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POSTURE VERBS AND INTERNALLY-CAUSED VERBS IN ROMANCE AND GERMANIC LANGUAGES: causativity, stationary motion, and intransitive-locative alternations

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PhD Thesis

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2019

No hay sustantivos en la conjetural *Ursprache de Tlön*, de la que proceden los idiomas "actuales" y los dialectos: hay verbos impersonales, calificados por sufijos (o prefijos) monosilábicos de valor adverbial. Por ejemplo: no hay palabra que corresponda a la palabra *luna*, pero hay un verbo que sería en español *lunecer* o *lunar*. *Surgió la luna sobre el río* se dice *hlör u fang axaxaxas mlö* o sea en su orden: hacia arriba (*upward*) detrás duradero-fluir luneció. (Xul Solar traduce con brevedad: upa tras perfluyue lunó. *Upward, behind the onstreaming it mooned.*)

Jorge Luis Borges, "Tlön, Uqbar, Orbis Tertius", *Ficciones*.

ACKNOWLEDGEMENTS

As I reach the end of my journey through this winding road, I look back to remember the names of those who offered me their support and friendship.

I would like to express my heartfelt gratitude to my advisor, Jaume Mateu, for his constant support and encouragement during the last five years. His guidance, his vast knowledge of argument structure and cognitive science, his detailed and insightful comments, and his patience with a slow-writing student have been paramount to complete the dissertation. It has been a privilege having him as my advisor.

I would also like to thank María Jesús Fernández Leborans for her kindness. I would not have had a chance of completing my PhD had we not providentially met.

I am grateful to Federico Silvagni, whose help was vital.

My friends, here and there, who always leave their doors open for me to walk in even if I have been absent for too long.

I would finally like to thank my family for their unwavering love and support.

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ABSTRACT

The present dissertation is devoted to the study of cross-linguistic variation with posture verbs and internally-caused verbs in Romance and Germanic languages. Using Ramchand's (2008, 2014, 2018) first phase syntax, I examine a diverse range of constructions in which these verbal roots may appear.

In chapter 1 I present Ramchand's (2008, 2014, 2018) constructivist approach to argument structure and explore how cross-linguistic variation can be dealt with in it. I also consider the difference between structural meaning, pre-linguistic cognitive conceptual content, and encyclopedic meaning.

In chapter 2 I endeavor to show that causativity and path encoding are both relevant parameters to account for cross-linguistic variation in the causative sense of posture verbs in Romance and Germanic languages. I identify intra-linguistic differences in Germanic languages and link them to the mentioned parameters.

In chapter 3, building on the previous chapter's characterization of process posture verbs, I explore intra-linguistic variation in the expression of stationary motion with these verbs. Against Talmy (1991, 2000), I discard the existence of a co-event in the simple position sense of posture verbs and discuss the grammaticalization of process posture verbs into copulas.

In chapter 4 I concentrate on two different types of the intransitive-locative alternation with posture verbs and internally-caused verbs. The fact that process posture verbs in both Romance and Germanic languages appear in this construction confirms the absence of a co-event with posture verbs when they denote stationary motion. Finally, I look into the properties of internally-caused verbs in Spanish and their ability to enter the stative-locative alternation, where the location argument takes on the role of subject of the predication.

In chapter 5 I summarize the main conclusions, present the contributions of the dissertation, and sketch future venues of research.

RESUMEN

La presente tesis se ocupa del estudio de la variación interlingüística con los verbos de postura y los verbos de causación interna en las lenguas romances y germánicas. Tomando como punto de partida el marco teórico de Ramchand (2008, 2014, 2018), se estudian varias construcciones en las que aparecen estas raíces verbales.

En el capítulo 1 se presenta el enfoque constructivista de la estructura argumental propuesto por Ramchand (2008, 2014, 2018) y se considera cómo tratar la variación interlingüística en este marco teórico. Además, se inquiere la diferencia entre el significado estructural, el contenido cognitivo-conceptual separable del lenguaje y el significado enciclopédico.

En el capítulo 2 se trata de mostrar en qué medida la codificación de la causatividad y la trayectoria son parámetros relevantes que tener en cuenta para explicar la variación interlingüística en el significado causativo de los verbos de postura en las lenguas romances y germánicas. Se identifican, además, los factores que influyen en la variación intralingüística en las lenguas germánicas.

En el capítulo 3, una vez asumida la caracterización aspectual y estructural de los verbos procesuales de postura del capítulo anterior, se explora la variación intralingüística en la expresión de movimiento estático con estos verbos. En oposición a Talmy (1991, 2000), se descarta que exista un co-evento en el significado estático de posición de los verbos de postura y se discute el proceso de gramaticalización por el que los verbos procesuales de postura se convierten en cópulas.

En el capítulo 4, se investigan dos tipos diferentes de alternancia locativa intransitiva con los verbos de postura y los verbos de causación interna. El hecho de que los verbos procesuales de postura aparezcan en esta construcción tanto en las lenguas romances como en las lenguas germánicas corrobora la asunción previa de que los verbos de postura no incluyen un co-evento en su significado estático de posición. Por último, se estudian las propiedades de los verbos de causación interna en español y su capacidad de aparecer en la alternancia locativa intransitiva, donde el argumento locativo asume el papel de sujeto de la predicación.

En el capítulo 5, se presenta un resumen de las conclusiones principales, se enumeran las contribuciones de la tesis y se discuten futuros temas de investigación.

CHAPTER ONE. Introduction

INTRODUCTION

The purpose of this chapter is to present the research goal and scope of the dissertation and introduce the theoretical framework under which the proposal is formulated. The first section introduces posture verbs and the set of internally-caused verbs in Romance and Germanic languages examined in the dissertation. The following section focuses on Ramchand's (2008, 2014, 2018) first phase syntax, a theoretical framework that takes a generative-constructivist[1] approach to argument structure, which I adopt making some minor modifications about the aspectual make-up of the subeventive heads to be able to account for the seemingly unruly behavior of the intransitive verbs that are the focus of the dissertation. Afterwards, I revise recent approaches to argument structure and their account of cross-linguistic variation, discuss how cross-linguistic variation fits in Ramchand's framework, and address questions pertaining to the status of Talmy's co-event within the Ramchandian first phase syntax. Finally, the fifth section concludes the introduction by briefly sketching the content of the subsequent chapters of the dissertation.

1. GOALS AND SCOPE OF THE DISSERTATION

The goal of this dissertation is to study cross-linguistic variation through posture verbs and internally-caused verbs in Romance and Germanic languages. In particular I address how their first phase syntax is structured in causative configurations, stationary motion statements, and intransitive-locative alternations.

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[1] Ramchand (2008) uses the label *generative-constructivist* to refer to approaches such as Borer (2005) or Marantz (2013), which are elsewhere denominated *neo-constructionist* approaches, and reserves the label *constructionist* for theories of construction grammar such as Goldberg (1995).

In Ramchand's first phase syntax (2008, 2014, 2018), event structure and argument structure are mutually linked as the verbal phrase is segmented into three main phrases corresponding to the initiation, process, and result subevents of a macro-event. Each phrase has available a specifier position to lodge the entities that serve as participants of the subevents, except for the initiation phrase, whose participant appears as the specifier of the EvtP, the head that introduces the subject of the predication (cf. Ramchand 2014). This information is codified in the type-A meaning of roots, which instantiates structural meaning relevant to syntax and is used to create the articulated phrase structure. By contrast, type-B meaning encapsulates lexical conceptual meaning with no effect over syntax but ultimately relevant to the mind module as it spreads all over the syntactic structure, once the derivation is sent off to the conceptual-intentional interface. The particular challenges these verbs pose stem from the type-A meaning codified in their lexical entries, which I argue is subject to variation from a cross-linguistic and intra-linguistic viewpoint. Specifically, the questions that arise regarding these sets of verbs are related to their argument structure and event structure.

Posture verbs can be found in both causative and non-causative configurations across Romance and Germanic languages but there exist non-trivial differences among these languages as to how these configurations are obtained. According to Levin & Rappaport Hovav (1995), it is possible to identify four meanings for posture verbs: a causative sense, an assume position sense, a simple position sense, and a maintain position sense. These uses are exemplified in (1) through (3) for English and Spanish. The causative sense (1) selects two arguments and describes a caused change of state brought about by an agent, or causer, on a theme. The assume position sense (2) describes an event of change of posture and necessarily involves a single animate entity to bring about the event. The simple position sense (3) describes a state of location of an entity. Finally, the maintain position sense (3a) is identical in form to the simple position sense, but it additionally implies that there is a deliberate "effort" in maintaining the state.

(1) *Causative sense*

a. I sat the child *(on the chair)

b. I sat the child down (on the chair)

c. Yo senté al niño (en la silla) (Spanish)

I sat to-the child on the chair

(2) *Assume position sense*

a. The child sat *(on the chair)

b. The child sat down (on the chair)

c. El niño se sentó (en la silla) (Spanish)

the child REF sat on the chair

(3) *Simple position sense*

a. John sits on the floor (for an hour)

b. John is sitting

c. *El niño sienta en el suelo (Spanish)

the child sits on the floor

As can be observed, posture verbs in English and Spanish display differences regarding the optionality of the prepositional complements specifying the endpoint of the path of motion (1-2) or the capability to encode stationary motion (3), as well as the need for anti-causative morphology in the assume position sense in Spanish. In the second chapter of the dissertation, two patterns are identified: posture verbs may encode a complex first phase syntax consisting of initiation, process, and result phrases or a simple one comprising a single process phrase. After the examination of the lexical inventory of posture verbs in Romance and Germanic languages, I conclude that both patterns are available in Romance and Germanic languages, except for English, whose posture verbs mainly follow the simple pattern and simply contain a process phrase. In this respect, it also becomes important to consider parameters such as causativity and path encoding, which will be shown to constitute an important source of variation (cf. Haspelmath 1993, Alexiadou et al. 2006, 2015, Talmy 2000, Mateu 2002, Acedo Matellán 2010, 2016, Real Puigdollers 2013, among others). With Ramchand (2008) I assume a causativization approach for English, which presupposes the existence of a

null *init* head that is merged on top of the first phase syntax to introduce the initiational subevent. Another important source of divergence is the encoding of path information. Spanish solely allows the encoding of path information in the verb root, which is identified here with the result phrase of the event, in line with Talmy's (1991, 2000) verb-framed characterization of this language, which conflates motion and path information. By contrast, English can take an additional element such as an adverb or prepositional phrase to codify the path information of the event. This is consistent with Talmy's (1991, 2000) characterization of Germanic languages as satellite-framed, which conflate motion and a co-event of manner or cause.

On the other hand, event structure notions such as dynamicity and stativity will become important to understand how these verb roots may instantiate both causative events and stationary motion exclusively in English. Following Silvagni (2017), I surmise that dynamicity is a by-product of events rather than their defining characteristic as it results from the presence of a spatio-temporal unit, or stage, along with the existence of an initiator, whose properties endow it with the capability to bring about the event. These notions are discussed in chapter 3, where I make the necessary modifications to the denotations of Ramchand's event phrases, since for her dynamicity is an integral part of what defines an event and has its locus in the process phrase. Instead, I propose that the process phrase simply contains a spatio-temporal unit in its denotation and, hence, dynamicity is obtained either by means of an initiation phrase, which introduces an entity able to initiate the event, or as the result of two contiguous subevents, which are consequently interpreted as process and result. Therefore, events are not defined by the existence of dynamicity but rather by the presence of a spatio-temporal unit in their denotations. This conception of what constitutes an event will help account for the abovementioned contrasts in the expression of stationary motion with posture verbs in Romance and Germanic languages, as well as understand the event structure of internally-caused verbs in the stative-locative alternation in Spanish. Unequivocally, the different type-A meaning codified in the lexical entries of each language's posture verb will determine their capability to encode stationary motion. Another important characteristic of posture verbs is the possibility of having a light-version of the full-fledged lexical form, which might co-exist with the latter. These uses are found in both Romance and Germanic languages that have non-dynamic process posture verbs. In chapter 3 I discuss how these uses stem from the absence of type-B meaning in the first

phase syntax of the verb and look at the copularization process whereby 'light' versions are obtained.

(4) a. Jan zit op de bank (Dutch)
Jan sit.PRES.3.SG on def sofa
'Jan is sitting on the sofa'
b. Jan zit in Frankrijk
Jan sit.PRES.3.SG in France
'Jan is in France'

(Hengeveld 1992:238, (3-4))

In light of the properties ascertained for posture verbs cross-linguistically, I cast doubt on Talmy's (2000) co-event characterization of these verbs in Germanic languages when they denote stationary motion, which is argued to be unfitting as these verbs do not instantiate two synchronous subevents, but rather a single non-dynamic process event, which may be further characterized by a rhematic prepositional phrase stablishing a predicational relation between the entity located and its location. The impossibility of a co-event analysis is confirmed by the inability of English posture verbs with the adjective *full*, and its equivalent forms in other Germanic languages, to denote a resultative predication in the location as subject order (5), or *Location-Subject* order. Furthermore, Spanish non-dynamic process posture verbs are shown to allow the same predicational structure (6) with the equivalent adjective to *full*, which confirms that the availability of this alternation is not limited to satellite-framed languages and helps discard a co-event analysis for these verbs.

(5) a. de slingers hangen in de zaal (Dutch)
the garlands hang in the room
b. de zaal hang vol met slingers
the room hangs full with garlands

(Mulder 1992:168, (3))

(6) El paseo […] yace repleto de casitas de estilo vasco[2] (Spanish)
the promenade lies full of little-houses of style basque

Posture verbs in the *Location-Subject* word order are argued to share similarities with internally-caused verbs (7), a class of intransitive verbs characterized by their atelic and non-agentive properties, which partake in the so-called stative-locative alternation and also have a *Location-Subject* order. After thoroughly examining the properties of Spanish internally-caused verbs in chapter 4, I discard that they behave as stative in the alternation and put forward that the properties displayed in the *Location-Subject* order follow from, first, their default first phase syntax as a consequence of their atelic dynamic unergative nature, and, second, the properties of the prepositional phrase introducing the locatum argument, which is argued to possess causative semantics.

(7) a. Las abejas abundan en el jardín (Spanish)
the bees swarm in the garden
b. El jardín abunda de abejas
the garden swarms of bees

The rest of the present chapter is structured as follows. Section 2 introduces Ramchand's first phase syntax, which is used as the theoretical framework of the dissertation, comparing it to other constructivist frameworks. In section 3, I draw attention to cross-linguistic facts that will prove to be relevant to the discussion in the chapters that follow. I introduce Talmy's (1991, 2000) distinction between verb-framed and satellite-framed languages and revise how this typology has been implemented in argument structure. The section concludes with a discussion of Ramchand's (2008) brief account of cross-linguistic variation in resultative constructions, which I revise and expand taking into account recent proposals dealing with resultative constructions cross-linguistically. Section 4 deepens into the distinction between type-A and type-B meaning and considers the place of Talmy's co-event in Ramchand's first phase syntax. The last section concludes with a brief summary of the subsequent chapters of the dissertation.

[2] Example retrieved from https://www.elcorreo.com/.

2. *THE SYNTAX OF ARGUMENT STRUCTURE*

Argument structure, as a construct, conveys meaning that is independent of verbs and that, to a certain extent, pertains to event structure and event participants. There are several trends and proposals, which differ in their theoretical assumptions and the relevance given to cross-linguistic variation in their accounts. Among the current neo-constructionist approaches to argument structure developed within the Generative Grammar tradition, I briefly review Marantz (2013) and Mateu and Acedo-Matellán's approach to argument structure to gain a better insight into how Ramchand's first phase syntax works and compares to these frameworks. Under these approaches, syntax builds structure using a finite set of functional elements, and meaning is formed compositionally from that structure and the conceptual content contributed by roots. Finally, I present Ramchand's (2008, 2014, 2018) first phase syntax, whose framework is implemented in this dissertation to examine the range of verbs and alternations discussed in the previous section.

2.1. A radical neo-contructionist view of argument structure: Marantz (2013)

Marantz (2013) follows the current trend of joining together the Minimalist Program's assumption that syntax is the only generative engine of structure and Distributed Morphology's assumption that Vocabulary Items are inserted late in the derivation.[3]

[3] Distributed Morphology (Halle & Marantz 1993, 1994) is a framework based on the Chomskyan inverted Y model of grammar. It adopts the Minimalist Program's assumption that syntax is the only generative component of grammar (Chomsky 1995). From this premise it follows that all word formation is syntactic. Thus, the existence of a (pure) lexicon, i.e. the place where items used by the computational system are created and stored, is dispensable. In fact, Distributed Morphology propounds that the "lexicon" is distributed into three different components, or lists (i).

(i) a. List 1: It contains roots and abstract morphemes
b. List 2: It contains Vocabulary items, i.e. the rules for pronouncing terminal nodes
c. List 3: It contains the semantic information for interpreting terminal nodes

The lists are accessed at different stages in the derivation. First, a subset of the roots and abstract morphemes contained in List 1 are selected. These items undergo the syntactic operations of merge, copy, and agree, as required, to deliver a linguistic expression that will later be handled by the "Spell-Out" operation, which sends the relevant outputs to the levels of Logical Form and Phonetic Form. Some morphological adjustments can take place on the PF branch prompted by language-specific requirements to meet well-formedness conditions through the operations of Impoverishment, Fusion, Fission, insertion of dissociated features or morphemes, post-syntactic movement, etc. (see Halle & Marantz 1993, 1994,

Under this view, argument structure is not projected from the lexicon but generated in the syntax via merge, and later interpreted semantically in the LF and phonologically in the PF. Thus, the syntactic structure creates meaning in which roots are merged as event modifiers. For example, a verb such as *open* is not associated with a meaning of change of state, but rather this meaning arises from the syntactic structure in which the root is inserted (2013:155). The verbal phrase is generated via a v head, which introduces an event variable, a state or an event, and transforms the structure into a verbal phrase. The newly constituted vP may take as a complement a DP or a small-clause (8). If the v head takes a DP, the verbal phrase will be interpreted as a change of state, which is undergone by the DP object. By contrast, if the v head takes a DP embedded in a small-clause, the DP is also surmised to undergo a change of state of the nature specified in the complement of the small-clause, which might be a PP or some other predicational element such as a root.

(8) a. [$_{vP}$ v [DP]]
b. [$_{vP}$ v [[DP] [PP]]]

Oltra-Massuet et al. (2017) highlight the use of the prefix *re-* to separate unergative structures from transitive structures with a DP or small-clause complement (8). The structure in (9a-b) contains no complement as shown by the unacceptability of attaching the prefix *re-* to the verb, and confirms the unergative status of the structure in which the verb root is merged as a modifier. By contrast, the presence of a DP object such as the one in (9c) allows the presence of the prefix as confirmed by the acceptability of the

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Halle 1997, Embick & Noyer 2001, 2007). These operations are subject to strict locality conditions (Halle & Marantz 1993, 1994). Once morphological operations have been applied, Vocabulary items in List 2 are accessed to compete for insertion into terminal nodes so that the latter are supplied with phonological features. Vocabulary insertion takes place according to the *Subset Principle* (ii), which states that the most highly specified item is chosen.

(ii) *Subset Principle*
"The phonological exponent of a Vocabulary item is inserted into a morpheme in the terminal string if the item matches all or a subset of the grammatical features specified in the terminal morpheme. Insertion does not take place if the Vocabulary item contains features not present in the morpheme. Where several Vocabulary items meet the conditions for insertion, the item matching the greatest number of features specified in the terminal morpheme must be chosen."
(Halle 1997:128)

Finally, on the LF branch of the derivation, List 3 is accessed to provide abstract morphemes and roots with semantic interpretation.

sequence. On the other hand, the structures in (10) show that a verb such as *put* (10a) requires the presence of a small-clause in order to generate an acceptable sequence, which is further confirmed by the unacceptability of the sequence if the prefix *re-* is attached to the verb root (10b). The example in (10c) suggests that a verb such as *shelve* does not require a small-clause, but rather its single argument is merged as complement of v (cf. Hale & Keyser 2002, Mateu 2002, Acedo Matellán 2010, 2016, among others, for a different view of the argument structure of these verbs).

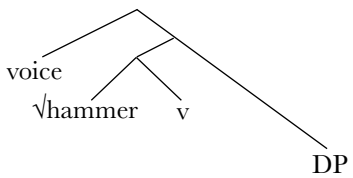
(9) a. John danced
b. *John re-danced
c. John re-danced a dance first performed by his distant ancestors

(10) a. John put the display *(on the table)
b. *John re-put the display on the table
c. John re-shelved the books

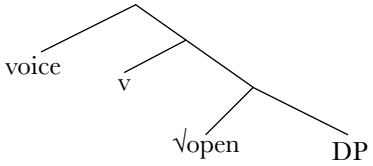
(Oltra-Massuet et al. 2017:6, (19-20))

Returning to the role played by the root, these elements are integrated in the argument structure as adjuncts of v, a position from which they are able to contribute any relevant semantic information or to impose any restrictions that might apply. Specifically, Marantz (2013: 157) contends that roots may modify either the manner of an activity event or the state of a change of state event. Based on the previous structures, Marantz puts forward the following merge positions for roots: as modifiers of v (11a) or as modifiers of the DP (11b). Note that, following Kratzer (1996), Pylkkänen (2008), among others, Marantz assumes that the external argument of the predicate is introduced by a head independent from v, that is, VoiceP.

(11) a. hammer the nail



b. open the door



(Marantz 2013:158, (4))

While Marantz acknowledges that to some extent roots determine the phrase structure in which they are merged, whether it is unergative, unaccusative, or transitive, he concludes that their role is solely as post-syntactic modifiers of the structural semantics, which is generated by syntax, in the Logical Form or some other interface between syntax and semantics. Thus, verbs are not unergative, unaccusative, or transitive *per se*, but rather roots may be associated to these syntactic configurations (12).

(12) "The meanings of roots involve world knowledge to a large extent, and the flexibility of roots to be used in different syntactic structures is governed somewhat by our experience and our imaginations."

(Marantz 2013:159)

Similarly, Marantz does not address the argument structure of stative predicates and takes for granted that a structure similar to the ones proposed above for other types of eventualities might also apply. As will be discussed in section 2.3, Ramchand's (2008) first phase syntax proposes a different approach to this matter as her framework establishes a syntactic correlate between events types and phrase structure, and makes provisions for different event types. Essentially, these frameworks will be shown to differ in the amount of "semantics" that the syntactic structure can convey. While the Ramchandian framework establishes a clear correlate between argument structure and event structure by assuming that the verbal phrase may consist of up to three heads instantiating different subevents, Marantz's approach supports a view of argument structure where semantic interpretation is unaffected by the syntactic derivation, as the structure is interpreted post-syntactically in the conceptual interface. An intermediate stance is taken in the framework developed by Mateu (2002), Acedo Matellán (2010, 2016), Mateu & Acedo Matellán (2012), and Acedo Matellán & Mateu (2014), which is discussed in the next section.

2.2. A relational approach to argument structure: Mateu (2002), Acedo Matellán (2010), and Acedo Matellán & Mateu (2014)

Mateu (2002) and Acedo Matellán (2010) put forth a syntactic theory of argument structure, establishing a distinction between relational and non-relational elements, where roots *qua* non-relational elements provide encyclopedic content and functional heads *qua* relational elements are used to build the structure. In both cases, merge is applied to build the syntactic argument structure. The framework chosen in Acedo-Matellán (2010) is Distributed Morphology,[4] who assumes its hypotheses about syntax as the only generative engine, Late Insertion, and post-syntactic PF-branch operations. As for the semantics, Mateu and Acedo Matellán also subscribe to the view that semantics is read off the syntactic structure; however, their approach presumes a higher amount of semantics beyond what is assumed by Marantz (2013). Specifically, different configurations receive different semantic interpretations hinging upon the positions assumed by relational and non-relational elements. Thus, when a DP is merged in Spec,v, that is, as an external argument, the event is interpreted as externally caused by some entity (13), whereas if no element is merged in this position, the event is interpreted as non-externally caused (14). On the other hand, if v takes as its complement a root or DP, the event is interpreted as a creation or consumption event, depending on the properties of the non-relational element (13a, b,). There might also be atelic transitive events if the non-relational element is merged in Compl,Place (13c).[5] Change of state and change of location events require that a PathP is merged in Compl,v (cf. (13d-e)). Note that, in contrast to Marantz (2013), Mateu and Acedo Matellán consider that a verb such as *shelve* contains a small-clause as complement of the v head in accordance with the analysis proposed by Hale & Keyser (2002).

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[4] See footnote 3.

[5] Acedo Matellán (2010) assumes that prepositions consist of a non-relational element, that is, a root, adjoined to the functional Place head. Thus, in his view, the difference between *in the box* and *on the box* is conceptual rather than grammatical as both sequences are built using the same structure (i).

(i) a. [$_{\text{PlaceP}}$ the cat [$_{\text{Place'}}$ Place $\sqrt{\text{IN}}$ [$_{\text{DP}}$ the box]]]
b. [$_{\text{PlaceP}}$ the cat [$_{\text{Place'}}$ Place $\sqrt{\text{ON}}$ [$_{\text{DP}}$ the box]]]

While a single pP is interpreted as Place and assumed to establish a predicative relation between its specifier and complement, a double pP is interpreted as Path, which takes as complement a PlaceP.

(13) *Unergative and transitive structures*

a. Sue danced: [$_{vP}$ [$_{DP}$ Sue] [$_{v'}$ v √DANCE]]

b. Sue did a dance: [$_{vP}$ [$_{DP}$ Sue] [$_{v'}$ v [$_{DP}$ a dance]]

c. She pushed the car: [$_{vP}$ [$_{DP}$ Sue] [$_{v'}$ v [$_{PlaceP}$ [$_{DP}$ the car] [$_{Place'}$ Place √PUSH]]]]

d. Sue put the books on the shelf: [$_{vP}$ [$_{DP}$ Sue] [$_{v'}$ v (=put) [$_{PathP}$ [$_{DP}$ the books] [$_{Path'}$ Path [$_{PlaceP}$ [~~$_{DP}$ the books~~] [$_{Place'}$ [$_{Place}$ Place √ON] [$_{DP}$ the shelf]]]]]]

e. Sue shelved the books: [$_{vP}$ [$_{DP}$ Sue] [$_{v'}$ v [$_{PathP}$ [$_{DP}$ the books] [$_{Path'}$ Path [~~$_{DP}$ the books~~] [$_{PlaceP}$ Place √SHELVE]]]]]

Unaccusative structures, that is, events that are non-externally caused, allow several configurations. If v takes a PlaceP as its complement, the event is interpreted as stative or atelic (14a). By contrast, when a PathP is merged as Comp,v, the event is interpreted as an unaccusative change of state or location (cf. (14c-d)). Acedo Matellán (2010:61) argues for the possibility that copular constructions may be reducible to a PlaceP merged directly with T, without v mediating between them (14b). Then, it follows that copular *be* in English may be the phonological instantiation of T.

(14) *Unaccusative structures*

a. Dinosaurs existed: [$_{vP}$ v [$_{PlaceP}$ [$_{DP}$ dinosaurs] [$_{Place'}$ Place √EXIST]]]

b. Sue is in Barcelona: [$_{PlaceP}$ [$_{DP}$ Sue] [$_{Place'}$ [$_{Place}$ Place √IN] [$_{DP}$ Barcelona]]]

c. The sky cleared: [$_{vP}$ v [$_{PathP}$ [$_{DP}$ the sky] [$_{Path'}$ Path [$_{PlaceP}$ [~~$_{DP}$ the sky~~] [$_{Place'}$ Place √CLEAR]]]]

d. Sue went to Barcelona: [$_{vP}$ v (=go) [$_{PathP}$ [$_{DP}$ Sue] [$_{Path'}$ Path (=to) [$_{PlaceP}$ [~~$_{DP}$ Sue~~] [$_{Place'}$ Place [$_{DP}$ Barcelona]]]]]]

In following work, Mateu & Acedo Matellán (2012) and Acedo Matellán & Mateu (2014) explore the manner/result complementarity, that is, the impossibility that a single verb can simultaneously lexicalize manner and result, to account for cross-linguistic variation in resultative constructions (see Rappaport-Hovav & Levin 2010, Beavers & Koontz-Garboden 2012, Ramchand 2014, among others). The complementarity is argued to follow from morphophonological reasons, meaning that "a single null head, in this case *v,* may be specified with only one phonological matrix. Since both incorporation and conflation are aimed at filling up this null head *v,* they

cannot apply simultaneously" (Mateu & Acedo Matellán 2012). Furthermore, the authors pursue that a root's interpretation derives from its point of merge in the argument structure. The examples below show the different interpretations a root can have depending on the place where it is merged: the manner interpretation is obtained in (15a) and (16a) by merging the root as an adjunct to *v*; if the root occurs as complement in a small-clause, a result interpretation is obtained instead as in (15b) and (16b); finally, roots can also be interpreted as incremental themes if they are merged in the complement position of *v* (16c).

(15) a. [$_{vP}$ [$_{v}$ √BREAK v] [$_{SC}$ [$_{DP}$ he] [into the room]]] (He broke into the room)
b. [$_{vP}$ v [$_{SC}$ [$_{DP}$ the glass] [√BREAK]]] (The glass broke)

(16) a. [$_{vP}$ [$_{v}$ √CLIMB v] [$_{SC}$ Joe out of the tunnel]] (Joe climbed out of the tunnel)
b. [$_{vP}$ v [$_{SC}$ [$_{DP}$ the prices] [√CLIMB]] (The prices climbed)
c. [$_{vP}$ Joe [$_{v'}$ v √CLIMB]] (Joe climbed)

(Acedo Matellán & Mateu 2012)

This approach contrasts with Marantz's (2013) view of roots as adjuncts of the verbal head or as predicational elements that can denote a state in change of state predicates. In this regard, Mateu and Acedo Matellán propose a more constrained view of the semantics of argument structure, as the structural assumptions about the location of roots in the structure limit in specific ways the semantic interpretation of the derivation in the conceptual interface. While Marantz does not make any claims about cross-linguistic variation, Mateu and Acedo Matellán make the claim that a language's ability to conflate a root as a manner co-event in resultative structures is limited to satellite-framed languages, impeding their existence in Romance languages. In section 3, I thoroughly discuss resultative constructions and address how they can be analyzed within Ramchand's first phase syntax. Importantly, the approach taken to account for the properties of this construction will significantly differ from the one taken by Mateu and Acedo Matellán, as in her framework, roots can only materialize heads and cannot appear as adjuncts or complements of heads.

