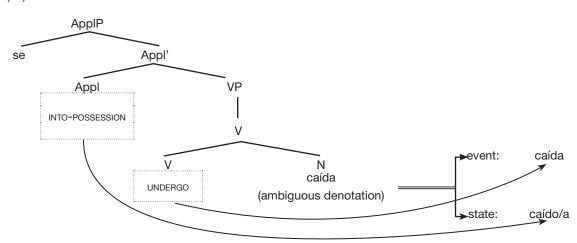
So the semantics of (38) can be reformulated in (40) and (41), which reads as follows: there is an event that consists of an argument Juan that undergoes a falling (denoted by the conflated noun) and there is a transfer of possession to Juan of the state 'be fallen' (denoted by conflated noun too). The implication of the transfer of possession of the state to the subject is that Juan ends up fallen.

(40) Juan se cayó.

Juan **se** fell.

∃e(undergo) & undergoer(e, Juan) & f(e,x) & theme(e, caída FVENT) & TO-THE-POSSESSION (caída STATE, se) & se=Juan

(41)

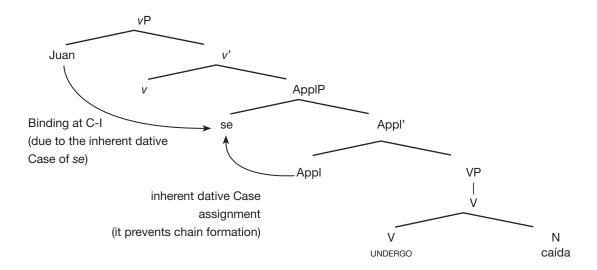


The question at stake now is how it is possible for Juan to bind se, which is a se-anaphor, without violating the Theta Criterion. Reuland (2001) argued that Dutch zich, which is a sE-anaphor, can be locally bound by the subject because it is bound along the syntactic derivation by means of syntactic chains, which was directly translated to A-binding at the C-I interface. This is possible because zich lacks number φ-feature. The fact that the binding is done at syntax by means of chains implies that both zich and its binder are interpreted as one argument at the C-I system. The problem with se when appearing with verbs in (31) is that it is interpreted as an argument, i.e. in (40) there are four arguments or  $\lambda$  operators (leaving aside the event argument): Juan, caída EVENT, caída STATE and se.

Our proposal is that the binding of Juan and se is possible without violating the Theta Criterion because the applicative head assigns inherent dative Case to se in Spanish (as low applicatives do in German, cf. Schäfer, 2008) as represented in (42). The inherent Case of se prevents the chain formation and the binding cannot be done at the syntax but must be done by means of A-binding at the C-I system. This means that both Juan and se are interpreted as two different arguments although Juan binds se (cf. Volkova, 2009; and pseudo-reflexive binding in Teomiro, 2010, p. 237).



## (42) Juan se cayó. Juan se fell.



When 'caer' occurs with se, i.e. with the low applicative, it is no longer a verb of change of location but a verb of change of state. In other words, 'caer' denotes a change of location through a path (hence, it admits paths and adverbials that measure paths, as seen in §3). However, no result state is encoded in the lexical entry of 'caer', and hence, its compatibility with phrases denoting result states, as seen in §3. When 'caer' is realized with se, i.e. with the low applicative, it denotes a change of location whose result is a change of state: the individual referred to by the subject changes its state from non-'caído' to 'caído' (the same happens with the verb 'morir'). This result state, denoted by the low applicative, binds the event of falling, denoted by 'caer', and hence the aspect shift and the compulsory telicity (see Campanini & Schäfer (2011) for the same argumentation with consumption verbs that optionally occur with se in Spanish and Italian).

Two questions arise now. On the one hand, why other intransitive verbs such as Spanish 'nacer' cannot occur with se as in (43), whereas they occur with the pronominal particle in other languages like Czech (44).

- (43) El niño (\*se) nació (De Miguel & Fernandez Lagunilla, 2000, p. 24) sietemesino. The child (\*se) was born two months premature. 'The child was born two months premature.'
- (44) Jan \*(se) narodil včera Juan<sub>nom</sub> \*(se) was born<sub>1SG,MS</sub> yesterday in night<sub>locativo</sub>. 'Juan was born yesterday night.'

On the other hand, it is not clear why 'caer' and 'morir' cannot optionally take se in other languages with pronominal verbs such as Dutch (45a,b) and Czech (46a,b).

- (\*zich) gevallen. (45) a. Jan is Jan has (\*zich) fallen. 'Jan fell.'
  - b. Jan is (\*zich) gestorven. Jan has (\*zich) died. 'Jan died.'
- (46) a. Jan (\*se/\*si) spadl. Jan (\*se/\*si) fell. 'Jan fell.'
  - b. Jan (\*se/\*si) včera zemřel. Jan (\*se/\*si) yesterday died. 'Jan died yesterday.'

