

This is the “Author Accepted Manuscript (AAM)” of the following chapter or book part, published by John Benjamins Publishing Company:

Gibert Sotelo, Elisabeth (2017). “Asymmetries between Goal and Source prefixes in Spanish: a structural account from a diachronic perspective”. In Silvia Luraghi, Tatiana Nikitina & Chiara Zanchi (eds.), *Space in Diachrony* (p.241-280)

Published Version of Record available at  
<https://doi.org/10.1075/slcs.188.09sot>

Copyright © 2017, John Benjamins . All Rights Reserved

# Asymmetries between Goal and Source prefixes in Spanish:

## A structural account from a diachronic perspective

Elisabeth Gibert Sotelo

*Universitat de Girona*

(elisabeth.gibert@udg.edu / elisabethgibertsotelo@gmail.com)

### Abstract

An asymmetry is observed in Spanish between the Goal prefixes *a-* and *en-* and the Source prefix *des-*: while the former are not productively adjoined to verbal bases, the latter felicitously attaches to verbs in order to encode Source-oriented transition events. From a diachronic standpoint, it is shown that this asymmetry was not present in Latin, and that it was triggered by the evolution from a satellite-framed system (rich in prefixed verbs able to encode a Manner co-event in the verbal root) to a verb-framed one (whose prefixed verbs can only encode an abstract Ground in the root of the verb). The different behaviour of *a-* and *en-*, on the one hand, and *des-*, on the other, can be accounted for by taking into consideration the different conceptual and structural complexity of Goal paths and Source paths. The present study offers a nanosyntactic analysis of the observed asymmetry which, in addition, fits the *Goal bias* and naturally explains the linear order in which Spanish directional prefixes appear in multi-prefixed verbs.

### Keywords

Directional prefixes. Typology of motion events. Diachronic evolution. Goal-Source asymmetry.

### 1. Introduction

The present paper examines an important asymmetry observed in Spanish —and in Romance Languages in general— between the Goal prefixes *a-* and *en-*, usually labelled *ingressive* because of their Goal orientation (cf. Grossmann 1994), on the one hand, and the Source prefix *des-*, called *egressive* because of its Source value (cf. Grossmann 1994), on the other hand. *A-* and *en-* are no longer productive in the creation of prefixed

verbs from verbal bases, being only productive in the creation of new verbs from nouns and adjectives by parasynthesis<sup>1</sup>, as illustrated in (1) and (2). By contrast, *des-* displays high productivity in the creation of new verbs from verbal bases, being also productive in the creation of new verbs from nouns and (to a lesser extent) from adjectives by parasynthesis, as is exemplified in (3):

(1)	a. <i>tejer</i> <sub>V</sub> ‘to weave’	>	* <i>a-tejer</i> <sub>V</sub>	lit. “to-weave”	--
	b. <i>confiar</i> <sub>V</sub> ‘to trust’	>	* <i>a-confiar</i> <sub>V</sub>	lit. “to-trust”	--
	c. <i>tierra</i> <sub>N</sub> ‘land’	>	<i>a-terr-ar</i> <sub>V</sub>	lit. “to-land-INF”	‘to bring down’
	d. <i>bravo</i> <sub>A</sub> ‘wild’	>	<i>a-brav-ar</i> <sub>V</sub>	lit. “to-wild-INF”	‘to excite’
(2)	a. <i>tejer</i> <sub>V</sub> ‘to weave’	>	* <i>en-tejer</i> <sub>V</sub>	lit. “in-weave”	--
	b. <i>confiar</i> <sub>V</sub> ‘to trust’	>	* <i>en-confiar</i> <sub>V</sub>	lit. “in-trust”	--
	c. <i>tierra</i> <sub>N</sub> ‘land’	>	<i>en-terr-ar</i> <sub>V</sub>	lit. “in-land-INF”	‘to bury’
	d. <i>bravo</i> <sub>A</sub> ‘wild’	>	<i>em-brav-ecer</i> <sub>V</sub>	lit. “in-wild-INF”	‘to infuriate’
(3)	a. <i>tejer</i> <sub>V</sub> ‘to weave’	>	<i>des-tejer</i> <sub>V</sub>	lit. “from-weave”	‘to unweave’
	b. <i>confiar</i> <sub>V</sub> ‘to trust’	>	<i>des-confiar</i> <sub>V</sub>	lit. “from-trust”	‘to distrust’
	c. <i>tierra</i> <sub>N</sub> ‘land’	>	<i>des-terr-ar</i> <sub>V</sub>	lit. “from-land-INF”	‘to exile’
	d. <i>bravo</i> <sub>A</sub> ‘wild’	>	<i>des-brav-ar</i> <sub>V</sub>	lit. “from-wild-INF”	‘to tame’

The observed asymmetry did not emerge until the Late Latin period: in Archaic and Classical Latin Goal prefixes (*ad-* and *in-*) as well as Source ones (*ab-*, *de-*, *dis-* and *ex-*) productively attached to verbs in order to create new predicates (cf. § 2.2).

The aim of this study is to offer an account of the asymmetrical productivity of Spanish Goal and Source prefixes in verbal derivation from both a diachronic and a formal perspective. The hypothesis put forward is that the different behaviour of the Goal-oriented prefixes *a-* and *in-* and the Source-oriented prefix *des-* is due to the combined effect of the following three factors: the typological change that took place in the evolution from Latin to Spanish (and Romance in general) (cf. Acedo-Matellán 2006b; Acedo-Matellán & Mateu 2013); the different structural complexity of Goal

---

<sup>1</sup> Parasynthetic verbs are those verbs created by the simultaneous addition of a prefix and a verbalizing suffix to an existing lexical item, the intermediate forms [prefix-base] and [base-verbalizing suffix] being non-existent (cf. Scalise 1986; Serrano-Dolader 1995; Lieber 2010; among others).

paths and Source paths (cf. Pantcheva 2011); and the fact that events are Goal-oriented by default (cf. Lakusta & Landau 2005).

I have structured the paper as follows. Section 2 presents the source of the data under investigation and introduces the theoretical approach adopted in the paper. In section 3 it is shown that the shift from a satellite-framed system (Latin) to a verb-framed one (Spanish, and Romance in general) is at the base of the preference for a parasyntetic pattern in the formation of new verbs in Spanish. Section 4 describes the asymmetrical productivity of Goal and Source prefixes in verb-framed Spanish and links this asymmetry to the cognitive preference for Goals over Sources. An explanation for the asymmetries existing between Spanish Goal and Source prefixes is given in section 5 on the grounds of their different structural complexity. Finally, section 6 summarizes the paper and points out some remaining issues to be explored in future research.

## **2. Methodology and empirical basis**

### *2.1. Collection of the data*

In this paper the different productivity of the Spanish Goal prefixes *a-* and *en-* and the Spanish Source prefix *des-* is addressed from a diachronic perspective that takes into account data from Archaic (3rd century BC – 100 BC) and Classical Latin (100 BC – 2nd century AC),<sup>2</sup> Late Latin (3rd century AD – 6th century AD), Old Spanish (10th century – 15th century) and Modern Spanish (16th century onwards).

Data regarding prefixed verbs in Archaic and Classical Latin have been extracted from Lewis & Short's (1879) *Latin Dictionary* (referred to as *Lewis & Short* in the present paper) and contrasted with the information contained in Gaffiot's (1934) *Dictionnaire Latin-Française* (referred to as *Gaffiot* in this article), both of them available online. Verbs in use have also been surveyed in the Greek and Roman Materials database of the *Perseus Digital Library Project*, available online. The studies in Latin verbal prefixation by García Hernández (1980), Crocco Galèas & Iacobini (1993), Haverling (2000), Acedo-Matellán (2006b, 2010, 2016a, 2016b), and Acedo-

---

<sup>2</sup> I follow Crocco Galèas & Iacobini (1993) in assuming Classical Latin to encompass the Silver Latin period (1st and 2nd centuries AD) and extend from 100 BC to the end of the 2nd century AD.

Matellán & Mateu (2009, 2013) have been examined in depth and constitute an important source of information.

The use of Goal and Source prefixes in Late Latin has been evaluated taking into account Crocco Galèas & Iacobini's (1993) scrutiny of prefixed verbs along this period, and contrasted with the documentation of these verbs in *Lewis & Short* and *Gaffiot* dictionaries.

To evaluate the productivity of Goal and Source prefixes in Old Spanish I have scrutinized early dictionaries of the Spanish language: Nebrija's (1495) *Vocabulario español-latino* and Covarrubias' (1611) *Tesoro de la lengua castellana o española*. Another lexicographic source for this period has been the *DHLE (Diccionario Histórico de la Lengua Española)* elaborated by the *RAE (Real Academia Española)* from 1960 to 1996. To obtain the contextual uses of these verbs I have made use of the textual corpus *CORDE (Corpus Diacrónico del Español)*, an online corpus of the *RAE* that comprises documents from the origins of the language (10th century) up to the year 1974.

As for Modern Spanish, *a-*, *en-* and *des-* prefixed verbs have been searched out in two Spanish dictionaries: *RAE's (2014) Diccionario de la Lengua Española (DRAE)* and the Spanish usage dictionary *Clave* (Ediciones SM, 2012). The use of these verbs in context has been checked out in two online corpora of the *RAE*: *CORDE* and *CREA (Corpus de Referencia del Español Actual)*, the latter encompassing documents from the year 1975 to the year 2004. Additional information regarding the use of these verbs in current Spanish has been obtained via Google search.

Since productivity is a crucial notion in the present study, a definition of this phenomenon is in order. In this paper productivity is understood as the possibility of using a given morphological process to create new words in a systematic way in a particular stage of the language. In Plag's (1999) sense, productivity is not used here as an absolute concept, but it is conceived as a gradual phenomenon, since the productivity of a particular morphological process is measured in comparison with other morphological processes and in comparison with the availability of the very same morphological process in other stages of the language. Accordingly, I will establish the productivity of Spanish Goal and Source prefixes in verbal derivation taking into account a) their ability to combine with different types of lexical bases in a systematic way, b) their availability to create new verbs in a particular stage of the language, and c) the productivity of their Latin antecedents in verbal derivation.

## 2.2. Theoretical framework

To analyze the data extracted from the above-mentioned sources I assume the typology of motion events established by Talmy (2000) as well as a recent approach to the architecture of grammar known as Nanosyntax (Svenonius, Ramchand, Starke & Taraldsen 2009). In §2.2.1 I present the well-known typological distinction made by Talmy (2000) between satellite-framed languages and verb-framed languages and specify why it is relevant for the present investigation. In §2.2.2 I briefly introduce the postulates of Nanosyntax that are significant for the analysis of the phenomena examined in this study.

### 2.2.1. Talmy's typology of motion events

According to Talmy (1985, 2000), motion events (which encompass either a situation of motion or a situation of stationary location) consist of four internal components: the Figure component (i.e. the object in motion or being located), the Ground component (i.e. the reference object with respect to which the position of the Figure is determined), the Path component (i.e. the direction followed by the Figure or the site it occupies with respect to the Ground),<sup>3</sup> and the Motion component (i.e. the component contributing dynamism or stativity to the event). The sentences in (4) exemplify these semantic elements:

- (4) a. *The dog jumped onto the sofa.*  
b. *The dog lay on the sofa.*

Both in (4a) and in (4b) *the dog* is the Figure whose position is at issue and *the sofa* is the Ground with respect to which the position of the Figure is determined. These two components are related to each other by means of the Path component, encoded by *onto* in (4a) and by *on* in (4b). The Motion component is codified in the verb: in (4a) *jumped* expresses an event of motion, whereas in (4b) *lay* codifies a situation of stationary location. In addition to these basic semantic components, a motion event can be related to an external Co-event referring to the Manner in which the motion takes place or to its

---

<sup>3</sup> Talmy assumes that the Path component may be dynamic but also static, and, thus, he considers that both pure locative expressions as well as directional ones codify Path. Following Jackendoff (1983, 1990), Svenonius (2004, 2007), Acedo-Matellán (2010), and Pantcheva (2011), among others, I distinguish static Paths, here labelled *Places*, from dynamic ones, here labelled *Paths* (see section 5).

Cause. Hence, in (4a) the motion of *the dog* onto *the sofa* is related to a jumping Co-event specifying the Cause of the motion, and in (4b) the location of *the dog* on *the sofa* is related to a lying Co-event that identifies the Manner of the location.<sup>4</sup>

Talmy maintains that change of state events are parallel to motion events, and that the semantic constituents identified in the latter are also components of the former.<sup>5</sup> Events encoding change or maintenance of state can also be shown to involve a Figure (the entity undergoing change or being in a state), a Ground (the state with respect to which the Figure can be considered to change or to remain unchanged), a Path (the change of state or its maintenance) and a Motion component (either dynamism or stativity). A Manner or a Cause Co-event can also be involved. In either one of the sentences in (5) *the man* is the Figure whose state is at issue. *Death* (5a) and *sorrow* (5b) are the Ground components specifying the state of the Figure, and Figure and Ground are related to each other through the Path component, lexicalized by *to* in (5a) and by *in* in (5b). The dynamicity or stativity of the event (i.e. the Motion component) is expressed by means of the verb: *choked* in (5a) and *was* in (5b). The change of state codified in (5a) is related to a choking Co-event that specifies its Cause, whereas no Co-event is involved in the maintenance of the state codified in (5b):

- (5) a. *The man choked to death.*  
b. *The man was in sorrow.*

As reported by Talmy (1991, 2000), the schematic core that distinguishes a motion event from other motion events is the Path component or the Path together with the Ground. This schematic core is labelled by the author as *Core Schema*. Based on how the languages of the world tend to encode the Core Schema, Talmy (1991, 2000)

---

<sup>4</sup> It is crucial not to mix up a Cause Co-event with the agentive causal chain inherent to agentive events. Hence, it is possible for a nonagentive motion event to be related to a Cause Co-event, as is the case in the location situation illustrated in (4b) and as I exemplify below for a situation of motion:

(i) *The bone pulled out of its socket*

Intended: [the bone MOVED out from its socket] WITH-THE-CAUSE-OF [(something) pulled on it]  
(Example taken from Talmy 2000, II: 227, 5)

In (i), the Co-event [(something) pulled on the bone] specifies how the main event [the bone moved out from its socket] took place. Crucially, no agentive Causer is involved in such an event.