2.3. Ramchand's first phase syntax

Ramchand's (2008, 2014, 2018) first phase syntax is a syntactically represented event-structure decomposition framework, in which the verbal phrase is divided into several projections. The number of projections is determined by the category labels included in the lexical entry of the verb root, which is inserted into as many terminal nodes as category labels are specified and, as a result, a single verb root may be linked to several positions in the structure. Importantly, within this framework, terminal nodes may not necessarily be realized by a single verb root, but rather a lexical item may either identify a terminal node or a chunk of structure in line with Nanosyntax's premises (see Starke 2009, Caha 2019, among others).[6] On the other hand, category labels correspond to subeventive projections identifying the subevents of the macro-event, that is, a causative subevent, a process subevent, and a result-state subevent, respectively (17). Thus, every head contains semantic information that is relevant to the interpretation of the

[6] Nanosyntax's main premise is that lexical items do not necessarily establish a one to one correspondence with functional heads. Terminal nodes can be submorphemic allowing for the possibility that a single morpheme may expand over several terminal nodes in the syntactic structure. Consequently, the lexicon can store *subtrees*, that is, "syntactic trees, paired with phonological and conceptual information" (Starke 2009:2). In this regard, Ramchand's (2008) framework allows that a single verb root may be used to realize every functional node in the verbal phrase if its lexical entry specifies the category labels init, proc, and res. Nanosyntax presupposes that a lexical entry consists of both phonological form, type-A information, and type-B information. This contrasts with Distributed Morphology's assumption that root information is distributed into three different lists, which are accessed at different moments during the syntactic derivation. Argument structure is built in the syntax, whose basic configuration is assumed to be universal across languages. As a consequence, cross-linguistic variation is argued to stem from a language's lexical items and the category labels specified in their lexical entries. According to Starke, syntax occurs before the lexicon, which only becomes relevant during "Spell-out", when the argument structure generated by the syntactic component is combined with a language's available lexical items, that is, differently sized chunks of structure as small as a single terminal node or as large as a subtree. To determine which lexical items are inserted two principles are proposed: the *Superset Principle* (i) and the *Elsewhere Principle* (ii).

(i) *Superset Principle*
"A lexically stored tree matches a syntactic node iff the lexically stored tree contains the syntactic node."

(Starke 2009:3, (1))

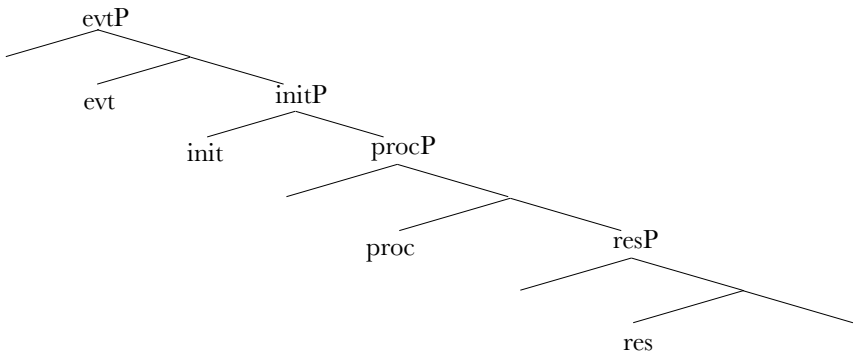
(ii) *Elsewhere Principle*
"At each cycle, if several lexical items match the root node, the candidate with least unused nodes wins."

(Starke 2009:4, (3))

The derivation is later sent to the interfaces, where it is interpreted by the phonological and conceptual systems. Thus, Nanosyntax also subscribes to late insertion and the application of merge and move before "Spell-out". However, in contrast to Distributed Morphology there are neither bundles of features nor post-syntactic operations applying in PF. See Caha (2019) for a comparison of how Distributed Morphology and Nanosyntax deal with different phenomena if no post-syntactic operations are assumed to apply after "Spell-out".

predicate.

(17)



As other theories of argument structure, Ramchand's first phase syntax presumes the introduction of an event variable along with the verbal head. The event variable may consist of several subevents, whether states or processes, which together form a macro-event via the 'leads to' relation (18).[7]

(18) *Event Composition Rule*

e = e1⟶ e2 : e consists of two subevents, e1, e2 such that e1 causally implicates e2

(Ramchand 2008:44, (5))

In Ramchand's framework, a process denotes an eventuality with internal change unlike states, which lack internal change. Only procP is assumed to contain a process subevent, whereas initP and resP instantiate states (19).

(19) a. State (e): e is a state

b. Process (e): e is an eventuality that contains internal change

(Ramchand 2008:44, (6))

The interpretation of the state subevent is contingent on the position where it is merged, thus, the way of composing the argument structure is syntactically determined.

[7] This view of argument structure contrasts with Hale & Keyser's (2002:224-225) syntactic approach, which propounds that event structure is orthogonal to argument structure, operating independently as different components of grammar.

Ramchand proposes two rules to determine its interpretation: if the state precedes the process subevent, then it will be interpreted as an initiation subevent (20); in contrast, if it follows the process subevent, it will be taken to instantiate a result subevent (21).

(20) IF $\exists e_1, e_2$ [State(e_1) & Process(e_2) & $e_1 \longrightarrow e_2$] , then by definition Initiation (e_1)

(21) IF $\exists e_1, e_2$ [State(e_1) & Process(e_2) & $e_2 \longrightarrow e_1$] , then by definition Result (e_1)

(Ramchand 2008:44, (7-8))

This notwithstanding, in chapter 3 I will assume Silvagni's (2017) redefinition of the notion of event in terms of the presence of a spatio-temporal unit, or stage, and discard the existence of dynamicity as a necessary property of events. This conception allows the existence of both non-dynamic events and dynamic events (22a). States are then treated as properties of an entity (22b), to which they apply regardless of spatio-temporal notions.

(22) a. Events:

i. Non-dynamic events: *sit, lie, be ill, be tired, hang, smell,* etc.

ii. Dynamic events: *wait, sleep, run, write, work build, paint, clean, eat, sing*, etc.

b. States: *love, know, be yellow, be intelligent,* etc.

In this way, it will be possible to account for the particular aspectual properties of process posture verbs and internally-caused verbs, which will be argued to contain a spatio-temporal unit and behave as canonical events, thus rejecting the existence of stativity in their denotations. As a consequence, it will be necessary to modify the denotation of process as a subevent containing only a spatio-temporal unit, which in the present terms constitutes an event. A pertinent distinction between initP and resP will be established according to which only the former denotes a proper state of being the cause for the initiation of an event, that is, a process, whereas the latter will be held as an event, which contains a spatio-temporal unit. Under these assumptions, dynamicity will result from the concatenation of at least (i) an initiation and a process head, or (ii) the combination of the process head with a scalar head, namely, a result phrase or a path phrase. Note that the changes introduced do not require the

modification of Ramchand's event composition rules. The interpretation of two subevents in immediate vicinity will then follow from the previously stated rules, which resolve that (i) a state subevent appearing before an event, or process head, is by definition an initiation subevent (23) and (ii) two consecutive events will be interpreted as a process and a result subevent (24), each in order. See chapter 3 of this dissertation for further discussion on the redefinition of events as an eventuality with a spatio-temporal stage, for which dynamicity is a by-product, and states as properties of entities regardless of spatio-temporal notions.

(23) IF $\exists e_1, e_2$ [State(e_1) & Event(e_2) & $e_1 \longrightarrow e_2$] , then by definition Initiation (e_1)

(24) IF $\exists e_1, e_2$ [Event(e_1) & Event(e_2) & $e_2 \longrightarrow e_1$] , then by definition Result (e_1)

The theory also accounts for the possibility of having event participants as expressed by NPs, DPs, PPs, etc., and how they contribute to the composition and interpretation of the event. These elements may occupy the specifier or complement positions of the initiation, process, and result heads, thereby determining the interpretation of the entities as participants of the subevents. A predication relation is established between heads and their specifiers. A DP appearing in the specifier position of a result head will be interpreted as the resultee of the macro-event, while if it appears in the specifier position of process, it will be interpreted as the undergoer. The same reasoning is followed for the interpretation of DPs in the specifier position of the initiation head in Ramchand (2008). This notwithstanding, following Harley (2013), Ramchand (2018) argues for the existence of a functional head evtP, hierarchically higher than initP, which merges with the resulting first phase syntax and whose specifier lodges the external argument of the predicate. The entity occupying the specifier position of this head may take up this position via either external merge or internal merge if that entity raises from an inferior specifier position in the structure. EvtP closes up the first phase syntax and deploys its content to denote a property of events (see Ramchand 2018 for further discussion). Importantly, evtP is independent of the init head, which introduces the causative semantics in the first phase syntax. The presence of the causative head legitimizes the introduction of an initiator in the external argument position, that is, an entity whose inherent properties allow it to generate the event regardless of

intentionality. The subevent introduced by the initiation head is characterized as a state, namely, an eventuality without internal change. The denotation corresponding to each subeventive head along with the instructions to interpret each DP in the corresponding specifier position, regardless of the verb, is made clear below (25-27).

(25) $[\![\text{res}]\!]=\lambda P\lambda x\lambda e\ [P(e) \& \text{res}'(e) \& \text{Event}(e) \& \text{Subject}(x,e)]$

(26) $[\![\text{proc}]\!]=\lambda P\lambda x\lambda e\ \exists e_1, e_2\ [P(e_2) \& \text{proc}'(e_1) \& \text{Event}(e_1) \& e=(e_1 \longrightarrow e_2) \& \text{Subject}(x,e_1)]$

(27) $[\![\text{init}]\!]=\lambda P\lambda x\lambda e\ \exists e_1, e_2\ [P(e_2) \& \text{init}'(e_1) \& \text{State}(e_1) \& e=(e_1 \longrightarrow e_2) \& \text{Subject}(x,e_1)]$

The combination of the different heads gives as a result different event types, which correspond to the ones traditionally identified in the lexical aspect literature (cf. Vendler 1957, Comrie 1976, Mourelatos 1978, Bach 1986, Bertinetto 1986, Parsons 1990, Mittwoch 1991, Pustejovsky 1991, Smith 1991, Rothstein 2004, among others).

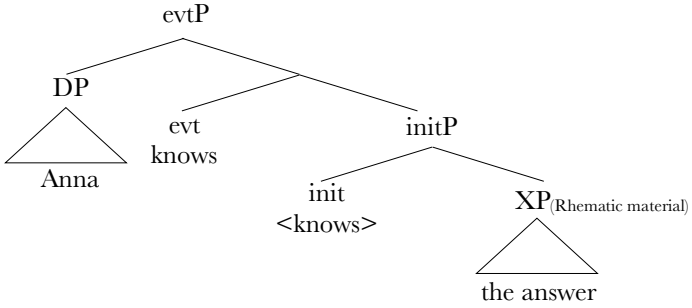
Starting with the initiation head, its single appearance in the first phrase syntax introduces a state subevent as those instantiated by verbs such as *love*, *know*, or *fear*, which simply ascribe a property to an entity (28). States may take as complement a rhematic element such as a DP, NP, or PP and, in that case, the init head will serve to mediate a predication relation between a figure and a ground. In spite of the fact that there is no process event that can be initiated by the DP in Spec,evtP, the DP entity is still interpreted as the initiator of the macro-event, which in this case amounts to having the property to hold the state.

(28) *States*

a. Anna knows the answer

b. [[know]] = $< \text{know}, <\text{init}>, \lambda e \lambda e_{\text{init}}[e=e_{\text{init}} \wedge \text{know}(e_{\text{init}})] >$

c.



The conception of state adopted in this dissertation relies on Silvagni's (2017) view, according to which states are simply properties predicated of an entity independent of spatio-temporal notions, which in his terms, correspond to a stage, or spatio-temporal unit. This definition corresponds seamlessly with Ramchand's initiation states, discussed above. By definition, states are non-dynamic as dynamicity only applies to events, that is, eventualities with a spatio-temporal unit.

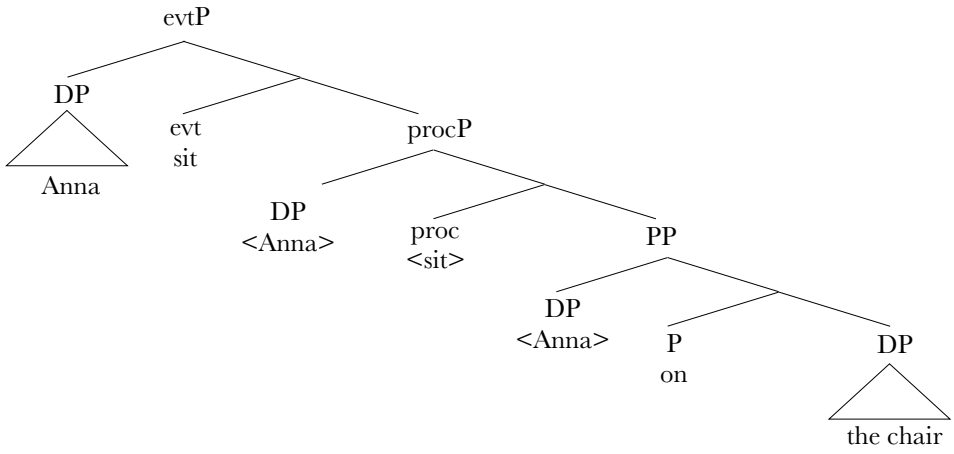
The process head may as well appear on its own to denote a non-dynamic event, that is, a property holding of a spatio-temporal unit. This type of event is instantiated by verbs such as *sit*, *stand*, and *lie* in their simple position sense, where the subject entity plays the role of an undergoer (29). In addition, I will hold that they also contain a rhematic PP stablishing a predicational relation between the figure and the ground.

(29) *Processes*

a. Anna sits on the chair

b. [[sit]] = < sit,<proc>,λeλe$_{proc}$[e=e$_{proc}$ ∧ sit(e$_{proc}$)] >

c.



This type of eventuality does not imply dynamicity, that is, a succession of stages triggered by the action of an initiator. The lack of dynamicity and the seeming absence of a happening has led to the classification of these verbs as states rather than events in the literature on lexical aspect. Nevertheless, these verbs have been shown to deviate from the proper behavior of states as detailed in Dowty (1979), Maienborn (2005), among others, who have shown that their properties are parallel to that of activities. The contradicting behavior of these verbs can be solved if we assume with Silvagni

(2017) that these verbs instantiate non-dynamic events. See chapters 2 and 3 for an extensive discussion of the properties of posture verbs.

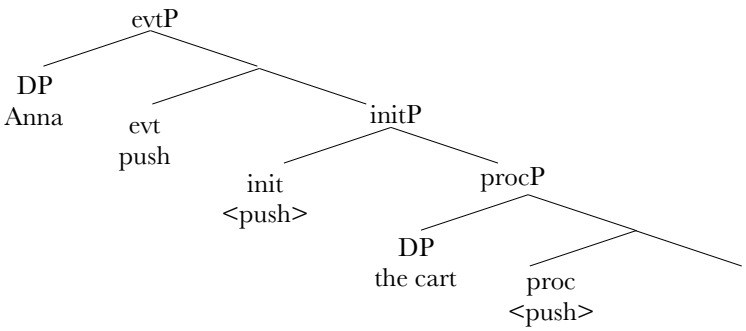
Dynamic events may result from the combination of an initiation and process head. In Silvagni's (2017) terms, dynamicity results from the existence of a succession of spatio-temporal units, which are triggered by the action of an entity capable of producing such an event. This property of events is related to the presence of an init head in the first phase syntax, which introduces causativity in the verbal phrase but does not require agentivity or intentionality for its legitimization, since as put by Ramchand (2008:107), the initiator is simply the cause or grounds for the happening of an event. In addition, this type of event may take an object, which may be realized in different positions depending on its interpretation as (i) undergoer of the event, in which case it would appear as specifier of the process head, or (ii) as rhematic object if a homomorphic relation exists between the part-whole structure of the event and that of the DP in rhematic position, occupying then the complement position of the process head. The latter option would be equivalent to a PP path, which may also appear with dynamic process verbs (see section 3 for further discussion of this latter possibility). Verbs such as *push*, *eat*, or *run* follow these patterns. Observe that the first phase syntax for these verbs differ significantly in terms of the roles undertaken by their subjects. While the first phase syntax of the verb *push* (30) indicates that its subject has only the role of initiator, as it only occupies the Spec,evtP position, the first phase syntax for the verbs *eat* (31) and *run* (32) confer a more complex role to their subjects owing to their occupying both the specifier positions of evtP and procP. On this point, note that Ramchand's framework allows the possibility of having a single DP with multiple roles in the first phase syntax, inasmuch as a single verb root may merge and remerge to satisfy all category labels in its lexical entry. Every head will also project a specifier, except for the init head, whose specifier appears in Spec,evtP, by reason of its sole role of introducing causative morphology and semantics. In turn, a predication relation will be established between every head and its specifier, thus creating a complex set of associations. Telicity may arise if the path object is bounded and thus produces an accomplishment, otherwise the interpretation of the macro-event will be unbounded as proc by itself does not provide an endpoint for the event, which is commonly identified with an activity event as long as an init head appears along with it.

(30) *Dynamic processes with undergoer objects*

a. Anna pushed the cart

b. [[push]] = < push,<init,proc>,λeλe$_{init}$λe$_{proc}$[e=e$_{init}$ → [e$_{proc}$ ∧ push(e$_{init}$) ∧ push(e$_{proc}$)] >

c.

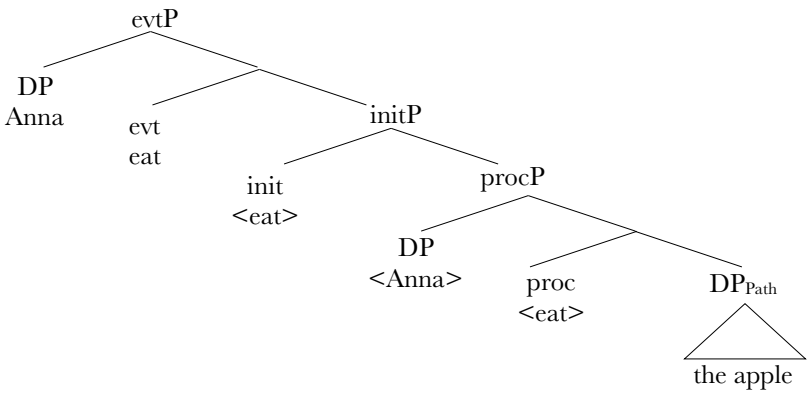


(31) *Dynamic processes with path objects*

a. Anna ate the apple

b. [[eat]] = < eat,<init$_i$,proc$_i$>,λeλe$_{init}$λe$_{proc}$[e=e$_{init}$ → [e$_{proc}$ ∧ eat(e$_{init}$) ∧ eat(e$_{proc}$)] >

c.

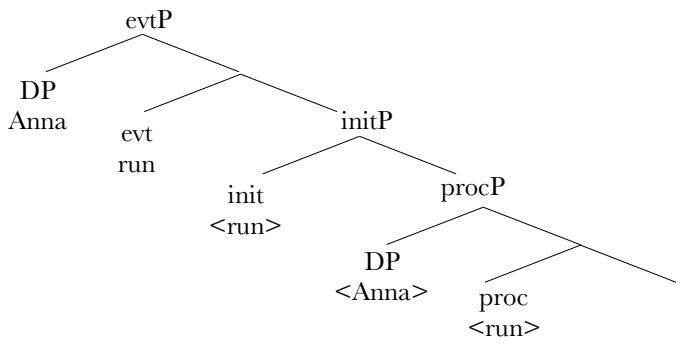


(32) *Dynamic processes with initiator-undergoer subjects*

a. Anna ran

b. [[run]] = < run,<init$_i$,proc$_i$>,λeλe$_{init}$λe$_{proc}$[e=e$_{init}$ → [e$_{proc}$ ∧ run(e$_{init}$) ∧ run(e$_{proc}$)] >

c.



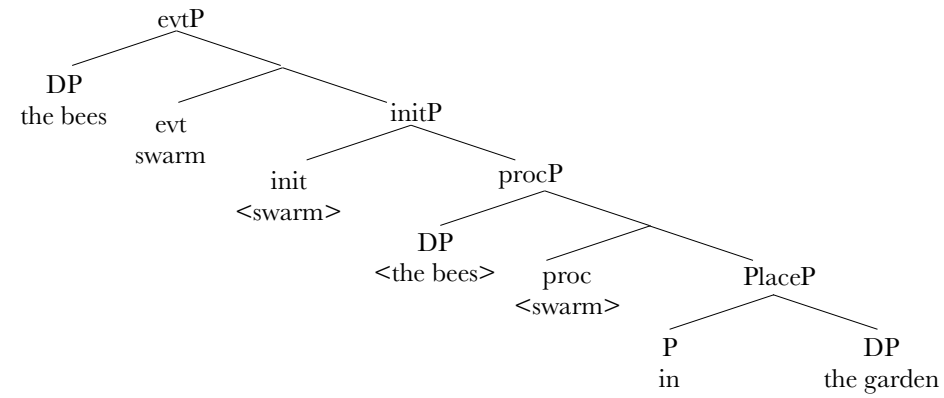
In chapter 4, I will argue that internally-caused verbs such as *swarm*, *shine*, or *buzz* (33) have the same first phase syntax as dynamic process verbs, as evidenced by the results of applying several diagnostics testing for the presence of a spatio-temporal unit and dynamicity.

(33) *Internally-caused verbs*

a. The bees swarm in the garden

b. [[swarm]] = < swarm,<$init_i$,$proc_i$>,λeλe$_{init}$λe$_{proc}$[e=e$_{init}$ → [e$_{proc}$ ∧ swarm(e$_{init}$) ∧ swarn(e$_{proc}$)] >

c.



A caveat is in order regarding the status of rhematic arguments in the first phase syntax. Ramchand treats these elements, such as the object *the answer* in (28) or *in the* garden in (33), as non-aspectual objects whose role is to provide further predicational information about the nature of the figure. In this sense, they are considered equivalent to Talmy's (1991, 2000) ground argument (Ramchand 2008:36, footnote 14). An important property of rhemes is that they cannot introduce an additional subevent in the macro-event, but rather they simply function as modifiers of the init head as in (28) or the process head as in (33), which introduces the spatio-temporal variable.

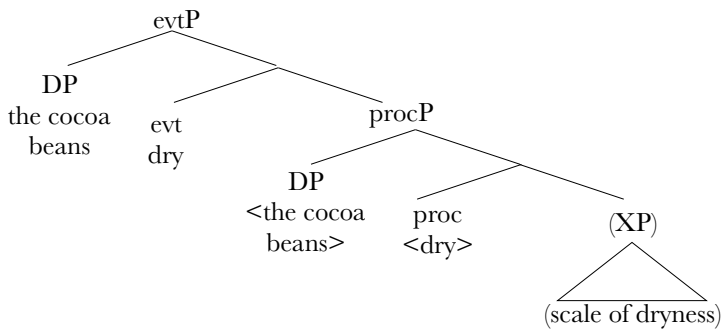
Ramchand considers PathPs as a subclass of rhematic object. In contrast to rhemes, paths can establish a homomorphic relation with the process head as in (31), thereby connecting the "a monotonic property of [an] entity […] with respect to the part-whole structure of the event" (Ramchand 2008:50). Following Randall's (2009) distinction between obligatory arguments, optional arguments, and adjuncts, I will assume that this position may not only be satisfied by obligatory syntactic arguments but also by other conceptual elements even if they might be considered optional or have an adjunct role inasmuch as the they may be required for pragmatic compatibility issues. See chapter 2, 3, and 4 for further discussion of these elements.

Another way to obtain a dynamic process with verbs that lack an initiation phrase would be by dint of a path phrase, which provides a scale of boundedness whereby the part-whole structure of the event and that of the path, occupying then the complement position of the process head, are homomorphically related. This would be the case of verbs such as *dry* and *clear*, for which I would like to introduce the possibility that dynamicity may be deduced from the existence of a homomorphic relation between the spatio-temporal unit and the scale, or path provided by the verb root (34). Ramchand (2008:89-91) discards the presence of a result phrase in degree achievements as the limit of the event seems to be contextually provided and, instead, proposes that the process head takes as complement a bounded path provided by the adjectival base of the verb, which acts as a measuring scale, whose value is determined contextually.

(34) *Degree achievements*

a. The cocoa beans dried in the sun for two hours

b.



(Ramchand 2008:90, (53-54))

Events may also be bounded by the existence of a resP in the first phase syntax. Note that in Ramchand's framework the presence of this head is not required to obtain a bounded interpretation of events, or telicity, as a bounded path phrase allows to trigger telic readings as well. Verbs such as *arrive*, *break*, or *throw* have a first phase syntax comprising all three sub-events (35). Ramchand claims that these verbs denote punctual events, namely, achievements in the classical terminology, if all three subevents identified by the verb root are interpreted as overlapping and, consequently, occurring instantaneously.

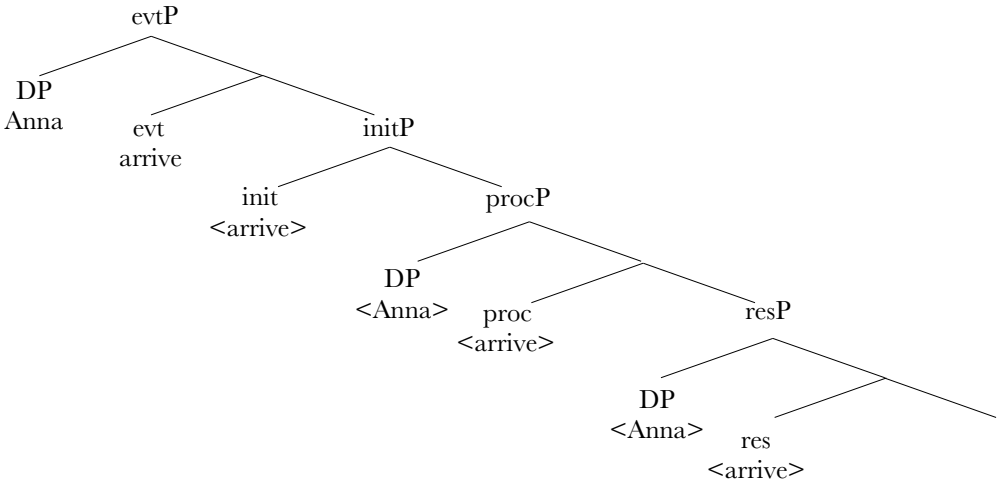
(35) *Achievements*

a. Anna arrived

b. [[arrive]] = < arrive,<$init_i$,$proc_i$,res_i>,λeλe$_{init}$λe$_{proc}$λe$_{res}$[e=e$_{init}$ → [

e$_{proc}$ → e$_{res}$ ∧ arrive(e$_{init}$) ∧ arrive(e$_{proc}$) ∧ arrive(e$_{res}$)] >

c.



In this section, I have sketched Ramchand's first phase syntax and examined the principles behind the composition of basic aspectual types in verbal predication. In the following section, I discuss cross-linguistic variation in the expression of path information to understand how it may affect the first phase syntax of the Romance and Germanic languages examined in the dissertation. To do so, I will review Talmy's (1991, 2000) descriptive work on lexicalization patterns and explore how these differences have been implemented in theories of argument structure. Finally, I will show how the attested variation can be dealt with in Ramchand's first phase syntax.

3. CROSS-LINGUISTIC VARIATION IN CONSTRUCTIVIST FRAMEWORKS

In the following sections, I present Talmy's descriptive account of lexicalization patterns and how his generalizations about the encoding of path information cross-linguistically have been implemented in several approaches to argument structure. Section 3.1 summarizes Talmy's distinction between verb- and satellite-framed languages. Section 3.2. briefly summarizes the number of approaches to cross-linguistic variation in theories of argument structure. Afterwards, following Mateu (2012), section 3.2.1 contains an overview of the cross-linguistic variation attested in resultative constructions in Spanish, Japanese, and English. Section 3.2.2 discusses Ramchand's (2008, 2014) treatment of path encoding in the first phase syntax and revises it to include the important insights unveiled in the literature on cross-linguistic variation.

3.1. Talmy's (1991, 2000) typology of lexicalization patterns

Talmy (1991, 2000) proposes the existence of macro-events as a "cognitive unit" with a "specific conceptual structuring", which can be considered as a universal of linguistic organization. The conceptual structure of a macro-event consists of several pieces: (i) an agent causal-chain, (ii) a framing event, (iii) a supporting relation, and (iv) a co-event (see Figure 1).

The agent causal-chain relates an agent to the macro-event, which may relate directly to the framing event or the co-event if the latter is interpreted as the cause of the framing event. In turn, the framing event refers to the main event, which determines the argument structure and the semantic interpretation of the elements participating in the macro-event. The supporting relation mediates the interpretation of the co-event to the framing event, which may be of precursion, enablement, cause, manner, concomitance, purpose, or contributive.[8] Finally, the co-event is a subordinate event providing an additional circumstance about the framing event.

[8] See Talmy (1991, 2000) for further discussion of these relations.

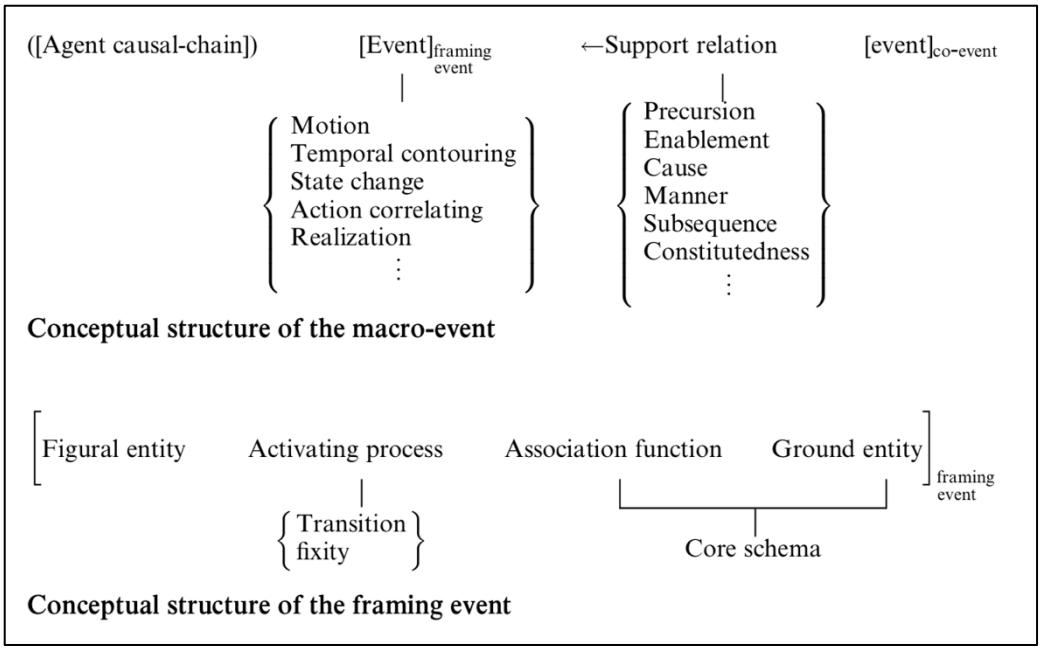


FIGURE 1: THE CONCEPTUAL STRUCTURE OF THE MACRO-EVENT (TALMY 2000:221)

The semantic components involved in the framing event include a (v) figure, (vi) an activating process, (vii) an association function, and (viii) a ground entity. The figure is the element moving or located with respect to a ground, which may be a frame or object of reference providing the background for the figure's motion or location. The activating process refers to the mode, transition or fixity, of the domain-schematizing event, which may denote an event of motion, change, aspect, correlation, or realization (36).

(36) a. Events of motion or location in space: *enter*, *pull out*, etc.
b. Events of change: *choke to death*, *wither away*, etc.
c. Events of contouring in time or aspect: *finish*, *continue*, etc.
d. Events of correlation among actions: *play along,* etc.
e. Events of fulfillment or realization: *kick the hubcap flat*, etc.