The answer to the first question relies on the lexical nature of the verbs 'caer' (fall) and 'nacer' (be born) in Spanish, on the one hand, and 'narod' (be born) in Czech, on the other hand. 'Nacer' is not a denominal verb. In fact, the noun that denotes the event "be born" is deverbal: 'nacimiento'. This noun is made up of the verbal root 'naz-' and the derivative morpheme '-iento' that forms nouns out of verbs. Since 'nacer' is a predicate without other argument than the subject, the applicative head cannot be licensed (recall that it needs two arguments, more concretely, a direct object, according to Pylkkänen, 2008). The Czech verb 'narod' requires the pronominal particle se that appears with anticausatives rather than with the optional pronominal particle si. This points towards the possibility for this verb to be an instance of a frozen anticausative verb like the verb 'desmayarse' in Spanish, which always requires se (see Reinhart, 2002 and Teomiro, 2010 for frozen anticausatives).

As for Dutch verbs in (45a,b), the answer is basically the same as with 'nacer' (be born) in Spanish: neither 'vallen' nor 'sterven' are denominal verbs. The noun that denotes the event of falling in Dutch is 'valling', which is made up of the verbal root 'val-' and the nominalizer suffix '-ing'. The noun that denotes the event of dying in Dutch is 'dood', not even morphologically related to the verb 'sterven'.

The question as to why Czech verbs (46a,b) cannot occur with the optional pronominal particle si is more complicated, and will be left open for future research. Nonetheless, see in (47) and (48) that the roots that form the verbs are the same as the roots that form the adjectives from both verbs.

(47) a. verb ('fall'): spadl / upadl noun ('falling'): pád adjective ('fallen'): padlý (48) a. verb ('die'): zemřt noun ('death'): b. smrt adjective ('dead'): mrtvý C.

If the noun is to be formed, either an extra prefix must be added ('-s' in (48b)) or a suffix must be deleted (-'1' in (47)). This points to the possibility that these verbs in Czech are deadjectival rather than denominal, which would account for the impossibility of the low applicative in such a syntactic configuration: no direct object is available for the applicative head to relate with the subject.

Last, the incompatibility of paths and se with 'caer' shown in §3 is semantically motivated. Without se, 'caer' denotes a change of location. On the other hand, 'caer' denotes a change of state when it appears with se. When the state is present (se), the path adverbial cannot take scope over the first eventuality but only over the second one, which is a state. Note that paths are also odd with 'morir' because it does not imply any change of location. The incompatibility of se and duration adverbials seen in §3 is also semantic: a durative adverbial is incompatible with the result state, as it was shown in (26b).

#### 6. CONCLUSIONS

This work has studied a peculiar set of alternating pronominal verbs in Spanish: 'caer(se)', 'morir(se)', 'tropezar(se)' and 'encallar(se)'. They are special because they are intransitive, they optionally allow the clitic 'se', and they do not enter the causative-inchoative alternation (i.e. they are non-anticausative).

The analysis put forward in this work follows the seminal paper written by De Miguel & Fernández Lagunilla (2000). We agree with these authors that 'se' with the aforementioned verbs correlates with the presence of a state preceded by an accomplishment or an achievement. However, we have characterized 'se' as a se-anaphor rather than an aspectual operator, and have derived its syntactic properties described in §3 by its position within a low applicative phrase that relates the subject (which binds 'se') with a state. This state is denoted by the conflated noun that forms the denominal verb.

The analysis proposed in this work accounts for the aspectual and syntactic properties of 'se' described by De Miguel & Fernández Lagunilla, as well as for the syntactic properties described in §3. Besides, this analysis can be integrated in other analyses of 'se' with other types of verbs (e.g. anticausatives, inherent reflexives, etc.) that argue that 'se' is a nominal argument (cf. Burzio, 1986; Manzini, 1986; Cinque's (1988) [+arg] si; Dobrovie-Sorin, 1998; Masullo, 1999; Rivero, 2001; Teomiro, 2010; 2011).