<sup>5</sup> Thus, Talmy embraces the localist hypothesis (Gruber 1965; Anderson 1971; Lyons 1977; Jackendoff 1983, 1990), according to which the conceptual schema inherent to spatial relations (namely, movement or location) is the same schema that we use to represent more abstract, non-spatial relations (e.g. change of state).

distinguishes two main groups of languages: satellite-framed languages and verb-framed languages. Satellite-framed languages tend to express the Core Schema (the Path or the Path together with the Ground) in a satellite.<sup>6</sup> Germanic languages, like English, are good examples of this group because most of their motion verbs do not lexicalize the Path into the verb root, but encode this component through directional particles (e.g. go in, go out, go up, go down, etc.). Verb-framed languages, by contrast, usually express the Core Schema conflated with the Motion within the verb root. Romance languages, like Spanish, are considered to instantiate the verb-framed pattern, as they have inherently directional verbs in which the Path component is conflated into the verb root together with the Motion component (e.g. *entrar* ‘to go in’, *salir* ‘to go out’, *subir* ‘to go up’, *bajar* ‘to go down’, etc.).

Talmy (2000, II: 222) argues that this typology is complementary to the way in which the Co-event component is lexicalized. Hence, satellite-framed languages “regularly map the Co-event onto the main verb”, whereas verb-framed ones typically map this component onto an adjunct or a satellite. Accordingly, I assume that satellite-framed systems involve both encoding of the Core schema in a satellite and Co-event conflation, and I identify verb-framed systems with those languages in which the Core-Schema is lexicalized in the verb and conflation of a Co-event is disallowed.

The English sentence in (6a) instantiates the satellite-framed pattern, whereas its Spanish counterpart (6b) displays a verb-framed configuration:

- (6) a. English: *John*<sub>Figure</sub> *limped*<sub>Motion+Manner</sub> *into*<sub>Path</sub> *the room*<sub>Ground</sub>  
 b. Spanish: *Juan*<sub>Figure</sub> *entró*<sub>Motion+Path</sub> *en* *la habitación*<sub>Ground</sub> *cojeando*<sub>Manner</sub>  
 Juan entered in the room limping  
 ‘Juan limped into the room’.

In (6a) the verb *limp* expresses the Motion together with a Co-event that specifies the Manner in which this motion is performed (i.e. by limping). The Spanish counterpart in (6b) expresses both the Path and the Motion conflated in the verb *entrar* ‘to enter’ (that

---

<sup>6</sup> Talmy (2000, II: 102) calls satellite “the grammatical category of any constituent other than a noun phrase or a prepositional phrase complement that is in a sister relation to the verb root”. The satellite “can be either a bound affix or a free word”, and encompasses grammatical forms such as English verb particles, German separable and inseparable verb prefixes, or Latin and Russian verb prefixes.



is, ‘to go [= Motion] into [= Path]’), and the Co-event specifying the Manner is expressed through an adjunct, which in this case is the gerund *cojeando* ‘limping’.

This typological distinction is crucial to understand why Latin directional prefixes could head any kind of verb whereas their Spanish descendants cannot. As will be shown in section 3, the satellite-framed nature of Latin vs. the verb-framed nature of Spanish allows for a plausible explanation to the different degree of productivity of directional prefixes in each language.

### 2.2.2. Nanosyntax

In order to offer a rigorous account for the asymmetrical productivity of Spanish Goal and Source prefixes I draw on a recent theory known as Nanosyntax (Svenonius, Ramchand, Starke & Taraldsen 2009). This framework is especially useful in the study of morphological processes because it makes strong predictions on the possible combinations of morphemes.

The main assumption of this framework (and the one that distinguishes it from other formal syntactic theories) is that morphemes (or lexical items) are not unanalyzable atoms in the syntactic structure. Rather, morphemes are envisaged as complex elements involving a particular syntactic structure. Accordingly, the basic principle postulated by Nanosyntax is that morphemes are syntactic constructs that can spell out multiple syntactic heads.<sup>7</sup> For example, in (7a) the English preposition *to* expresses direction ‘to’ *the room* as well as a final location ‘at’ *the room*, which means that in this context *to* lexicalizes a Path feature in addition to a Place feature. By the assumption that a single morpheme can lexicalize several syntactic heads, this preposition (a single morpheme) is allowed to spell out both Path and Place. Nonetheless, in (7b) the very same preposition only encodes direction ‘to’ *the room*, but not location ‘at’ *the room*, since in this sentence *to* co-appears with a pure locative preposition, *in*, that encodes location. Hence, in (7b) *to* spells out Path (but not Place), and the locative preposition *in* spells out Place:

---

<sup>7</sup> Some authors formalize this principle as Phrasal Spell-out, according to which lexical items can lexicalize not only terminal nodes of the syntactic structure, but also (and mainly) phrasal nodes (Starke 2009; Pantcheva 2011). Others adopt the mechanism of “spanning”, according to which a single morpheme may encompass several adjacent terminals (Bye & Svenonius 2012).

- (7) a. *He went to the room.*  
b. *He went into the room.*

Thus, the English preposition *to* is syncretic between a directional meaning entailing a final location ‘at’, and a pure directional meaning. Cases of syncretism like that are elegantly accounted for in Nanosyntax by means of the Superset Principle, according to which lexical items can spell out the entire amount of syntactic features they are specified for, or only a subpart of it (Starke 2009). The Superset Principle predicts that, in certain contexts, some of the features of a lexical item may remain unassociated at spell-out, a phenomenon that Ramchand (2008) calls *underassociation*. Underassociation may only occur when part of the features identified by a morpheme have already been lexicalized by another lexical item, as is the case in (7b), where *in* lexicalizes Place, the Place feature of *to* being forced to remain underassociated.<sup>8</sup>

By using the tools provided by Nanosyntax the generalizations that arise from the study of empirical data can be formalized in a regulated way, and certain questions that remain unanswered from a purely descriptive perspective receive a consistent explanation based on well-established syntactic principles. Along this paper certain questions will emerge the answers to which will be provided in section 5 on the grounds of a nanosyntactic analysis.

### 3. From Latin to Spanish

#### 3.1. Latin prefixed verbs

Prefixes of spatial meaning had a great capacity to be combined with verbs in (Archaic and Classical) Latin. These prefixes usually coexisted with a homonymous preposition, and accordingly they are usually called prepositional prefixes. In this study I will focus exclusively on the Goal prefixes *ad-* and *in-* and the Source prefixes *de-*, *dis-* and *ex-*, since these are the Latin antecedents of the Spanish Goal prefixes *a-* (< *ad-*) and *en-* (< *in-*) and the Source prefix *des-* (< *de-*, *ex-*, *dis-*), respectively.<sup>9</sup> I label «Goal prefixes»

---

<sup>8</sup> The way in which the lexicalization of the syntactic structure takes place according to Nanosyntax is regulated by other principles and constraints the description of which exceeds by far the scope of this paper. I refer the reader to Fábregas (2007); Svenonius, Ramchand, Starke & Taraldsen (2009); Pantcheva (2011); and references therein for an accurate description of the principles put forward in this theory.

<sup>9</sup> For a study of the entire set of Latin directional prefixes and their ability to join verbal items, see García Hernández (1980); Haverling (2000); and Acedo-Matellán (2016b).

those whose basic meaning is that of ‘direction TO’, as is the case of Latin *ad-*, used to express ‘direction to’, and *in-*, used to encode ‘direction into’. These two prefixes are opposed to each other in relation to the (un)boundedness of the Goal they select: *ad-* denotes arrival at a non-delimited Ground element (e.g. *ad-duco* ‘to lead to’), whereas *in-* denotes entrance into a delimited Ground (e.g. *in-duco* ‘to lead into’). In turn, the label «Source prefix» is used here to identify directional prefixes expressing ‘direction FROM’, as Latin prefixes *de-* ‘direction (down) from’, *ex-* ‘direction from inside’ and *dis-* ‘direction from one point in different ways’. The primitive sense of Latin *de-* was the vertical notion of downward detachment (see García Hernández 1980), a sense that, when adopting a horizontal perspective, was reanalyzed as ‘detachment from’ (cf. *de-duco* ‘to lead down’ ‘to lead away’). *Ex-* has the function of expressing exit from a delimited Ground, and it was the Source-oriented counterpart of the Goal prefix *in-* (cf. *e-duco* ‘to lead out of’ vs. *in-duco* ‘to lead into’).<sup>10</sup> As for *dis-*, its basic meaning ‘from one point in different directions’ implies separation but also dispersion (cf. *di-duco* ‘to draw apart, in different directions’), and entails plural Grounds or Grounds understood as involving a plurality of parts.<sup>11</sup>

The productivity of the combination of Latin Goal and Source prefixes with verbal bases is illustrated in Table 1 with the activity verbs *curro* ‘to run’, *fluo* ‘to flow’, *labor* ‘to slide’, *moveo* ‘to move’, *volo* ‘to fly’, *canto* ‘to sing’ and *scribo* ‘to write’:

---

<sup>10</sup> In that sense, *ex-* was opposed to the source prefix *ab-* ‘direction from outside’, a prefix that denotes departure from the outside of a limit. *Ab-* will not be taken into consideration in the present paper, since I am only concerned with the antecedents of the Spanish prefix *des-*.

<sup>11</sup> A basic distinction between this prefix and the rest of source prefixes is that the latter have a prepositional counterpart (Latin prepositions *de* and *ex*) and the former does not (there is no \**dis* preposition in Latin). Nevertheless, *dis-* has an antonymous Goal-oriented prefix-preposition: *cum/co(m)-* ‘direction to the same goal’. As *dis-*, *cum/co(m)-* selects for plural Grounds or Grounds understood as involving a plurality of parts (cf. *di-gero* ‘to separate, to divide’ vs. *con-gero* ‘to bear together, to collect’).

**Table 1.** Combination of activity verbs with Goal and Source prefixes in Latin

	Goal prefixes		Source prefixes		
	AD- ‘to’	IN- ‘into’	DE- ‘(down) from’	DIS- ‘in different directions’	EX- ‘out’
<b>CURRO</b> ‘to run’	<i>accurro</i> ‘to run to’	<i>incurro</i> ‘to run into’	<i>decurro</i> ‘to run down from’	<i>discurro</i> ‘to run in different directions’	<i>excurro</i> ‘to run out’
<b>FLUO</b> ‘to flow’	<i>affluo</i> ‘to flow to’	<i>influo</i> ‘to flow into’	<i>defluo</i> ‘to flow down from’	<i>diffluo</i> ‘to flow in different directions’ ‘to flow away’	<i>effluo</i> ‘to flow out’
<b>LABOR</b> ‘to glide/ slide/ slip’	<i>allabor</i> ‘to glide/slide to’	<i>illabor</i> ‘to glide/slide into’	<i>delabor</i> ‘to slip down’	<i>dilabor</i> ‘to disperse’ ‘to dissolve’ ‘to glide away’	<i>elabor</i> ‘to slip/glide away’
<b>MOVEO</b> ‘to move’	<i>admoveo</i> ‘to move to’	--	<i>demoveo</i> ‘to move away’	<i>dimoveo</i> ‘to move asunder’	<i>emoveo</i> ‘to move out’
<b>VOLO</b> ‘to fly’	<i>advolo</i> ‘to fly to’	<i>involo</i> ‘to fly into’	<i>devolo</i> ‘to fly down’ ‘to fly away’	--	<i>evolo</i> ‘to fly out’
<b>CANTO</b> ‘to sing’	<i>accanto</i> ‘to sing at’	<i>incanto</i> ‘to sing in’	<i>decanto</i> ‘to sing off’	--	<i>excanto</i> ‘to charm out’
<b>SCRIBO</b> ‘to write’	<i>ascribo</i> ‘to annex by writing’	<i>inscribo</i> ‘to write in’	<i>describo</i> ‘to write/copy from’	<i>discribo</i> ‘to distribute among’	<i>exscribo</i> ‘to write out’

The combination of directional prefixes with activity verbs in Latin gives rise to predicates expressing (physical or abstract) directed motion occurring in various manners. In fact, as pointed out by Talmy (1991, 2000) and examined in depth by Acedo-Matellán (2006b, 2010, 2016a) and Acedo-Matellán & Mateu (2009, 2013), Latin (particularly, Archaic and Classical Latin) is a satellite framed system rich in prefixed verbs in which the prefix encodes a (physical or abstract) Path that structures the event and acts as the main predicate, and the verb corresponds to a secondary predicate (a concomitant Co-event) that specifies the Manner in which the event is performed. Hence, for instance, all the verbs from the table headed by the Goal prefix *ad-* ‘to’ encode various manners of arrival at a (physical or abstract) Goal; and all the verbs from the table containing the verbal base *curro* ‘to run’ encode different directed motion events performed in the same manner: by running.