The association function refers to the relation mediating between the figure and ground, which may be identified as a path, or trajectory, in motion framing events. Furthermore, Talmy characterizes this element as the characteristic locus of the encoding of motion, but also of aspect, state change, action correlation, and realization.

Talmy identifies two main tendencies in the expression of the core schema, that is, the association function and the ground entity, of a macro-event among languages, which lead him to propose a binary typology based on which surface element instantiates it, namely, (i) verb-framed languages, in which the path of motion is expressed in the verbal root, and (ii) satellite-framed languages, in which the path of motion is expressed by means of a satellite, an element associated to the verb, which may be a prefix, a particle, or a subordinate element. The former pattern is instantiated by Romance languages, Greek, Semitic, Turkic, Basque, Korean, and Japanese, while the latter is found in Germanic, Slavic, Celtic, and Finno-Ugric languages. The two main patterns are exemplified below using an example of a non-agentive motion event with a manner supporting relation in English and Spanish.

(37) a. The bottle floated into the cave

b. La botella entró flotando a la cueva (Spanish)
the bottle entered floating to the cave

c. *Conceptual structure*: [the bottle MOVED in to the cave] WITH-THE-MANNER-OF [it floated]

As evidenced by the conceptual structure in (37c), both English and Spanish denote the same type of macro-event but differ in terms of how the surface form integrates the activating process, core schema, and co-event. English assembles together the activating process (transition, motion) and the co-event ('float') as a single element and expresses the core schema ('into the cave') by means of a satellite or a preposition such as *into* in the example in (37a) (cf. Figure 2). By contrast, Spanish integrates the activating process and core schema in a single element ('entró') and utilizes an adjunct ('flotando') to encode co-event information (cf. Figure 3).

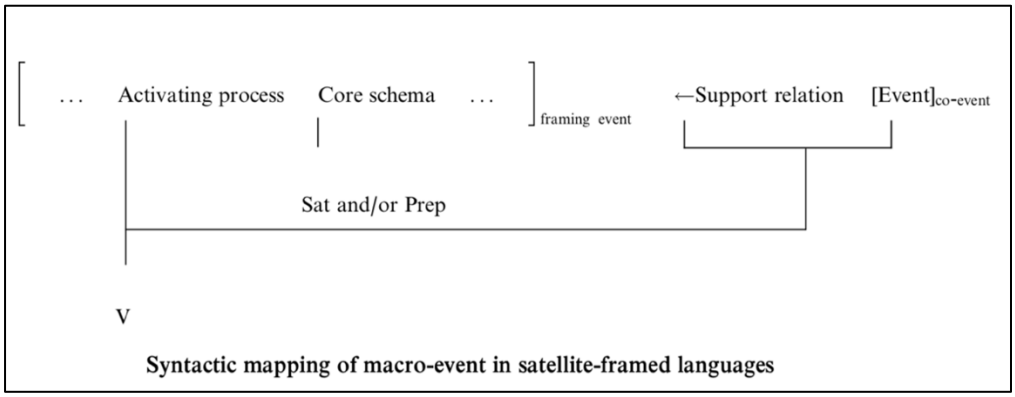


FIGURE 2: THE MACRO-EVENT IN SATELLITE-FRAMED LANGUAGES (TALMY 2000:223)

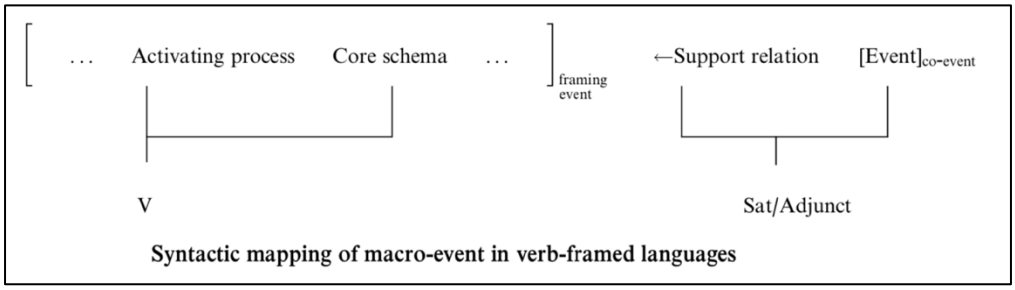


FIGURE 3: THE MACRO-EVENT IN VERB-FRAMED LANGUAGES (TALMY 2000:223)

The implementation of Talmy's macro-event has been undertaken in several proposals such as Acedo Matellán (2010), Mateu (2002, 2012), Folli & Harley (2016), among others. The following sections concentrates on some of the insights offered by these accounts, which I later integrate in Ramchand's first phase syntax. Note that I do not intend to offer a revision of all of these proposals, but to obtain an overview of the phenomena of cross-linguistic variation and how they can be accounted for in Ramchand's framework in order to offer an accurate first phase syntax of posture verbs in the coming chapters.

3.2. The argument structure of verb-framed and satellite-framed languages in resultative constructions

The objective of the present section is to provide the necessary theoretical background to deal with resultative constructions cross-linguistically as they will become important

in chapter 2 of the dissertation where I deal with cases of *result augmentation* (Ramchand 2008) via particles with posture verbs in English. Additionally, it will also help exemplify how cross-linguistic variation can be accounted for in Ramchand's (2008) framework.

Several proposals, assuming different approaches to argument structure, have materialized Talmy's generalization placing the burden of the variation in different domains. Folli & Harley (2016) observe that these proposals share all the assumption that some sort of deficiency is in place. The first family of approaches identified by Folli & Harley seems to assume that a lexical deficiency affects one of the language families. Specifically, verb-framed languages impose a restriction, or prohibition, against lexicalizing path in non-verbal elements, whereas in satellite-framed languages these restrictions do not apply, making possible the encoding of path information in both verbs and satellites. The second family of approaches puts forth the lack of a structural operation enabling the conflation of manner information in the verb. This latter group of approaches differs regarding the domain where this operation applies in satellite-framed languages.[9] The relevant operation may apply in either the (morpho-)lexical

[9] In contrast to deficiency-based accounts, Folli & Harley (2016) propose that the cross-linguistic variation observed in Germanic and Romance languages can be explained if a *requirement* on Romance languages, but not on Germanic languages, for undergoing head-movement in the VP phrase is set. A Romance language such as Italian requires that its verbs undergo head-movement in change of state constructions and directed motion constructions with manner verbs. A constraint seems to operate on change of state structures, namely, the result state must be encoded in the verb. Specifically, they propose a Res to v^o movement for change of state v^o heads (v_{CAUSE} and v_{BECOME}) that count with a selectional feature, uRes*****, to select for a result complement. In contrast, English has a uRes feature in change of state v^o heads that checks its feature against the result complement without triggering head movement. As an example, consider the creation verb *carve* in English and its equivalent in Italian *intagliare*. Folli & Harley argue that, while in English it is possible to use this verb root in creation, resultative, and created result contexts, Italian only admits creation and resultative contexts. The created result use would not be available in Italian since the result would be instantiated by an element independent of the verb, making impossible the feature checking operation.

(i) a. Maria carved a doll (from wood) (Creation / Product)
b. Maria carved the wood (Resultative/Material)
c. Maria carved the wood into a doll (Created result)

(ii) a. Maria ha intagliato una bambola (Italian)
Maria has carved a doll (from a piece of wood)
b. Maria ha intagliato un pezzo di legno
Maria has carved a piece of wood
c. *Maria ha intagliato un pezzo di legno in una bambola
Maria has carved a piece of wood in a doll

(Folli & Harley 2016:109-110, (8-9))

In contrast to other proposals, Folli & Harley not only try to deal with resultative constructions with adjectives and particles, but also endeavor to include double object constructions and compounds in their analysis. Yet, their proposal cannot account for manner verbs that take a directional path in Italian such as *correre* 'run' (cf. Iacobini & Masini 2006, Mateu & Rigau 2007, 2010, Lapesa & Lenci 2012). Verbs

level as proposed by Snyder (2001, 2012), the (morpho-)syntactic level as in Mateu (2002, 2012), or the semantic level as elaborated in Beck & Snyder (2001). In contrast, Acedo-Matellan (2010, 2016) treats the variation as a morphological constraint applying at PF.[10]

In the following section, I review Mateu's work on resultative constructions, which will help me underpin the basic facts about cross-linguistic variation that Ramchand's first phase syntax should be able to account for in order to offer a bridging view of path encoding in Romance and Germanic languages.

3.2.1. Mateu's (2002, 2012) study of resultative constructions cross-linguistically

Mateu (2002, 2012) studies cross-linguistic variation following Talmy's distinction between satellite-framed languages and verb-framed languages, concentrating on the reason why it is possible for satellite-framed languages to have both complex telic path of motion constructions (38a) and complex resultative constructions (38b), while verb-framed languages lack both these constructions altogether (39).

(38) a. Lisa danced out of the room
b. The gardener watered the tulips flat

such as *bere* 'drink', *lavare* 'wash', *mangiare* 'eat', *raschiare* 'scrape', etc. can be combined with the particles *via* 'away' or *fuori* 'out' to form phrasal verbs (Mateu & Rigau 2010). Folli & Harley suggest that, in this case, the manner component of the verbs has been lost, thus allowing for the directional sense of the particle.

[10] Acedo Matellán (2010) proposes that the difference between satellite- and verb-framed languages (Talmy 1985, 2000) can be accounted for in morphophonological terms. His tenet is that in satellite-framed languages v and Path do not form a unit and, in consequence, they need not be realized as a single item phonologically. In contrast, in verb-framed languages v and Path form a single unit by lowering the v head to the Path head and fusing both at PF. Therefore, cross-linguistic variation derives "from language-specific morphophonological properties of functional heads" (Acedo Matellán 2010:80); specifically, cross-linguistic variation depends on the ability of languages to apply lowering and fusion to v and Path. While verb-framed languages apply these operations at PF, satellite-framed languages are not equipped with this possibility but, instead, they can conflate a verbal head and a root to express the co-event. This notwithstanding, note that Acedo Matellán (2010) contends that the two-way typology should be transformed into a three-way typology based on the properties of the Path element in these languages. The result of this reevaluation is the distribution of satellite-framed languages into two subtypes: strong satellite-framed languages and weak satellite-framed languages. Strong satellite-framed languages differ from weak satellite-framed languages in that Path and v are independent words or morphemes. In contrast, in weak satellite-framed languages, while v and Path are still independent, they form a single phonological word. Strong satellite-framed languages such as Dutch, German, English, Icelandic, Finish and Hungarian, are able to license PP, particle, and AP resultatives. Meanwhile, weak satellite-framed languages such as Ancient Greek, only allow the formation of resultatives with affixal particles and disallow PP and AP resultatives if inflection is present on the adjective. See Acedo Matellán (2010) for further discussion on this three-way typology.

(39) a. *Lisa bailó fuera de la habitación (directional reading)
Lisa danced out of the room
a'. Lisa salió de la habitación bailando
Lisa went-out of the room dancing
b. *El jardinero regó los tulipanes planos (resultative reading)
The gardener watered the tulips flats

Mateu argues that in verb-framed languages such as Romance languages, the (telic) path is incorporated into the verb expressing motion. This process is lexically fossilized, that is, the verb and the path form an atom in such a way that it is no longer possible to distinguish the morphophonological properties of each element.[11] The manner component is pushed into the background as an adjunct to the verb. In contrast, satellite-framed languages such as Germanic languages allow the conflation of the manner component, that is, Talmy's co-event, into the verb which makes possible that the path can be left stranded as a mere satellite to the verb. As for complex resultative constructions, it is argued that adjectives can encode a path relation just like PPs appearing in motion constructions (Talmy 1991). In this respect, Mateu (2002) holds that adjectives are not primitives of syntactic theory, but rather they can be reduced to the lexical head P, consisting of a relational element plus a non-relational element. In contrast to Germanic languages, Romance languages do not have adjectives comprising a path relation. That being the case, cross-linguistic variation is subsumed into two possible patterns: the path incorporation pattern and the co-event conflation pattern.

Mateu (2012) applies Haugen's (2009) reinterpretation of the operations of conflation and incorporation in terms of the Minimalist Program (Chomsky 1995). Incorporation is reformulated as involving head-movement, which is instantiated through the syntactic operation of copy in the Minimalist Program. As stated in Mateu (2012), incorporation involves copying the full phonological matrix of the incorporated element into the null phonological matrix of the verb. On the other hand, conflation is redefined in terms of the syntactic operation of merge. This means that the conflated element (a root) is adjoined to a null light verb. Importantly, Mateu relates the operation

[11] See Acedo Matellán (2010, 2016) for a proposal on how this could be accounted for under a Distributed Morphology approach.

of conflation to the availability of the co-event conflation pattern in Talmy (1991, 2000), that is, the existence of a side event.

Following Washio's (1997) work on resultatives in Japanese, Mateu further assumes that there are two main types of resultatives: strong resultatives and weak resultatives. Strong resultatives are "[r]esultatives in which the meaning of the verb and the meaning of the adjective are completely independent of each other… In resultatives of this type, it is impossible to predict from the semantics of the verb what kind of state the patient comes to be in as the result of the action named by the verb" (Washio 1997:7).[12] This is evidenced in the examples in (40), where the verbs *run* and *fly* do not imply a result state such as *thin*.

(40) a. The joggers ran the pavement thin

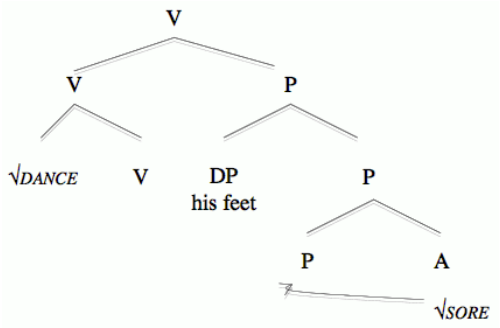
b. The planes flew the ozone layer thin.

(Randall 1982:68 *apud* Washio 1997:8)

Strong resultatives instantiate Talmy's co-event conflation pattern. Accordingly, Mateu proposes that they require conflation (merge) of a process root with a light verb. The example in (41) shows the analysis for a strong resultative in a Germanic language.

(41) a. The boy danced his feet sore

b.



(Mateu 2012:258)

[12] One caveat is in order regarding Washio's notion of weak and strong resultatives as it does not provide a reliable criterion to classify the different types of resultatives and explain their availability cross-linguistically inasmuch as, while it may be true that to a certain extent the meaning of the verb and that of the adjective may be more or less logically related, whether or not the verb can be used in a resultative construction and imply a specific result cannot depend solely on the lexical semantics of the adjectives. What is more, this cannot be the only reason determining the availability of different types of resultatives cross-linguistically.

It follows that this construction should be impossible in Romance inasmuch as conflation of a root into a light verb is disallowed in Romance (42).

(42) *El chico bailó sus pies doloridos (Spanish)
The boy danced his feet sore

Weak resultatives are defined negatively, that is, resultatives in which the meaning of the verb and the meaning of the adjective are not independent of each other. In the examples in (43), the meanings of *roll*, *polish,* and *boil* can entail result states like *thin*, *shiny,* and *soft*, respectively.

(43) a. John-wa pankizi-o usuku nobasi-ta (Japanese)
J.-TOP dough-ACC thin roll out-PST
'John rolled the dough thin'
b. John-wa kinzoku-o pikapika-ni migai-ta
J.-TOP metal-ACC shiny polish-PST
'John polished the metal shiny'
c. John-wa niku-o yawar akaku ni-ta
J.-TOP meat-ACC soft boil-PST
'John boiled the meat soft'

(Washio 1997:9)

Weak resultatives are available in English and Japanese, but disallowed in Spanish, as reported by Washio (1997). Mateu further distinguishes another class of resultatives, denominated simple resultatives (44), which are available in Spanish.

(44) a. Juan puso a María nerviosa (Spanish)
Juan put A María nervous
'Juan got María nervous'
b. Juan cayó enfermo
Juan fell sick

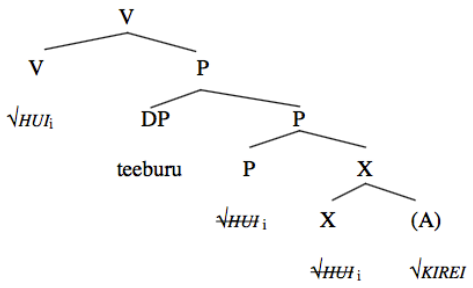
c. Juan volvió loca a María
Juan turned crazy A María
'Juan drove María crazy'

(Mateu 2012:259)

Weak resultatives and simple resultatives are required to undergo the operation of incorporation to be formed in the verb-framed pattern. In the case of weak resultatives, found in Japanese (45), the element sitting in Comp,Path is incorporated into a null light verb.

(45) a. Kare-wa teeburu-o kirei-ni hui-ta (Japanese)
he-TOP table-ACC clean-NI wipe-PST
'He wiped the table clean'

b.

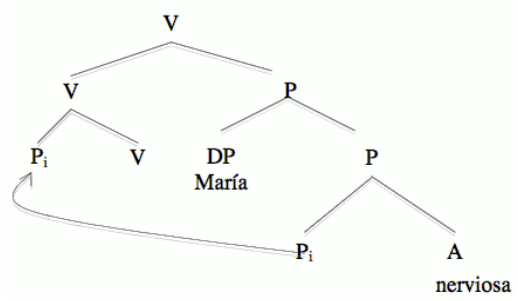


Mateu (2012:260, 262)

As for simple resultatives (46), the pattern characteristically found in Romance languages, the P(ath) element is incorporated into a light verb (cf. Hoekstra & Mulder 1990, Den Dikken 2010). Notice that, as set forth in Mateu (2002), incorporation of an element into a light verb prevents the verb from allowing a subsequent operation of conflation.

(46) a. Juan puso a María nerviosa (Spanish)
Juan put A María nervous
'Juan got María nervous'

b.



The case of English is interesting because it makes use of both path incorporation and the co-event conflation pattern, as independent strategies, to express motion events. The pair of sentences in (47) contains the verb *dance* in two different constructions: unaccusative and unergative. The former expresses a co-event, which is non-existing in the latter. In the sequence of (47a), the co-event appears as an adjunct to a light verb, via conflation, in an unaccusative construction with an explicit directional element. Without this element in (47b), the construction can only have a locative sense in which case the construction is unergative and there is no possible conflation operating since there is no co-event. On the other hand, the sentence in (48) is ambiguous between a directional and a locative reading. The disambiguation requires assigning different structures to each reading. In the former, the verb *run* is used as a light verb (cf. Hoekstra & Mulder 1990, den Dikken 2010) in an unaccusative construction where a Path/directional element has been conflated. The latter reading is obtained from an unergative structure. In both cases, Mateu argues that there is no co-event.

(47) a. The boy danced into the room (directional)
b. They boy danced in the kitchen (locative)

(48) The boy ran in the kitchen (locative/directional)

Mateu claims that the incorporating constructions in English are equivalent to the incorporating constructions in Italian; allegedly, incorporation is the only operation available in verb-framed languages. The sequence in (49) shows that the verb *correre* behaves similarly to its equivalent in English, since it allows incorporation of a directional element into the verb. The structure under discussion is unaccusative, as signaled by the use of *essere* 'be' as auxiliary of the perfect. A pure manner verb such as

danzare 'dance' cannot have a directional reading in the presence of a locational element such as *a la cucina*. The unaccusative reading is impossible as signaled by the use of *essere* 'be' as auxiliary of the perfect. As mentioned above, conflation is not available in verb-framed languages to express motion events, then there is no possible way in which the sequence with *danzare* 'dance' could be interpreted as a main event co-occurring with a co-event.

(49) a. Il bambino è corso a la cucina (Italian)
They boy is run prep the ditchen
'The boy ran in the kitchen'
b. *Il bambino è danzato a la cucina
The boy is danced prep the kitchen
'The boy danced to the kitchen'

Mateu's conclusion is that the cross-linguistic distribution of the incorporation and conflation patterns is unequal: the path incorporation pattern is pervasively present in languages, whereas the co-event conflation pattern seems to be only available in certain languages. This determines the availability of resultative structures in the languages discussed. The information has been gathered together in table 1.[13]

[13] This section does not discuss other types of resultative constructions found in Romance languages consisting of two adjectives as in Italian (ia), an adverb and an adjective as in Spanish (ib), and pseudo-resultatives as in Spanish (ic).

(i) a. Maria ha martellato il metallo piatto *(piatto) (Italian)
Maria has hammered the metal flat flat
(Acedo Matellán & Mateu (2015):113, (23))
b. Juan limpió la mesa bien limpia (Spanish)
Juan wiped the table very clean
(Jaume Mateu, p.c.)
c. Juan pintó la pared blanca / de blanco (Spanish)
Juan painted the wall.F white.F / of white
(Jaume Mateu, p.c.)

The analysis of these constructions goes beyond the limits of this dissertation. For further discussion, see Bosque (1990), Armstrong (2012), Espinal & Mateu (2018), Levinson (2010), among others.

	Simple resultatives	*Weak resultatives*	*Strong resultatives*
Spanish	✓	✗	✗
Japanese	✓	✓	✗
English	✓	✓	✓

TABLE 1: AVAILABILITY OF RESULTATIVE CONSTRUCTIONS

3.2.2. Cross-linguistic variation in Ramchand's first phase syntax

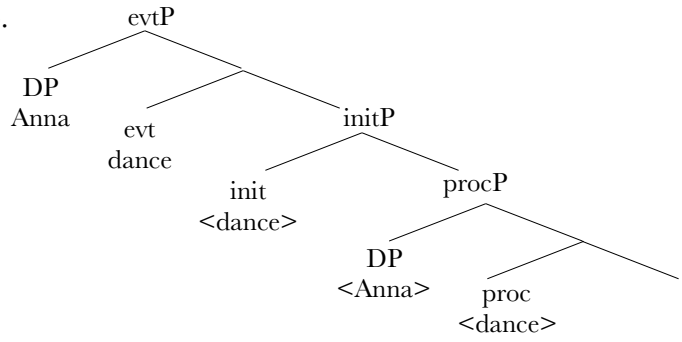
The detailed study of resultative constructions available in Spanish, Japanese, and English undertaken by Mateu proves that, to some extent, all of these languages can encode resultative meanings. Ultimately, what determines the availability of the different types of resultatives is the existence of certain operations in the syntactic level. How can we account for the generalizations Mateu draws from his data in terms of the Ramchandian first phase syntax? Ramchand (2014) considers that cross-linguistic variation should encompass exclusively type-A meaning, namely, information that is structurally relevant for the first phase syntax of verbs. Among the meaning components included in the repository of type-A meanings, Ramchand includes scalar change, understood as the expression of incrementality, path of motion, and property change, which appear as complements of the process head or as result phrases. Assuming that cross-linguistic variation is related to scalar change, I consider as true the widely-held assumption that languages differ in terms of the possibility of instantiating a path or a result head by means of an element independent of the verb (cf. Mateu 2002, Acedo-Matellan 2010, and Ramchand 2014). Namely, satellite-framed languages such as English can encode path or result information independently of the verb, while verb-framed languages can only encode it in the verb root. I will take advantage of Ramchand's first phase syntax and the availability of specifier positions instantiating different relations with the verbal head to elucidate how to represent the restrictions and combinatorial possibilities of English and Spanish in Ramchand's framework, whose properties can help extrapolate the behavior of other Germanic and Romance languages in this domain, as characteristic examples of satellite- and verb-framed languages. After examining the data studied by Ramchand (2008), the conclusion that will be reached is that simple resultatives are a case of underassociation, weak resultatives require a path instantiated by a DP, PP, or AP, and strong resultatives are

realized by a res head, instantiated by a null lexical item or a particle. Note that the treatment of cross-linguistic variation is incidental in Ramchand (2008) as it only deals with the mentioned Italian data superficially. This notwithstanding, I hold that Ramchand's first phrase syntax provides an advantageous and strong system as it makes available several structural positions to account for the nuances found in the so-called resultative construction as will be made clear below. Let us see Ramchand's take on the first phase syntax of the three different types of resultatives to later implement the necessary changes to materialize the attested cross-linguistic variation.

Ramchand's typology of resultative structures distinguishes three types of resultative constructions: directed motion readings, unselected object resultatives, and selected object resultatives. First, verbs of motion (50) are argued to acquire a directed motion reading via event-path structural homomorphism such that "the path structure of the PP is mapped onto the temporal structure of the time line of the event" (Ramchand 2008:49), by dint of a relaxation of the roles of initiator and undergoer of the DP subject, which allows to select for an undergoer object provided that a path is selected as complement of the process head (51).

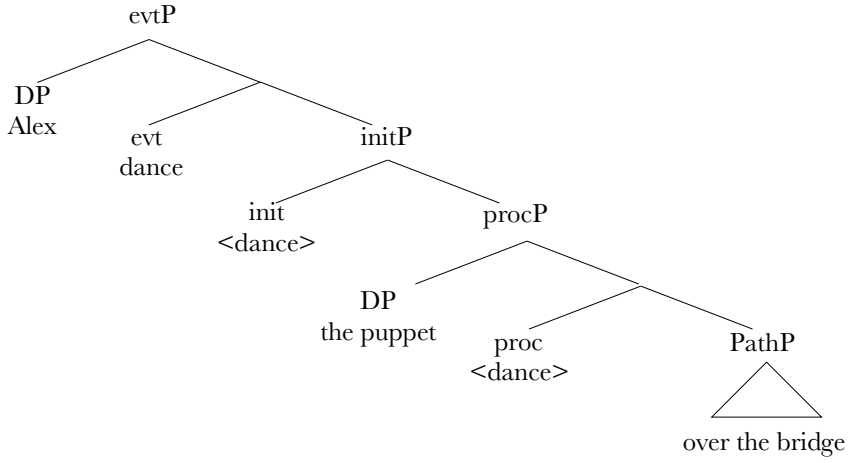
(50) a. Alex danced

b.



(51) a. Alex danced the puppet over the bridge

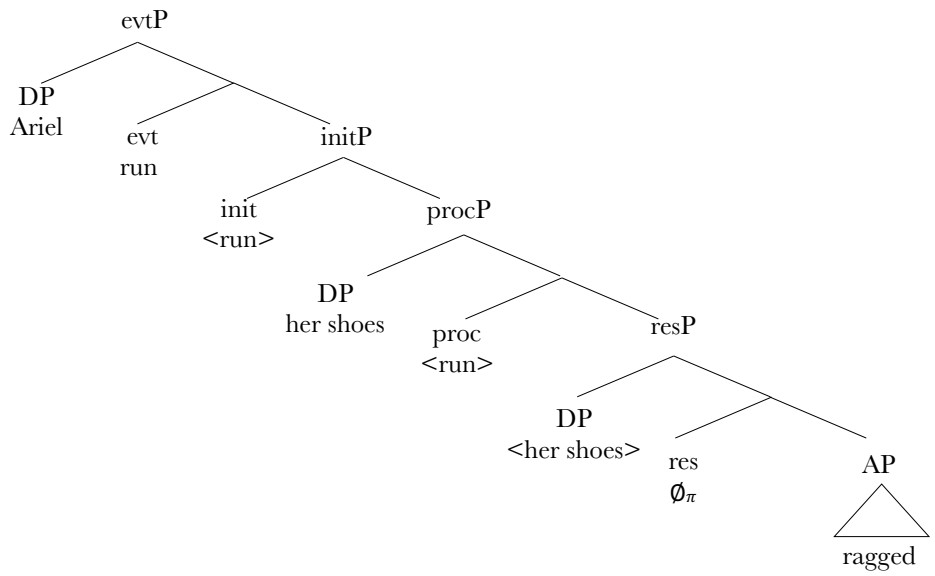
b.



Notice that this particular verb does not select for an object, hence one could say that it is arguably similar to unselected object resultatives inasmuch as the latter take on verbs such as *run*, *sing*, *cough*, etc., which do not license objects by default, and an adjective phrase that instantiates the result of the event. Interestingly, in spite of the similarities between these two types of resultative structure, Ramchand puts forth two different first phase syntax for verbs of motion with a directed reading and unselected object resultatives. Specifically, unselected object resultatives are argued to consist of a process head and a result phrase instantiated by a null lexical item, which instantiates the 'leads to' relation and takes an adjective as complement. The res phrase along with the AP forms a structure slightly equivalent to a small-clause, which projects a specifier to lodge the resultee object. In this case, there is no homomorphism between the scalar structure of the adjective and that of the event. This type of resultative would be an instance of Washio's strong resultatives as there does not seem to exist a relation between the "result" implied by the verb, *run* in the example below in (52), and the one specified by the adjective *ragged*.

(52) a. Ariel ran her shoes ragged

b.

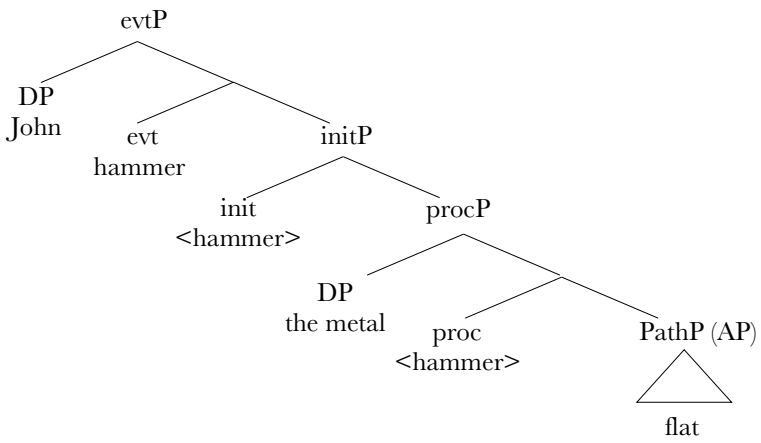


By contrast, selected object resultatives do not require a null res head to lodge the object argument as the verbs entering this resultative structure can lodge an object in Spec,procP by default. Ramchand argues that these verbs select for a bounded PathP, in this case, a closed scale adjective that provides the measure for the path-event

homomorphic unity between the scalar structure of the adjective and the temporal structure of the event (53).

(53) a. John hammered the metal flat

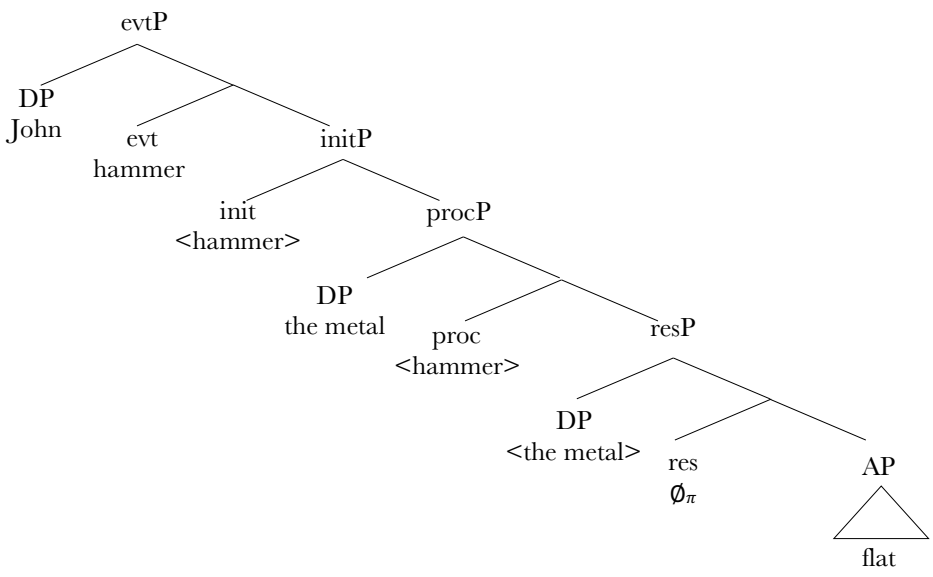
b.