#### REFERENCES

- Burzio, L. (1986). Italian Syntax. A Government-Binding Approach. Dordrecht: Kluwer. doi:10.1007/978-94-009-4522-7
- Campanini, C. and Schäfer, F. (2011). Optional Se-Constructions in Romance: Syntactic Encoding of Conceptual Information. Talk given at Generative Linguistics in the Old World, 34.
- Carlson, G. (1977). A unified analysis of the English bare plural. Linguistics and Philosophy, 1(3), 413-457. doi:10.1007/BF00353456
- Chomsky, N. (1981). Lectures on Government and Binding. Dordrecht: Foris.
- Chomsky, N. (2001). Derivation by Phase. In M. Kenstowicz (ed.), Ken Hale: A Life in Language. MA: The MIT Press,
- Chomsky, N. (2005). Three Factors in Language Design. Linguistic Inquiry, 36(1), 1-22. doi:10.1162/0024389052993655
- Chomsky, N. (2008). On Phases. In R. Freidin, C. P. Otero and M. L. Zubizarreta (eds.), Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud. Cambridge MA: MIT Press, 133-166.
- Cinque, G. (1988). On si constructions and the Theory of Arb. Linguistic Inquiry, 19, 521-581.
- Cuervo, M. C. (2003). Datives at large. Doctoral Dissertation, MIT.
- De Miguel, E. and Fernandez Lagunilla, M. (2000). El Operador Aspectual "se". Revista Española de Lingüística, 30(1), 13-44.
- Dobrovie-Sorin, C. (1998). Impersonal se constructions in Romance and the passivization of unergatives. Linguistic Inquiry, 29(3), 399-437. doi:10.1162/002438998553806
- Hale, K. and Keyser, J. (2002). Prolegomenon to a Theory of Argument Structure (39). Cambridge, MA: MIT Press.
- Jackendoff, R. (1987). The Status of Thematic Relations in Linguistic Theory. Linguistic Inquiry, 18(3), 369-411.
- Levin, B. and Rappaport-Hovav, M. (1995). Unaccusativity at the Syntax-Lexical Semantics Interface. Cambridge MA: MIT Press.
- Manzini, M.R. (1986). On Italian si. In Hagit Borer (ed.), Syntax and Semantics 19: The Syntaxo fo Pronominal Clitics. New York: Academic Press, 241-262.
- Martín Zorraquiño, M. A. (1979). Las Construcciones Pronominales en Español. Madrid: Gredos.
- Masullo, P.J. (1999) La Interfaz Léxico-Sintaxis: Presencia y Ausencia del Clítico se en Construcciones Inacusativas. Ms. Universidad Nacional del Comahue & University of Washington.
- Mendikoetxea, A. (1999a). Construcciones con se. Medias, Pasivas e Impersonales. In I. Bosque & V. Demonte (eds.), Gramática de la Lengua Española. Madrid: Espasa-Calpe.
- Mendikoetxea, A. (1999b). Construcciones inacusativas y pasivas. In I. Bosque and V. Demonte (eds.), Gramática de la Lengua Española. Madrid: Espasa-Calpe.
- Pustejovsky, J. (1991). The Syntax of Event Structure. In B. Levin and S. Pinker (eds.), Lexical and Conceptual Structure, 47-81. Oxford: Blackwell.
- Pylkkänen, L. (2002). Introducing Arguments. Doctoral Dissertation, MIT.
- Pylkkänen, L. (2008). Introducing Arguments. Cambridge: MIT Press.
- Ramchand, G. C. (2007). Verb Meaning and the Lexicon: A First Phase Syntax. Cambridge: Cambridge University Press.
- Real Academia Española. (1973). Esbozo de una Nueva Gramática de la Lengua Española. Madrid: Espasa-Calpe.
- Reinhart, T. (2002). The Theta System: An Overview. Theoretical Linguistics, 28(3), 229-290. doi:10.1515/ thli.28.3.229
- Reinhart, T. and Reuland, E. (1993). Reflexivity. Linguistic Inquiry, 24(4), 657-720.
- Reinhart, T. and Siloni, T. (2005). The Lexicon-Syntax Parameter: Reflexivization and other Arity Operations. Linguistic Inquiry, 36(3), 389-436. doi:10.1162/0024389054396881
- Reuland, E. (2001). Primitives of Binding. *Linguistic Inquiry*, 32(3), 439-492. doi:10.1162/002438901750372522
- Reuland, E. (2006). Agreeing to Bind. In H. Broekhuis & N. Corver (eds.), Festschrift for Henk van Rimsdijk.
- Rivero, M.L. (2001). On impersonal reflexives in Romance and Slavic and semantic variation. In J. Camps and C.F. Wiltshire, Romance Syntax, Semantics and L2 Acquisition. Amsterdam: John Benjamins, 169-195.
- Schäfer, F. (2008). The Syntax of (Anti-)Causatives. External Arguments in Change-of-State Contexts. Amsterdam/ Philadelphia: John Benjamins, 126.
- Teomiro, I. (2010). Anaphors at the Interfaces. A Comparative Study of the Variation of the Anaphoric Systems of English, Dutch and Spanish. Doctoral dissertation, Universidad Autónoma de Madrid, Madrid.
- Teomiro, I. (2011). Reflexivity and adjustment strategies at the interfaces. Tromsø Nordlyd Working Papers in Linguistics, 119-149.
- Volkova, A. (2009). Structural vs. Inherent Case: Evidence from Finno-Ugric. Talk given at NORM Workshop -Relating to Reflexives.