A characteristic shared by Latin prefixed verbs displaying a satellite-framed pattern is that in them the complement of the prefix is not the verbal base, given that the

verbal bases of these constructions do not identify the Ground element but a Manner Co-event.<sup>12</sup> Rather, the complement of the prefix is an argument in the sentence identifying the Ground. Hence, as argued by Acedo-Matellán (2006b, 2010), an indicator of the satellite-framedness of (Archaic and Classical) Latin is the ability of its prepositional prefixes to govern a full phrase, a syntactic dependency known as p(reverbal)-government (Lehmann 1983). P-government shows clearly when the addition of a prefix entails the introduction of a new argument of locative nature that is not licensed by the unprefixated verb, as exemplified below:

(8) *Novissimos in-currere* (Latin)  
 rear.ACC in-run.PRF.3PL  
 ‘They charged against the rear’  
 (Tac. *Ann.* 1, 51; *apud.* Acedo-Matellán 2010: (39))

(9) *Itinere de-erremus* (Latin)  
 way.ABL from-wander.PRS.1PL  
 ‘We deviate from the way’.  
 (Quint. *Inst.* 10, 3, 29; *apud.* Acedo-Matellán & Mateu 2009: 477, (11))

In the example provided in (8), the prepositional prefix *in-* introduces the accusative marked DP *novissimos* ‘the rear’, an argument interpreted as a Ground that the intransitive non-prefixated verb *curro* does not license. In (9), the ablative DP *itinere* ‘way’ is governed by the ablative-selecting prepositional prefix *de-*.

In many cases, the argument governed by the prefix is null and must be discursively or pragmatically inferred, as pointed out by Acedo-Matellán (2006b, 2010). In (10), for example, the prefixed predicate *ac-currit* ‘run to’ expresses the translation of the Figure, *ipse* ‘himself’, to a Ground that is not explicitly expressed but that may be figured out as “there”; and in (11) the Ground from which the Figure *putamina* ‘egg shells’ is detached is identified with the body of the snakes:

---

<sup>12</sup> Notice that the complement of a P element must necessarily be interpreted as a Ground (see Talmy 1975; Svenonius 2007; Fábregas 2010).

(10) *Subito ipse ac-currit.* (Latin)  
 suddenly himself.NOM to-run.PRS.3SG  
 ‘Suddenly he himself runs up there.’  
 (Cic. Verr. 2, 5, 16, 2; *apud* Acedo-Matellán 2016b: (8))

(11) *Serpentes putamina ex-tussiunt.* (Latin)  
 snake.NOM.PL shell.ACC.PL out-cough.3PL  
 ‘Snakes cough the egg shells out.’  
 (Plin. Nat. 10, 197; *apud*. Acedo-Matellán & Mateu 2013: (2))

When the Source prefixes *de-* and *dis-* are added to speech verbs, such as *hortor* ‘to encourage’, *fateor* ‘to confess’ or *suadeo* ‘to advise’, the resulting prefixed verbs express ways of denying; cf. *de-hortor* ‘to encourage not to’, *dif-fiteor* ‘to deny by confession’ and *dis-suadeo* ‘to advise not to’, ‘to advise against’. As noticed by García-Hernández (1980) and Acedo-Matellán (2016b), in this type of verbs the prefix does not deny the content of the verb to which it is affixed (*dehortor* does not mean ‘not to encourage’, *diffiteor* does not mean ‘not to confess’, and neither does *dissuadeo* mean ‘not to advise’), but the content of the object it selects. The verbal base, in turn, expresses a Manner Co-event accompanying the denial event (by encouragement, by confession, and by advice, respectively). The example in (12) illustrates:

(12) *poenam suam dis-suadentes* (Latin)  
 punishment.ACC their.ACC different\_ways-advise.PTCP.PRS.NOM.PL  
 ‘advising not to be punished’  
 (Perseus: Tac. Ann. 13, 26).

Finally, Latin Goal and Source prefixes can hold aspectual values when combined with activity verbs (see García Hernández 1980; Haverling 2000). The Goal prefixes *ad-* and *in-* express ingressive aspect: they are used to encode the beginning of the event denoted by the verbal base, as in *ad-edo* ‘to start eating’ and *in-cipio* ‘to begin to do something’. Source prefixes are used to encode egressive aspect. In them, the idea of departure from a place is abstractly interpreted as egression from an event, which gives rise to constructions, such as *de-fervesco* ‘to cease boiling’ or *ex-spiro* ‘to cease breathing’,

encoding the end of an event. Acedo-Matellán & Mateu (2009) state that these constructions show a satellite-framed pattern in which the prefix conveys the aspectual value of the predicate and the verbal base specifies the kind of event.

In satellite-framed Latin, thus, either the Goal prefixes *ad-* and *in-* or the Source prefixes *de-*, *dis-* and *ex-* attach productively to verbs in order to create new predicates expressing (physical or abstract) directed motion events.

### 3.2. Spanish parasynthetic verbs

In the previous section it has been shown that Latin Goal and Source prefixes displayed a great productivity in their combination with verbal bases encoding different sorts of actions. By contrast, the Spanish descendants of these prefixes, namely the Goal prefixes *a-* ‘to’ (evolution from Latin *ad-* ‘to’) and *en-* ‘into’ (evolution from Latin *in-* ‘into’), and the Source prefix *des-* ‘from’ (that amalgamates the values of Latin *de-*, *ex-* and *dis-*), are not productively attached to activity verbs. Table 2 collects the Spanish equivalents of the Latin activity verbs included in Table 1, and gives evidence of the scarce productivity of *a-*, *en-* and *des-* with this sort of verbs.

**Table 2.** Combination of activity verbs with Goal and Source prefixes in Spanish

	Goal prefixes		Source prefix
	<i>a-</i> ‘to’	<i>en-</i> ‘into’	<i>des-</i> ‘from’
<i>correr</i> ‘to run’	--	--	<i>descorrer</i> ‘to run back’ ‘to draw back’
<i>fluir</i> ‘to flow’	<i>afluir</i> ‘to flow’ ‘to flock’	--	--
<i>patinar</i> ‘to slide’	--	--	--
<i>mover</i> ‘to move’	--	--	--
<i>volar</i> ‘to fly’	--	--	--
<i>cantar</i> ‘to sing’	--	<i>encantar</i> ‘to enchant’	--
<i>escribir</i> ‘to write’	--	--	--

Only three prefixed verbs displaying one of the verbal bases in Table 2 are attested in current Spanish: *a-fluir* ‘to flow/flock’, *en-cantar* ‘to enchant’, and *des-correr* ‘to run back’, ‘to draw back’. Crucially, none of them shows a satellite-framed pattern. *Afluir* and *encantar* are the descendants of Latin *affluo* ‘to flow to’ and *encanto* ‘to sing in’, respectively, and in current Spanish they are lexicalized items rather than transparent

prefixed constructions. *Des-correr* is a reversative verb of Spanish genesis in which the verbal base *correr* is not interpreted as an activity verb, but as a telic predicate involving a resulting state: ‘to move something over a delimited path’.

The scarce productivity of the combination of Spanish directional prefixes with activity verbs contrasts with the great capacity of these prefixes to create parasynthetic verbs from nominal bases and, to a lesser extent, from adjectival ones. The ability of *a-*, *en-* and *des-* to combine with multiple nominal or adjectival bases, as well as the possibility of attaching these prefixes to the same nominal or adjectival base, is an indicator of the productivity of this process. It is illustrated in Table 3.

**Table 3.** Combination of Goal and Source prefixes with nouns and adjectives in Spanish parasynthetic verbs

	Goal prefixes		Source prefix
	<i>a-</i> ‘to’	<i>en-</i> ‘into’	<i>des-</i> ‘from’
<i>boca</i> <sub>N</sub> ‘mouth’	<i>abocar</i> ‘to arrive to a port/channel’ ‘to result in’ ‘to lead to’	<i>embocar</i> ‘to put sth into sb’s mouth’, ‘to insert sth into a hole’	<i>desbocar</i> ‘to break the rim of’ ‘to get out of control’
<i>carril</i> <sub>N</sub> ‘rail’	--	<i>encarrilar</i> ‘to put on the rails’	<i>descarrilar</i> ‘to derail’
<i>cartón</i> <sub>N</sub> ‘cardboard’	<i>acartonar</i> ‘to grow stiff (like cardboard)’	<i>encartonar</i> ‘to cover with cardboard’	--
<i>corcho</i> <sub>N</sub> ‘cork’	<i>acorchar</i> ‘to cover with cork’ ‘to go soft (like cork)’	<i>encorchar</i> ‘to cork’	<i>descorchar</i> ‘to uncork’
<i>tierra</i> <sub>N</sub> ‘land’	<i>aterrar</i> ‘to land’	<i>enterrar</i> ‘to bury’	<i>desterrar</i> ‘to banish’ ‘to exile’
<i>bravo</i> <sub>A</sub> ‘wild’	<i>abravar</i> ‘to become wild’	<i>embravecer</i> ‘to become rough’ ‘to infuriate’	<i>desbravar</i> ‘to become less wild’
<i>grande</i> <sub>A</sub> ‘big’	<i>agrandar</i> ‘to enlarge’	<i>engrandecer</i> ‘to magnify’ ‘to enlarge’	--

It is widely assumed that parasynthetic verbs encode change of state events (Grossmann 1994; Acedo-Matellán 2006a; Iacobini 2010; Gibert Sotelo & Pujol Payet 2015; among others). Goal prefixes *a-* and *en-* yield parasynthetic verbs expressing a Goal-oriented event (i.e. an event that leads to a new state), whereas the Source prefix *des-* gives rise to parasynthetic verbs that encode a Source-oriented event (i.e. an event that originates from a previous state). As Acedo-Matellán (2006b) points out, and as shown in the previous section, Latin directional prefixes keep their locative prepositional nature and select DP arguments as complements. Their Spanish descendants, by contrast, have a



more abstract value: *a-* expresses the arrival to a state, *en-* encodes the entrance into a state, and the basic meaning of *des-* is that of exit from a state. Crucially, Spanish semantically bleached prefixes do not select DPs as complements, selecting instead nominal or adjectival bases identified with the final (verbs headed by the Goal prefixes *a-* and *en-*) or initial (verbs headed by the Source prefix *des-*) state of an event of change (Acedo-Matellán 2006b; Acedo-Matellán & Mateu 2013):

- (13) Lat. *ad-* ‘to / at [somewhere]<sub>DP</sub>’ > Sp. *a-* ‘to [state]<sub>V</sub>’  
 Lat. *in-* ‘into/in [somewhere]<sub>DP</sub>’ > Sp. *en-* ‘into [state]<sub>V</sub>’  
 Lat. *de-* ‘(down) from [somewhere]<sub>DP</sub>’ }  
 Lat. *dis-* ‘from [somewhere]<sub>DP</sub> in dif- }  
 ferent directions’ } > Sp. *des-* ‘from [state]<sub>V</sub>’  
 Lat. *ex-* ‘out of [somewhere]<sub>DP</sub>’ }

In parasyntetic verbs, thus, the nominal or adjectival base identifies the Ground (either the Source Ground or the Goal one) of an abstract motion event encoding change from one state (interpreted as a Source Ground) to another state (understood as a Goal Ground). By change of state I am referring to pure change of state events as well as to change of place and change of possession ones. This is illustrated below with the Spanish parasyntetic verbs *alargar* ‘to lengthen’ (encoding pure change of state), *embotellar* ‘to bottle’ (encoding change of place), and *descabezar* ‘to behead’ (encoding change of possession):

- (14) a. *largo*<sub>A</sub> ‘long’ > *a-larg-ar*<sub>V</sub> ‘to make become *largo*’  
 b. *botella*<sub>N</sub> ‘bottle’ > *em-botell-ar*<sub>V</sub> ‘to make become in a *botella*’  
 c. *cabeza*<sub>N</sub> ‘head’ > *des-cabez-ar*<sub>V</sub> ‘to take out from having *cabeza*’

*Alargar* ‘to lengthen’ (14a) denotes a change of state by means of which a certain Figure arrives to the state of “being long”, and so the adjectival base *largo* ‘long’ is identified with the final state of the event (i.e. with a Goal Ground). *Embotellar* ‘to bottle’ (14b), encodes a change of place the result of which is the state of “being in a bottle”, and therefore the nominal base *botella* ‘bottle’ corresponds to the final location of the event (the Goal Ground). *Descabezar* ‘to behead’ (14c), headed by the Source

prefix *des-*, encodes the exit from the state of “having head”, the nominal base *cabeza* ‘head’ being understood as the initial state “having head” (the Source Ground).<sup>13</sup>

The preference for nominal and adjectival bases over verbal ones is thus explained by the ability of the former to be interpreted as states. Dynamic atelic verbs of the sort of *bailar* ‘to dance’ or *rodar* ‘to roll’ do not admit prefixation because they can hardly be interpreted as the initial or final state of a transition event (i.e. as an abstract Ground), but just as manner of motion verbs.<sup>14</sup> In addition, it is not possible to interpret the very same verbal bases as Manner Co-events if headed by a prefix, given that in Spanish the lexical base to which a prefix is attached is understood as the complement of the prefix, and the complement of a P element is necessarily interpreted as a Ground, (cf. footnote 12). Accordingly, both the Ground and the Co-event interpretation of the verbal bases given in (15) are unavailable:

		<u>base = Ground</u>	/	<u>base = Co-event</u>
(15) a.	<i>bailar</i> ‘to dance’	> * <i>a-bailar</i>	‘to become [dance] <sub>STATE</sub> ’/	‘to dance to’
		* <i>em-bailar</i>	‘to become [dance] <sub>STATE</sub> ’/	‘to dance into’
		* <i>des-bailar</i>	‘to get out from [dance] <sub>STATE</sub> ’/	‘to dance out’
b.	<i>rodar</i> ‘to roll/rotate’	> * <i>a-rodar</i>	‘to become [rotate] <sub>STATE</sub> ’/	‘to roll to’
		* <i>en-rodar</i>	‘to become [rotate] <sub>STATE</sub> ’/	‘to roll into’
		* <i>des-rodar</i>	‘to get out from [rotate] <sub>STATE</sub> ’/	‘to roll out of’

The unproductivity of Spanish directional prefixes with verbal bases is directly related to the verb-framed nature of this language, a language that lacks the Co-event conflation pattern but is rich in inherent directional verbs (see section 2.2.1). Although it could be argued that parasynthetic verbs are nothing but satellite-framed constructions because the path component they involve (abstractly interpreted as change of state) is expressed through (semantically bleached) directional prefixes (Kopecka 2006; Acedo-Matellán 2006b), parasynthetic verbs are typical from systems tending to a verb-framed pattern, as is the case of Romance languages. In fact, and as observed by Crocco Galèas & Iacobini (1993), the parasynthetic procedure was not the main way to build prefixed

<sup>13</sup> For a fine-grained analysis of the meaning of Spanish parasynthetic verb bases, see Gibert Sotelo & Pujol Payet (2015).