As Bruening (2010) reports, Ramchand's account of resultative constructions lacks consistency, as different first phase syntax structures are proposed for the same type of resultative structures. For example, later in her discussion of resultative constructions in English, the unselected object resultative exemplified above in (53) is also analyzed following the pattern of unselected object resultatives brandishing a null res head (54).

(54) a. John hammered the metal flat

b.



Furthermore, Ramchand notes that the option to have a res head as complement of the process head with selected object resultatives is not available in all languages. Consider

the example in (55) from Italian. The reason why this structure would be available in English is due to the existence of a null res head able to create a predicational relation between the entity and the AP. This head also makes available a specifier position, thereby making possible a resultee interpretation of the entity. This type of resultative structure has been shown to be marginally possible in Japanese with different degrees of acceptability among speakers (56) (see Washio 1997 and Snyder 2012 for discussion of these facts). Then, it might be the case that selected object resultatives do not require a result phrase to be instantiated but rather a homomorphic path relation, supporting the hypothesis that verb-framed languages cannot encode result information via a satellite, but rather this information is exclusively found in the verbal root. If we were to look for the source of the telicity in this structure in verb-framed languages, we would be forced to locate it in the PathP. This would help explain why Japanese possesses this type of resultative but leave unexplained why Romance languages lack this type of resultative unless we assume with Mateu (2012) that Romance language lacks path adjectives. The first phase syntax I am arguing for is the one found in (53), where the procP takes a PathP as complement.

(55) *****Gianni ha martellato el metalo piatto (Italian)
John has hammered the metal flat

(Ramchand 2008:123, (33a))

(56) a. ??John-ga kinzoku-o petyanko-ni tatai-ta (Japanese)
John-NOM metal-ACC flat pound-PST
'John pounded the metal flat'

b. John-ga teeburu-o kiree-ni hui-ta
John- NOM table- ACC clean wipe- PST
'John wiped the table clean'

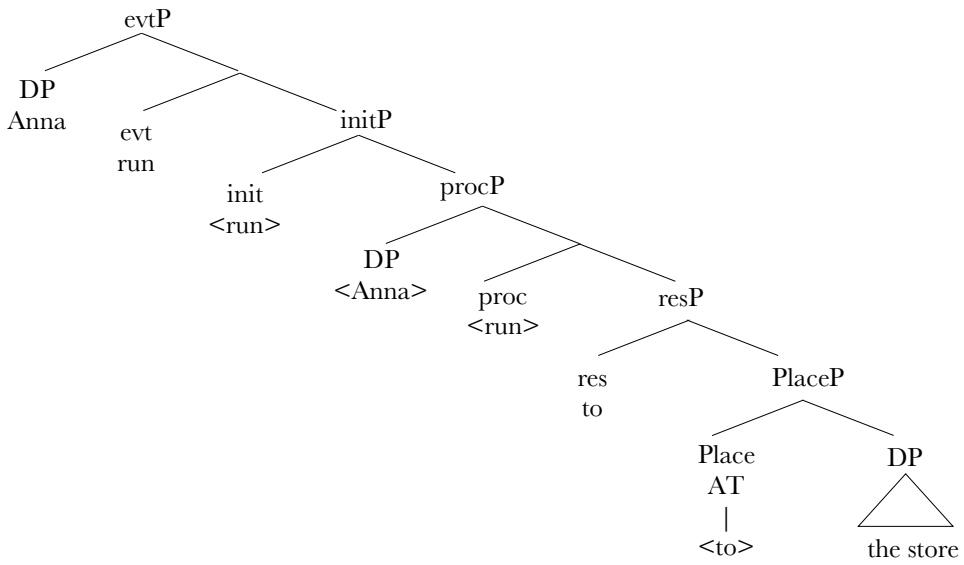
(Snyder 2012:294, (11.20, 11.19))

Returning to directed motion verbs, Ramchand holds that these verbs may select for the preposition *to* in English and proposes that this element carries both a place and a res feature, which makes possible its combination with process verbs in goal-of-motion readings such as the one exemplified in (57).

(57) *Dynamic processes with path PPs*

a. Anna ran to the store

b.



Incidentally, a slightly similar structure is available in Italian, Spanish, and Japanese, where a construction involving a process verb such as *run*, *fly*, etc. and a particle specifying the endpoint of the path can be used to denote a telic event. Fábregas (2007) presents a proposal implementing a path category label in the lexical entry of these verbs under the assumption that they encode directionality. If he is correct, then telicity could be obtained by dint of the path structure provided by the path via homomorphic unity for which the PP provides the endpoint of the trajectory. Thus, these are not proper resultative structures as no result phrase is realized in the first phase syntax. Similarly, Beavers (2008) shows that Japanese can use these verbs with a goal interpretation (58), as the complement introduced by *-made* 'until' specifies the endpoint of the path of motion (59).

(58) John-wa eki-made hatta Japanese
John-TOP station-until crawled
'John crawled to the station.'

(Beavers 2008:296)

(59) "The marker *-made*, on the other hand, is a general limit-marker. It marks endpoints of event participants, and in the case of motion predicates it is capable of marking the endpoint of the path of motion. However, it itself encodes no specific path or motion-based semantics."

(Beavers 2008:309)

The number of manner of motion verbs in Spanish allowing this structure is limited. Among them, we might include other verbs such as *deslizarse* 'slide into' and *saltarse* 'break into' (60).

(60) a. Aprovechando la confusión, *(se) deslizó a la habitación
Taking-advantage-of the confusion, REF slid into the room
'Taking advantage of the confusion, he slid into the room'

b. El ladrón (se) saltó a la casa del vecino
The thief REF jumped to the house of-the neighbor
'The thief broke into the neighbor's house'

Just like in Spanish, the range of Italian manner-of-motion verbs that allow this construction is limited, since the majority of them (*camminare* 'walk', *ballare* 'dance', *nuotare* 'swim', *galleggiare* 'float') reject it (cf. Acedo-Matellán & Mateu 2013, Folli & Ramchand 2005). Furthermore, these verbs take the auxiliary of unaccusatives in Italian, *essere* 'be', when they appear with particles such as *via* 'through' (61).

(61) Gianni è corso via Italian
Gianni is run away
'Gianni ran away'

Mateu (2012:267, (27))

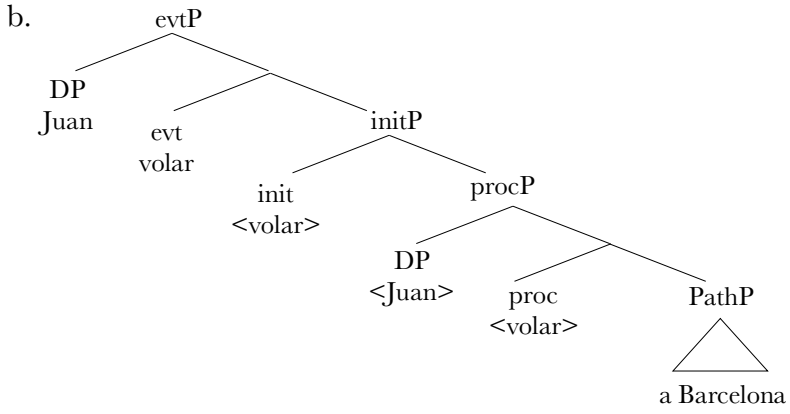
I concur with Mateu (2012) and hold that the structures in Japanese and Spanish are different from the one in English. While the former instantiate a process head with a PathP as complement, the construction in English is obtained thanks to an additional result phrase legitimized by the preposition *to* (62). Furthermore, I surmise that the previously discussed verbs of motion that can have a directed goal reading exclusively

in satellite-framed languages such as English must have a similar structure inasmuch as this specific resultative is only available in satellite-framed languages.

(62) a. Juan voló a Barcelona (Spanish)
Juan flew to Barcelona

Mateu (2012:277, (46))

b.



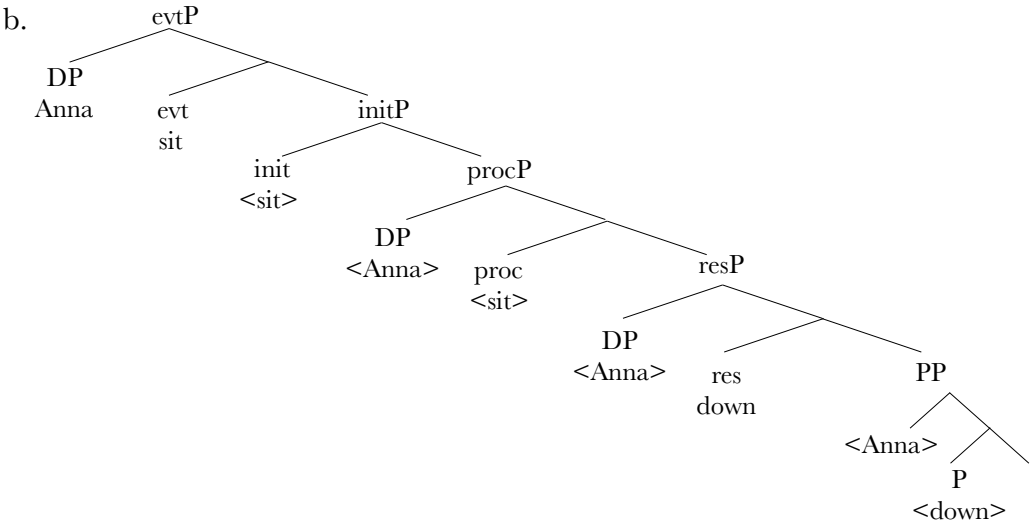
Additionally, I would like to call attention to the fact that Spanish, Italian, and Japanese, in spite of being verb-framed languages, show different degrees of flexibility in their capability to license PathPs, with which the verb must establish a homomorphic relation. While Spanish can take a verb of manner of motion with a single initiator-undergoer subject and combine it with a PathP (cf. (60, 63)), Japanese not only allows this structure, but it can also potentially utilize a structure containing an initiator subject and an undergoer object as event participants along with an adjectival PathP as evidenced by its ability to have weak resultatives, slightly equivalent to selected object resultatives in Ramchand's view (cf. (56b, 58)). Japanese would then be able to relax the requirement to merge the same entity as specifier of initiation and process in resultative constructions.

Returning to satellite-framed languages, Ramchand shows that in English the res head may also be fleshed out by a particle in the first phase syntax such as *down*, *up*, *away*, etc. In chapter 2, I will argue that this option is available for English process posture verbs, which may take a particle, that is, an element morphophonologically independent of the verb, to specify the path of motion (63). The event composition would take a process head instantiated by the verbal root and a result phrase crafted with a particle, whose structure also allows for a small-clause complement. The

structure below also includes a null init head to introduce the causative semantics, endowing its subject with an initiator-undergoer complex role.

(63) a. Anna sat down

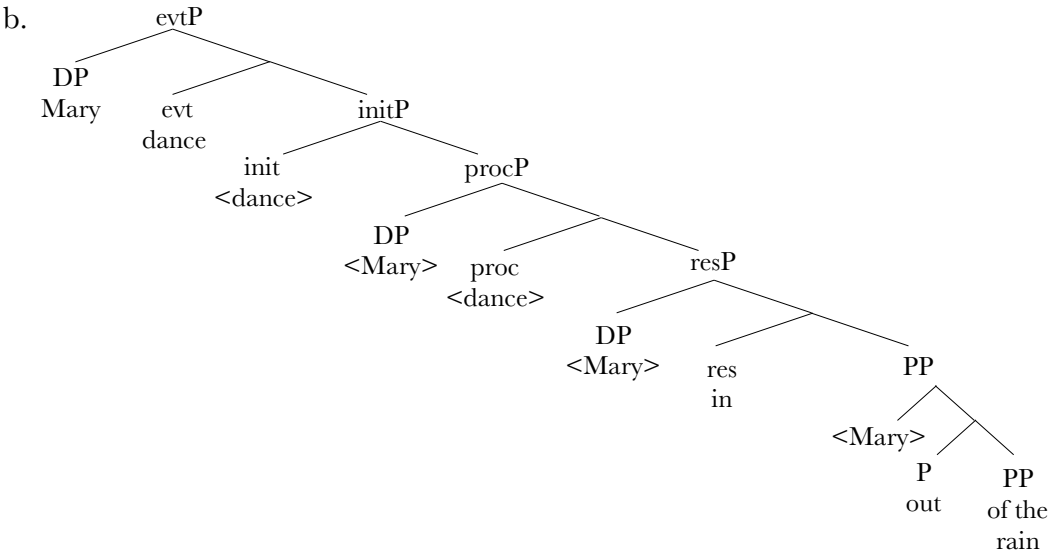
b.



Another type of element that can instantiate the res head in English is the preposition *in*, exemplified in (64) with an unselected object resultative with the verb *dance*. Note that in this case the res head also takes a small-clause like complement with a PP.

(64) a. Mary danced in out of the rain

b.

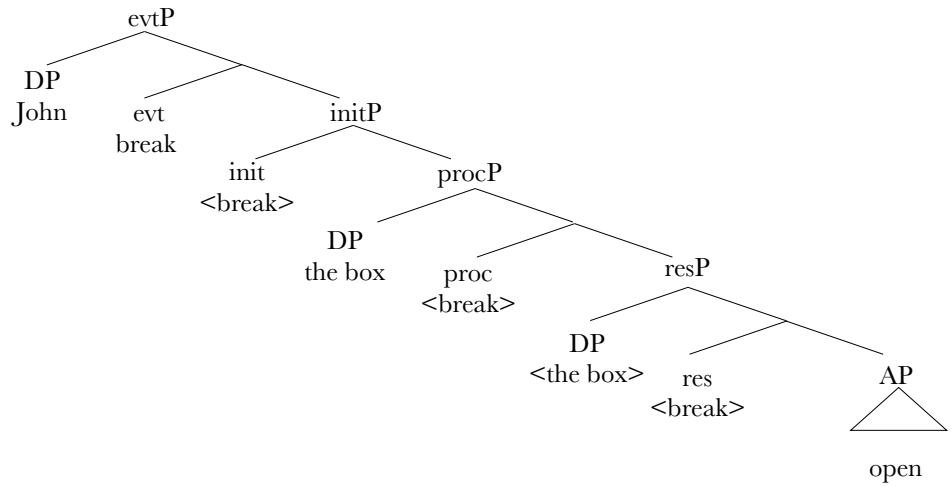


One final instance of resultative construction is the one instantiated by verbs such as *break* (65), which is also included in the group of selected object resultatives. In spite of

the similarities with the mentioned class of resultatives, Ramchand puts forth a first phase syntax, where the resultee is licensed by a result phrase instantiated by verbal morphology, which takes as a complement an AP.

(65) a. John broke the box open[14]

b.



Note that this type of resultative is not available in verb-framed languages such as Spanish. I would like to put forth that the verbal morphology instantiating the result head in Spanish would compete for the same position as the adjective, thus, blocking its presence. As remarked in Mateu (2012), Spanish does count with simple resultatives, which I assume require *underassociation* (66) of its res feature by means of an AP, due to the loss of type-B meaning (67). See chapter 2 for further discussion.

(66) *Underassociation*

If a lexical item contains an underassociated category feature,

(i) that feature must be independently identified within the phase and linked to the underassociated feature, by Agree;

(ii) the two category features so linked must unify their lexical-encyclopedic content.

(Ramchand 2008:136, (61))

[14] Jaume Mateu (p.c.) notes that the verb *break* may also take a particle such as *off*, in which case the verb will necessarily underassociate its result category label, which will in turn be realized by the same particle in the first phase syntax.

(i) The hammerhead broke off

(67) Juan se volvió loco
Juan REF turned crazy
'Juan went crazy'

As yet, it has been shown that in Ramchand's framework, telicity can be derived from three different sources: (i) a verbal res head specifying the result subevent, (ii) an adjectival res head, and (iii) a PathP specifying an ending point.[15] If we take into consideration Mateu's insights and the comments in this section, the conclusion drawn is that Spanish can form resultatives based on path complements and underassociation. In this way, we can account for Italian and Spanish constructions involving a process verb such as *run*, *fly*, etc. and a particle specifying the ending point of the path. I surmise that telicity is obtained by dint of the path structure provided by the PP via homomorphic unity, rather than by event composition of a subevent of initiation, a subevent of process, and a subevent of result. Thus, Romance languages can express telicity by means of a res head only if it is included in the lexical entry of the verb, or via a PathP, such as a quantized DP or a bounded PP. In Japanese, more options have been attested as this language can also license a homomorphic path relation between a process and an AP with an initiator subject and an undergoer object. As for the reason of Japanese's flexibility in this regard, I cannot offer an explanation at this point.[16]

---

[15] Following previous work by Parsons (1990) and Levin & Rappaport Hovav (1998), among others, who assume that accomplishments consist minimally of two subevents, one of process and of result, Ramchand's (2008) framework assumes a syntactic approach to *result augmentation*.

[16] Snyder (2001, 2012) considers Japanese's availability of weak resultatives to be a direct consequence of the possibility of also having "creative" endocentric compound nouns in the language such as *frog man,* which can be used compositionally, denoting anything related to frogs: "a man who resembles a frog, behaves like a frog, or collects frogs". By contrast, Romance languages lack this principle and, consequently, the equivalent compound in French, *homme grenouille*, has a fixed use, in this case, 'underwater diver'. According to Snyder, the existence of these constructions in a language are enough to confirm that the language in case allows Generalized Modification, which in turn is necessary to create resultative structures.

(i) *The Compounding Parameter (TCP)*: The languages (does/does not) permit Generalized Modification.

(ii) *Generalized Modification (GM)*: If α and β are syntactic sisters under the node γ, where α is the head of γ, and if α denotes a kind, then interpret γ semantically as a subtype of α's kind [in the sense of Chierchia (1998)] that stands in a pragmatically suitable relation to the denotation of β.
(Snyder 2012:285)

Snyder puts forward that two other parameters along with the TCP determine the availability of weak resultatives in Japanese: the Incremental Theme Parameter, that is, whether a language counts with adpositions that are incremental (boundary crossing adpositions), and the availability of small-clauses as

Finally, English has a higher degree of flexibility, which endows it with the possibility of instantiating a resultee object by means of a satellite or particle, an element morphophonologically independent of the verbal root, which is licensed by a result head. As previously discussed, in English, the first phase syntax may contain a PP that does not specify the end of the path of motion (51), which suggests that this structure could contain a resP instead of a path. Thus, I will be assuming that unselected object resultatives with PPs such as the one in example (51), also instantiate a res head, which allows the introduction of a resultee object in the first phase syntax. This structure is only available in English, for which a result phrase independent of the verb morphology is possible. In comparison, these are proper resultative structures as verb-framed languages' resultative structures can only license undergoer objects. In particular, Spanish and Italian can only have initiator-undergoer entities, whereas Japanese allows initiator subjects and undergoer objects in the same first phase syntax. To conclude, I present the information discussed in this section in table 2 as a summary. Now that we have a picture of the first phase syntax of resultatives cross-linguistically, the following section considers the place of Talmy's co-event in the Ramchandian first phase syntax.

	First phase syntax	*Spanish*	*Japanese*	*English*
Simple resultatives	<(init), proc, res>	*poner* 'put' + AP		
Simple directed goal of motion	<init, proc, path (PP)>	*correr* 'run', *nadar* 'swim' + PP	*hatta* 'crawl' + PP	
Selected object resultatives	<init, proc, path (AP)>		*tatai*, *hui* + AP	*hammer*, *wipe* + AP
Unselected object resultatives	<init, proc, res + AP/PP>			*sing*, *run* + AP *run*, *swim*, *dance* + PP

TABLE 2: RESULT AUGMENTATION ACROSS LANGUAGES

complements to V. In this way, Snyder aims to account for the availability of certain AP resultative constructions in Japanese, specifically, the kind that Washio (1997) calls "weak" resultatives and direct motion readings of manner of motion verbs. See Snyder (2012) for further discussion.

4. STRUCTURAL AND CONCEPTUAL MEANING IN VERB SEMANTICS

The question I aim to answer in this section is: where does the co-event component stem from? It is necessary to understand how the framework in which I am operating can account for both these possibilities. In order to do so, in section 4.1, I review Ramchand's (2014) take on the division of meaning identifiers between syntax/semantics and the lexicon. The idea I would like to explore is that the manner component is contributed by the verb root and its type-B meaning, while the co-event information derives from the existence of two spatio-temporal stages introduced by the process and result heads. Section 4.2 offers an overview of research dealing with the existence of prelinguistic cognitive defaults that might support Ramchand's take on the division of structural and conceptual meanings. Finally, section 4.3 concludes by discussing how to introduce the manner or cause co-event in the first phase syntax.

4.1. Ramchand (2014)

Ramchand (2014) argues for a *Cross-Modular Unification* approach to meaning whereby a lexical root contains different types of meaning, which are obtained from different sources and later unified during the derivation. Type-A meaning (68) instantiates structural meaning relevant for syntax, which is used to create an articulated phrase structure, whereas type-B meaning (69) encapsulates lexical conceptual meaning with no effect over syntax but relevant to the mind module as it spreads all over the syntactic structure.

(68) *Type-A Meaning ("Skeleton")*

> A structured representation of abstract factors that are directly correlated with linguistic generalizations concerning argument structure realization in the syntax. (It is an open question whether the information in this domain is linguistically universal, or whether individual languages can choose to grammaticize sub portions of a set of more general primitives made available by cognition.)

(69) *Type-B Meaning ("Flesh and Blood")*

> Encyclopedic and conceptually rich information that provides detailed expression to highly specific named events. It is always unsafe to assume that this type of meaning package is universal although it is drawn from common human cognitive primitives, since it is packaged up in culturally specific and historically contingent ways.
>
> (Ramchand 2014:208)

In the derivation, the resulting bundles of type-A meaning (categorial features) and type-B meaning (conceptual information) realize each of the nodes of the syntactic tree, as stated by Ramchand in the principles governing the lexical instantiation of the structure, namely, the *Exhaustive Lexicalization principle* (70) and the *Non-terminal Lexicalization principle* (71).

(70) *Exhaustive Lexicalization*[17]

> Every node in the syntactic representation must be identified by lexical content.

(71) *Non-terminal Lexicalization*

> Lexical items are bundles of conceptual information specified with a set of categorial features which determine points of meaning unification with syn-sem structure (which I assume must correspond to continuous stretches of hierarchical structure in order to feed linearization).
>
> (Ramchand 2014:211-212)

As Ramchand points out in her definition of type-A meaning, any patterns or tendencies in verbal meaning across languages should be associated to this type of meaning, since type-B is world-knowledge, or culturally, based. One of these patterns or tendencies appears in the encoding of scalar change, namely, that associated with path of motion, property change and incremental themes. The notion of verb-framed and satellite-framed languages is notably connected to different patterns of encoding scalar change. Verb-framed languages encode the path of motion in the verb root while

[17] See Fábregas (2007) for the original formulation of this principle and further discussion of its application.

satellite-framed languages can encode the path of motion in satellites or particles. As shown, Spanish, along with other Romance and Germanic languages, codifies result/path information in the lexical verb root realizing the result portion of the first-phase syntax; in contrast, English's equivalent forms make use of satellites to instantiate this subevent.

According to Ramchand, another relevant source of information to corroborate this assumption would be light verbs. As a result of verbal polysemy, a verb may count with a full-fledged lexical version and a light version. Lights verbs should be recognized as different from auxiliary verbs, whose semantic and conceptual content is non-existent and purely functional (see table 3). In Ramchand (2018), these elements, such as the auxiliary or copula *be* in English, for example, instantiate the Event, Tense, and Aspect nodes of the syntactic structure. Ramchand cites Butt and Lahiri (2013) for the generalization on this type of stable polysemy involving lexical and lights verbs (72).

(72) *Butt and Lahiri's Generalization (Butt and Lahiri 2013)*

> Unlike auxiliaries which may become grammaticalized over time to have a purely functional use, light verbs always have a diachronically stable corresponding full or "heavy" version in all the languages in which they are found.
>
> (Ramchand 2014:217, (11))

Ramchand sets light verbs clearly apart from their lexical counterparts on the basis of the amount of semantic information that each of them contains. Specifically, light verbs instantiate only type-A meaning, that is, only a subset of the information contained in the heavy version of the verb. As shown in table 3, we can set apart lexical verbs, light verbs, and auxiliaries on the basis of the division of meaning identifiers. That is, lexical verbs instantiate both type-A and type-B meanings, light verbs exclusively contain type-A meaning, and auxiliaries are devoid of both type-A and type-B meanings. See chapter 3 for further discussion.

	Type-A meaning	*Type-B meaning*
Lexical verbs	✓	✓
Light verbs	✓	✗
Auxiliaries	✗	✗

TABLE 3: VERBAL POLYSEMY AND TYPE-A AND TYPE-B MEANINGS

Light verb uses can be identified on the basis of the compatibility of the bare nominal appearing with them with tests such as "passivization, Wh-movement, relativization, reference by means of a pronominal, modification by adjectives, and use of a definite article" (Ramchand 2014:219). As an example, consider Ramchand's analysis of the heavy and light uses of the verb *give* in English. The heavy use refers to a possession transfer (73), while the light use denotes a volitional action or experience (74).

(73) a. John gave Mary a book
b. John gave Mary a kiss

(Ramchand 2014:220, (15))

(74) John/the train gave a shudder/sigh/whistle

(Ramchand 2014:222, (19))

In spite of the difference in meaning complexity, Ramchand concludes that both uses codify the same type-A information, that is, they both contain init, proc, and res phrases; however, other types of information such as physical transfer are lost (cf. (73) and (74)). Through the examination of the heavy and light uses of English, Bengali, and Persian verbs, Ramchand provisionally concludes how meaning identifiers should be divided up between meaning types (see table 4). The syntactically represented event-structure would include information regarding: causation, as represented by initP; event structure properties such as dynamicity, resulting from the combination of initP and procP; and abstract path information, that is, types of scalar change. If scalar change is the source of cross-linguistic variation among languages, and this variation has its locus in the language's capability to realize the result portion of the event by means of a morphophonological element independent of the verb, that is, in these languages,

resultative structures may consist of two independent lexemes, while in verb-framed languages the resultative structure can only be created by a single verb root, then we might assume that what is at stake is the ability to introduce a bivariate transition by means of a morphophonological element independent of the verbal root or a multivariate transition by means of a PathP, and the possibility of combining these elements with a non-scalar verbal head, that is a procP. In turn, lexical items, verbs or morphemes, would contain one or an array of lexical encyclopedic identifiers such as manner of causation, change, properties, locations, etc.

Domains of conflation I[18]	
Syn-Sem (Type-A meaning)	*Lexical Encyclopedic Identifiers (Type-B meaning)*
Cause	- Manner of causation (instruments, degree of volitionality)
Non-change vs. change	- Specific properties and state descriptions - Manners of change
Non-scalar vs. scalar change	- Types of dynamicity generally (qualities of motion, speed, attitude, shape and orientation of figure, etc.)
Multivariate vs. bivariate transition	- Types of scalar changes (properties, ordered location)
Source of scale	- Specific properties, locations for start and end of scalar path
Result of change	

TABLE 4: DOMAINS OF CONFLATION I (RAMCHAND 2014)

Ramchand notices that the verbs participating in this specific type of polysemy are "verbs of generalized movement and transfer in space (attached to different path properties)" (2014:240); accordingly, she lays out the idea that there might be a group of cognitive defaults including transfer, motion, and location which may be added to verbs that lack sufficient lexical encyclopedic identifiers. Thus, per definition, light verbs could become heavy by the application of cognitive defaults if no other element provided the missing event structure parts (see table 5).

[18] The term *conflation* as used by Ramchand should not be equaled to the use of this term in Hale & Keyser (2002), Mateu (2002, 2012), Mateu & Acedo Matellán (2012), Acedo Matellán & Mateu (2014), and Acedo Matellán (2010).

Domains of conflation II		
Syn-Sem (Type-A meaning)	*Cognitive Defaults*	*Lexicon (Type-B meaning)*
Cause	Caused positional transfer	Everything else
Non-change vs. change	Locations	
	-Manners of motion	
Non-scalar vs. scalar change	Change of location	
Multivariate vs. bivariate transition		
Source of scale		
Result of change		

TABLE 5: DOMAINS OF CONFLATION II (RAMCHAND 2014)

Ramchand's hypothesis about the existence of these cognitive defaults might be supported by studies in human cognition, tracking eye-movement and attention allocation patterns in subjects whose first language is a verb-framed or satellite-framed language. The next section reviews these studies to pinpoint Ramchand's hypothesis. Afterwards, section 4.3 returns to the question of how Talmy's co-event fits in the Ramchandian framework.

4.2. Ramchand's core cognitive defaults: the existence of prelinguistic cognitive conceptual content

Studies such as Papafragou et al. (2006, 2008) and Papafragou (2015), among others, conclude that the way events are perceived and cognitively processed is universal. These studies contrast the possible differences in the way people observe motion and causation events while (i) memorizing and freely inspecting ongoing events and (ii) preparing and producing verbal descriptions of ongoing events. According to Papafragou et al. (2008), subjects behaved similarly in how they allocated attention in tasks requiring the memorization and free inspection of ongoing events. These tasks did not involve the production of language strings. Importantly, there were no significant differences during these tasks even if the subject's first language was a verb-framed or a satellite-framed language. The subject's first language was only relevant after motion had

stopped and people began to memorize events to produce descriptions thereby paying specific attention to those aspects that are not prototypically encoded in verbs in their first language. On the other hand, differences between speakers of verb-framed and satellite-framed languages were significant during the verbal description task. The eye-tracking showed that speakers allocated more attention on those aspects of the ongoing motion that are prototypically encoded in their languages; thus, different eye-movement patterns were registered during the first second of the start of the motion. Papafragou et al. (2006) elaborate further on the cross-linguistic differences between English and Greek, specifically, on the expression of the manner component, determining that, even though English speakers tend to express the manner of motion more frequently than Greek speakers, Greek speakers can also track manner information and express it in motion descriptions if that information is not inferable from the situation described. Thus, speakers of both languages are able to pay attention to manner information and share it whenever it is considered relevant or necessary to avoid miscommunication.

Similarly, Bunger et al. (2016) expose that a speaker's native language does not predetermine the way events are viewed and processed during non-linguistic tasks. This only changes during linguistic tasks when speakers inspect events in the order in which the relevant elements will be encoded in the sentences. They also noticed significant differences between the attention-allocation patterns of children and adults. Their behavior diverged during both linguistic and non-linguistic tasks. Importantly, their investigation showed that conceptual representations of events exist and can be created independently from language. As a matter of fact, children of different languages tended to pay more attention to the means component than the result component. This diverged from the behavior of adults who, consistently, paid attention first to the means component before beginning their event descriptions and only after one or two seconds directed their attention to the result component. This is consistent with the way this information is encoded and mentioned in event descriptions, even if speakers of English and Greek in this study use different strategies to encode this information in sentences. While English speakers preferred the means first and result second pattern, Greek speakers followed a different pattern consisting of a path-incorporating verb or a two-clause description. We can explain the differences among the two subject groups, children and adults, on the basis of the interaction of language acquisition and cognitive development. Clark (2004) argues that children create conceptual representations of the

external world through perceptual inputs, involving objects, relations, and events, which are used during language acquisition, when these representations are matched to words. Spatial representations begin to emerge as soon as 6 to 7 months when children start tracking locations as goals and paying attention to the orientation of figures. These representations are available to all children but, as soon as language acquisition increments, children follow different paths since languages codify differently the external world, reflecting a community's choice on how to organize that experience. Children need to learn which aspects are codified in their language's words. This process begins around 18 months for spatial relations and its completion point differs among languages. Thus, the availability of lexical items in a language can determine language acquisition and its mastery. Furthermore, it also affects second language acquisition. Lemmens & Perrez (2010) show that French-speaking learners of Dutch tend to underuse or overgeneralize when they use the Dutch posture verbs *staan* 'stand', *liggen* 'lie', and *zitten* 'sit'. This is correlated to the existence of typological differences between French and Dutch, which will be discussed at length in chapter 3 of this dissertation. In spite of them, French-speaking learners are able to draw generalizations and "operate on grammaticised semantic distinctions drawn from the target language" (2010:315), proving that, underlying language, there exists a common representational background of the external world.

The conclusions drawn in these studies tally with the ideas presented in Hinzen (2012) and Hinzen and Sheehan (2013), according to whom perception is a pre-linguistic cognitive system which allows the creation of concepts via the analysis of perceptual stimuli, that is, environmental variables that are analyzed to create structured representations. A bundle of perceptual features can receive a phonological form and be stored in our minds making its retrieval possible regardless of the existence of a stimulus. The process of lexicalization requires dissociating the percept from the stimulus, so that the concept, or lexical item, need not be triggered by an external element and may be accessible to thought and reference via grammar, an artifact only available to humans. In this sense, lexemes are a repository of "shared conceptualization", a classification of human experience of the world, that are learnt as atoms of meaning. Along with the creation of such abstract elements, the mind is also able to create relational concepts such as agent or cause. Importantly, this conceptual system is pre-linguistic. With the emergence of grammar, a new semantics emerges

bringing with it a formal ontology distinguishing objects, events, propositions, facts, properties, and states, which is manifested in the various parts of speech. This implies the addition of a "grammatical layer of structure", which results in a novel class of meaning organization in the form of grammatical categories. The content of a lexeme, that is, the representation based on perceptual features, is inaccessible to grammar while a derivation is created. On the other hand, atomization of grammatical chunks of structure can happen as well. This brings about the lexicalization of configurations, as shown for the verb *kill* (75), which implies the existence of a causative subevent that brings about a result state expressed in the small-clause.

(75) 'kill' ⇒ The bride [made [$_{SC}$ Bill dead]]

(Hinzen & Sheehan 2013:48)

To summarize, Hinzen and Sheehan put forward that:

(76) "[Grammar] yields perspectives on a reality already perceptually analysed, which are themselves not a part of this reality, but correspond to the specific grammatical way in which it is known by us."

(Hinzen & Sheehan 2013:73)

The existence of a pre-linguistic system of causation is further supported by the research of Carey (2009). Studies testing infants as young as 6-to-7-month-old show that they are able to generate causal inferences. Causal representations created by humans require the integration of various systems of core cognition. Previous studies suggested that causation was solely based on perceptual or sensorimotor parameters; however, Carey claims that along with these systems infants can also integrate "information about the ontological status and stable causal dispositions of the interacting entities" (2009:243), thus, including inferences about the roles of agents, objects, or patients played by the entities participating in the scenario. These causal inferences do not only apply to motion events but also to change of state events. According to Carey, the causality relation is based on immediate contact of an inanimate entity by a moving object, or source of energy, affecting it in both motion and change of state events. Thus, relational concepts such as cause are brought into existence by several systems including

perception, sensorimotor, and other cognitive devices identifying dispositional roles that allow humans to create representations of the external world.

(77) "[T]he representational primitives from which the human mind is constructed are not solely perceptual or sensori-motor. Concepts such as object and agent are the output of innate input analyzers, embedded in distinct systems of core cognition. Thus, core cognition is the source of some innate representations with conceptual content."

(Carey 2009:215)

The important conclusion to be drawn from these studies is that there exist pre-linguistic cognitive defaults, which might be at play during language production and comprehension and, furthermore, they may be intertwined with language and unify with the syn-sem structure when the derivation is sent to the conceptual-intentional interface (Ramchand 2014). The work by Papafragou et al. (2008), Papafragou (2015), and Bunger et al. (2016) shows that conceptual representations of events exist at some cognitive representational level and can be created independent from language. In addition to the possibility of creating conceptual representations, the mind is able to produce relational concepts such as agent or cause before language has been completely acquired by infants as young as 6-to-7-month-old, as put forward by Carey (2009). For our purposes, what is important is that inferences about the external world can be obtained independently from language. The creation of a causational relation between two (sub-)events, one of means of motion and another of result, might be linked by means of one of the possible cognitive defaults at our disposal. According to Ramchand (2014), the list of cognitive defaults triggered by these cognitive systems would include caused positional transfer, locations and manners of motion, and change of location, which may be added to verbs that lack sufficient lexical encyclopedic identifiers. Whether this is a viable hypothesis or not, requires further research beyond the limits of this dissertation.

4.3. Where is the co-event found in the first phase syntax?

While Ramchand (2014) argues that a single lexical item may contribute content to more than one terminal node in the first phase syntax, as these elements are distributed among the init, proc, and res heads, I think there are compelling reasons to assume that manner information should not be part of the syntactic derivation. According to the discussion in the previous sections, the manner meaning is orthogonal to the first phase syntax and is only integrated once the derivation has been sent off to the semantic interface. Assuming that there is a connection between the process head and the manner meaning is not sufficient to conjecture that a co-event is present in the structure. The view I am arguing for considers that the existence of a co-event should be understood as the presence of two subevents that together form a macro-event. As argued by Talmy, the co-event may be of different types not only manner or cause, depending on the relation established between the framing event and the supporting relation. The category labels that conform the first phase syntax provide the structure, which instantiates event and argument information and which we might correlate with Talmy's framing event. This structure is later enriched by means of the lexical-semantic information contained in the root, or roots, that instantiate the terminal nodes of the first phase syntax, namely, type-B information. The co-event arises due to the presence of at least two different roots that instantiate the process and result phrases, respectively. In this sense, whatever lexical-semantic contribution a root can make depends on which terminal nodes it realizes. Consider the case of manner + result roots discussed in Beavers & Koontz-Garboden (2012) as instantiated in manner of killing verbs such as *guillotine*, *electrocute*, *drown*, etc. These authors argue against Rappaport-Hovav & Levin's (2010) claim that non-stative verbs can only encode either manner or result as these meanings appear in complementary distribution, and how they are realized in event schemas, or other artifacts fleshing out event and argument structure (78). According to Rappaport Hovav & Levin, the ontological characterization of roots will determine their role as modifiers of the event schema or as arguments. In a simplex lexeme, a root may only be associated with manner or result, which are equivalent to the positions of modifier of ACT or argument of BECOME. This fact is used to restrict the types of meanings a root can instantiate. By contrast, a complex lexeme may consist of two different roots encoding manner and result, respectively.

(78) a. [x ACT⟨ROOT⟩]

b. [[x ACT] CAUSE [y BECOME ⟨ROOT⟩]]

c. *[[x ACT⟨ROOT⟩] CAUSE [y BECOME ⟨ROOT⟩]]

d. *[[x ACT⟨ROOT$_1$⟩] CAUSE [y BECOME ⟨ROOT$_2$⟩]] (in a single verb)

(Beavers & Koontz-Garboden 2012:333, (3))

Beavers & Koontz-Garboden challenge this assumption and show that manner of killing verbs contain both manner and result meanings. Specifically, there is no constraint in how many truth-conditional meanings a root may codify. A garden-variety of diagnostics is used to prove this claim, showing that these verbs contain both meaning components (see Beavers & Koontz-Garboden 2012 for further discussion). This notwithstanding, the manner/result complementarity holds true of event structures. By dint of the readings triggered by the scopal adverb *again* (79) and the restitutive prefix *re-* (80) in English, the authors show that manner + result verbs behave differently from complex resultative structures consisting of at least two roots as these elements consistently take scope over the result, while manner + result verbs allow not only the restitutive meaning but also a repetitive reading about the manner, or cause, which facilitated the result event. Thus, manner and result in these verbs are argued to form a scopal unit, which preempts the capability of these elements to take scope over only the result.

(79) a. Mary made a sheet of metal that is flat, but it later accidentally became bent. Fortunately, John hammered the metal flat again.

b. John drowned the zombie again.
MEANS 'John caused the zombie to be dead by drowning again.'
CANNOT MEAN 'John caused the zombie to become dead again by drowning, but the last time he was killed it was with a chainsaw.'

(Beavers & Koontz-Garboden 2012:357, (65a); 358, (68))

(80) John reguillotined the zombie.

MEANS 'John caused the zombie to be dead by guillotining again.'

CANNOT MEAN 'John caused the zombie to become dead again by guillotining, but the last time he was killed it was with a chainsaw.'

(Beavers & Koontz-Garboden 2012:359, (71))

Beaver & Koontz-Garboden's conclusion is that our ontologies of roots should include manner, result, and manner+result roots, for which they propose an event structure equivalent to that of change of state verbs.

Mateu & Acedo Matellán (2012) and Acedo Matellán & Mateu (2014) further explore the importance of this fact in argument structure, as previously discussed in this chapter. They show that the interpretation of roots depends on the merging position of these elements in the argument structure within their framework. In particular, they argue that the manner interpretation results whenever a root is adjuncted to the verbal head via conflation (81), i.e. external merge, whereas the result interpretation is obtained when the root is incorporated (82), i.e. internal merge, into the verb root. These operations are aimed at giving phonological form to the verbal head; hence they cannot be applied simultaneously for a single verbal head. Finally, even if this root is argued to contain both manner and result meaning identifiers, its contribution is determined by the position of the root in the syntax.

(81) a. The guy guillotined his way onto the list

b. [$_{vP}$ [$_{DP}$ The guy [$_{v'}$ √GUILLOTINE v] [$_{PP}$ [$_{DP}$ his way] [$_{P'}$ P$_{TCR}$ the list]]]]

(Mateu & Acedo Matellán 2012:215, (14)

(82) a. They guillotined Mary

b. [$_{vP}$ [$_{DP}$ They [$_{v'}$ √GUILLOTINE [$_{PP}$ [$_{DP}$ Mary] [$_{P'}$ P$_{TCR}$ ~~√GUILLOTINE~~]]]]

(Mateu & Acedo Matellán 2012:214, (11)

In the Ramchandian framework, the framing event is the bare first phase syntax, to which a co-event may be related by the existence of at least two roots with the relevant category labels instantiating process and result, respectively. The so-called manner meaning arises in the conceptual interface as the root contributes its conceptual

meaning, or type-B meaning, which I assume is linked to the spatio-temporal unit introduced by process. In this sense, co-event simply refers to one of the spatio-temporal entities present in the first phase syntax, whose meaning is enriched by the conceptual content contributed by the root. Inasmuch as a co-event presupposes dynamicity, I take the co-event to arise minimally from the presence of either an initiation and process head or a process and result head. A co-event is then dependent on the existence of at least two subevents, instantiated by different roots. This hypothesis is further explored in chapter 3 with posture verbs in satellite-framed languages for which, against Talmy (1991, 2000), I reject a co-event analysis as these verbs do not instantiate two spatio-temporal units in their first phase syntax when they denote stationary motion.

5. STRUCTURE OF THE DISSERTATION

Chapter 2

In this chapter, I examine how cross-linguistic and intra-linguistic properties of Romance and Germanic languages determine the properties of posture verbs in their causative and assume position senses. Causation encoding is shown to have a bearing intra-linguistically since Germanic languages show important divergencies in the way causation is manifested in these two senses of posture verbs. Similarly, path encoding will be shown to be determinant in the properties of these verbs cross-linguistically. Ultimately, the source of the attested variation will be found in the type-A meaning of these verbs across languages.

Chapter 3

Building on the theoretical foundations established in the previous chapter, I take a stance regarding the controversial aspectual status of posture verbs in Germanic languages when they express stationary motion. These verbs have been argued to constitute an aspectual class of their own along with other verbs such as *sleep*, *shine*, etc., however I surmise that their basic aspectual make-up and the labile nature of English explains their properties. I also examine the use of posture as co-events and 'light' verbs,

which I argue arise as a consequence of the different interactions of type-A and type-B meaning in the first phase syntax. The process of grammaticalization experienced by posture verbs cross-linguistically is argued to stem from the lack of type-B meaning. By contrast, the co-event use of posture verbs in Germanic languages, as propounded by Talmy (1991, 2000), will be argued to contain a rhematic prepositional phrase, or small-clause, with the figure and ground arguments, following the seminal work by Hoekstra & Mulder (1990).

Chapter 4

In this chapter I examine two different instances of the intransitive-locative alternation, in which the subject of the predication is a locative element. Bearing in mind the properties ascertained for posture verbs, I study the behavior of these verbs in the intransitive-locative alternation and show that this alternation is also possible with Spanish posture verbs. The rest of the chapter is devoted to the so-called stative-locative alternation in Spanish with verbs such as *pulular* 'swarm' or *brillar* 'shine'. The argumentation will be built around previous accounts of this alternation in Dutch, which will help me underpin the first phase syntax for these verbs in both alternants. I will argue that the properties of these verbs in the *Location-Subject* order in Spanish stem from the locative nature of the subject DP and the particular properties of the prepositional phrase introduced by *de* 'of', which will be taken to instantiate a cause phrase expressing the initiating entity of the process event.

Chapter 5

This chapter presents the conclusions of the dissertation including the summary of findings, the main contributions, and the future directions of research.

CHAPTER TWO. Causation and path encoding in posture verbs in verb-framed and satellite-framed languages

INTRODUCTION

This chapter spins around the notions of causation and path encoding in posture verbs. The approach adopted highlights the cross-linguistic and intra-linguistic differences that set apart these verbs in Romance and Germanic languages. In the following pages, I analyze the causative and assume position senses of posture verbs, using Levin & Rappaport Hovav's (1995) terminology. The conclusions drawn about their argument structure will prove essential to understand the argument structures of the simple position and maintain position senses in chapter 3. Specifically, I will show that the difference in the encoding of path and causativity explains the contrasts in the behavior of posture verbs in Romance and Germanic languages. The source of the mentioned variation will be found in the type-A meaning codified in the lexical entries of these verbs. On the one hand, path information is expected to be differently codified in Romance and Germanic languages due to the fact that the former follow the verb-framed pattern and the latter adopt the satellite-framed pattern, as established by Talmy (1991, 2000). Following Ramchand (2008), I will assume that the category label resP fleshes out this meaning component, which will be shown to be differently realized morphologically in Romance and Germanic languages such as Spanish and English but realized in a similar way in Spanish and other Germanic languages like German. On the other hand, I will argue that the encoding of causation is also pertinent for the properties of posture verbs inasmuch as Romance and Germanic languages tend to represent two different poles of the typology of causation encoding. This additional source of cross-linguistic variation will help understand the differences in the argument structures of these verbs and explain the intra-linguistic differences found between Germanic and Romance languages. Finally, while posture verbs are "reflexively" marked in some languages, I will not endorse a reflexive analysis *per se*; instead, I will

explore how reflexive morphology might be used in these verbs to mark a rather different relation between the argument participants and introduce the notion of autocausativity (Geniušienė 1987). Most importantly, the conclusions drawn from the properties of the argument structure of posture verbs will help lay the theoretical foundations for the remaining chapters of the dissertation.

1. AN OVERVIEW: THE ARGUMENT STRUCTURE OF POSTURE VERBS

By way of introduction, I present a brief overview of the analysis that will be argued for the assume position and the causative senses of posture verbs. As mentioned in chapter 1, Levin & Rappaport Hovav (1995) identify three possible non-causative meanings for verbs of spatial configuration, referred to as posture verbs in this dissertation: a simple position meaning, a maintain position meaning, and an assume position meaning. The center of attention in this chapter is the causative and assume position senses of these verbs, both of which will be claimed to possess causative semantics and syntax. By means of the examination of the argument structures of these two causative senses, the properties of the simple position and the maintain position senses will be initially ascertained; nevertheless, their peculiarities will be further analyzed in chapter 3.

On a first approach to the matter at hand, I present the following data about the posture verb *sit* in some Romance and Germanic languages (1-6) to establish an initial comparison of the mechanisms to express causation and path encoding between them. Regarding causation, I would like to call attention to the importance of the observable variation in the examples below, inasmuch as two different mechanisms are in use, namely, the so-called anticausative alternation and the labile alternation. The causative and assume position senses of posture verbs show a striking similarity across Romance languages –Spanish, Catalan, French (1-3)– and Germanic languages –Swedish, German (5-6)–, except for English (4), which does not use an anticausativizing strategy to create the assume position sense (1b-6b), but rather it uses the intransitive verb *sit* to build all senses, including the simple position sense. I put forward that what sets apart English from the rest of languages is its labile nature, namely, English uses the same verb root for causative and anticausative structures with no further difference

between them. On the other hand, the rest of Germanic languages, and the Romance languages as well, follow the anticausative pattern creating their respective assume position sense by means of a reflexive pronoun.

(1) a. Yo senté al niño en la silla (Spanish)
I sat to-the child on the chair
b. El niño se sentó en la silla
The child REF sat-down on the chair

(2) a. El pare va asseure el nen a la cadira (Catalan)
The father PST sit the child on the chair
'The father sat the child on the chair'
b. El nen es va asseure a la cadira
The child REF PST sit-down on the chair
'The child sat down on the chair'
(Jaume Mateu, p.c.)

(3) a. J'assieds l'enfant sur une chaise pour le faire manger (French)
I sit the-child on a chair for him make eat
'I sit the child on a chair to feed him'
b. Je m'est assis dans le fouteil
I REF-is sat-down in the sofa
'I sat down on the sofa'

(4) a. I sat the child on the chair (English)
b. The child sat down on the chair

(5) a. Peter satte babyn i stolen (Swedish)
'Peter sat the baby in the chair'
b. Peter satte sig upp i sängen
'Peter sat down'
(Viberg 2013:141)

(6) a. Der Vater setzte das Kind auf den Stuhl (German)
The father sat the child on the chair
'The father sat the child on the chair'
b. Das Kind setzte sich auf den Stuhl
The child sat-down REF on the chair
'The child sat down on the chair'

The argument structure configurations underlying these verbs will reflect these properties and will be labeled causative and autocausative. Concentrating now on English and Spanish, I will argue that the examples in (1) have the same number of participants, that is, initiator, undergoer, and resultee, as well as subevents, differing in that the variant with the clitic *se* (1b) confers a semantic nuance not included in (1a), which I will refer to with the label autocausation, following Geniušienė (1987). The reason behind this nomenclature is self-explanatory: the subject's action is the cause of the motion affecting the subject itself. The clitic will be argued to play a placeholder function in the argument structure, that is, its presence will serve to mark that the element that works as undergoer and resultee is also the initiator of the event. This will be shown to be in consonance with the fact that Spanish, as other Romance languages, is an anticausative language, which has been traditionally regarded as a way of deleting or demoting one of the participants of the event. However, instead of adopting this view, I will assume with Pujalte & Saab (2012) that the clitic is inserted to satisfy the requirement of initP to have an argument that works as an initiator. By contrast, the lexical entry argued for the equivalent sequences in English (4) will be notably simpler. The reason behind it is the fact that English is a language that enters the labile alternation. As discussed in Ramchand (2008:82-89), the causative variant of this verb will require the merging of an initP to allow the insertion of an initiating subevent, whose specifier will appear in evtP. It will need to account for the fact that the English posture verb *sit* denotes a process, whose only participant is exclusively the undergoer of the event.

The second factor determining the properties of posture verbs in English will be its satellite-framedness, which allows it to introduce a result path, an element morphophonologically independent from the verb, in the event. Since Spanish is a verb-framed language, the lexical entry for Spanish *sentar* 'sit' will specify that this verb

contains the category labels init, proc, and res in its first phase syntax, thus, codifying the path information in the verb root. As put forward in Mateu (2002) and Acedo Matellán (2010), the acquisition of a property can be conceived of as a path. In the lexical entry, the result will identify the path, which in this case can be identified with the property of being seated. In contrast, English will unavoidably require a satellite such as *down* (4b) to specify the result of the event.

In the following sections, I present evidence that supports the claims laid out above. First, in section 2, I will argue that cross-linguistic variation in the encoding of causation is pertinent for posture verbs inasmuch as English and Spanish, along with the rest of Romance languages in the sample and several other Germanic languages, represent two different poles of the typology. This has immediate consequences for the properties of these verbs cross-linguistically, which will be reflected in their lexical entries and first phase syntax. Furthermore, intra-linguistic differences are found within Germanic languages setting apart English from German, Swedish, or Icelandic. Finally, in section 3, I will deal with path expression in Romance and Germanic languages and its importance in the first phase syntax of posture verbs. Section 4 concludes the chapter.

2. *CAUSATIVITY FROM A TYPOLOGICAL POINT OF VIEW: CROSS-LINGUISTIC VARIATION IN THE ENCODING OF CAUSATION*

This section examines the encoding of causation from a typological point of view with special attention to English and Spanish. In section 2.1, I review the classical study of Haspelmath (1993) and more recent proposals such as Alexiadou et al. (2006, 2015), and the ideas therein contained about the anticausative alternation, so as to shed light on the argument structure of posture verbs. Next, in section 2.2, I introduce the concept of autocausation, first minted by Geniušienė (1987), and argue that this semantic notion on how the only participant of the event is both the initiating and affected entity is relevant to understand the lexical entry and argument structure of posture verbs. In section 2.3, I discuss the properties of the clitic pronoun *se* that appears in the assume position sense in Spanish and suggest extending the same analysis to its counterparts in

the Romance and Germanic languages studied here. The conclusions to this section are presented in 2.4.

2.1. Causativity from a typological view

From a cross-linguistic point of view, variation in the expression of causativity is commonplace in languages. Specifically, languages vary in the way they mark the relation holding between inchoative and causative verb pairs that share the same meaning. This idea is found in Haspelmath (1993), who defines an inchoative/causative verb as:

(7) "a pair of verbs which express the same basic situation (generally a change of state, more rarely a going-on) and differ only in that the causative verb meaning includes an agent participant who causes the situation, whereas the inchoative verb meaning excludes a causing agent and presents the situation as occurring spontaneously".

(Haspelmath 1993:90)

In this view, whether a situation can be conceptualized as occurring spontaneously, that is, without some entity initiating it, will determine the existence of an inchoative version of a causative verb.[19] On the basis of this definition, Haspelmath (1993) proposes a three-way typology of languages to account for the variation in causativity expression: causative, anticausative, and non-directed alternation languages (see figure 1). The markedness relation in the causative and anticausative languages signals one of the verbs as basic and the other one as derived. For example, in Arabic, a causative language, the inchoative verb *darasa* (intr.) 'learn' is causativized by stem modification, which renders *darrasa* (tr.) 'teach'. In contrast, anticausative languages such as Russian mark the anticausativized transitive verbs by means of an affix as in *katat'-sja* (intr.) 'roll', from *katat'* (tr.) 'roll'. On the other hand, non-directed alternations hold no derivational

[19] As a matter of fact, the idea that a certain situation may occur spontaneously as justification for the creation of an inchoative verb form is a widely held point of view among linguists; nevertheless, I will contend that there exists compelling evidence involving posture verbs in Spanish that challenges this view, which will be discussed in due course.

relation between the inchoative/causative verb pairs. Three further subtypes are distinguished for this class of languages: equipollent, suppletive, and labile. Equipollent languages use the same stem for causative and inchoative verbs but apply different affixes, auxiliaries or modifiers depending on the sense of the verb. Japanese applies different affixes to the verb stem to mark the inchoative sense as in *atum-aru* (intr.) 'gather' and *atum-eru* (tr.) 'gather'. Suppletive languages use different verb roots instead as in the Russian pair *goret'* (intr.) and *žeč'* (tr.) 'burn'. Finally, labile languages use the same verb root for both inchoative and causative senses as in Greek's *svíno* (intr./tr.), which means 'go out' and 'extinguish', respectively.[20]

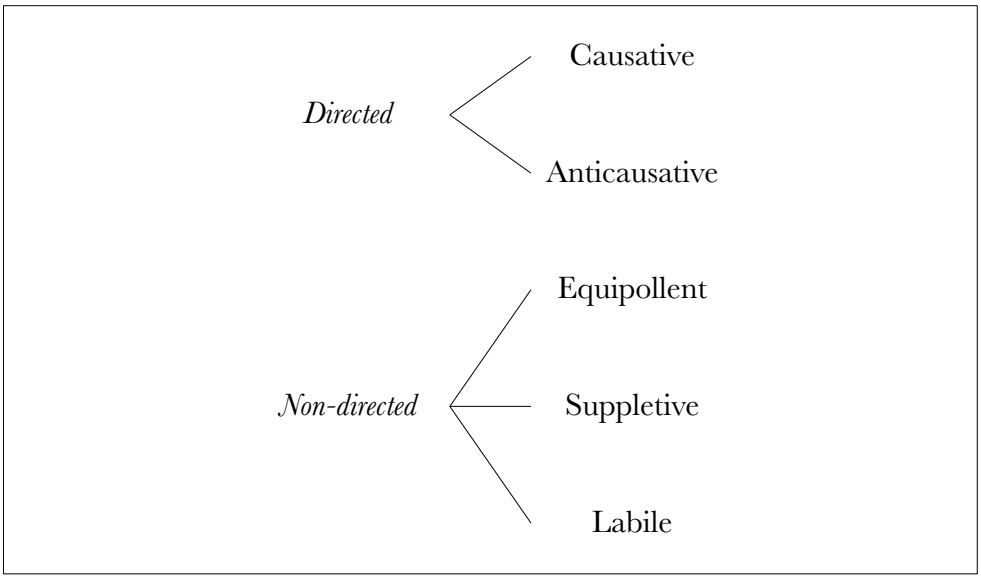


FIGURE 1: A TYPOLOGY OF CAUSATIVITY (HASPELMATH 1993)

Note that, in Haspelmath's list of examples, one language may count with inchoative/causative verb pairs of different classes. That would be the case of Russian and Hindi-Urdu in his survey, which can use the anticausative directed strategy with some verb pairs and, at the same time, use non-directed strategies for other verb pairs. For example, as mentioned above, Russian employs suppletive verb forms such as the pair *gorêt* (intr.) and *žeč'* (tr.) 'burn' and also anticausative verbs such as *katat'-sja* (intr.) and *katat'* (tr.) 'roll'. On the other hand, Hindi-Urdu has anticausative verb pairs such as *khul-naa* (intr.) and *khol-naa* (tr.) 'open' and equipollent forms such as *šuruu honaa* (intr.)

[20] All the examples mentioned here are taken from Haspelmath (1993).

and *šuruu karnaa* (tr.) 'begin'. Taking into consideration this evidence, the typology could be considered a tendency that languages follow while still allowing for other possibilities to express causativity. This is the approach adopted by Alexiadou et al. (2006, 2015), who propose a three-way typology of anticausatives (8) instead:

(8) a. Type A: marked anticausatives by means of a reflexive pronoun
b. Type B: unmarked anticausatives
c. Type C: optionally marked or unmarked anticausatives

This typology is built on the basis of Greek data: The first class, Type A, includes anticausatives that are morphologically marked. In the case of Greek, these verb forms are marked with non-active morphology (9). This class would also include anticausatives that are marked with a reflexive pronoun such as in Romance languages or German. The second class, Type B, groups together all anticausatives that are unmarked (10), which in the case of Greek appear with active morphology, in contrast to Type A. Finally, Type C (11) admits both possibilities, that is, this class is characterized by the optionality of the marking.

(9) a. O Janis ekapse ti supa (Greek)
the John.NOM burnt.ACT the soup.ACC
'John burnt the soup'
b. I supa kaike
the soup.NOM burnt.NACT
'The soup burnt'

(Alexiadou et al. 2015:63, (1))

(10) a. O Janis adiase ti sakula
the John.NOM emptied.ACT the bag.ACC
'John emptied the bag'
b. I sakula adiase
the bag.NOM emptied.ACT
'The bag emptied'

c. I sakula adiastike apo to Jani
the bag.NOM emptied.NACT from the John
'The bag was emptied by John'

(Alexiadou et al. 2015:64, (3))

(11) a. O Janis lerose to trapezomandilo
the John.NOM dirtied.ACT the tablecloth.ACC
'John dirtied the tablecloth'
b. To trapezomandilo lerose/lerothike
the tablecloth.NOM dirtied.ACT/NACT
'The tablecloth got dirty'

(Alexiadou et al. 2015:64, (4))

To determine whether an inchoative/causative verb pair will be morphologically marked, they resource to Haspelmath's "scale of increasing likelihood of spontaneous occurrence" (1993:105), that is, the likelihood that a situation can occur spontaneously without the involvement of an acting entity. The rationale behind it is that situations that are less likely to occur spontaneously will have marked inchoative forms, while situations that tend to occur spontaneously will count with unmarked inchoative forms or optionally marked ones. Even though this reasoning may help explain the inchoative/causative verb pairs in their sample, I argue that this is a simplification, which does not encompass all the possibilities languages actually encode. The spontaneity of an action cannot be the only relevant factor. In particular, I argue that posture verbs in Spanish challenge this view, since a reflexive clitic pronoun can appear with these verbs and, at the same time, express a "high involvement" of the entity initiating the event. Thus, the presence of a reflexive clitic pronoun cannot be said to solely mark the absence of a causer, or spontaneity, when some events require the existence of an undergoer in the conceptualization of the event. To test the non-spontaneous behavior of posture verbs, consider the acceptability of these verbs in (12) with the phrases *deliberately*, *on purpose,* or *in order to,* which should not be compatible with anticausative predicates (cf. Alexiadou et al. (2015), Chierchia (2004), Levin & Rappaport Hovav (1995), Mendikoetxea (1999), among others).

(12) a. El niño se sentó en el suelo deliberadamente (Spanish)
The child REF sat-down on the floor deliberately
b. El niño se sentó en el suelo a propósito / para descansar
The child REF sat-down on the floor on purpose / in.order.to rest

If we reexamine the data from Romance languages in (1-3), we can appreciate that posture verbs in Spanish, Catalan, and French tend to follow the anticausative alternation. Germanic languages such as English prefer the labile alternation (4). In stark contrast, other Germanic languages such as Swedish and German (5-6) adhere to the anticausative alternation in the manner of Romance languages. I repeat below the examples from Spanish (13) and English (14), for ease of exposition, and use them to build my argumentation.

Each language's choice has a bearing in the type-A information codified in verbs and these differences are manifested in the properties of posture verbs, which are reflected in (15) and (16) for Spanish and English, respectively. These two different patterns are the basic building blocks for posture verbs in the languages studied here. On the one hand, Germanic languages, such as Swedish or German, and Romance languages, such as Catalan, exploit both patterns to encode causative, anticausative, and static meanings. On the other hand, English can only use the pattern in (16) due to its labile nature, leveraging its satellite-framedness to express autocausative meanings allowing it to codify the path independently from the verb. Finally, Spanish and French would only use the pattern in (15) resorting to a different strategy to encode static meanings (see chapter 3).