<sup>14</sup> Only stative verbs and telic verbs conveying a result can be coerced into a state reading. In §4.1 it will be shown that, in Spanish, telic verbs are productively combined with the Source prefix *des-* in order to encode reversative events.

verbs in Archaic and Classical Latin (a satellite framed system); rather, its productivity started in Late Latin. Moreover, the step from Ancient Greek (a satellite-framed system) to Modern Greek (a hybrid system that tends towards a verb-framed pattern; see Papafragou et al. 2006), also triggered the spread of parasynthetic verbs (see Papanastassiou 2011; Efthymiou 2015). Therefore, to assume that parasynthetic constructions display a satellite-framed pattern seems to be in contradiction with the empirical fact that this kind of construction is mainly attested in verb-framed systems.

In view of this evidence, and in line with Acedo-Matellán & Mateu (2013), I assume that parasynthetic verbs convey a verb-framed schema, rather than a satellite-framed one. A crucial distinction between parasynthetic verbs and proper satellite-framed structures is that the former do not licence the Co-event conflation pattern, whereas in the latter the lexicalization of the Core schema in a satellite goes hand in hand with the conflation of a Co-event in the verb root. However, what leads me to conclude that parasynthetic verbs are verb-framed constructions is the observation that these structures are nothing but the verbalization of the Core schema, i.e., the verbalization of the sum of a Path element (codified in the prefix) and a Ground element (codified in the lexical base). Taking into account that verb-framedness is identified with the lexicalization of the Core Schema in a verb root, parasynthetic verbs, in which the two components of the Core schema emerge as a complex verbal predicate, must be considered to be an instantiation of the verb-framed strategy.

Therefore, and as observed by Acedo-Matellán & Mateu (2013), the new morphological schema to create prefixed verbs reflects the shift from a satellite-framed system with a Co-event conflation pattern (Latin) to a verb-framed system with a Path conflation pattern (Spanish, and Romance in general).

### *3.3. Prefixed verbs in Late Latin and Old Spanish: a typological change*

In this section prefixed verbs in Late Latin and Old Spanish are at issue in order to elucidate how the change from satellite-framed Latin, rich in prefixed deverbal verbs with a Co-event conflation schema, to verb-framed Spanish, devoid of Co-event conflating structures but rich in Ground incorporating parasynthetic verbs, took place.

Crocco Galèas & Iacobini (1993), in their detailed study of the emergence of parasynthetic verbs along the evolution of the Latin language, assert that the emergence of the parasynthetic pattern occurred in Late Latin and that it was extended and

generalized in the Romance period. In Archaic and Classical Latin some parasynthetic verbs are attested (cf. *in-unc-o* ‘to hook’ [*<unco* ‘hook’], *ex-pector-o* ‘to expectorate’ [*<pectus* ‘breast’]), although they are mainly used in non literary registers. In Late Latin parasynthetic verbs increase in number and are attested in all the registers of the language.

Late Latin was a hybrid system in which Co-event conflating prefixed verbs co-existed with parasynthetic verbs. Along this period, the generalization of parasynthetic constructions overlapped with the decrease of productivity of the old Co-event conflating schema, which ended up giving rise to a series of new systems with a clear preference for the verb-framed schema: Romance languages. In the early stages of Romance, however, some vestiges of the satellite-framed configuration are still attested, as illustrated by Dufresne et al. (2001, 2003) and Kopecka (2006) for Old French, and by Bartra & Mateu (2005) and Acedo-Matellán & Mateu (2013) for Old Catalan. In Old Spanish, the satellite-framed strategy of conflating a Manner Co-event in the verbal root of prefixed verbs is still found:

(16) Old Spanish

*Cuantos que y son a-corren la seña e a mio Cid el Campeador*  
 As\_many\_as that there are to-run the sign and to mio Cid el Campeador  
 ‘Everyone there run up to the signal and to Mio Cid el Campeador’  
 (CORDE: 1140. *Poema de Mio Cid*)

(17) Old Spanish

*Non pudo iulio cesar des-fuir la muerte.*  
 Not could iulio cesar from-escape the death  
 ‘Iulio cesar couldn’t escape from death’.  
 (CORDE: c1270. Alfonso X, *Estoria de Espanna*).

In the above examples, *acorrer* ‘to run to’ (16) and *desfuir* ‘to run away’ ‘to escape from’ (17) involve a verbal base denoting both Motion and a Manner Co-event, and a directional prefix encoding a rich path able to take a full phrase as its complement. In (16) the coordinated phrase *la seña e a mio Cid el Campeador* ‘the sign and to mio Cid el Campeador’, interpreted as a Ground, is clearly introduced by the prefix *a-*, given that

the intransitive motion verb *correr* ‘to run’ does not license the presence of an argument of this sort. In (17) the DP *la muerte* is interpreted as the Source Ground from which the Figure *iulio cesar* tries to get away by escaping. Thus, the complement of the Source prefix *des-* is not the verbal base *fuir* ‘to escape’, but the Ground DP *la muerte*.

In addition to the few prefixed deverbal verbs still showing a satellite-framed configuration, in Old Spanish some deverbal verbs are found conveying the verb-framed pattern. These are cases such as *a-callar* ‘to silence someone’ or *a-crecer* ‘to make increase something’, two verbs (still in use in current Spanish) that encode Goal-oriented change of state and that can be roughly paraphrased as ‘to make become *call-* [‘silent’]’ and ‘to make become *crec-* [‘grown’]’, respectively. In them, the prefix *a-* identifies the Goal-oriented change and the verbal root encodes the resulting state of the change (i.e. the Goal Ground). Examples of the use of these verbs are provided below:

(18) Old Spanish

*el ama a-callo el moço & le dio la teta.*  
 the mistress to-be\_silent.PST.3SG the youth & he.DAT gave the breast  
 ‘The mistress silenced the child and breastfed him’.

(CORDE: a1412. Pablo de Santa María, *Suma de las coronicas de España*)

(19) Old Spanish

*Ismael bivará, e bendezir l' é e a-crecré su linage.*  
 Ismael live.FUT and bless.INF him have.1SG and to-grow.FUT his lineage  
 ‘Ismael will live, and I will bless him and I will increase his lineage’.

(CORDE: c1275. Alfonso X, *General Estoria. Primera Parte*)

The case of *acrecer* ‘to increase’ is specially striking, since it is the Spanish descendant of Latin *accresco* ‘to become larger by growth’. *Accresco* clearly shows the Co-event conflating pattern in one of its senses: ‘to be joined to [= *ad*] by way of increase or augmentation [= *cresco*]’ (see *Lewis & Short*, s.v.). The reanalysis of *accresco* as a change of state verb was probably triggered by uses in which the prefix conveyed an aspectual value rather than a pure spatial one (recall that the employment of directional prefixes as aspectual markers is typical from satellite-framed Latin; see §3.1). These are uses, like the one in (20), in which *ad-* emphasizes the beginning of the action denoted

by the base *cresco* ‘to grow’ and describes such an action as something that starts and goes on gradually:

- (20) *nobis jam paulatim ad-crescere puer incipiat.* (Latin)  
 we.DAT now little\_by\_little to-grow.INF boy.NOM begin.SBJV.PRS.3SG  
 ‘But the time has come for the boy to grow up little by little’.  
 (Quint. *Inst.* 1 2.1; apud. *Lewis & Short*, s.v. *accresco*)

The gradual desemantization of the prefix in this verb started in Latin (triggered by its aspectual uses) and is also traceable in Spanish. Hence, the interpretation of *acrecer* as a change of state verb in which *a-* encodes Goal-oriented change (cf. (19)) gave rise to the interpretation of the prefix as a mere intensifier of the inner directionality of *crecer* ‘to grow’. Accordingly, and as illustrated in (21), in Old Spanish *acrecer* could be used as a(n almost) synonym of the non-prefixed *crecer*:

- (21) *E quando les a-crecier mucho la sequedad,*  
 And when they.DAT to-grow.SBJV.IPFV.3PL a\_lot the dryness  
*denles [...] carne remojada en leche d'ouejas.* (Old Spanish)  
 give.IMP.2PL=they.DAT meat steeped in milk of sheep.PL  
 ‘And if their dryness increases, give them meat steeped in sheep milk’.  
 (CORDE: 1250. Abraham de Toledo, *Moamín. Libro de los animales que cazan*)

The use of Spanish directional prefixes as mere intensifiers is fairly well attested in Old Spanish. Goal prefixes *a-* and *en-* were used as intensifiers of inherently Goal-oriented events, whereas the Source prefix *des-* was used to intensify the meaning of verbs encoding inherently Source-oriented events (cf. *matar* ‘to kill’ vs. *a-matar* ‘to kill’, *caecer* ‘to fall’, ‘to take place’ vs. *a-caecer* ‘to take place’, *comendar* ‘to entrust/command’ vs. *a-comendar* ‘to entrust/command’ vs. *en-comendar* ‘to entrust/command’, *prestar* ‘to lend’ vs. *em-prestar* ‘to lend’, *apartar* ‘to move away’ vs. *des-apartar* ‘to move away’). The example in (22) shows the possibility of using *matar* and *amatar* as synonyms:

- (22) *E muchas de vezes el callar mata la ira, así como a-mata el*  
 And lots of times the be\_silent.INF kills the rage, just like to-kills the  
*fuego el que tuelle la su materia.* (Old Spanish)  
 fire the who exhausts the its matter  
 ‘And lots of times being silent extinguishes the anger, just like the fire is  
 extinguished by whom exhausts its matter’.  
 [CORDE: a1250. *Bocados de Oro*]

The use of directional prefixes as intensifiers decreased along the evolution of Spanish.<sup>15</sup> The pairs prefixed – non-prefixed verb in which the prefix acts as an intensifier have only survived in cases in which the prefixed and the non-prefixed verb have specialized in different uses, as, for example, *cubrir* ‘to cover’ and *encubrir* ‘to hide’, ‘to cover up for’.

It seems, thus, that the combination of directional prefixes with verbal bases decreased in productivity mainly due to the desemantization undergone by these prefixes, the addition of which to verbal bases gave rise to new verbs with an entirely new meaning in Latin (a satellite-framed system with semantically rich prefixes), but to almost synonymic constructions in Spanish (a verb-framed system with semantically bleached prefixes).

#### 4. Goal prefixes *a-* and *en-* vs. Source prefix *des-* in Spanish

##### 4.1. *The asymmetry*

In the stage that goes from Latin to Spanish, prefixed verbs are reanalyzed as change of state verbs because the new system (verb-framed Spanish) does not allow the interpretation of the verbal root as a Co-event, but as an abstract Ground (the complement of the prefix) identified with the initial or final state of a transition. As a consequence, Spanish directional prefixes *a-*, *en-* and *des-* mainly attach to bases able to be interpreted as states, which triggers the generalization of the parasynthetic pattern in the creation of new verbs.

---

<sup>15</sup> In current Spanish the use of directional prefixes as mere intensifiers can still emerge in popular or dialectal varieties. See, for example, Torres Martínez (2006) for the study of the intensive uses of Source-oriented *des-*.