(13) a. Yo senté al niño (en la silla) (Spanish)
I sat to-the child on the chair
b. El niño se sentó (en la silla)
The child REF sat-down on the chair

(14) a. I sat the child *(on the chair) (English)
b. The child sat down (on the chair)

(15) a. *sentar*: [init, $proc_i$, res_i]

b. [[sentar]] = < sentar,<init,$proc_i$,res_i>,λeλe_{init}λe_{proc}λe_{res}[e=e_{init} → [e_{proc} → e_{res} ∧ sentar(e_{init}) ∧ sentar(e_{proc}) ∧ sentar(e_{res})] >

(16) a. *sit*: [proc]

b. [[sit]] = < sit,<proc>,λeλe_{proc}[e=e_{proc} ∧ sit(e_{proc})] >

Following Ramchand (2008), I will adopt a causativization approach for English. That is, there exists a null init head merged on top of the structure to introduce an initiational subeventuality that brings about the process subeventuality. In order to causativize, init cannot be specified in the lexical entry of a verb. In contrast, Spanish posture verbs will already include an initP in their lexical entry. As indicated in the lexical entry in (16a), the intransitive posture verb *sit* denotes a process, whose only participant is exclusively the undergoer of the event. The lexical entry does not contain information about the initiator of the event. By contrast, the lexical entry for Spanish *sentar* 'sit' (15a) specifies that this verb contains the category labels init, proc, and res in its first phase syntax. Thus, the subject is not only the undergoer and resultee of the event, but also the initiator.

Having said this, I won't defend an anticausative analysis of these verbs in the assume position sense; but rather, following previous proposals by Geniušienė (1987), Wierzbicka (1976), and Kemmer (1988), I will argue that the relation holding between the arguments should be seen as autocausative inasmuch as the event denoted by these predicates expresses a caused change of state brought about by an initiator on a undergoer-resultee, whose reference is exactly the same. I think that the most compelling reason why the clitic *se* with verbs of posture should not be considered an instance of anticausativization is the different semantic interpretations of the subjects in these constructions, as discussed previously. For the sake of the argument, consider the sequence in (17a), where the subject (*el cristal* 'the glass') cannot be interpreted as the initiator of the event, since it could not bring about the change of state undergone/experienced by itself.[21] In contrast, the subject of (18b) must be the initiator

[21] See Beavers & Koontz-Garboden (2013), Chierchia (2004), Koontz-Garboden (2009), Levin & Rappaport Hovav (1995), Mendikoetxea (1999), Reinhart & Siloni (2005), Schäfer (2008), among others.

of the event, the entity that brings about the change of position on herself. Thus, the clitic that appears in anticausative constructions (17) cannot be of the same type as the one that appears with posture verbs, or rather they are inserted in very different argument structures.

(17) a. El cristal se rompió (Spanish)
the glass REF broke
'The glass broke'
b. El niño rompió el cristal
the child broke the glass
'The child broke the glass'

(18) a. La niña se sentó en la silla
the child REF sat-down on the chair
'The child sat on the chair'
b. La madre sentó a la niña en la silla
the mother sat to the child on the chair
'The mother sat the child on the chair'

Thus, Haspelmath's approach on the relation between the pairs of verbs in this alternation clashes with this view and the data to be discussed in the following sections, since propounding an analysis in terms of the deletion or demotion of the agent in the event cannot account for the properties displayed by these predicates. His definition can only describe one side of the spectrum or possibilities offered depending on the verb's type-A information and it would have to be modified to include posture verbs. Similarly, Alexiadou et al.'s (2006, 2016) spontaneity-based account of inchoative/causative forms does not explain why these verbs include a "reflexive" pronoun if an initiating entity can be identified. The reader should note that I won't be pursuing here a thorough analysis of all verbs that enter the so-called anticausative alternation or provide an encompassing definition of this phenomenon as it would go beyond the limits of this dissertation. I will concentrate on justifying the autocausative semantics of these verbs and assume Pujalte & Saab's (2012) analysis of the clitic pronoun *se* for this construction in Spanish and the rest of languages studied here that

enter this alternation, namely, the clitic is inserted to satisfy the requirement of evtP to have a specifier.

2.2. A plea for autocausative meaning: The hidden argument of the assume position sense

The properties of posture verbs in the assume position sense show a consistent pattern across the languages considered so far, except for English, showing similarities in their argument structure configuration and semantics, that is, the presence of a reflexive pronoun and autocausative semantics in the terms discussed in this chapter. Namely, the autocausative sense of posture verbs denotes an event of change of posture that necessarily involves an animate entity to bring about the event. The fact that the same entity causes and undergoes the change of state is argued here to be the main characterizing property of this construction. While the semantic characterization presented so far is somewhat intuitive, the present section is devoted to elucidating the semantic properties of these verbs and the function that the clitic plays in the argument structure. I briefly review previous proposals that support the autocausative semantics and discard a reflexive analysis of this construction.

Wierzbicka (1976) presents a similar idea to autocausation for verbs encoding a relation holding between an individual and its body that express that the state of the latter is directly caused by the actions of the former. In her view, "intransitive" verbs such as *sit down, get up,* or *walk* would not be semantically less reflexive than transitive verbs such as *raise, carry,* or *send*, since the former seem to contain the patient (or resultee, in the terms used here) of the event in its own meaning. In Kemmer's (1988) study of middle voice, a similar concept is used to discuss the properties of (canonical) reflexives and verbs of "body action" (posture verbs, here), such as those shown in table 1. It is contended that "body action verbs" may be considered reflexive from a semantic point of view inasmuch as "the subject acts on his or her own body" (1988:38). In fact, it is not uncommon to find a mark of reflexivity with these verbs as shown in the table in bold. This idea was also pursued by Geniušienė (1987) in her cross-linguistic study of reflexivity. We owe this author the term *autocausative reflexives* to refer to verbs that denote a "change of location or motion which the (human) referent causes by his own activity"

(1987:87). According to this definition, the use of a verb in the autocausative sense implicates that the "Actor […] ends up in a new location or position thus acquiring the feature of Patient" (1987:87). According to this characterization, it follows, then, that the subject argument would receive the roles of initiator and resultee. Predicates such as *hide oneself, flatten oneself, move oneself, throw oneself forward, rise oneself, bend oneself,* in several languages, are argued to instantiate this relation as well.

Language	*Verbs with Mark of Reflexivity*	
A. Quechua	tiya-ku-y	'to stand up'
Classic Greek	klīne-sthai	'to lie down'
	káthē-sthai	'to sit down'
Sanskrit	nipadyat-e	'to lie down'
Djola	lak-ɔ	'to sit down'
Indonesian	ber-lutut	'to kneel'
Romanian	se ridica	'to stand up'
	se aşeza	'to sit down'
Kanuri	hápkà-t-ə	'to stand up'
German	sich hinlegen	'to lie down'
	sich hinsetzen	'to sit down'
Guugu Yimidhirr	daga-adhi	'to sit down'
Hungarian	emel-ked-	'to stand up'

TABLE 2: POSTURE VERBS WITH A MARK OF REFLEXIVITY (KEMMER 1988)

The idea that reflexivity might be relevant for this construction arises in the proposals of these authors; however, I think that there is compelling evidence against such an analysis. First, constructions with posture verbs are not readily interpretable as reflexive, that is, as an action performed by an entity on itself that allows clitic doubling by means of an anaphor (19). This interpretation is unavailable for the sequence with a posture verb in (20). In the reflexive interpretation, it is unclear how one could make oneself kneel down on the floor.

(19) Los niños se lavaron a sí mismos (Spanish)
the children REF washed-3PL to themselves
'The children washed themselves'

(20) *Ana se arrodilló a sí misma (en el suelo)
Ana REF knelt to herself on the floor
'Ana knelt herself on the floor'

Geniušienė (1987) gathers similar evidence against a reflexive analysis of posture verbs. In her examples from Lithuanian (21) and Latvian (23), the grammaticality of the base verb with a reflexive marker contrasts with the unacceptability of the same verb taking a reflexive pronoun that makes explicit a reflexive interpretation.

(21) a. pa-*si*-slėpti (Lithuanian)
PREF-REF-hide
'to hide (oneself)'
b. *paslėpti save
hide oneself
'to hide oneself'

(22) a. Piespiestie-*s* (Latvian)
press-REF
'to press/flatten (oneself)'
b. *piespiest sevi
press oneself
'to press/flatten oneself'

(Geniušienė 1987:88)

It seems, then, that the reflexive interpretation is not readily available for posture verbs with the clitic pronoun *se*. This points to the possibility that the clitic in this construction may not be marking such meaning relation, but it may have a different function. Along the same lines, Talmy (2000) rejects that the clitic that appears with these verbs in Spanish has anything to do with a reflexive meaning, otherwise such interpretation

would require that the entity had acted on itself. The following quote from Talmy (2000) summarizes this reasoning:

(23) "This use of the reflexive is a special grammatical device, not a semantically motivated one, because there is no way to construe the normal meaning of the reflexive in this context. Normally, the reflexive entails that exactly what one could do to another, one does to oneself. In the present case, what one does to another is to place one's arms around his/her body, lift and set down. But that is not what one does with oneself. The movement is accomplished, rather by internal –i.e., neuromuscular– activity".

(Talmy 2000:119, note 36)

The discussion in this section has highlighted that the properties of the reflexive and autocausative construction differ, as shown by their different behavior with respect to the diagnostics discussed here. The potential difference between (canonical) reflexives and posture verbs (or what others have labelled autocausative reflexives) must lie in their having different argument structures. Specifically, I suggest tentatively that reflexive constructions contain a low ApplP (see Pylkkänen (2008) for a typology of ApplPs). Following Cuervo (2003), this ApplP would instantiate a static possession transfer relation, where the dative argument is understood to be the (inalienable or alienable) possessor of the object, as exemplified in (24).

(24) a. Pablo le besó la frente a Valeria (Spanish)
Pablo CL.DAT kissed the forehead.ACC to Valeria.DAT
'Pablo kissed Valeria on the forehead'
(Lit: 'Pablo kissed Valeria the forehead')
b. Pablo le lava el auto a Valeria
Pablo CL.DAT washes the car.ACC to Valeria.DAT
'Pablo washed Valeria's car'

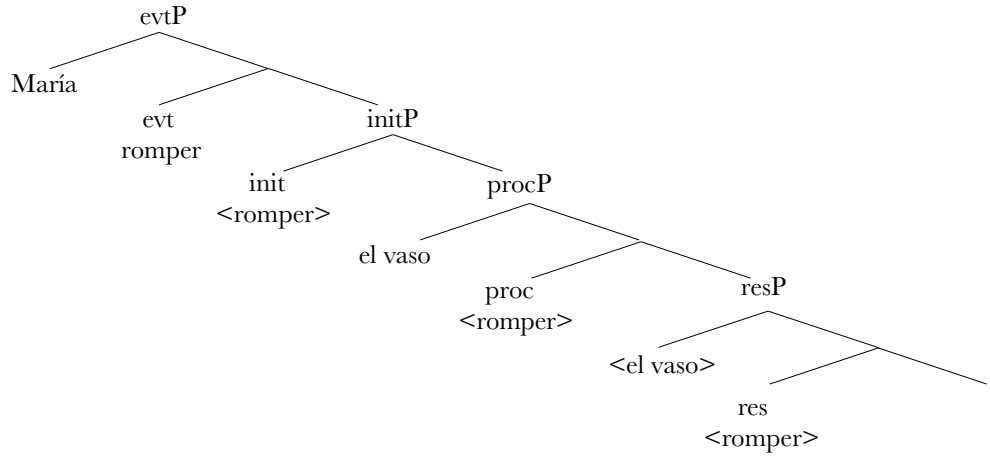
(Cuervo 2003:77-78)

Observe the sequences below where the verb *romper* 'break is inserted in two different argument structures. First, the verb *romper* can appear in a transitive construction taking

a direct object as complement with no reflexive meaning implied (25). By contrast, the sequence in (26) would have a more complex structure, such as the one argued for the examples above from Cuervo (2003), which contain a low ApplP, whose semantics indicate a possession relation between the applicative and the object.

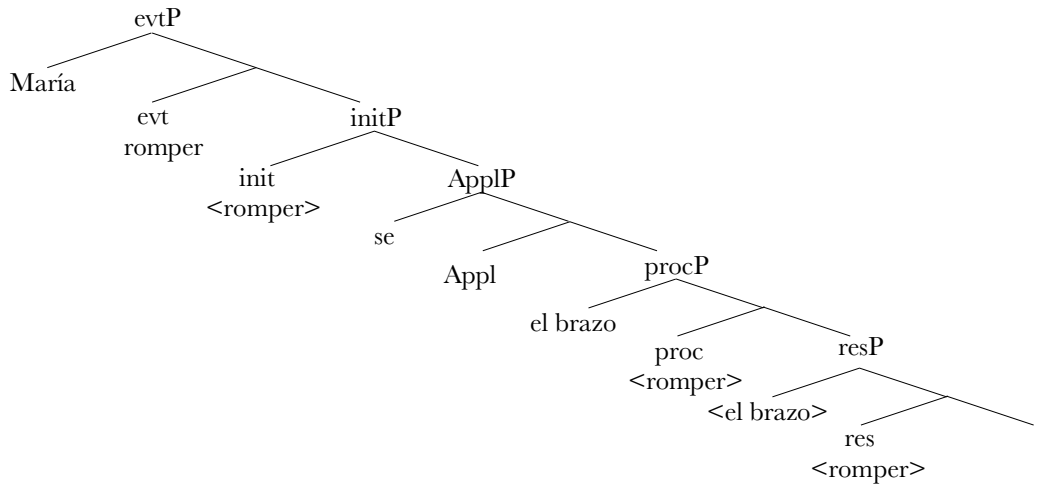
(25) a. María rompió el vaso (Spanish)
María broke the glass
'María broke the glass'

b.



(26) a. María se rompió el brazo
María REF broke the arm
'María broke her arm'

b.



To conclude this section, I recapitulate the main conclusions drawn from the discussion of the properties of the *se* clitic with posture verbs in the assume position

sense. The argument structure of posture verbs, in which the *se* clitic is inserted, has been determined to differ significantly from that of anticausative constructions to the extent that the subject of the former has the characteristics of an initiator rather than of a simple undergoer. I have also rejected a reflexive analysis of their argument structure, holding that it is significantly different in terms of event participants and subevents. Following proposals on autocausativity and Ramchand's (2008) more recent proposal postulating complex theta-roles, I argued that the subject fulfills both the theta-roles of initiator, undergoer, and resultee of the event.

2.3. The clitic *se* as a position filler in Spec,evtP

In this section I explore the function of the clitic *se* in the assume position sense in Spanish and contend that this element satisfies the selectional requirements of initP to have an initiator, which will appear as specifier of evtP in accordance with Ramchand's (2018) distinction between the head introducing the external argument of the predicate and the head that introduces the initiating subeventuality (see also Harley 2013). I adopt Pujalte & Saab's (2012) proposal that clitic insertion is a repair strategy applying in the PF branch whenever a required external argument has not been merged in the syntax. Thus, rather than deleting or demoting an argument, the clitic's function is to prevent the syntactic derivation from crashing when sent to the interfaces. I would like to propose that the rest of languages examined in this chapter that count with a similar element in the assume position sense – namely, French, Catalan, German, and Swedish – could be integrated in the same analysis. Being aware of the differences among these languages, I will not endeavor to deal with the peculiarities of the equivalent elements in the languages mentioned above.[22] However, the discussion on the properties of the

[22] As a matter of fact, the appearance of these pronouns may have an impact on auxiliary selection in the perfect (McFadden 2007). For example, reflexive verbs in German appear with *have* just like transitive verbs (i), whereas Italian selects *be* only when the reflexive clitic pronoun is used and, in turn, it selects *have* if a reflexive anaphor appears instead (ii). In addition, German (iii-iv) shows intra-linguistic variation in the realm of posture verbs since different dialects may select either *have* or *be*. See also Sorace (2000, 2004), Keller & Sorace (2003), and Kauffman (1995), among others, for further discussion of auxiliary selection in Romance and Germanic languages.

(i) a. Holger hat Gudrun verletzt (German)
Holger has Gudrun hurt
'Holger has hurt Gudrun'

clitic *se* in Spanish in this construction should suffice to illustrate, at least, the properties of the equivalent elements in the mentioned Romance and Germanic languages.[23]

---

b. Holger hat sich verletzt
Holger has himself hurt
'Holger has hurt himself'

(McFadden 2007:4, (6))

(ii) a. Giorgio ha (*e) ucciso sé stesso (Italian)
Giorgio has is killed REF himself
'Giorgio killed himself'
b. Giorgio si é (*ha) ucciso
Giorgio REF is has killed
'Giorgio killed himself'

(McFadden 2007:4-5, (8))

(iii) a. Albert hat sich auf den Boden gelegt (German)
Albert has himself on the.ACC floor laid
'Albert lay down on the floor'
b. Ingrid hat sich in die Ecke gestellt
Ingrid has herself in the.ACC corner stood

(iv) a. Dä Albert isch uff dä Boddä glägge (Alemanic)
the Albert is on the.ACC floor laid
b. D'Ingrid isch in dä. Eck gschtande
the Ingrid is in the.ACC corner stood
'Ingrid took her place in the corner'

(Kaufmann 1995:410, (37-38))

[23] In addition to these languages, the examples below show posture verbs in several other languages accompanied by an element similar to the clitic *se*, namely: Lithuanian (i), Latvian (ii), Bulgarian (iii), Armenian (iv), Serbo-Croatian (v), Azerbaijani (vi), Tatar (vii), and Fula (viii). The respective idiosyncrasies of these languages prevent me from extending the analysis to be presented here to them, however, such an analysis might be feasible in accord with the similarities in the argument structure and semantics of posture verbs.

(i) Petr-as pa-*si*-slėpė (Lithuanian)
Pedro-NOM PERF-REF-hid
'Peter hid himself'

(ii) Es spiežo-*s* pie sien-as (Latvian)
I-NOM press-REF to wall-GEN
'I flatten myself against the wall'

(Geniušienė 1987:86)

(iii) Toj *se* premesti (Bulgarian)
he REF moved
'He moved (changed place)'

(iv) Ašot-ə aŕadž net-*v*-ec (Armenian)
Ašot-ART forward throw- REF-PST
'Ašot threw himself forward'

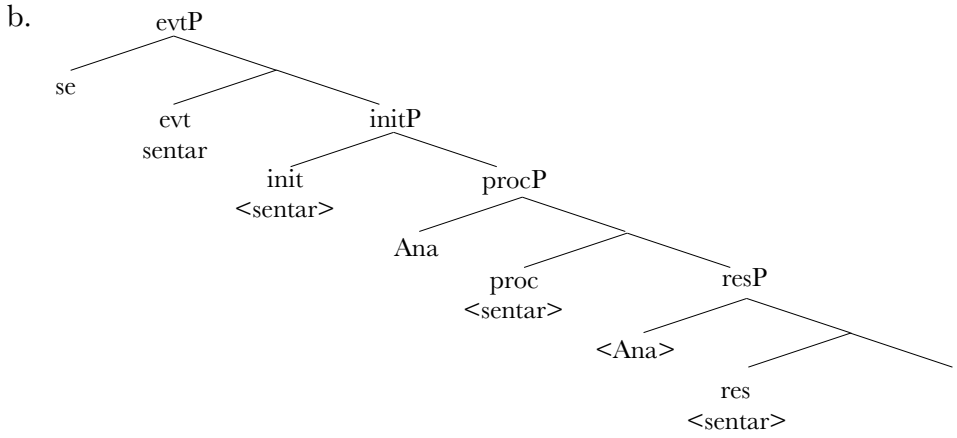
(v) Lazar *se* diže (Serbo-Croatian)
Lazar REF picks-up
'Lazar rises'

The lexical entry proposed for Spanish *sentar* 'sit' in (27) renders a syntactic structure consisting of an initP, procP, and resP in both the assume position sense and the causative sense. Following the discussion in the previous sections on autocausativity, I put forward that the two senses differ fundamentally in the fact that the assume position sense contains two DPs that refer necessarily to the same entity, since this element is initiator, undergoer, and resultee of the event (28). By contrast, in the causative sense, the DPs possess disjoint reference: one of the arguments plays the role of initiator and the other argument assumes the roles of undergoer and resultee (29). Therefore, both argument structures are identical except for the elements lodged at Spec,evtP.

(27) *sentar*: [init, $proc_i$, res_i]

(28) a. Ana se sentó en la silla
Ana REF sat-down on the chair
'Ana sat down on the chair'

b.



(Geniušienė 1987:251-252)

(vi) Ana-Ø tärpä-*n*-di (Azerbaijani)
mother-NOM stir-REF-PST-3SG
'Mother stirred'

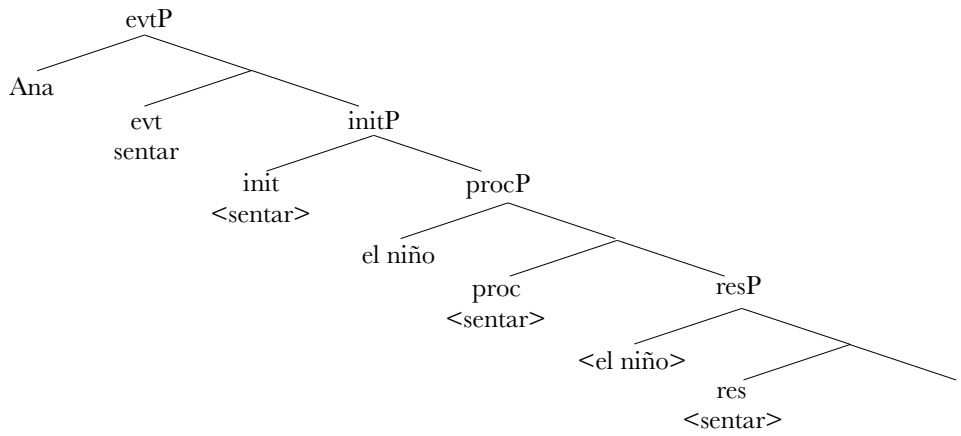
(vii) Ul jäšer-*en*-de (Tatar)
he-ABS hide-REF-PST-3SG
'He hid himself'

(viii) O hommb-*ike* (Fula)
he bend-REF-PERF
'He has bent'

(Geniušienė 1987:315-316)

(29) a. Ana sentó al niño en la silla
Ana sat to.the child on the chair
'Ana sat the child on the chair'

b.



The function of the clitic is that of a position filler in (28), specifically, it fills Spec,evtP. On the one hand, it satisfies the requirement of initP to have a DP instantiating the role of initiator; on the other hand, its reference is determined to be identical with the reference-bearing DP below in the argument structure. I follow Pujalte & Saab (2012) and assume that if a transitive verb with a D feature lacks a specifier in the external argument position, it will lead to a crash in the PF branch, since the verb's selectional requirements wouldn't have been met. To repair the absence of a DP in the syntax, the clitic is inserted post-syntactically as a last-resort repair strategy in the PF branch to meet the D feature requirement of the head. The clitic that appears in this construction has expletive-like characteristics, since it enters the derivation with unvalued phi features that are later valued against a full-fledged DP in the structure through a probe-goal relation.[24]

This operation is altogether unnecessary in English. The approach proposed here is in line with Ramchand's (2008) appeal for a causativization approach to the detriment of a detransitivization analysis for English. This amounts to the existence of a null init head that is merged on top of the structure to introduce an initiational subeventuality that brings about the process subeventuality. In order to causativize, init cannot be specified in the lexical entry of the verb. The lexical entry of *sit* complies with

[24] Pujalte & Saab (2012) define this type of clitic as a morphological one since it depends on the presence of a full-fledged element to value its features. In contrast to it, syntactic clitics are proper arguments inserted in the syntax.

this requisite (30). Thus, the assume position sense is derived in the syntax by the merging of an initP on top of a procP.

(30) *sit*: [proc]

By the same token, the causative sense in English will also require the insertion of a null initP. While this is not morphologically marked in English, some languages do mark the addition of a causative morpheme (cf. Ramchand (2008:82-89)). However, as was the case in Spanish, the assume position sense and causative sense will stand apart in that the elements lodged at the specifier positions in the assume position sense will all refer back to the same individual, while in the causative sense the undergoer-resultee will designate an individual different from the initiator. Further discussion of the properties of these senses in English is postponed until section 3.

2.4. Conclusion

This section has examined the encoding of causation from a typological point of view in English and Spanish. I have ruled out Haspelmath's (1993) analysis in terms of the deletion or demotion of the agent in the event and Alexiadou et al.'s (2015) spontaneity-based account of inchoative/causative forms as it cannot explain why these verbs include a "reflexive" pronoun if an initiating entity can be identified and, consequently, spontaneity is out of the question. I have also introduced Geniušienė's (1987) concept of autocausation and argued that this semantic notion on how the only participant of the event is both the initiating and affected entity is relevant to understand the lexical entry and first phase syntax of posture verbs in the assume position sense, thus, rejecting an analysis in terms of reflexivity or anticausativity. Finally, I have assumed Pujalte & Saab's (2012) analysis of the clitic pronoun *se* in Spanish for this construction proposing that the pronoun satisfies the selectional requirements of initP, rather than playing a role in an arity reducing operation.

3. PATH ENCODING: ON THE NATURE OF RESP

The assume position sense and the causative sense of posture verbs have been argued to consist of three subeventualities: initiation, process, and result. Spanish and English differ, importantly, in the nature of the initiational subeventuality. While the lexical entry for Spanish posture verbs specifies that the verb counts with the aforementioned subeventuality, in English posture verbs the initiational subeventuality is a result of a structure building process by means of the merging of a null init phrase in the syntax. In addition, it has been observed that Germanic languages such as German and Swedish behave as Romance languages such as Spanish, Catalan, and French in that they use a reflexive pronoun to create the assume position sense. In this section, I concentrate on the properties of the result subeventuality in these languages. The argumentation is organized around the well-known cross-linguistic fact that Spanish and English instantiate different path-encoding patterns. The verb-framed nature of Spanish allows it to encode path information in the verbal root, which I have identified with the result portion of the event following Ramchand (2014). On the other hand, the satellite-framed nature of English makes an additional element available to codify the path information of the event. These particles, or satellites, will be argued to identify the result portion of the event.

The section is organized as follows. Section 3.1 discusses the verbal nature of the result phrase in Spanish. In section 3.2, I explore the properties of the PPs that appear in the assume position sense with Spanish posture verbs. In section 3.3, I delve into the non-verbal nature of the result phrase in English posture verbs. Section 3.4 concludes by discussing intra-linguistic variation in Germanic languages' posture verbs.

3.1. The verbal nature of resP in Spanish

The existence of a result state in the lexical entry of Spanish posture verbs can be confirmed through the following sequences with the assume position sense of these verbs (31), where the temporal complement is ambiguous between two readings: a result state-related interpretation and an eventuality-related interpretation. As described in Piñón (1999), the result state-related interpretation measures the length of the result state, whereas the eventuality-related interpretation of the adverbial asserts for how

long the event was repeated, over and over again. Note that this ambiguity occurs only when the temporal complement appears in constructions with a result state. According to Piñón, this possibility is thus restricted to accomplishments and achievements, the only types of eventuality that can have a result state.

(31) a. Elisa se sentó (en la silla) durante una hora (Spanish)
Elisa REF sat-down on the chair for an hour
'Elisa sat down on the chair for an hour'
b. Elisa se acostó (en el sofá) durante una hora
Elisa REF lay-down on the sofa for an hour
'Elisa lay down on the sofa for an hour'

In the result state-related interpretation, these sentences could be paraphrased as follows: 'Elisa {sat down on the chair/lay down on the sofa} and stayed in this state for an hour'.[25] In addition to the result-state information, I assume here that the conceptual information contained in each root will also determine the kind of path expressed by posture verbs, that is, whether they indicate movement toward the ground (32) or movement away from the ground (33) (cf. Stefanowitsch & Rohde 2004):

[25] Piñón (1999) notes that this ambiguity, present in Spanish (31), does not affect languages such as German (i) or Hungarian (ii), which count with different elements for each of the meanings. In German (i), the preposition *für* and *lang* are used to express the result state-related interpretation and the eventuality-related interpretation, respectively. As for Hungarian (ii), the difference between the result state-related interpretation and the eventuality-related interpretation is codified by means of case markers. The result state-interpretation is expressed by means of the sublative case marker *–rV* 'onto', whereas the postposition *át* 'through' is used to convey the eventuality-related interpretation. A further change in necessary to express the latter meaning in Hungarian as it requires a different verb root. See Piñón (1999) for further discussion on the topic.

(i) a. Manuela ist für zwanzig Minuten in das Wasser gesprungen (German)
Manuela is for twenty minutes into the water jumped
'Manuela jumped into the water for twenty minutes'
b. Manuela ist zwanzig Minuten lang in das Wasser gesprungen
Manuela is twenty minutes long into the water jumped
'Manuela jumped into the water (repeatedly) for twenty minutes'

(ii) a. Manuela húsz percre be·ugrott a vízbe (Hungarian)
Manuela twenty minute-onto into-jumped the water-into
'Manuela jumped into the water for twenty minutes'
b. Manuela húsz percen át ki-be ugrált a vízból
Manuela twenty minute-on through out-into jumped the water-out-of
'Manuela jumped into the water (repeatedly) for twenty minutes'
(Piñón 1999)

(32) a. Se sentó {en/*de} la silla (Spanish)
REF sat-down on/from the chair
b. Se acostó {en/*de} el sofá
REF lay-down on/from the sofa
c. Se puso {en/*de} el escalón
REF put on/from the step
d. Se escondió {en/ *de} los matorrales
REF hid in/of the bushes
e. Se quedó {en/*de} la oficina
REF stayed in/from the office
f. Se acurrucó {en/*de} la cama
REF curled-up on/from the bed
g. Se arrodilló {en/*de} el suelo
REF knelt-down on/from the floor

(33) a. Se levantó {*en/de} la cama
REF got-up on/from the bed
b. Se quitó {*en/de} la entrada
REF moved-away in/from the entrance

Further evidence in support of Spanish's ability to codify path information in the verb root comes from inherently-directed motion verbs in Spanish (34), which are significantly similar to posture verbs given that they also appear with the reflexive pronoun *se*, which in some instances might be facultative as indicated in the list below.

(34) *ir(se)* 'leave', *llegar(se)* 'arrive', *salir(se)* 'go out', *venir(se)* 'come', *volver(se)* 'go back', *regresar(se)* 'return', *entrar(se)* 'enter', subir(se) 'go up', *bajar(se)* 'go down', *acercarse* 'get close', *aproximarse* 'go towards', *alejarse* 'move away', *desplazarse* 'move', *pasar(se)* 'go', *huir(se)* 'run away', *fugarse* 'run away' [26]

[26] In regard to the presence of the clitic in Spanish, these verbs show varying behavior, as indicated in (45) by means of parenthesis. For most of them, the clitic is subject to omission (i), while for the rest, the clitic is compulsory. Take the case of the verb *ir* 'go' (ii): when the path selected by this verb expresses the source of motion, the clitic is obligatorily present. By contrast, if the path encodes the goal of motion, the presence of the clitic is optional. See Jiménez-Fernández & Tubino (2014) for an explanation of this phenomenon.

As happened with posture verbs, this is not a phenomenon reduced to Spanish. Table 2 contains a list of languages, where movement verbs (inherent verbs of motion and manner of movement verbs) also require or allow the appearance of a mark of reflexivity in the form of a pronoun.

Language	*Verbs with Mark of Reflexivity*	
Guugu Yimidhirr	madha-adhi	'climb up'
Pangwa	i-nu-xa	'climb up'
Old Norse	ganga-sk	'go, leave'
	koma-sk	'come'
	hlaupa-sk	'run (away)'
B. Indonesia	ber-djalan	'walk, stroll'
Classical Greek	péte-sthai	'fly'
Hungarian	mene-ked-	'flee'
A. Quéchua	ayqe-ku-y	'flee'
Lingala	kílinga-na	'run (away), hurry'
	na-na	'go upstream'
Fula	ma'y'y-o	'climb, mount'
	ɓad-o	'arrive'
Romanian	se plimba	'take a walk'
	se duce	'go'

TABLE 2: VERBS OF MOTION WITH A MARK OF REFLEXIVITY (KEMMER 1988)

Additionally, notice that just as posture verbs in the assume position sense these verbs lack reflexivity as such. Compare the examples in (35) and (36), where inherent direction

(i) a. (Se) salió de la reunión pronto (Spanish)
REF went-out from the meeting soon
'He left the meeting early'
b. (Se) vino con nosotros a casa
REF came with us to home
'He came home with us'

(ii) a. *(Se) fue del trabajo a las cinco
REF left from-the workplace at the five
'He left work at 5'
b. (Se) fue al trabajo a las cinco
REF went to-the workplace at the five
'He went to work at 5'

verbs are shown not to follow the proper behavior of canonical reflexives to the extent that they do not allow clitic doubling by means of an anaphor.

(35) a. El niño se peinó (a sí mismo) (Spanish)
The child REF combed to himself
'The child combed his hair'
b. Ana se lavó (a sí misma)
Ana REF washed to herself
'Ana washed herself'

(36) a. El secretario se salió de la reunión (*a sí mismo)
The secretary REF went-out from the meeting to himself
'The secretary left himself the meeting'
b. Se vino a casa (*a sí mismo)
REF came to home to himself
'He came home himself'
c. Se volvió del trabajo temprano (*a sí mismo)
REF came-back from-the workplace soon to himself
'He came back himself from work soon'
d. Se fue de casa a las doce (*a sí mismo)
REF went from home at the twelve to himself
'He left home himself at twelve'

I would like to argue that inherently-directed motion verbs have an initiational syntax and semantics just like posture verbs. Following Ramchand, the alleged unaccusative nature of these verbs should be blamed on their telicity and the presence of a single argument, hence the purported similarity with true objects of transitive verbs (2008:78). Nevertheless, this class of verbs in Spanish does not show the properties of a true transitive verb's object as highlighted in the contrasts in (37-38) about the ability of inherently-directed motion verbs and transitive verbs to enter the absolute construction (37) and to appear as participles in the resultative construction with the copula *estar* 'be' (38).

(37) a. Una vez llegado / ??salido / *ido / marchado Juan[27] (Spanish)
Once arrived/ left / gone / left
b. Una vez lavada / planchada / guardada la camisa
Once washed/ ironed / put-away the shirt

(38) a. ??Juan está llegado / salido / ido / marchado
Juan is arrived / left / gone / left
b. La camisa está rota / manchada / lavada
The shirt is teared / stained / washed

The degraded readings of these verbs in these constructions can be explained if we assume with Ramchand that:

(39) " […] being an undergoer or resultee is a necessary condition for passive participial prenominal modification in English. However, I tentatively assume that if the argument in question is also an initiator, the construction is seriously degraded and modification related to the initiation position of the event is required. The single argument of an 'arrive' verb is resultee, undergoer and initiator, which is why it does not pattern clearly with the unaccusatives."
(Ramchand 2008:78, footnote 6)

Thus, contrary to the wide-held view that these verbs are unaccusative, I am assuming with Ramchand that, in fact, they are not, since the introduction of an initP in their argument structure endows the single participant of the event with the roles of initiator, undergoer, and resultee.

[27] There is yet the question of how to account for those cases where these verbs seem to behave as true unaccusative verbs such as in (i), or as transitive verbs, as has been attested in the Andalusian variety of Peninsular Spanish (ii) (see Jiménez-Fernández & Tubino (2014) and Lara (2017) for discussion of the transitive use of these verbs). In this case, an optional init head should be assumed for these verbs. In lack of a better explanation, I leave this matter for future research.

(i) Una vez salido el sol / del útero / de la cárcel (Spanish)
Once risen the sun / from.the uterus / from the jail

(ii) Entré el coche en el garaje
Entered the car in the garage
'I parked the car in the garage'

3.2. Argumenthood of PPs with posture verbs in Spanish

Finally, I present evidence in favor of considering that prepositional phrases co-appearing with posture verbs in Spanish are not true argumental elements, thus, confirming again that the path has been lexicalized in the verb root. I follow Randall's (2009) distinction between obligatory arguments and optional arguments (see also Culicover & Jackendoff (2005)). That is, while arguments can be optional, only syntactically required elements can be considered obligatory arguments. The tests Randall proposes to determine the argumenthood of prepositional phases are replacement by *do so* and separation from the verb by means of adjuncts. These tests can only be used to tell apart arguments from adjuncts, as they cannot discriminate between optional and obligatory arguments. As an example, consider the results of replacing the verb phrase using *do so*. Just like obligatory arguments cannot be left behind by *do so,* as shown in (40a) for the verb *put,* optional arguments cannot either, as shown in (40b) and (40c) for the verbs *stay* and *deliver*, respectively. Randall also gives examples for adjuncts such as *all day, all night*, *by truck*, or *by bike* in (41).

(40) a.*Whenever company comes, John puts the dog [in the basement], and Lily does so [in the kitchen]
b. *Fred stayed [in the bedroom] and Lily did so [in the kitchen]
c. *This company delivers newspapers [to rural customers] and that company does so [to urban ones]

(41) a. Fred stayed in the kitchen [all day] and Lily did so [all night]
b. This company delivers newspapers to rural customers [by truck] and that company does so [by bike]

(Randall 2009:132)

Since this test does not shed light on the obligatory or optional status of the prepositional phrases, Randall (2009:135) proposes another test: deleting the prepositional element from the sequence. If grammaticality is not affected, then the argument must be optional as shown for the English examples in (42). Posture verbs in the assume position sense in Spanish allow the omission of the prepositional phrase as shown in the sequence

in (43b), which is completely grammatical. This confirms the optional character of these prepositional phrases with posture verbs.

(42) a. Lily stayed (in the kitchen)
b. John delivered the packages (to the customers)

(43) a. María se sentó en la silla (Spanish)
María REF sat-down on the chair
'María sat down on the chair'
b. María se sentó
María REF sat-down
'María sat down'

Observe that the use of the proform *hacerlo* 'do it' in Spanish helps confirm the argumental status of this prepositional phrase (44). Remember that the proform substitutes for a part of the verbal phrase, leaving out adjuncts, given that they are not selected arguments of verbs. The examples in (44) show that the proform does not include adjuncts in its scope, which explains the grammaticality of (44a); however, it does encompass arguments, which is the reason why (44b) is out. The same pattern is obtained for *levantarse* 'get up' (45). Of course, this test only helps us determine that these elements are arguments; however, whether they are optional or obligatory can only be deduced from sequences like those in (43), showing that these prepositional phrases can be omitted without compromising the grammaticality of the sequence. That is, they are optional semantic arguments of these verbs.

(44) a. Juan se sentó en la silla a las 8 y María lo hizo a las 9 (Spanish)
Juan REF sat-down on the chair at the 8 and María it did to the 9
'Juan sat down on the chair at 8 and María did it at 9'
b. ??Juan se sentó en la silla y María lo hizo en la cama
Juan REF sat-down on the chair and María it did on the bed
'Juan sat down on the chair and María did it on the bed'

(45) a. Juan se levantó de la silla a las 8 y María lo hizo a las 9
Juan REF got-up from the chair at the 8 and María it did to the 9
'Juan got up from the chair at 8 and María did it at 9'

b. ??Juan se levantó de la silla y María lo hizo de la cama
Juan REF got-up from the chair and María it did from the bed
'Juan got up from the chair and María did it from the bed'

Before concluding, I would like to call attention to the contrasts in (46-47), where the omission of the prepositional phrase has different outcomes in terms of grammaticality for the verb *poner(se)* 'put oneself', which can also be used to express posture. Let us first compare the result of deleting obligatory arguments and adjuncts. If the deletion of the prepositional phrase leads to the ungrammaticality of the sequence, then it must be the case that this element is an argument of the verb: whereas in (47) the deletion poses no challenge to the acceptability of the sequence, the deletion of the prepositional phrase in (46) is problematic.

(46) a. María puso la silla en el jardín (Spanish)
María put.PST the chair in the garden
'María put the chair in the garden'

b. ?María puso la silla[28]
María put.PST the chair

(47) a. María limpió la silla en el jardín
María cleaned the chair in the garden
'María cleaned the chair in the garden'

b. María limpió la silla
María cleaned the chair

(Hernanz & Brucart 1987:234-235)

[28] Note that the verb *poner* 'put' has also the sense of *colocar* 'place' in which case the post-verbal PP is not obligatory as in collocational uses such as *poner la mesa* 'set the table', where the predicate has a process or activity reading.

The same result is obtained if *poner* 'put' is used in its assume position sense (48) which requires the reflexive clitic, where the deletion of the prepositional phrase makes the sequence unacceptable (48b).

(48) a. María se puso en la silla (Spanish)
María REF put.PST on the chair
'María put herself on the chair'
b. *María se puso
María REF put.PST

Then, it may be the case that the roots for, on the one hand, *poner(se)* 'put (oneself)', and on the other hand, *sentarse* 'sit down', *levantarse* 'get up', *tumbarse* 'lie down', etc. differ somehow in the information codified. I would like to argue that *ponerse* 'put' has a deficient resP and it obligatorily underassociates (49) in the syntax adopting a path phrase to denote the result subevent. Following Ramchand (2014), I put forward that *poner* 'put' has become a light verb keeping type-A information such as sub-events and deixis. However, type-B information, or encyclopedic information, has been stripped off the lexical information carried by the root, thus, requiring an additional element to provide the path semantics.

(49) *Underassociation*
If a lexical item contains an underassociated category feature,
(i) that feature must be independently identified within the phase and linked to the underassociated feature, by Agree;
(ii) the two category features so linked must unify their lexical-encyclopedic content.

(Ramchand 2008:136, (61))

The loss of type-B meaning can be once again confirmed by the presence of a prepositional phrase further specifying the nature of the result state such as *a gachas* 'bowing', *a gatas /a cuatro patas* 'on your hands and knees', *de costado /lado* 'on one's side', *de pie* 'on feet', *de puntillas* 'on tiptoe', *de rodillas* 'kneeling', or *en cuclillas* 'squating'. I will assume that in the presence of such modifiers the result phrase of the root is projected

and further specified by the rhematic information contained in these prepositional phrases.

In summary, the Spanish posture verb consists of a conglomerate of subeventualities instantiating the causation, the process, and the result subevent (50). No additional element is needed or permitted to fill in these meaning components since all three components are lexicalized by the verb root. Finally, I also assume that inherently-directed motion verbs would have the same lexical entry, since they have been shown to share important similarities with posture verbs cross-linguistically.

(50) [[sentar]] = < sentar,<init,proc$_i$,res$_i$>,λeλe$_{init}$λe$_{proc}$λe$_{res}$[e=e$_{init}$ → [e$_{proc}$ →e$_{res}$ ∧ sentar(e$_{init}$) ∧ sentar(e$_{proc}$) ∧ sentar(e$_{res}$)] >

3.3. Result augmentation in English

In contrast to Spanish, English, being a s-framed language, can express the path of motion by means of a satellite, using Talmy's terminology, that is, an element morphophonologically independent from the verb. This is the situation with the assume position sense in English, which counts with a satellite such as *down* or *up* to express the path of motion as shown below for several posture verbs (51).

(51) a. sit down
b. bend down
c. lie down
d. kneel down
e. bow down
f. get up
g. stand up
h. curl up

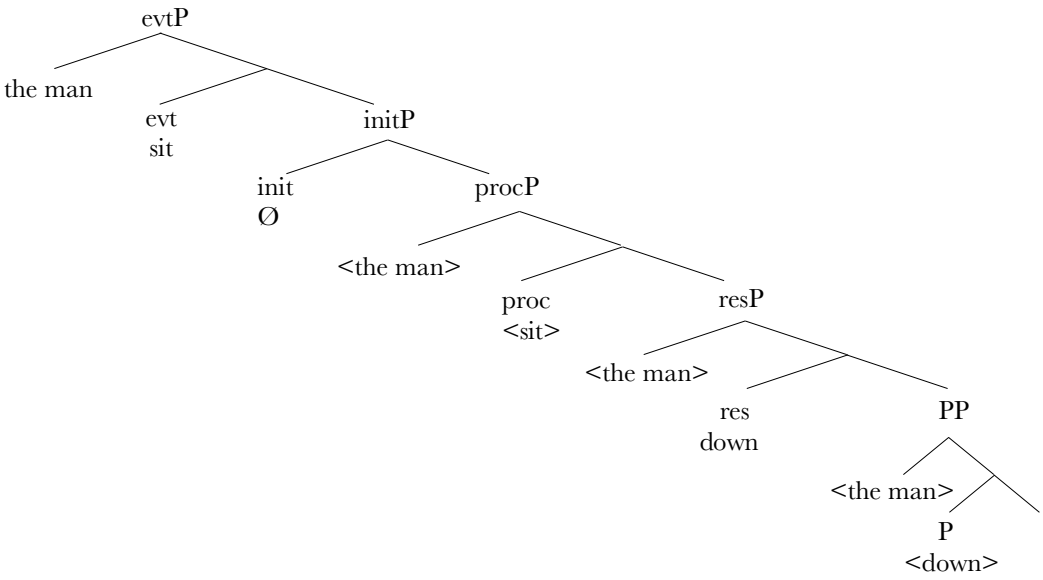
This particle is argued to add a result-state subeventuality to the argument structure of posture verbs (52). By adopting Ramchand's (2008) *result augmentation* operation we can account for the properties of the argument structure resulting from the combination of

a pure process (posture) verb and a particle. The verb meaning is built compositionally by the addition of a SC-like structure containing the particle, *up* or *down*, which can further identify the *res* head in the verbal ensemble, since it is lexically specified with a *res* feature, and allows the presence of a subject (53). In the structure shown below, I am also including the null init head, argued for in the previous section, on top of the structure, to introduce the causation subeventuality.

(52) [[sit]] = < sit,<proc>,λeλe$_{proc}$[e=e$_{proc}$ ∧ sit(e$_{proc}$)] >

(53) a. The man sat down

b.



Following Ramchand (2008), since the particle can identify the *res* head in the structure and the DP can remain in Spec,PP, the verb-particle order is possible for these verbs as well, giving rise to sequences such as those in (54b).

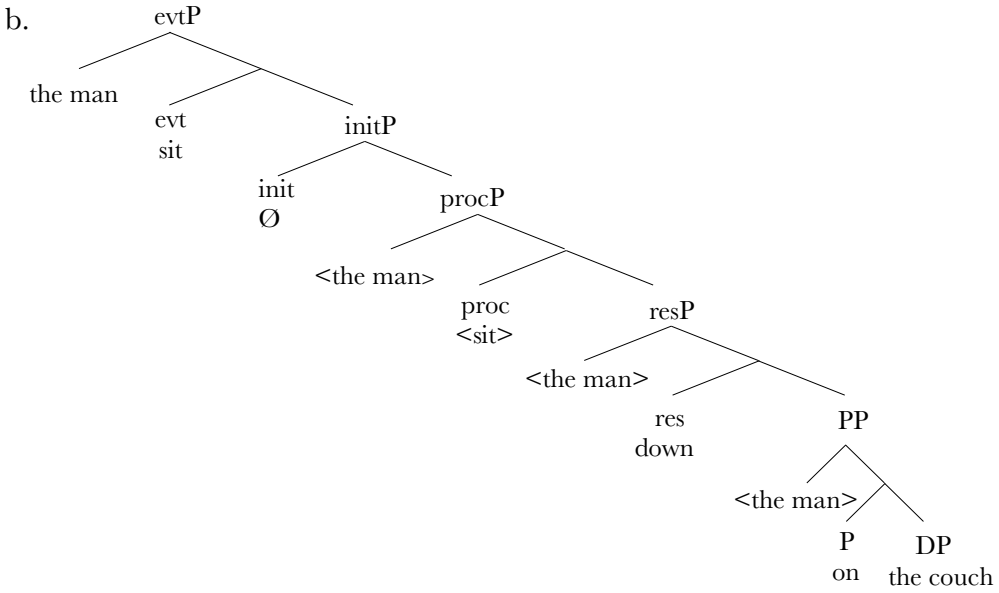
(54) a. The man sat himself down

b. The man sat down himself

The verb complex may as well take a prepositional phrase complement to further specify the resulting state location (55).

(55) a. The man sat down on the couch

b.



In addition to introducing a result state, the res feature of particles allows them to turn intransitive process posture verbs into transitive verb complex insomuch as the subject of *sit* is not only the initiator and undergoer of the event but also the resultee. This satellite-framed transitivization is also at play even if a transitive verb with similar lexical-conceptual information, or type-B information, exists such as in the case of *lie* and *lay*. I assume that their lexical entries differ in complexity: whilst *lie* is an intransitive process verb, *lay* is a full-fledged transitive verb containing initiation, process, and result subeventualities (56).

(56) a. *lie*: [proc]

b. *lay*: [init,proc$_i$,res$_i$]

A simple search in *Google Books* gets several examples of these verbs in combination with the particle *down* (57-58):

(57) a. If I lie myself down in a snow-drift

b. I advanced and was bold enough […] to lie myself down on the cushions beside her […]

c. I walked down the street, taking all the familiar paths and heading towards that place where I used to lie myself down

(58) a. I had to go and lay myself down. I felt like I was going to have nervous break down

b. It was the prettiest land I had ever seen and the only reason I picked up my pace as I moved across the flat blue plain of water was just to lay myself down in that carpet of rich, emerald green

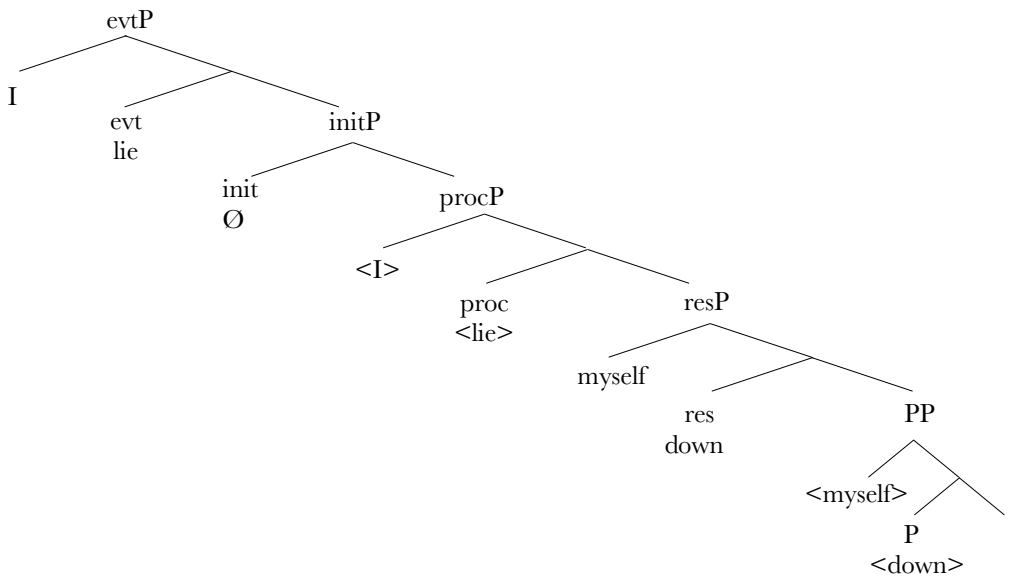
c. It seems restful and right, as if I could slough off the burden of suffering and lay myself down to rest

I assume that *result augmentation* is at play in the examples with *lie* along with the particle *down* in (57), as previously argued for *sit*. Similarly, the verb-particle order is possible with this verb as well (59); thus, I will be assuming a first phase syntax where the particle *down* may instantiate the res head and the SC-subject may stay low in the argument structure (60).

(59) a. It is so wonderful to slip slowly into unconsciousness after resting my eyes on the cows and the field, as if I could in some way lie down myself on sweet grass […]

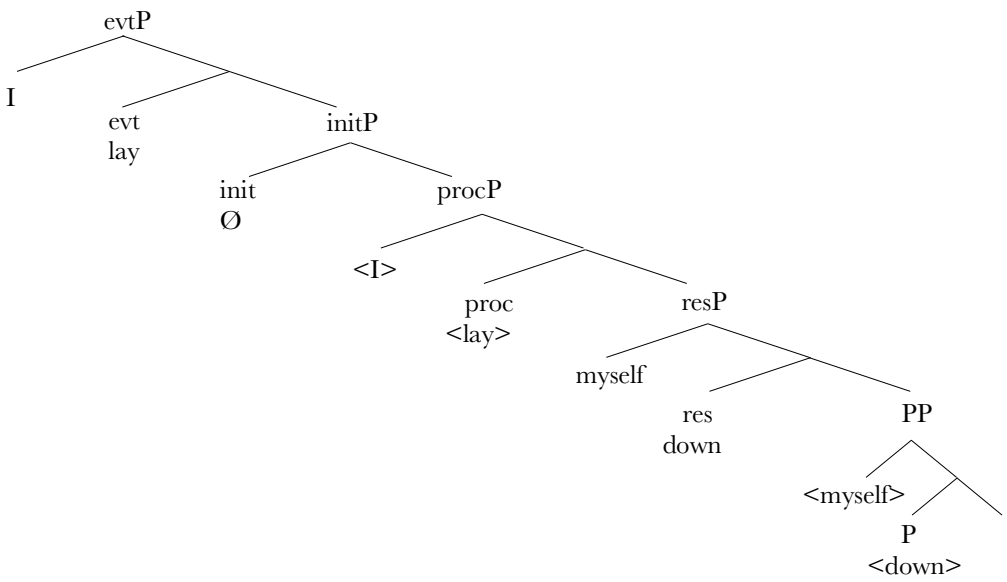
b. I went to take a peek to make sure they were asleep before I lie down myself on the sofa in the living room

(60)



By contrast, *result augmentation* is not needed with *lay* as this verb already contains a result subeventuality (56b). The syntactic derivation for transitive *lay* requires the *underassociation* of its category features instead (61). The result introducing head is realized by the particle *down,* which takes up the role of identifying the result. Finally, the verb-particle order is also possible in this case as shown below (62).

(61)



(62) a. I lay down myself, resting my head in the middle of Homer's back
b. I took note of this and lay down myself on my side of the bench to get some sleep

To conclude this section, I would like to call attention to the fact that the structures analyzed here require a prepositional phrase identifying the result location, unless a particle or satellite is present to provide that information, which, if unspecified, would render an ungrammatical sequence. Of course, this is not necessary in the case of transitive posture verbs such as *seat* (63), which already contains a resP in its lexical entry and, consequently, does not require a prepositional phrase specifying the location of the resultee. Expressed differently, since posture verbs in English are pure process subevents, the assume position sense in English needs an additional component to *augment* its subevent structure, thus providing the result portion. One of the options to accomplish this is by merging a morphophonological independent element such as *down*

or *up*. However, sequences where only a prepositional phrase accompanies the process verb are possible as well (64).

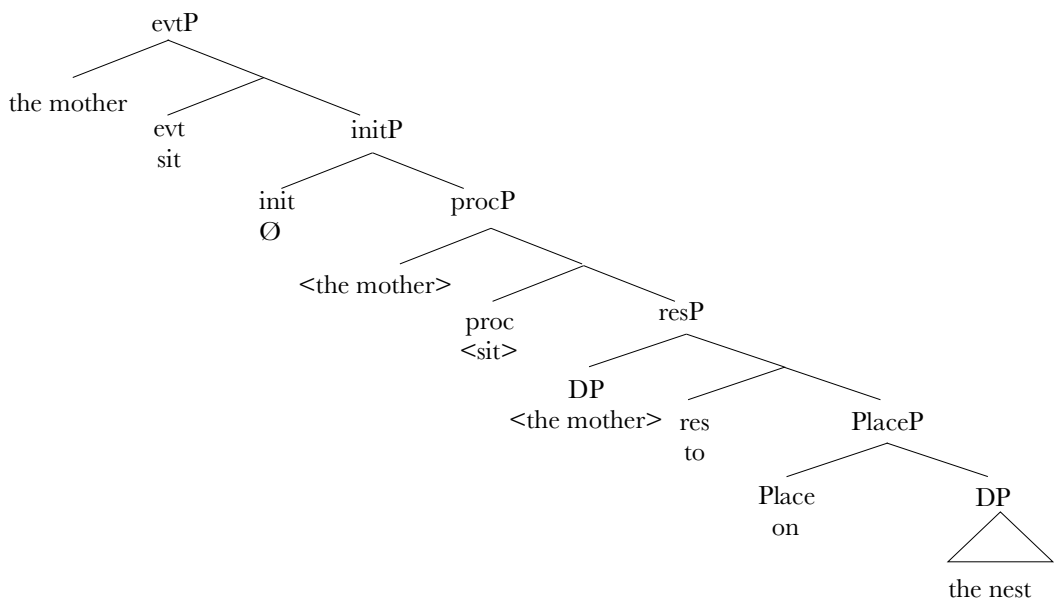
(63) Proceeding toward the center of the cable, he seated himself very complacently, and took a look at the seated around him[29]

(64) The mother came back and almost without hesitation sat onto the nest again and looked around[30]

Following the discussion in section 3.2.2 of chapter 1, I am assuming that a resP is added to the first phase syntax of the verb in the form of a *to* preposition legitimizing the result interpretation of the predicate.

(65) [[proc]] = λyλxλe[Path(y,e) & proc'(e) & Process(e) & Subject(x,e)]

(66)



To conclude, I have argued that, in addition to the difference in the initiational subevents, the different ways of encoding path information in Spanish and English have a bearing on the lexical entries of posture verbs. While path information is contained

[29] Example obtained from https://www.nytimes.com/.

[30] Example obtained from https://www.irishtimes.com/.

in the verb root in Spanish, English assigns the function of providing path, or result, information to a satellite. This possibility is enabled by the availability of *result augmentation* in English. I have also shown the relevance of Ramchand's *underassociation* in both Spanish and English, which allows a lexical item to take up a super-set of the category features of the lexical root and, thus, spell out the result portion of the event.

3.4. English vs. the rest of Germanic languages in the sample

Two main patterns have been identified for posture verbs: process and change of state. The languages examined, English and Spanish, have been argued to conform to one of the patterns. Nevertheless, a more careful look into the lexical inventory of these and the rest of the languages with which I started the discussion in this chapter reveals that all of them count with both process and change of state posture verbs, thus, instantiating both patterns. Let us discuss each in turn.

Germanic languages such as Swedish, German, and Icelandic have at their disposal both the process and change of state patterns but, in contrast to English, they instantiate the anticausative alternation and form the assume position sense by the same procedure I have argued for Spanish, namely, a reflexive pronoun fills up the external argument position of the verb in Spec,evtP. The inventory of posture verbs for each of the languages mentioned is listed below in (67-69).

(67) *Swedish*

a. Simple position sense: *ligga* 'lie', *stå* 'stand', *sitta* 'sit'
b. Causative: *lägga* 'lay', *ställa* 'stand', *sätta* 'sit'
c. Assume position sense (anticausative): *lägga sig* 'lie down', *ställa sig/resa sig* 'stand up', *sätta sig* (upp/ner) 'sit up/down'

(Viberg 2013)

(68) *German*

a. Simple position sense: *liegen* 'lie', *stehen* 'stand', *sitzen* 'sit', *lehnen* 'lean', *hängen* 'hang'
b. Causative: *legen* 'lay', *stellen* 'stand', *setzen* 'sit'

c. Assume position sense (anticausative): *sich* (*hin*)*legen* 'lie down', *sich* (*auf*)*stehen* 'stand up', *sich setzen* 'sit down'

(69) *Icelandic*[31]

a. Simple position sense: *liggja* 'lie', *standa* 'stand', *sitja* 'sit'

b. Causative: *leggja* 'lay', *setja* 'sit'

c. Assume position sense (anticausative): *leggjast* 'lie down', *standa upp* 'stand up', *setjast* 'sit down'

Consequently, different verb roots are inserted for each of the senses. In the case of German and Icelandic, the assume position sense is created using the change of state form *setzen* and *setjast* 'sit down', respectively, which instantiate all three subevents in the argument structure, along with the pronoun equivalent to Spanish *se* to satisfy *setzen*'s (70) and *setjast*'s (72) requirement to have an initiator, whose reference is shared with the entity that assumes the roles of undergoer and resultee of the event as well. As remarked, they both count with intransitive process verbs to instantiate the simple position use, *sitzen* (71) and *sitja* (72) 'sit', respectively, which will be argued to compare to its English counterparts in chapter 3.[32]

(70) Der alte Mann setzte sich hin (German)
The old man sat REF down
'The old man sat down'

(71) Der alte Mann saß auf einer Bank
The old man sat on a bench
'The old man was sitting on a bench'

(72) Börnin settust á bekkinn (Icelandic)
Children.the sat-REF on bench.the
'The children sat down on the bench'

[31] These examples were obtained from Jóhannsdóttir (2006).

[32] The examples in (70) through (73) were obtained from http://valpal.info/.

(73) Börnin sátu á gólfinu
Children.the sat on floor.the
'The children sat on the floor'

Since these languages conform to the satellite-framed pattern, it is expected that they can combine with any such particles. In the case of Swedish this prediction is borne out. On the one hand, Swedish uses the same strategy as Spanish and builds the assume position sense by means of the transitive verb *sätta* 'sit' and the "reflexive" pronoun *sig* (74). On the other hand, it also allows the combination of this verb, *sätta* 'sit', in the assume position sense with the particles *ner* 'down' and *upp* 'up' (75), which take up the roles of introducing the result subevent in resP.