Nonetheless, and as already pointed out in the introduction of the paper, in Romance languages in general, and in Spanish in particular, there is an important asymmetry between the Goal prefixes *a-* and *en-*, on the one hand, and the Source prefix *des-*, on the other hand: while *a-* and *en-* are not productive in the creation of new prefixed verbs from verbal stems, *des-* is productively adjoined to verbs in order to encode a reversative value. This asymmetry is illustrated in Table 4:

**Table 4.** Asymmetrical productivity of *a-* and *en-* vs. *des-* with verbal bases

	Goal prefixes		Source prefix
	<i>a-</i> ‘to’	<i>en-</i> ‘into’	<i>des-</i> ‘from’
<i>activar</i> ‘to activate’	--	--	<i>desactivar</i> ‘to deactivate’
<i>ocupar</i> ‘to occupy’	--	--	<i>desocupar</i> ‘to clear’ ‘to vacate’
<i>coser</i> ‘to sew/stitch’	--	--	<i>descoser</i> ‘to unstitch’
<i>casar</i> ‘to marry’	--	--	<i>descasar</i> ‘to divorce’
<i>hacer</i> ‘to do’	--	--	<i>deshacer</i> ‘to undo’
<i>andar</i> ‘to walk’	--	--	<i>desandar</i> ‘to go back’ ‘to retrace one’s steps’
<i>a-muebl-ar</i> ‘to furnish’	--	--	<i>desamueblar</i> ‘to remove the furniture from’
<i>em-barc-ar</i> ‘to embark’	--	--	<i>desembarcar</i> ‘to disembark’

*Des-* can be adjoined to telic events of change, such as *activar* ‘to activate’ or *casar* ‘to marry’; but also to activity verbs which allow for an (a)telic interpretation depending on the context, like *coser* ‘to sew/ stitch’ or *andar* ‘to walk’ (see Rodríguez Rosique 2013). Crucially, activity verbs are interpreted as telic Goal-oriented events when prefixed with *des-* (see Horn 1988, 2002 for a similar approach to reversative *un-*verbs in English), and so they make available their interpretation as a resulting state. In this way, *descoser* ‘to unstitch’ does not only reverse the activity value of *coser* ‘to stitch’, but it also expresses the exit of a certain Figure from the resulting state of “being stitched”. Therefore, the adjunction of *des-* to verbal roots does not “produce” satellite-framed constructions, since the verbal root does not encode a co-event specifying the manner of



the change: it lexicalizes an abstract Ground interpreted as the initial state of a transition.

Due to the preference shown by *des-* to be added to telic verbs, this prefix is productively attached to parasynthetic verbs headed by the Goal prefixes *a-* and *en-* in order to encode a reversative value, as in *desamueblar* (created over *a-muebl-ar* ‘to furnish’) or *desembarcar* (created over *em-barc-ar* ‘to embark’). Moreover, I point out two important empirical generalizations. First, when prefixes stack, Source-oriented *des-* always occupies a more external position than Goal-oriented *a-* and *en-*, the reverse order being unattested in Spanish (cf. *\*a-des-muebl-ar* or *\*en-des-barc-ar*). Second, Goal prefixes *a-* and *en-* cannot co-appear, and constructions of the sort of *\*en-a-muebl-ar* or *\*a-em-barc-ar* are disallowed by the system (cf. Di Sciullo 1997 for similar observations regarding French prefixed verbs).

The asymmetry between *a-* and *en-*, unable to be adjoined to verbs, and *des-*, highly productive in the prefixation of verbs allowing for a telic interpretation, can be accounted for by considering the different conceptual complexity of Goal paths vs. Source paths. The following subsection is devoted to this issue.

#### 4.2. *The high productivity of des- as a consequence of its Source-orientation*

The asymmetrical productivity of Goal prefixes *a-* and *en-* and Source prefix *des-* in Spanish can be linked to the Goal bias, that is, to the preference for Goals over Sources in the conceptualization of motion events. Evidence in favour of the Goal bias in English is provided by experimental data in the psycholinguistic study developed by Lakusta & Landau (2005), who show that children with William syndrome as well as children and adults without this disease prioritize the encoding of Goals over the encoding of Sources in their description of different kinds of motion events (manner of motion events, change of state and change of possession). Hence, for example, the participants of the experiment designed by these authors used more frequently PPs expressing Goals, e.g. *into the pitcher*, than PPs focusing on Sources, e.g. *out of the bucket*. Moreover, experiments developed by Clancy (1985) suggest that Japanese children acquire the Goal particle *ni* earlier than the Source particle *kara*, thus pointing toward a preference for Goals over Sources also in this language and in language acquisition.

The Goal bias is assumed to be a conceptual, pre-linguistic one (Lakusta & Landau 2005; Gehrke 2008; Pantcheva 2011; Lewandowsky 2014). Evidence for the pre-linguistic nature of the Goal bias is provided by Lakusta et al. (2007), who show, by means of a psychological experiment, that 12-month-old infants pay more attention to Goals and less to Sources in their pre-linguistic representations of motion events. Such a conceptual primacy of Goals over Sources has a straightforward reflection in the grammar of natural languages. Hence, as noticed by Levin (1993), change of state events can specify in English both the Source and the Goal of the transition, as in (23a), or specify only the Goal of the transition, as in (23b). However, the omission of the Goal is ungrammatical, as illustrated by (23c):

- (23) a. *The frog turned from green to blue.*  
 b. *The frog turned to blue.*  
 c. \**The frog turned from green.*

The same kind of asymmetry is also attested in Spanish. In this language, motion verbs unmarked with regard to their directionality, as for example *ir* ‘to go’, can co-appear with a coordination of Source and Goal PPs, as in (24a), or with a Goal PP alone, as in (24b); the combination of such verbs with a Source PP in the absence of a Goal PP being ungrammatical, as in (24c):

- (24) a. *El tren va de Madrid a Barcelona.* (Spanish)  
 The train goes from Madrid to Barcelona  
 b. *El tren va a Barcelona.*  
 The train goes to Barcelona  
 c. \**El tren va de Madrid.*  
 The train goes from Madrid

Moreover, and as noticed by Gehrke (2008: 229), “a sentence like *the frog turned green*, where *green* is not marked as a Goal or a Source, can only mean that the frog is green at the end” but it cannot mean “that the frog started out being green and then turned from green to some different colour”, an observation that clearly points toward the fact that the Goal interpretation is the defective one, the Source interpretation requiring for a

specific mark. This is in accordance to the “Goal over Source principle” posed by Ikegami (1982) on the grounds of the marked character of Source expressions in relation to Goal expressions.

In sum, from the Goal bias it follows that events are by default interpreted as Goal-oriented, since Goals are conceptually more salient and grammatically unmarked. Accordingly, the addition of *a-* and *en-* (Goal prefixes) to event-denoting bases (Goal-oriented by default) to specify their Goal orientation gives rise to redundant constructions (cf. the redundant uses of *a-* and *en-* in Old Spanish, e.g. *a-matar* ‘to kill’ vs. *matar* ‘to kill’; see subsection 3.3), which accounts for the loss of productivity of this process along the evolution of Spanish. By contrast, in order to express that an event is oriented toward the starting point it is necessary to mark it with a Source marker, and in Spanish this Source marker is the prefix *des-*. Therefore, the high productivity of *des-* in verbal prefixation is due to its encoding a Source path, given that for a verb to encode a Source-oriented event the presence of a Source marker is required.

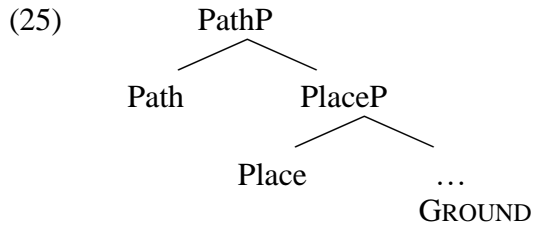
Still some questions remain related to the asymmetries existing between Goal and Source prefixes in Spanish: why do those (few) verbs codifying inherently Source-oriented events not admit Goal-oriented prefixes to reverse their Source meaning into a Goal one (e.g. *salir* ‘to go out’ does not admit *a-* nor *en-* prefixes: *\*asalir*, *\*ensalir*)? Why is the Source-oriented prefix *des-* always stacked to the left of Goal-oriented *a-* and *en-*, the reverse order being unattested (cf. *des-a-botonar* ‘to unbutton’ and *des-en-terrar* ‘to unearth’ vs. *\*a-des-botonar* and *en-des-terrar*)? Why can the Goal prefixes *a-* and *en-* never co-appear? The following section provides a formal analysis of the asymmetric productivity of *a-* and *en-* vs. *des-* with event-denoting bases that answers these questions alongside.

## **5. A structural account**

### *5.1. Syntactic structure of paths and motion events*

Since Jackendoff (1983) it has been widely assumed that the conceptual structure of paths contains two phases: a dynamic phase in which the Figure changes its position with respect to the Ground, and a static phase in which the Figure occupies a fixed position with respect to the Ground. The static phase, thus, is envisaged as the “result”

of the dynamic phase. Accordingly, Path expressions are syntactically decomposed into a directional head labelled Path (the dynamic phase) and a static head labelled Place (the static phase), the former taking the latter as complement (cf. Svenonius 2004; Gehrke 2008; Acedo-Matellán 2010; among others):



Pantcheva (2011), in her fine-grained study of path expressions, proposes that the Path head dominating Place is not an atomic projection, but that it can be further decomposed into more specific projections. The author, in a cross-linguistic survey of path expressions, notices that Goal and Source markers are not equally complex, but that the former are systematically embedded in the latter in certain languages, as illustrated in Table 5 (taken from Pantcheva 2011):

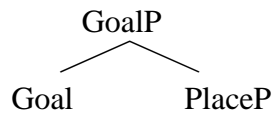
**Table 5.** Languages where the Source marker morphologically contains the Goal marker (Pantcheva 2011: 49, Table 4.2)

Language	Location	Goal	Source	Reference
Bulgarian	<i>pri</i>	<i>kəm</i>	<i>ot- kəm</i>	Pashov (1999)
Dime	<i>-se</i>	<i>-bow</i>	<i>-bow-de</i>	Mulugeta (2008)
Chamalal	<i>-i</i>	<i>-u</i>	<i>-u-r</i>	Magomedbekova (1967)
Ingush	<i>-ǧ</i>	<i>-ga</i>	<i>-ga-ra</i>	Nichols (1994)
Jingulu	<i>-mpili</i>	<i>-ŋka</i>	<i>-ŋka-mi</i>	Blake (1977)
Mansi	<i>-t</i>	<i>-n</i>	<i>-n-əl</i>	Keresztes (1998)
Quechua	<i>-pi</i>	<i>-man</i>	<i>-man-da</i>	Jake (1985), Cole (1985)
Uchumataqu	<i>-tá</i>	<i>-ki</i>	<i>-ki-stani</i>	Vellard (1967)

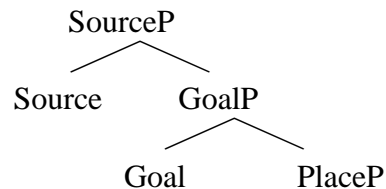
Crucially, the author does not find any language in which Goal markers morphologically contain Source markers, which suggests that Source paths are built upon Goal paths and, thus, that Source paths are structurally more complex than Goal

paths.<sup>16</sup> In view of this evidence, Pantcheva (2011) splits the Path head into a hierarchical structure in which Source paths are built on top of Goal paths, as illustrated below:<sup>17</sup>

(26) a. Goal path



b. Source path



According to Pantcheva, whose conclusions I endorse, the Goal head identifies a transition and imposes to the PlaceP it embeds the interpretation of the end-point of a path. The Source head, in turn, has the function of reversing the direction of the GoalP it takes as complement, in such a way that the transition encoded by the GoalP changes its orientation and, as a consequence, the location that PlaceP encodes is interpreted as the starting point of a path. Crucially, the transition is encoded by the Goal head, the only function of the Source head being that of reversing the orientation of the Goal-oriented transition.

Pantcheva's proposal is in accordance with the Goal bias: Source paths involve a more complex syntactic structure than Goal paths because they are conceptually more elaborate than Goal paths, the latter being involved by default in the encoding of directional expressions. Hence, a Goal-oriented path such as *to the house* displays the syntactic structure depicted in (27a), in which the Goal particle *to* encompasses Goal and Place, and the Ground DP *the house* is identified with the complement of Place. By contrast, the Source-oriented PP *from the house* displays the syntactic structure in (27b),

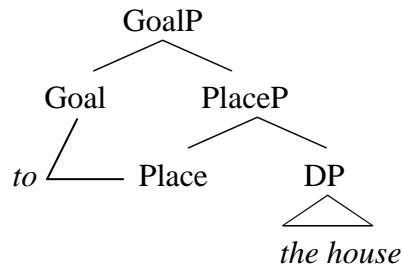
<sup>16</sup> Pantcheva's proposal, according to which Source paths contain Goal paths and Goal paths contain Places, predicts that syncretisms between Source and Place to the exclusion of in-between Goal are impossible (see Pantcheva 2011: §9.2.1). However, some languages seem to exhibit this prohibited pattern, as claimed by Lestrade (2010: §3.4.1; see also references therein) on the basis of an accurate compilation of unexpected syncretisms. These counterexamples are addressed by Pantcheva (2011: §9.3.2), who convincingly demonstrates that the apparent Place-Source syncretisms in these languages are spurious.

<sup>17</sup> Pantcheva (2011) proposes a more elaborate structure that also takes into account Route paths (i.e. the kind of paths encoded by prepositions such as *along* or *through*). Based on the observation that Route paths are more elaborated than Source and Goal paths, and that Route markers embed Source and Goal markers in certain languages, she proposes a hierarchy in which Route paths are built on top of Source paths, as depicted below:

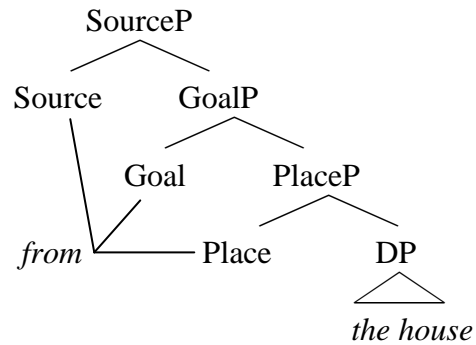
(ii)  $[_{\text{RouteP}} \text{Route} [_{\text{SourceP}} \text{Source} [_{\text{GoalP}} \text{Goal} [_{\text{PlaceP}} \text{Place}]]]]]$

in which it is made explicit that the Source marker *from* presupposes a Goal transition that is reversed and, thus, encompasses both Source and Goal (in addition to Place):

(27) a. *To the house*

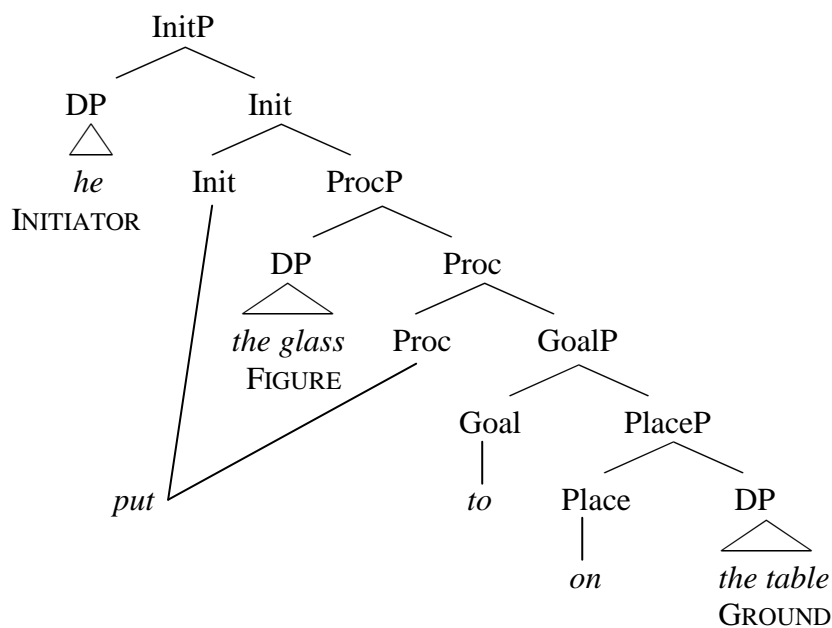


b. *From the house*

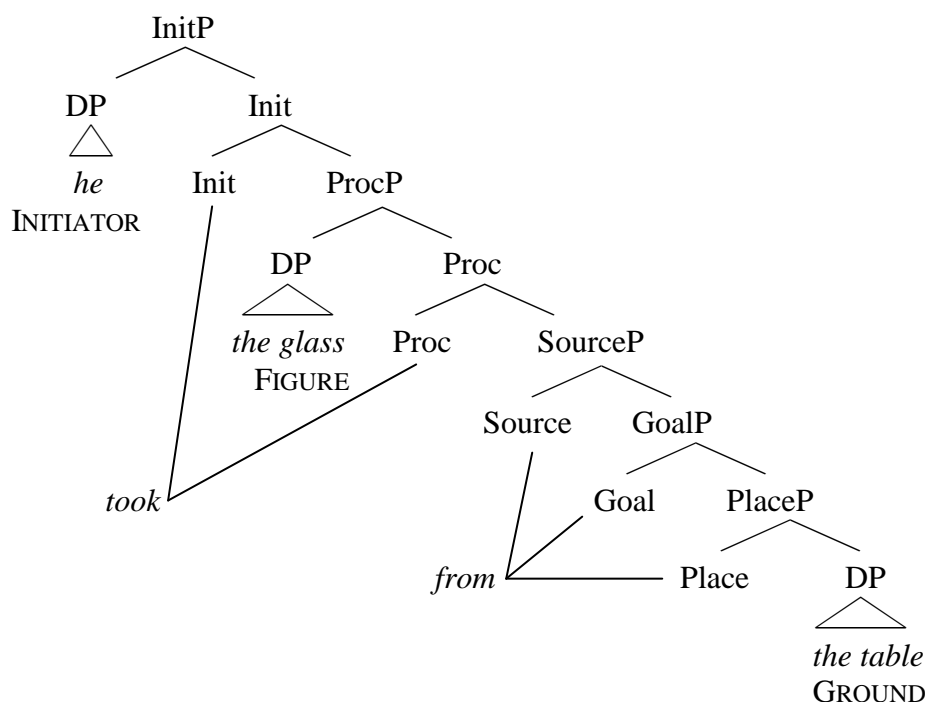


Path expressions are involved in motion events. Therefore, a motion event (and, by extension, a change of state event or a change of possession one) can be argued to be oriented toward an end-point or toward a starting-point depending on its containing a Goal path or a Source one. Accordingly, I propose a syntactic structure for Goal-oriented motion events (e.g. *he put the glass onto the table*) like the one reproduced in (28), and relate Source-oriented motion events (e.g. *he took the glass from the table*) to the syntactic structure in (29). In both (28) and (29) the basic conceptual components of motion events are identified with particular positions inside the syntactic structure:

(28) *He put the glass onto the table* (Goal-oriented motion event)



(29) *He took the glass from the table* (Source-oriented motion event)



This structure mainly follows Ramchand's (2008) proposal of decomposing events into three subeventive projections: an Initiation Phrase (InitP) that identifies the causative subevent and licences the external argument, a Process Phrase (ProcP) that corresponds to the dynamic component of the predicate, and a Result Phrase (ResP) that introduces the resulting state:

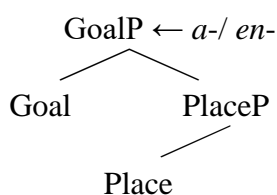
(30) [InitP Init [ProcP Proc [ResP Res]]]

In the structures I propose no ResP is present because the result of directed motion events is contextually inferred from the Place projection selected by the dynamic directional projections (particularly, selected by GoalP). Therefore, the structure put forward in (28) specifies that Goal-oriented motion events contain a Goal path that leads to a final location (the result); whereas the structure depicted in (29) makes explicit that Source-oriented motion events contain a Source path by means of which the Ground component (structurally identified with the complement of PlaceP) is interpreted as an initial location and not as a final one, the result of the event being, thus, the location of the Figure NOT in/on/at the Ground.

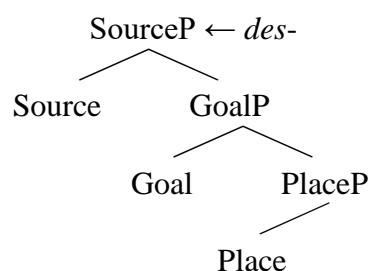
## 5.2. Inherent syntactic structure of *a-*, *en-* and *des-* prefixed verbs

In §3.2 it was shown that Spanish prefixes *a-*, *en-* and *des-* express, respectively, arrival, entrance and departure with regard to the state identified by the lexical root to which they are attached. Accordingly, and in line with Acedo-Matellán (2006a, 2006b) and Gibert Sotelo & Pujol Payet (2015), I posed that these prefixes encode an abstract path identified with a change of state. Taking into account the decomposition of the Path head put forward by Pantcheva (2011), I assume that the Spanish prefixes *a-* and *en-*, which express Goal-oriented transitions, have the structure of a Goal path and, accordingly, lexicalize Goal and Place, as shown in (31a). On the contrary, *des-*, whose meaning is that of a Source-oriented transition, incorporates the structure of a Source path and lexicalizes Source, Goal and Place, as (31b) illustrates. Hence, *des-* is structurally more complex than *a-* and *en-*, since it embeds the structure inherent to *a-* and *en-* and contains an additional feature, which is Source:

(31) a. Proposed structure for *a-* and *en-*



b. Proposed structure for *des-*

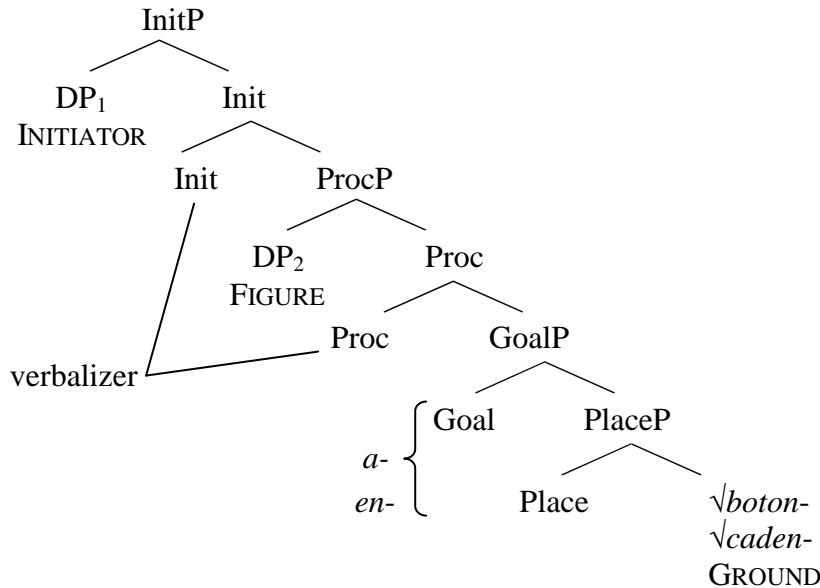


The Goal prefixes *a-* and *en-* have been shown to be productive in the creation of new parasynthetic verbs, giving rise to change of state events in which the lexical root gets interpreted as the final state of a transition. In view of that, I propose that parasynthetic verbs containing either the Goal prefix *a-* (e.g. *abotonar* ‘to button up’) or the Goal prefix *en-* (e.g. *encadenar* ‘to chain’) incorporate a syntactic structure such as the one in (32), which corresponds to the structure I have put forward for caused Goal-oriented motion events (cf. (28)). The syntactic representation in (32) specifies that the Spanish parasynthetic verbs *abotonar* ‘to button up’ and *encadenar* ‘to chain’ are causative and, therefore, incorporate the causative subeventive head *Init* and require a subject acting as the initiator of the event ( $DP_1$ ). In this structure it is also made explicit that the Goal prefixes *a-* and *en-*, which lexicalize Goal and Place, are the complements of the dynamic subeventive head *Proc*. *Proc* introduces the internal argument ( $DP_2$ ), and this



argument is interpreted as the Figure undergoing the change of state. *A-* and *en-* select the roots  $\surd$ *boton-* and  $\surd$ *caden-*, respectively, as complements and force these roots to be interpreted as the final state of the transition (i.e. with a Goal Ground). In these constructions, the verbalizing suffix is identified with the subeventive projections Init and Proc:

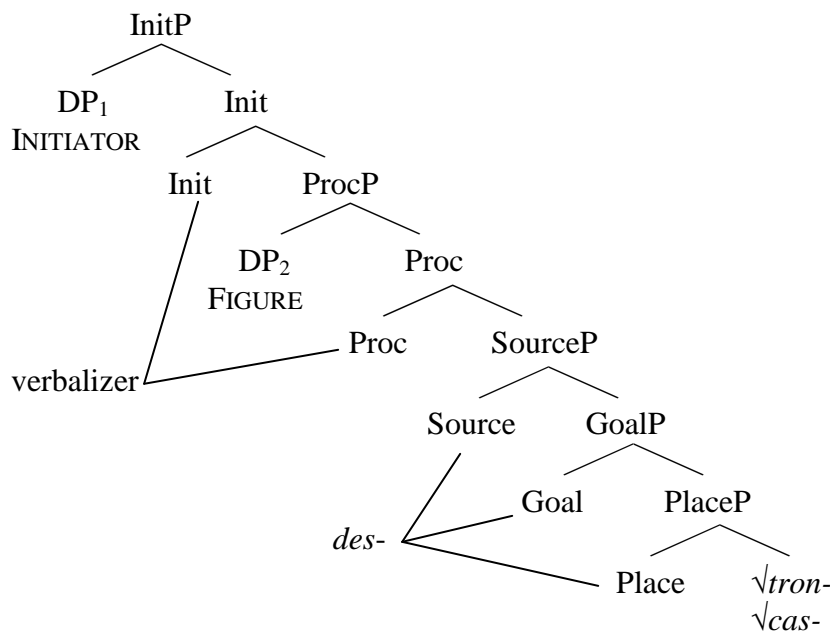
(32) Proposed structure for *a-boton-ar* ‘to button up’ and *en-caden-ar* ‘to chain’



As for the Source prefix *des-*, it has been shown that, in addition to being productive in the creation of new parasyntetic verbs (e.g. *destronar* ‘to dethrone’, *descabezar* ‘to behead’, etc.), it is productively attached to verbal bases in order to encode a reversative value (e.g. *descasar* ‘to divorce’, *deshacer* ‘to undo’, etc.). Parasyntetic verbs headed by the Source prefix *des-* encode departure from a state, and in them the lexical root is interpreted as the initial state of a transition. At the beginning of this section I have argued, in accordance with Horn’s (1988, 2002) and Rodríguez Rosique’s (2013) observations, that when *des-* is added to a verbal base in order to reverse its meaning the prefix forces the verbal base to be interpreted as a telic predicate involving a resulting state (cf. §4.1). Accordingly, I have put forward that in these constructions the prefix not only reverses the process inherent to the verbal base, but that it also expresses the departure from the resulting state that the verbal base involves. In fact, a reversative verb like *descasar* ‘to divorce’ ‘to dissolve the marriage’ not only encodes the reverse action of that denoted by the unprefix *casar* ‘to marry’, but also the departure from

the (resulting) state of being married. It seems, thus, that both parasynthetic verbs headed by *des-* as well as reversative ones encode departure from a state. In consequence, I hypothesize that either a parasynthetic verb such as *destronar* ‘to dethrone’ or a reversative one such as *descasar* ‘to divorce’ involve the syntactic structure in (33), which corresponds to that of a caused Source-oriented motion event (cf. (30)).

(33) Proposed structure for *des-tron-ar* ‘to dethrone’ and *des-casar* ‘to divorce’



In the analysis I posit the Source prefix *des-* spells out Source, Goal and Place, and takes the lexical root as a complement, forcing it to be interpreted as the starting point of a transition.

An immediate consequence of this analysis is that *des*-parasynthetic verbs and reversative verbs lexicalize the same syntactic structure, and that in both of them the prefix is attached to an acategorial root that is later on categorized, together with the prefix, as a verb. Hence, parasynthetic verbs as well as reversative ones are the verbalization of the Core schema (i.e. the verbalization of the sum of the Path component and the Ground component) and, therefore, instantiations of the verb-framed pattern.

The main difference existing between *des*-parasynthetic verbs and reversative verbs is that the lexical root of so-called parasynthetic verbs can be independently

realized as a noun or as an adjective but not as a verb, whereas the lexical root of reversative verbs can be independently realized as a verb. Hence, for instance, the lexical root involved in *descasar*, which is  $\sqrt{cas-}$ , may be independently realized as the verb *casar* ‘to marry’, a verb that is identified with a syntactic structure as the one in (34), in which it is made clear that when the lexical root  $\sqrt{cas-}$  emerges as a verb, it is interpreted as a Goal-oriented change of state and lexicalizes a Goal path:

(34) Proposed structure for *casar* ‘to marry’

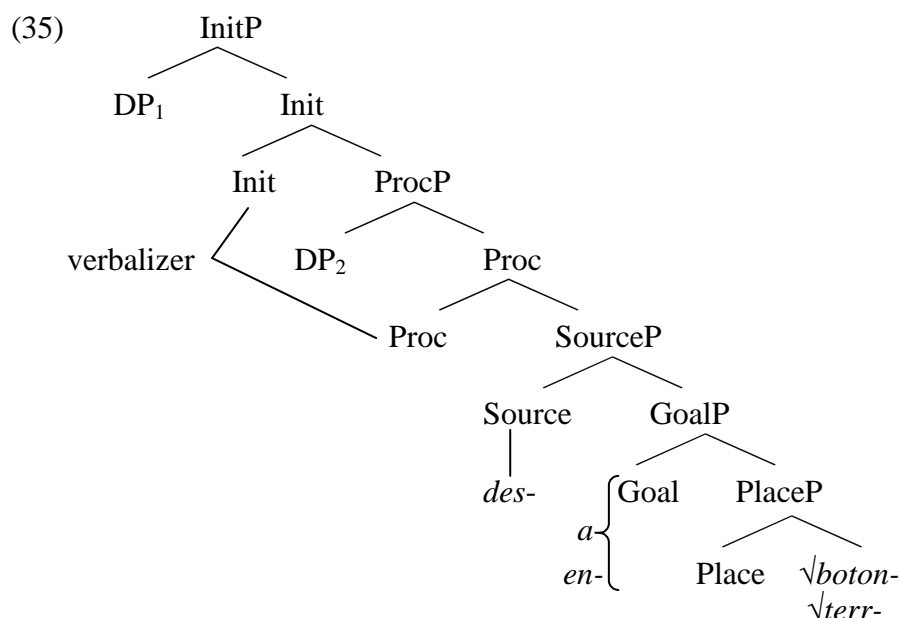
[<sub>InitP</sub> Init [<sub>ProcP</sub> Proc [<sub>GoalP</sub> Goal [<sub>PlaceP</sub> Place  $\sqrt{cas-}$ ]]]]

Since *casar* is inherently Goal-oriented and incorporates a Goal path, the addition of the Goal prefixes *a-* and *en-* to this verb is blocked because the features that these prefixes lexicalize, which are Goal and Place, are already lexicalized by the verb. And the same holds for the remaining telic predicates that allow being prefixed by *des-* in order to reverse their inherent directionality, but disallow being prefixed by the Goal prefixes *a-* or *en-*: since telic predicates encode a transition that is Goal-oriented by default, they already lexicalize the features identified by Goal prefixes, which blocks the insertion of these prefixes in the structure.

It could be argued that, like in the case of reversative *descasar* ‘to divorce’, in which *des-* is attached to an acategorial root  $\sqrt{cas-}$ , the Goal prefixes *a-* and *en-* are not attached to the verb *casar*, inherently Goal-oriented, but to the acategorial root  $\sqrt{cas-}$ , which would result in the change of state verbs *\*acasar* and *\*encasar* (unattested in Spanish). This possibility, however, is also blocked by the system, since the verbs resulting from the prefixation of *a-* or *en-* to the lexical root  $\sqrt{cas-}$  (i.e. *\*acasar* and *\*encasar*) would convey the very same meaning of the already existing verb *casar*: ‘to arrive or enter a state of marriage’, that is, ‘to marry’. The impossibility of creating the prefixed verbs *\*acasar* or *\*encasar* on the existence of *casar* follows from the Biggest wins theorem assumed by the Nanosyntax proposal. According to the Biggest wins theorem, if a single lexical item is able to spell out all the features contained in a syntactic tree in one go, it is to be preferred over the use of multiple items to spell out the very same amount of features (Starke 2009).

The linear order in which prefixes appear in multi-prefixed verbs (e.g. *des-a-boton-ar* ‘to unbutton’, *des-en-terr-ar* ‘to unearth’), and the impossibility of attaching

the Goal prefixes *a-* and *en-* to a more external position than the Source prefix *des-* (cf. *\*a-des-boton-ar* and *\*en-des-terr-ar*), is naturally accounted for in the present analysis: the hierarchy of the structure does not allow *a-* and *en-* to be inserted in a position higher than that of *des-*, because *des-* lexicalizes a Source feature (in addition to the Goal and Place features), which is higher in the structure than the Goal and Place features that *a-* and *en-* lexicalize. In (35) I depict the syntactic structure lexicalized by the multi-prefixed verbs *desabotonar* ‘to unbutton’ and *desenterrar* ‘to unearth’. In these predicates the Goal prefixes *a-* and *en-* lexicalize Goal and Place, forcing the Source prefix *des-* to underassociate and spell out Source alone (as conforming to the Superset Principle; see §2.2.2):



Moreover, from the analysis I propose for the Goal prefixes *a-* and *en-* it follows that they cannot co-appear in Spanish, since they lexicalize the same syntactic features (particularly, Goal and Place) and, accordingly, they occupy the same position in the structure. I assume, thus, that the difference between *a-* and *en-* is not syntactic, but that it is of conceptual nature: *a-* involves a non interiority relationship between Figure and Ground, whereas *en-* specifies that the relationship between Figure and Ground is one of interiority (see Acedo-Matellán 2006a for a similar account regarding *a-* and *en-* in Catalan). In many cases this relation of interiority/exteriority must be abstractly interpreted. Hence, for example, *a-* is mainly used in change of state verbs that express an event by means of which the internal argument acquires the external properties of the

root (e.g. *acartonar* ‘to become stiff like cardboard’; cf. *cartón* ‘cardboard’); whereas *en-* appears in change of state verbs that express an event by means of which the internal argument acquires the internal properties of the root (e.g. *enamorar* ‘to enter a state of love’; cf. *amor* ‘love’).

Finally, the analysis I put forth answers the question formulated at the end of §4.2, which is why inherently Source-oriented verbs (e.g. *salir* ‘to go out’) do not admit Goal-oriented prefixes to reverse their Source meaning into a Goal one. The answer to this question follows from the fact that the hierarchy of the structure does not allow Goal to be higher than Source, which prevents Goal prefixes to be attached either to inherently Source-oriented verbs or to items already containing the Source prefix *des-*.

## 6. Conclusions and future challenges

In this paper I have explored the Spanish (and Romance) asymmetry existing between the Goal prefixes *a-* and *en-* and the Source prefix *des-* in verbal derivation; namely, that *a-* and *en-* disallow being prefixed to verbal bases, whereas *des-* is productively adjoined to verbs in order to express the very opposite situation of that encoded by the verb it is adjoined to.

From a diachronic standpoint, it has been shown that, regarding the evolution from Latin to Romance, there is a change in the pattern involved in the formation of new verbs by prefixation. In Archaic and Classical Latin prepositional prefixes attached to verbs productively in order to create new predicates encoding directed motion events (cf. García Hernández 1980; Lehmann 1983; Acedo-Matellán 2006b, 2016a, 2016b). Such a system allowed both the Goal prefixes *ad-* and *in-* (which are the predecessors of the Spanish Goal prefixes *a-* and *en-*, respectively), and the Source prefixes *ab-*, *de-*, *dis-* and *ex-* (the last three converging in the Spanish Source prefix *des-*) to combine with verbal bases and to select a full DP as complement. In Late Latin, as noticed by Crocco Galèas & Iacobini (1993), the pattern to create new verbs by prefixation changed from a deverbal to a denominal/deadjectival one, which triggered the preference for creating new verbs by parasynthesis but, at the same time, gave rise to the asymmetry I am dealing with in this study.

In line with Acedo-Matellán (2006b) and Acedo-Matellán & Mateu (2013), it has been hypothesized that the preference of Spanish prefixes for nominal and adjectival bases reflects the shift from a satellite-framed system (Latin) to a verb-framed one (Spanish), a typological change prompted by the semantic bleaching that prepositional prefixes underwent in Late Latin. Hence, in the new satellite-framed system prefixes do not select full DPs as complements, but just the bases they are attached to, which forces these bases to be interpreted as the Ground of a transition (that is, the initial or final state of an event of change). Accordingly, only those lexical objects able to be interpreted as (initial or final) states may constitute the base for Spanish prefixed verbs, which leaves out all the verbs encoding atelic processes devoid of an initial or final boundary.

The fact that only the Source-oriented prefix *des-* is productively attached to verbal bases, while the Goal-oriented prefixes *a-* and *en-* are not, is expected from the Goal bias (Lakusta & Landau 2005), given that, if events are Goal-oriented by default, there is no need to attach the Goal prefixes *a-* and *en-* to verbs in order to signal a Goal orientation; on the contrary, it is necessary to add the Source prefix *des-* to a verb in order to mark a Source orientation. Such a cognitive asymmetry is shown to be structurally reflected (as argued by Pantcheva 2011), and, by means of a nanosyntactic approach, the asymmetric productivity of Spanish Goal and Source prefixes in verbal derivation is explained on the grounds of their different structural complexity.

I leave for future research analyzing the structure of those *des-*prefixed verbs expressing non-dynamic events (e.g. *des-confiar* ‘to distrust’, *des-agradar* ‘to dislike’), in which no transition is implied and, for this reason, it seems that the Source prefix *des-* is not lexicalizing a Path.<sup>18</sup> The asymmetry between *des-* and *a- /en-* also emerges in these cases, since verbs of the sort of *\*a-confiar* or *\*en-confiar* are not attested in Spanish.

---

<sup>18</sup> A solution to this puzzle is being explored in Gibert Sotelo (in preparation), where it is suggested that in non-dynamic events of this sort the Source path that the prefix *des-* lexicalizes is identified with a Source-oriented scale (and not with a Source-oriented transition).

## Acknowledgements

Previous versions of this paper were presented at the workshop *Space in diachrony: asymmetries in the space domain and their developments* (22<sup>nd</sup> ICHL, Naples, 27-31 July 2015), at the conference *Variación lingüística: morfología y sintaxis* (Universitat de Girona, 25 November 2015), and at the *CLT seminar* (Universitat Autònoma de Barcelona, 16 January 2016), whose audiences I thank for useful comments and discussion. I am especially grateful to the editors of this volume, Silvia Luraghi, Tatiana Nikitina and Chiara Zanchi, as well as to two anonymous reviewers, whose comments, observations and suggestions contributed to considerably improve this work. Thanks also to Víctor Acedo-Matellán, Montserrat Batllori, Isabel Pujol, Antonio Fábregas and María Mare for their valuable suggestions and encouragement. All errors are my own responsibility. Funding for this research has been provided by the FPU grant AP2012-1445 (Ministerio de Educación, Cultura y Deporte), the research projects FFI2011-29440-CO3-02 (Ministerio de Ciencia e Innovación) and FFI2014-56968-C4-4-P (Ministerio de Economía y Competitividad), and the program 2014-SGR-1013 (Generalitat de Catalunya).

## Abbreviations<sup>19</sup>

ABL: ablative

ACC: accusative

DAT: dative

DP: determiner phrase

FUT: future

IMP: imperative

INF: infinitive

IPFV: imperfective

Lat.: Latin

lit.: literally

NOM: nominative

PL: plural

PP: prepositional phrase

---

<sup>19</sup> The Leipzig Glossing Rules are adopted for interlinear morpheme-by-morpheme glosses (available at <http://www.eva.mpg.de/lingua/resources/glossing-rules.php>).

PRF: perfect  
PRS: present  
PST: past  
PTCP: participle  
SBJV: subjunctive  
SG: singular  
Sp.: Spanish  
TV: thematic vowel  
1/2/3: first/second/third person  
√: lexical root

## References

- Acedo-Matellán, Víctor. 2006a. Una aproximació sintàctica als verbs prefixats en català. *Estudios Catalanes*, 4. 41–78.
- Acedo-Matellán, Víctor. 2006b. Prefixes in Latin and Romance and the satellite-/verb-framed distinction. In *Actes del VII Congrés de Lingüística General* (CD-ROM). Barcelona: Universitat de Barcelona. <http://ling.auf.net/lingbuzz/000295>
- Acedo-Matellán, Víctor. 2010. *Argument structure and the syntax-morphology interface. A case study in Latin and other languages*. PhD thesis. Barcelona: Universitat de Barcelona.
- Acedo-Matellán, Víctor. 2016a. *The Morphosyntax of Transitions. A Case Study in Latin and Other Languages*. Oxford: Oxford University Press.
- Acedo-Matellán, Víctor. 2016b. Preverbs llatins: aspectes morfosintàtics i semàntics. In Buenafuentes, Cristina, Glòria Clavería & Isabel Pujol (eds.), *Cuestiones de morfología léxica*. 63-99. Madrid-Frankfurt am Main: Iberoamericana-Vervuert.
- Acedo-Matellán, Víctor & Jaume Mateu. 2009. L'expressió dels esdeveniments de canvi: del llatí al català. In Rafel, Joan (ed.), *Diachronic Linguistics*. 473-496. Girona: Documenta Universitaria.
- Acedo-Matellán, Víctor & Jaume Mateu. 2013. Satellite-framed Latin vs. verb-framed Romance: A syntactic approach. *Probus. International Journal of Latin and Romance Linguistics*, 25. 227-265.



- Anderson, John M. 1971. *The Grammar of Case: Towards a Localistic Theory*. Cambridge: Cambridge University Press.
- Bartra, Anna & Jaume Mateu. 2005. Aspecte i prefixació verbal en català antic. *Caplletra*, 39. 85-108.
- Blake, Barry J. 1977. *Case Marking in Australian Languages*. Linguistic Series, No. 23. Canberra: Australian Institute of Aboriginal Studies.
- Bye, Patrik & Peter Svenonius. 2012. Non-concatenative morphology as an epiphenomenon. In J. Trommer (ed.), *The Morphology and Phonology of Exponence: The State of the Art*. 427–495. Oxford: Oxford University Press.
- Clancy, Patricia M. 1985. The acquisition of Japanese. In D. I. Slobin (ed.), *The crosslinguistic study of language acquisition*, vol.1. 373-524. Hillsdale, NJ: Lawrence Erlbaum Publishers.
- [Clave] 2012. *Diccionario Clave. Diccionario de uso del español actual*. Ediciones SM. <http://clave.smdiccionarios.com/app.php>.
- [CORDE] Real Academia Española. *Corpus Diacrónico del Español*. <http://www.rae.es>.
- [CREA] Real Academia Española. *Corpus de Referencia del Español Actual*. <http://www.rae.es>.
- Covarrubias, Sebastián de. 1611. *Tesoro de la lengua castellana o española*. Madrid.
- Crocco Galèas, Grazia & Claudio Iacobini. 1993. Parasintesi e doppio stadio derivativo nella formazione verbale del latino. *Archivio Glottologico Italiano*, 78. 167-199.
- [DHLE] Real Academia Española. 1960-1996. *Diccionario Histórico de la Lengua Española*. Madrid.
- Di Sciullo, Anna-Maria. 1997. Prefixed verbs and adjunct-identification. In Di Sciullo, Anna-Maria (ed.), *Projections and Interface Conditions. Essays on Modularity*. 52-74. New York, Oxford: Oxford University Press.
- [DRAE] Real Academia Española. 2014. *Diccionario de la Lengua Española* Madrid: RAE-Espasa Calpe. <http://www.rae.es>.
- Dufresne, Monique, Fernande Depuis & Catherine-Marie Longtin. 2001. Un changement dans la diachronie du français: la perte de la préfixation aspectuelle en *a-*, *Revue québécoise de Linguistique*, 30. 33-54.
- Dufresne, Monique, Fernande Dupuis & Mireille Tremblay. 2003. Preverbs and particles in Old French. In Geert Boij (ed.), *Yearbook of morphology*. 30-60. The Netherlands: Kluwer Academic Publishers.

- Efthymiou, Angeliki. 2015. Modern Greek parasynthetic verbs. A hierarchical relationship between prefixes and suffixes? In S. Manova (ed). *Affix ordering across languages and frameworks*. 82-107. N. York: Oxford University Press.
- Fábregas, Antonio. 2007. The Exhaustive Lexicalization Principle. In M. Basic et al. (eds.), *Tromsø Working Papers on Language and Linguistics: Nordlyd 34.2*, Special issue on Space, Motion, and Result. 165-199. Tromsø: University of Tromsø. Tromsø: CASTL. [www.ub.uit.no/baser/nordlyd/](http://www.ub.uit.no/baser/nordlyd/).
- Fábregas, Antonio. 2010. On Spanish prepositional prefixes and the cartography of prepositions. *Catalan Journal of Linguistics*, 9. 55-77. <https://ddd.uab.cat/pub/cjol/16956885v9/16956885v9p55.pdf>.
- Gaffiot, Félix. 1934. *Dictionnaire Latin-Français*. Paris: Hachette. <http://www.lexilogos.com/latin/gaffiot.php>.
- García Hernández, Benjamín. 1980. *Semántica estructural y lexemática del verbo*. Tarragona: Avesta.
- Gehrke, Berit. 2008. *Ps in Motion: On the Semantics and Syntax of P Elements and Motion Events* (LOT Dissertation Series 184). Utrecht: LOT Publications.
- Gibert Sotelo, Elisabeth. In preparation. *Source and negative prefixes. On the syntax-lexicon interface and the encoding of spatial relations*. PhD thesis. Girona: Universitat de Girona.
- Gibert Sotelo, Elisabeth & Isabel Pujol Payet. 2015. Semantic approaches to the study of denominal parasynthetic verbs in Spanish. *Morphology*, 25. 439-472.
- Grossmann, Maria. 1994. *Opposizioni direzionali e prefissazione: analisi morfologica e semantica dei verbi egressivi prefissati con des- e es- in catalano*. Padova: Unipress.
- Gruber, Jeffrey S. 1965. *Studies in Lexical Relations*. Doctoral Dissertation. Cambridge: MIT.
- Haverling, Gerd. 2000. *On sco-verbs, prefixes and semantic functions. A study in the development of prefixed and unprefixed verbs from Early to Late Latin*. Göteborg: Acta Universitatis Gothoburgensis.
- Horn, Laurence R. 1988. Morphology, pragmatics and the *un-*verb. In *ESCOL (5<sup>th</sup> Eastern State Conference on Linguistics)* (1988). 210-233.
- Horn, Laurence R. 2002. Uncovering the *un-*word: A study in lexical pragmatics. *Sophia Linguistica*, 49. 1-64.

- Iacobini, Claudio. 2010. Les verbes parasynthétiques: de l'expression de l'espace à l'expression de l'action. *De lingua Latina*, 3. [http://www.paris-sorbonne.fr/IMG/pdf/Iacobini\\_parasynthetiques.pdf](http://www.paris-sorbonne.fr/IMG/pdf/Iacobini_parasynthetiques.pdf).
- Ikegami, Yoshihiko. 1982. Source vs. goal: A case of linguistic dissymmetry. In Hoops, Richard & Yvan Lebrun (eds.), *Language and Cognitive Styles*, no. 11 in *Neurolinguistics*. 292–308. The Netherlands: Swets and Zeitlinger B.V., Lisse.
- Jackendoff, Ray. 1983. *Semantics and Cognition*. Cambridge, MA: MIT Press.
- Jackendoff, Ray. 1990. *Semantic structures*. Cambridge: MIT Press.
- Jake, Janice L. 1985. *Grammatical relationships in Imbabura Quechua*. New York: Garland.
- Keresztes, Laszlo. 1998. Mansi. In Abandolo, Daniel (ed.), *The Uralic Languages*, Routledge Language Family Descriptions. 387-427. London - New York: Routledge.
- Kopecka, Anetta. 2006. The semantic structure of motion verbs in French: Typological perspectives. In Maya Hickmann & Stéphane Robert (eds.), *Space in languages: Linguistic systems and cognitive categories*, 83-101. Amsterdam: John Benjamins.
- Lakusta, Laura & Barbara Landau. 2005. Starting at the end: The importance of goals in spatial language. *Cognition*, 96. 1-33.
- Lakusta, Laura, Laura Wagner, Kirsten O'Hearn & Barbara Landau. 2007. Conceptual foundations of spatial language: Evidence for a goal bias in infants. *Language Learning and Development*, 3 (3). 179-197.
- Lehmann, Christian. 1983. Latin preverbs and cases. In Pinkster, Harm (ed.), *Latin Linguistics and Linguistic Theory*. 145-161. Amsterdam: John Benjamins.
- Lestrade, Sander. 2010. *The Space of Case*. PhD thesis. Nijmegen: Radboud University.
- Levin, Beth. 1993. *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago: University of Chicago Press.
- Lewandowsky, Wojciech. 2014. *La alternancia locativa en castellano y polaco: un análisis tipológico-construccional*. PhD thesis. Bellaterra: Universitat Autònoma de Barcelona.
- Lewis, Charlton T. & Charles Short. 1879. *A Latin Dictionary: Founded on Andrews' Edition of Freund's Latin Dictionary: Revised, Enlarged, and in Great Part Rewritten by Charlton T. Lewis, Ph.D.* <http://www.perseus.tufts.edu>.
- Lieber, Rochelle. 2010. *Introducing Morphology*. Cambridge: Cambridge University Press.

- Lyons, John. 1977. *Semantics*. Cambridge: Cambridge University Press.
- Magomedbekova, Zagidad. 1971. *Karatinskii iazyk: grammaticheskii analiz, teksty, slovar [The Karata Language: Grammar Analysis, Texts, Glossary]*. Tbilisi: Metsniereba.
- Mulugeta, Seyoum. 2008. *A Grammar of Dime*. PhD thesis. University of Utrecht.
- Nebrija, Antonio de. 1495. *Dictionarium hispanum latinum o Vocabulario español-latino*. Madrid: RAE [facsimile of the first edition, 1989].
- Nichols, Johanna. 1994. Ingush. In Riexs Smeets (ed.), *North East Caucasian Languages, Part 2*, vol. 4 of *The Indigenous Languages of the Caucasus*. Caravan books, Delmar, New York.
- Pantcheva, Marina. 2011. *Decomposing Path: The Nanosyntax of Directional Expressions*. PhD thesis. Tromsø: University of Tromsø.
- Papafragou, Anna, Christine Massey & Lila Gleitman. 2006. When English proposes what Greek presupposes: The cross-linguistic encoding of motion events. *Cognition*, 98, B75-B87.
- Papanastassiou, Georgios. 2011. The preverb apo- in Ancient Greek. In: K. Chatzopoulou, A. Ioannidou, S. Yoon (eds.), *Proceedings of the 9th International Conference on Greek Linguistics, 29-31 October 2009*. 97-111. Chicago, Illinois. [http://www.ling.ohio-state.edu/ICGL/proceedings/10\\_papanastassiou\\_edited\\_97.pdf](http://www.ling.ohio-state.edu/ICGL/proceedings/10_papanastassiou_edited_97.pdf).
- Pashov, Petâr. 1999. *Bŭlgarska Gramatika [A Grammar of Bulgarian]*. Plovdiv: Hermes.
- Perseus Digital Library. University of Tufts. URL: <http://www.perseus.tufts.edu>.
- Plag, Ingo. 1999. *Morphological productivity. Structural constraints in English derivation*. Berlin/New York: Mouton de Gruyter.
- Ramchand, Gillian. 2008. *Verb Meaning and the Lexicon: A First Phase Syntax*. Cambridge University Press.
- Rodríguez Rosique, Susana. 2013. El valor aspectual de los verbos reversativos: Claves pragmáticas para un proceso de verbalización. *Círculo de Lingüística Aplicada a la Comunicación*, 54. 99-129. <http://www.ucm.es/info/circulo/no54/rosique.pdf>
- Scalise, Sergio. 1986. *Generative Morphology*. Dordrecht: Foris Publications.
- Serrano-Dolader, David. 1995. *Las formaciones parasintéticas en español*. Madrid: Arco Libros.

- Starke, Michal. 2009. A short primer to a new approach to language. In Svenonius, Peter et al. (eds.), *Nordlyd 36.1: Special issue on Nanosyntax*. 1-6. [www.ub.uit.no/munin/nordlyd/](http://www.ub.uit.no/munin/nordlyd/).
- Svenonius, Peter. 2004. Spatial P in English (ms.). Tromsø: University of Tromsø.
- Svenonius, Peter. 2007. Adpositions, particles and the arguments they introduce. In Reuland, Eric, Tanmoy Bhattacharya & Giorgos Spathas (eds.), *Argument Structure*. 63-103. Amsterdam & Philadelphia: John Benjamins.
- Svenonius, Peter, Gillian Ramchand, Michal Starke & Tarald Taraldsen (eds.). 2009. *Nordlyd 36.1. Special issue on Nanosyntax*. Tromsø: Septentrio Press.
- Talmy, Leonard. 1975. Semantics and syntax of motion. In Kimbal, John P. (ed.), *Syntax and semantics*, vol. 4. 181-238. New York: Academic Press.
- Talmy, Leonard. 1985. Lexicalization patterns: Semantic structure in lexical forms. In Shopen, Timothy (ed.), *Language Typology and Syntactic Description*, vol. 3: *Grammatical Categories and the Lexicon*. 57-149. Cambridge: Cambridge University Press.
- Talmy, Leonard. 1991. Path to realization: A typology of event conflation. *Linguistic Society (BLS)*, 17. 480-519.
- Talmy, Leonard. 2000. *Toward a Cognitive Semantics*. Cambridge, Mass: MIT Press.
- Torres Martínez, Marta. 2006. Sobre el valor intensivo del prefijo *des-* en la lexicografía académica española. In Campos Souto, Mar & José Ignacio Pérez Pascual (eds.), *El diccionario de la Real Academia Española: ayer y hoy. Anexos de Revista de Lexicografía*. 237-249.
- Vellard, Jahen A. 1967. *Contribución al estudio de la lengua Uru*. Buenos Aires: Universidad de Buenos Aires, Facultad de Filosofía y Letras.