(74) a. Peter satte babyn i stolen (Swedish)
Peter put (seated) baby.the in chair.the
b. Peter satte sig
Peter sat-down REF

(75) a. Ann satte sig (ner) på sängen
Ann sat REF down on bed.the
b. Ann satte sig upp i sängen
Ann sat REF up in bed.the

(Viberg 2013)

One may wonder why German, Icelandic, and Swedish's satellite-framedness is different from English's in that the former prefer the anticausativizing strategy instead of using a process verb and a satellite as the latter considering that, as shown above, these elements may as well realize the result phrase of the event. Certainly, it seems more productive to have a single verb to be used in both intransitive and transitive argument structures exclusively via the addition of a particle, or satellite. While I do not have a definitive answer yet, I think that the availability of an anticausativizing strategy has a bearing on each language's choice. In addition, the lexical inventory of each language, that is, verb roots and pronouns, might also constrain the adoption of one of the patterns. Namely, the availability of anticausativizing strategies might be contingent

on the existence of reflexive pronouns or voice morphology in a language. On this matter, it might be pertinent to call attention to studies tackling the issue of satellite-framedness productiveness such as Lewandowski & Mateu (2016), Berthele (2004, 2013), and Berthele et al. (2015). For example, Lewandowski & Mateu show that German exploits more productively the satellite-framed lexicalization pattern than Polish in manner verbs. The authors conclude that these differences are not due to the lexical availability of manner verbs in these languages, but rather, the intra-typological divergence on the exploitability of these verbs is restricted by the ability of Polish prefixes and prepositions to combine with manner verbs. Similarly, Berthele notes the existence of divergences among languages belonging to the same typological group regarding co-event expression in both movement and stationary motion events. I leave this issue open for further research in the future.

On the other hand, while I have exclusively discussed the change of state pattern in Romance languages such as Spanish, the process pattern is also instantiated in this language by posture and positional verbs such as *colgar* 'hung', *yacer* 'lie', *pender* 'hang', etc. Similarly, French counts with transitive verbs participating in the autocausative alternation such as *asseoir* and *s'asseoir* 'sit down' or *allonger* and *s'allonger* 'lie down' as well as intransitive verbs denoting process events such as *gésir* 'lie' (76).

(76) a. Il gît sur le bord de la route, inanimé[33] (French)
It lie son the side of the road immobile
b. Ses vêtements gisaient sur le sol
His clothes lay under the sun

Intransitive process verbs will be discussed in detail in the next chapter along with the constructions in Spanish and French involving a copula like *estar* and *être* 'be', respectively, along with a posture root in the form of a participle, which seems to be the most recurring strategy to express the simple position use in Romance languages (Berthele et al. 2015). Another Romance language mentioned at the beginning of this chapter was Catalan, which also counts with transitive and intransitive posture verbs. Interestingly, the transitive pattern appears with the prefix *a-* 'ad' (from Latin) such as

[33] Example taken from http://www.larousse.fr/.

in the verb *ajeure* 'lie' in (77). As expected, the transitive verbs make use of the clitic pronoun *se* to create the autocausative variant as shown for the verb *asseure* 'sit' (2), repeated below in (78).

(77) a. En Joan jeu al llit tot el dia (Catalan)
The John lies in.the bed all the day
b. La Maria ja ha ajagut en Joan
The Maria already has put (to bed) the Joan
(Acedo-Matellán 2006:4, (12))

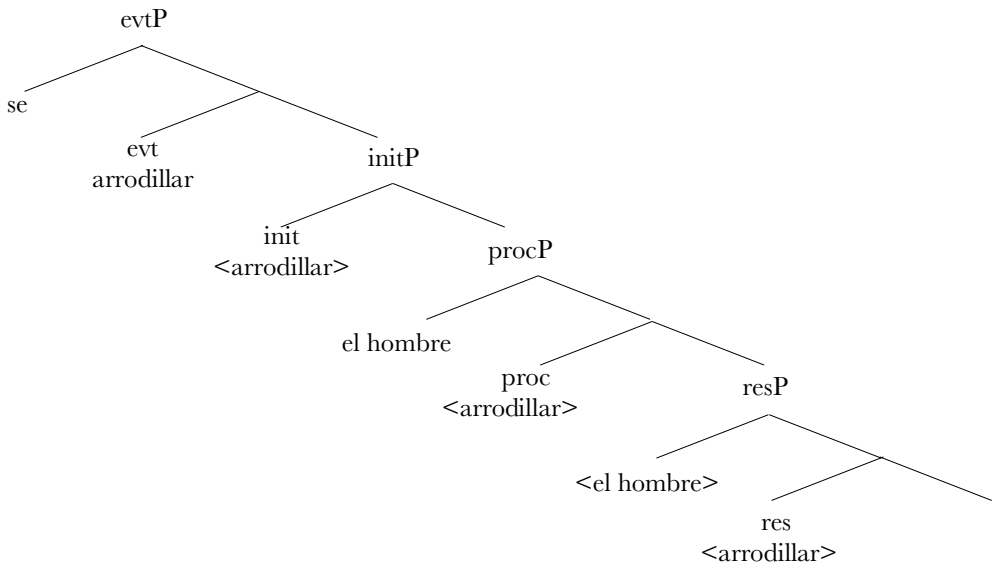
(78) a. El pare va asseure el nen a la cadira
The father PST sat the child on the chair
'The father sat the child on the chair'
b. El nen es va asseure a la cadira
The child REF PST sat-down on the chair
'The child sat down on the chair'
(Jaume Mateu, p.c.)

I will assume here that prefixes appearing with posture verbs in Catalan and Spanish, such as in *a-costar(se)* 'lie down', *a-currucar(se)* 'curl up', *a-gachar(se)* 'bend down', *a-poltronar(se)* 'to settle oneself', or *a-rrodillar(se)* 'kneel down' merely provide information on the result state of the event, following Acedo-Matellán & Mateu's (2013) postulation that, in the evolution of Romance languages from satellite-framedness to verb-framedness, prefixes lost their locative meaning and were reinterpreted as aspectual markers.[34] In this case, *a-* would indicate that the undergoer comes into the state denoted by the root. Due to the process of grammaticalization, I assume that the root and prefix are no longer distinguishable. Thus, I will represent them as a single element that instantiates all three subevent components in the first-phase syntax.

(79) a. El hombre se arrodilló
The man REF knelt-down

[34] See Acedo-Matellán & Mateu (2013) for discussion.

b.



Other verbs instantiating this pattern are *a-piñar(se)*, *a-montonar(se)*, *a-pelotonar(se)*, *a-golpar(se)*, which can all be translated as 'crowd together', and *a-poyar(se)* 'lean on'. I will assume that their argument structure is the same one as that for *arrodillarse* 'kneel down' on the basis of their similar semantics.

4. CONCLUSION

In this chapter, I have considered how cross-linguistic and intra-linguistic properties of Romance and Germanic languages determine the properties of posture verbs in their causative and assume position senses. I have used Ramchand's *resul autgmentation* to account for the ability of Germanic languages to encode the path of movement, or resP, in a satellite, while Romance languages consistently codify this information in the verb root. In addition, I have called attention to the importance of intra-linguistic variation in the encoding of causation among Germanic languages. Finally, I have hinted at the fact that the two patterns identified for posture verbs can also be realized by different verb roots in some Germanic languages. In chapter 3, I will take a stance regarding the controversial aspectual status of posture verbs in Germanic languages when they express stationary motion, that is, in their simple position use. These verbs have been argued to constitute an aspectual class of their own along with other verbs such as *sleep*,

shine, etc. I will put forward that it is not necessary to introduce additional types of eventualities in our ontology such as Davidsonian states or interval predicates to account for the properties of these verbs (cf. Maienborn 2005, Rothmayr 2009, and Dowty 1979); but rather, their basic aspectual make-up and the labile nature of English explains their properties. Furthermore, this analysis will be implemented to explain the properties of similar verbs in Romance languages.

CHAPTER THREE. Stationary motion with posture verbs in verb-framed and satellite-framed languages

INTRODUCTION

This chapter looks into the use of posture verbs in their simple position sense in Romance and Germanic languages as copulas or co-events. While there is a solid cross-linguistic tendency to grammaticalize posture verbs as copulas, or 'light' verbs, their use as co-events, as described in Talmy (1991, 2000) for English, is rather restricted as is the case in Romance languages, where these verbs cannot perform the function of codifying both stationary motion and a (posture) manner co-event. The following sections will attest to the high malleability of posture verbs in Germanic languages, that is, their ability to appear in very different argument structures. I will consider the degree of variation that exists in the resources used in locative predications and the role that posture verbs play in them, along with the evidence for cross-linguistic and intra-typological variation. Understanding the difference between structural and conceptual meaning in the semantics of the verb root will be vital to account for the properties of posture verbs in locative predications as well as in the grammaticalization of these verbs into copulas. The first section deals with the internal aspect of posture verbs in the simple position sense, a matter of controversy, which has stirred up numerous proposals to account for the lexical aspectual properties of these verbs. In the second section, I discuss intra-typological variation in the realm of Germanic posture verbs and connect it to the notion of manner co-event, which was examined in chapter 1, where this element was taken to be a byproduct of the type-B meaning of posture verbs. The chapter concludes with an exploration of instances of posture verbs which have lost their type-B meaning in Romance and Germanic languages.

1. THE INTERNAL ASPECT OF (PROCESS) POSTURE VERBS

Posture verbs in their simple position sense in English (1) have been argued to constitute an aspectual class of their own, as they do not readily fit the description of either states or activities (see section 1.1). The contradicting results obtained from applying several diagnostics, pairing them with either activities or states, depending on the test, has led to the creation of additional classes of states, namely, interval states (Dowty 1979) and Dadvidsonian states (Maienborn 2005), to account for the particular nature of the events denoted by posture verbs. I put forward that it is not necessary to introduce additional types of events in our ontology such as Davidsonian states or interval states to account for the properties of these verbs but rather, their basic aspectual make-up, that is, their having a single process subevent (procP), and the labile nature of English, as argued for in chapter 2 of this dissertation, can explain their properties. The lexical entry proposed for intransitive process posture verbs in English reflects these properties (2). In fact, as can be inferred from the lexical entry in (2), these verbs are not states but rather events whenever they appear by themselves, that is, without an initP introducing an initiating entity and a satellite instantiating a resP. In particular, they will be argued to be a non-dynamic type of process event. I follow the recent proposal by Silvagni (2017), who argues that dynamicity is orthogonal to the existence of an event. Instead, Silvagni proposes that the presence of a spatio-temporal unit, or stage, is the defining property of an event, dynamicity being the result of the existence of an initiating entity able to trigger an action and, thus, to create a sequence of spatio-temporal units, which are interpreted as a succession of stages (see section 1.4 for further discussion on how to obtain dynamicity in the first phase syntax).[35]

(1) a. John sits on the floor
    b. John is sitting

(2) *sit*: [proc]

[35] See also Fábregas & Marín (2012) for a proposal that also endeavors to separate eventivity and dynamicity and that derives dynamicity from the type of complement selected by the process head in the first phase syntax.

The Germanic languages included in chapter 2 count with at least three intransitive process verbs to instantiate the simple position use as shown below (3-5). This type of verb is not exclusive of Germanic languages, since Romance languages also have verbs with identical properties expressing posture such as *gésir* 'lie' in French, *jeure* 'lie' in Catalan, and *yacer* 'lie' in Spanish (see section 3.1). In addition to these verbs, Romance languages typically create stative predicates denoting posture by means of a copula and a result participle (see section 1.6).

(3) *Swedish*

d. Simple position sense: *ligga* 'lie', *stå* 'stand', *sitta* 'sit'
e. Causative: *lägga* 'lay', *ställa* 'stand', *sätta* 'sit'
f. Assume position sense (anticausative): *lägga sig* 'lie down', *ställa sig/resa sig* 'stand up', *sätta sig* (upp/ner) 'sit up/down'

(Viberg 2013)

(4) *German*

d. Simple position sense: *liegen* 'lie', *stehen* 'stand', *sitzen* 'sit', *lehnen* 'lean', *hängen* 'hang'
e. Causative: *legen* 'lay', *stellen* 'stand', *setzen* 'sit'
f. Assume position sense (anticausative): *sich* (*hin*)*legen* 'lie down', *sich* (*auf*)*stehen* 'stand up', *sich setzen* 'sit down'

(5) *Icelandic*

d. Simple position sense: *liggja* 'lie', *standa* 'stand', *sitja* 'sit'
e. Causative: *leggja* 'lay', *setja* 'sit'
f. Assume position sense (anticausative): *leggjast* 'lie down', *standa upp* 'stand up', *setjast* 'sit down'

(Jóhannsdóttir 2006)

In sections 1.1 and 1.2, I discuss the proposals by Dowty (1979) and Maienborn (2005) on posture verbs. Next, in sections 1.3 and 1.4 I present Silvagni's (2017) account of the internal aspect of eventualities and, consequently, make the necessary modifications in the denotation of Ramchand's process head to match the redefinition

of the notion of event put forth by Silvagni. Rather than being the locus of dynamicity, proc will be redefined as a head containing a spatio-temporal element. Section 1.5 discusses the maintain position sense identified by Levin & Rappaport-Hovav (1995) and contrast its argument structure and semantics to that of the simple position sense. Finally, in section 1.6, I compare and analyze the equivalent process posture verbs in Romance languages as well as the resultative structure used to express the simple position sense in these languages.

1.1. Dowty (1979)

Dowty (1979) uses the progressive to set apart a class of "stative" verbs that allow being used with the progressive tense, which should only be acceptable with events involving change or agency. Nevertheless, these non-dynamic verbs are able to bypass this restriction of the progressive tense, as shown in (6), even if they do not involve change. Similarly, they are ungrammatical with the phrase "*what x did was…*", which tests for agency, when the event has an inanimate entity as a subject (7):

(6) a. The socks are lying under the bed
b. Your glass is sitting near the edge of the table
c. The long box is standing on end
d. One corner of the piano is resting on the bottom step

(Dowty 1979:173, (62))

(7) a. *What the socks did was lie under the bed
b. *The glass is sitting near the edge, and the pitcher is doing so too
c. *The box is standing on end, which I thought it might do
d. *The piano did what the crate had done: rest on the bottom step

(Dowty 1979:173, (62'))

Dowty notices that these verbs are acceptable in the progressive as long as:

(8) "the subject denotes a moveable object, or to be more exact, an object that has recently moved, might be expected to move in the near future, or might possibly have moved in a slightly different possible situation."

(Dowty 1979:175)

This seems to be the reason behind the difference in acceptability of these sentences involving posture verbs in their simple position sense (9), where a locative relation is predicated of different non-animate figures (*New Orleans, John's house, The new building, That argument*) and a ground:

(9) a. New Orleans lies at the mouth of the Mississippi River
a'. ??New Orleans is lying at the mouth of the Mississippi River
b. John's house sits at the top of a hill
b'. ??John's house is sitting at the top of a hill
c. The new building stands at the corner of First Avenue and Main Street
c'. ??The new building is standing at the corner of First Avenue and Main Street
d. That argument rests on an invalid assumption
d'. ??That argument is resting on an invalid assumption

(Dowty 1979:174, (67))

To account for these contrasts, Dowty assumes Carlson's (1977) thesis that the progressive is only possible with stage-level predicates, that is, those involving a predication of a stage of an individual; in contrast to object-level predicates such as *know, love, like, believe*, etc., that is, those predicated of an individual, which are incompatible with the progressive. Thus, we must conclude that posture verbs are stage-level predicates, a conclusion that I will endorse in this chapter. In addition to the stage-level use of these predicates, a habitual reading can be obtained through Carlson's abstract operator G, which turns stage-level predicates into object-level predicates, explaining why the sentences in (9) with the simple present in English are better than those in the progressive tense, since they predicate a disposition of the figures. Dowty concludes that not only activities and change of state events require an interval, that is, a sequence of temporal moments, to be true, but we should also include the verbs *sit*, *stand*, *lie*, etc. in

English in this list. Thus, he proposes a three-way classification of stative predicates depending on whether they can be predicated of intervals or moments (10).

(10) a. Interval predicates: *sit, stand, lie,* etc.
b. Momentary stage-level predicates: *be on the table, be awake,* etc.
c. Object-level statives: *know, like, be intelligent,* etc.

While Dowty notices insightfully some of the properties of these verbs, he only deals with their non-agentive uses, thus, providing a somewhat limited snapshot, as the behavior of these specific uses cannot explain why they may behave as agentive in other circumstances (see section 1.5). However, importantly, Dowty shows that even though some predicates behave as eventive, they may show no dynamism.

1.2. Maienborn (2005)

Maienborn builds an ontology of eventuality types distinguishing between Davidsonian eventualities and Kimian states. Kimian states (11) are found in statives such as *love* or *hate* and copular constructions, that is, those predicates in combination with a copular verb such as *be* in English or *ser* and *estar* in Spanish. Davidsonian eventualities (12), in contrast, are typically process verbs such as *play*, *flicker*, *flap*, and the class of Davidsonian-states, or what Dowty called interval predicates, along with other predicates such as *sleep*, *gleam*, *wait*.

(11) *Kimian states*
"K-states are abstract objects for the exemplification of a property P at a holder x and a time t".

(Maienborn 2005:303, (47))

(12) *Davidsonian eventualities*
"Eventualities are particular spatiotemporal entities with functionally integrated participants".

(Maienborn 2005:279, (1))

Building on the definition of Davisonian eventuality, Maienborn devises a list of ontological properties and diagnostics to test for the presence of this type of eventuality in predicates. First, since Davidsonian eventualities are perceptible they should be acceptable as infinitival complements of perception verbs. Second, they can be located in space and time, therefore, they should be compatible with locative and temporal modifiers. Finally, since they can appear with argument participants, they are expected to be compatible with manner adverbials, instrumentals and the like. The application of these diagnostics shows that posture verbs pattern together with process verbs and differ from statives, which in this proposal are all subsumed under the Kimian state category. As an example, consider the contrasts with perception reports in (13-16), which set apart stative predicates from eventive ones.

(13) a. Ich sah Carol am Fenster stehen (German)
I saw Carol at.the window stand *D-states*
b. Ich sah Carol warten / schlafen
I saw Carol wait / sleep
c. Die spanischen Eroberer sahen überall Gold glänzen
The Spanish conquerers saw everywhere gold gleam
(Maienborn 2005:284, (10))

(14) a. *Ich sah Carol müde sein *copula+SLP*
I saw Carol tired be
b. *Ich hörte das Radio laut sein
I heard the radio loud be
c. *Renate sah Eva auf der Treppe sein
Renate saw Eva on the stairs be
(Maienborn 2005:283, (7))

(15) a. *Ich sah Carol blond sein *copula+ILP*
I saw Carol blond be
b. *Ich sah Carol intelligent sein
I saw Carol intelligent be

c. *Ich sah Carol Französin sein
I saw Carol French be

(Maienborn 2005:283-4, (8))

(16) a. *Ich sah die Tomate 1 Kg wiegen *states*
I saw the tomates 1 Kg weigh
b. *Ich hörte Carol die Antword wissen
I heard Carol the answer know
c. *Ich sah meine Tante Romy Schneider ähneln
I saw my aunt Romy Schneider resemble

(Maienborn 2005:284, (9))

Nevertheless, even though posture verbs pattern with process verbs in perception reports, in the end Maienborn classifies them as Davidsonian states in view of the fact that they cannot be embedded in the phrase "*what happened was …*" (17-19), which only accepts eventive predicates as shown below.

(17) *Das geschah während … / This happened while …*
a. Eva spielte Klavier *process verbs*
Eva played piano
b. Die Wäsche flatterte in Wind
The clothes flapped in.the wind
c. Die Kerze flackerte
The candle flickered

(Maienborn 2005:285, (11)

(18) **Das geschah während … / This happened while …*
a. Eva stand am Fenster *D-states*
Eva sood at.the window
b. Heidi schlief
Heidi slept
c. Die Schuhe glänzten
The shoes gleamed

d. Eva wartete auf den Bus
Eva waited for the bus

(Maienborn 2005:285, (12))

(19) **Das geschah während … / This happened while …*

a. Eva besaβ ein Haus *states*
Eva owned a house

b. Eva kannte die Adresse
Eva knew the address

c. Eva ähnelte ihrer Mutter
Eva resembled her mother

d. Eva hasste Mozart-Arien
Eva hated Mozart arias

(Maienborn 2005:286, (13))

To distinguish posture verbs from other aspectual classes, Maienborn claims that this special type of state counts with a Davidsonian-eventuality, that is, a spatio-temporal unit in their denotation, in contrast to statives and copular constructions, which count with a different sort of eventuality, a Kimian-state. On the other hand, posture verbs share with process verbs the same type of eventuality, the Davidsonian one; however, the size of the interval of which they are true is not alike:

(20) "The D-state verbs […] differ from process verbs in their sub-interval properties: while processes involve a lower bound on the size of subintervals that are of the same type, states have no such lower bound. That is, states also hold at atomic times […]. If or a certain time interval I it is true that, for example, Eva is standing at the window, sleeping, or the like, this is also true for every subinterval of I. In this respect D-state verbs pattern with statives."

(Maeinborn 2005:285)

Notice that the view advocated for by Maienborn opposes Dowty's account of these verbs, for whom they required an interval to be truthfully predicated. I won't dwell on this matter, but I would like to call attention to the fact that the equivalent Spanish

stative construction with posture verbs uses the copula *estar* 'be' and a participle, that is, *sit* in its stative meaning would be equivalent to *estar sentado* 'be sat'. If Maienborn's proposal were correct, these predicates in Spanish, and other Romance languages, should be an instance of a Kimian state, that is, a property predicated of an object instead of a spatio-temporal unit, while English and German posture verbs would be an instance of a Davidsonian event. Furthermore, predicates such as *estar sentado* 'be sat' and *estar enfermo* 'be ill' would contain different types of events: a Davidsonian event and a Kimian state, respectively, even though they both require the same copula (see Silvagni 2017 for further discussion of Maienborn's proposal).

1.3. Silvagni (2017)

Silvagni proposes a new taxonomy of eventualities based on the notion of stage, that is, a spatio-temporal unit (cf. Carlson 1977, Kratzer 1995). As a consequence, a clear divide is established between events and states in terms of the presence or absence of a spatio-temporal point. States are merely properties over individuals, hence spatio-temporal notions are not relevant to them. In contrast, events are defined by the presence of a stage, or stages, as part of their internal constitution. A welcome consequence of the redefinition of eventualities based on the presence of a spatio-temporal unit is that dynamicity is considered an epiphenomenon of events rather than their defining property, thus departing from the majority of accounts of internal aspect that propound dynamicity as the deciding feature of eventiveness (cf. Rothstein 2004, Smith 1991, Vendler 1957). When dynamicity is disregarded as the defining property of events, two main classes of eventualities arise, namely, states and events, which may be further subclassified as non-dynamic or dynamic (21).

(21) a. States: *love, know, be yellow, be intelligent,* etc.

b. Events:

i. Non-dynamic events: *sit, lie, be ill, be tired, hang, smell,* etc.

ii. Dynamic events: *wait, sleep, run, write, work build, paint, clean, eat, sing*, etc.[36]

[36] I do not necessarily agree with Silvagni's (2017) classification of *hang* and *smell* as non-dynamic events. These verbs would necessarily include an initiator in their first phase syntax to account for their ability to include an external argument in (ib) and (iib).

Posture verbs are included in the event category instead of being classified as states in this theory, in which the lack of dynamicity does not preclude eventualities from their eventivity, which, again, amounts to having a spatio-temporal stage. Thus, posture verbs in their simple position sense would not really be stative but rather non-dynamic eventive predicates, explaining why these verbs can appear with the progressive tense in English. Yet, as discussed in chapter 2, these predicates can also behave as change of state verbs as an initiating entity can bring about a change of posture in another entity or itself. A change of state implies the existence of dynamicity in the event. This is in accordance with Silvagni's definition of dynamicity, which obtains whenever a sequence of stages or spatio-temporal units is triggered by the action of an entity able to produce such a specific event (see 1.4 for further discussion). Whether the actant fulfills the action intentionally or unintentionally is not relevant, what is important is that the entity has the ability to generate such an event, since the property of being acted on belongs to events rather than the actant. I will identify this property of events with Ramchand's *init*P, which will be available to those events liable to being caused or initiated. Events that include this node in their first phase syntax tree will then be interpreted as dynamic, as long as a there is a process head in the lexical entry of the verb root. As discussed in chapter 2, the assume position sense and causative sense of posture verbs include an init phrase, which adds the initiating subevent that triggers the process, or event, leading to the result state. Before further discussing the internal aspect of posture verbs, I will revise the modifications made in chapter 1 about the denotation of subevents in the first phase syntax since Ramchand's definition of process binds together the notions dynamicity and eventivity.

1.4. Redefining the denotation of procP

Ramchand (2008) identifies two basic types of subevents: states and processes. Processes denote an eventuality with internal change contrasting with states, whose aspectual

(i) a. The painting hangs on the wall
b. The curators hung the surrealist paintings on the walls of the museum

(ii) a. The air smells of roses
b. Anna smelled the roses

make-up is described as stative. This should be understood as the absence of internal change in contraposition to the process subevent (22).

(22) a. State (e): e is a state
b. Process (e): e is an eventuality that contains internal change

(Ramchand 2008:44, (6))

These two basic subevent types can be combined together through the 'leads to' relation to form a macro-event (23).

(23) *Event Composition Rule*
e = e1⟶ e2 : e consists of two subevents, e1, e2 such that e1 causally implicates e2

(Ramchand 2008:44, (5))

In Ramchand's theory, procP contains a process subevent, thus, implicating internal change, while initP and resP are both assumed to instantiate a state with no apparent difference in their aspectual make-up. The way these stative subevents are interpreted depends on the elements composing the first phase syntax of the event. That is, the state will be interpreted as initiational if it appears on top of a procP (24) or as resultative if it appears below procP (25).

(24) IF $\exists e_1, e_2$ [State(e_1) & Process(e_2) & $e_1 \longrightarrow e_2$] , then by definition Initiation (e_1)

(25) IF $\exists e_1, e_2$ [State(e_1) & Process(e_2) & $e_2 \longrightarrow e_1$] , then by definition Result (e_1)

(Ramchand 2008:44, (7-8))

Since I have assumed Silvagni's redefinition of the notion of event in terms of the presence of a stage, it is necessary to change the denotation of process as a subevent containing only a spatio-temporal unit, to which an initiation event may be attached if the event is the result of an action carried out by an entity able to fulfill such an event. Thus, procP cannot implicate dynamicity by itself, it being dependent on the presence of an initiational head. The initP and resP are both treated as stative in Ramchand's

proposal; however, I would like to introduce a pertinent distinction between them: while initP simply denotes the properties of being "the cause or grounds" for an eventuality to obtain (Ramchand 2008:44), that is, a state, resP is an event inasmuch as it contains a spatio-temporal unit, that is, Silvagni's non-dynamic event type. To sum up, there are two types of eventualities: states and events (26). States are properties over individuals and lack internal aspect. Events are happenings, or processes, with internal aspect, that is, they codify, at least, a spatio-temporal unit.

(26) a. State (e): e is a state[37]
b. Event (e): e is an eventuality that contains a spatio-temporal unit

In spite of these changes, event composition proceeds in the same fashion as argued by Ramchand, and the interpretation of the heads remains unaltered. Thus, two subevents occurring in immediate vicinity of each other will be interpreted according to the previously stated rules, which are repeated in (27-28) for ease of exposition.

(27) IF $\exists e_1, e_2$ [State(e_1) & Event(e_2) & $e_1 \longrightarrow e_2$] , then by definition Initiation (e_1)

(28) IF $\exists e_1, e_2$ [Event(e_1) & Event(e_2) & $e_2 \longrightarrow e_1$] , then by definition Result (e_1)

A sequence of two subevents will be interpreted as a dynamic event followed by a result as long as an init head has been merged on top of the sequence of subevents. Yet, the role of the init head is twofold: in addition to introducing an argument that plays the role of initiator for a process head, thus, creating a dynamic predicate, init can also instantiate a predication relation by relating a figure and a ground, or rheme, if the verb denotes a state such as *love*, *hate*, etc. See section 2.3 in chapter 1 for further discussion of the consequences of these changes in Ramchand's first phase syntax.

[37] I am assuming here that states also count with an abstract argument in their denotation (cf. Kratzer 1996, among others).

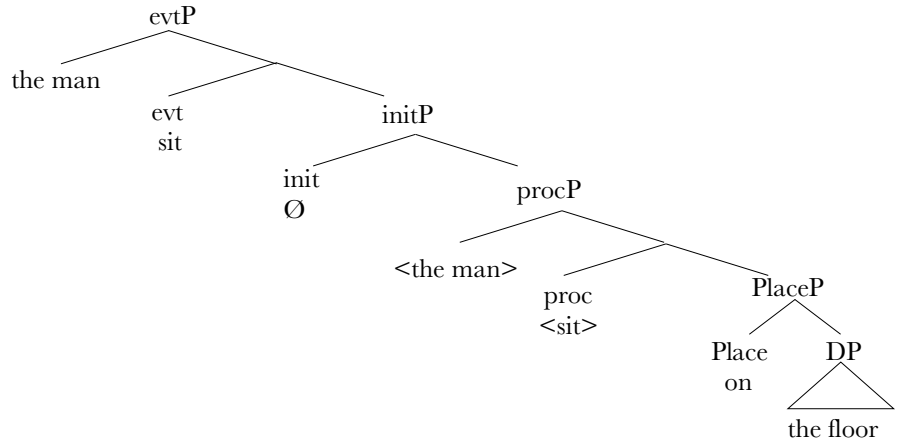
1.5. The maintain position sense

The conception of the internal aspect of eventualities presented in the preceding sections results in the following first phase syntax configurations (29) for posture verbs in English:

(29) a. *causative* sense: [init, proc, res]
b. *assume position* sense: [init, proc, res]
c. *simple position* sense: [proc]
d. *maintain position* sense: [init, proc]

In section 2.2 of chapter 2, I argued that the causative and assume position senses of posture verbs in English consisted of three subevents: init, proc, and res. Init was introduced in the syntax as English possesses a null init head. The simple position sense of posture verbs in English is then a non-dynamic event, which consists simply of a process head. Finally, I argue that the maintain position sense consists of an init and proc head, since the initiating entity is maintaining purposely a posture for an undetermined length of time, consistent with the lack of a result subevent in the first-phase syntax (30). Thus, posture verbs in the maintain position sense behave as any other self-initiating process event.

(30) a. The man sat on the floor purposely for hours
b.



Further evidence for the presence of an init head in the maintain position sense comes from auxiliary selection data in the impersonal passive with posture verbs in German.

As argued by Zaenen (1993), the Dutch impersonal passive only allows atelic and controllable predicates, that is, verbs that count with an initiating entity. Zaenen remarks that atelicity is not provided by the verbs themselves, but rather by the construction, and thus a telic predicate may appear in this construction as long as it allows a detelicized reading, for example, by means of a durative adverbial. On the other hand, controllability is taken to be a characteristic pertaining to verbs. This characterization of the impersonal passive can be applied to German. In the following examples with the atelic verb *dance* (31), only predicates with an external argument that can exert control over the situation, that is, initiate it, can form grammatical sequences in the impersonal passive.

(31) a. Auf der Party tanzten viele Gäste (German)
at the party danced many guests
'At the party many guests danced'
b. Auf der Party wurde (von viele Gäste) getanzt
at the party was (by many guests) danced
c. Vor dem Fenster tanzten Scneeflocken
in front of the window danced snow-flakes
d. *Vor dem Fenster wurde (von Schneeflocken) getanzt
in fron of the window was (by the snow-flakes) danced
(Kaufmann 1995:404, (24))

Interestingly, process posture verbs, that is, in the simple position sense, which do not necessarily imply control by an entity, can be acceptable in this construction (32) provided that the subject is human and can exert control over the situation. The contrasts below suggest that posture verbs in the simple position sense can take an init head to merge an initiator, which is then conceptualized as the entity in control of maintaining the relevant posture just as in the case of the maintain position sense.

(32) a. Bei Jazzkonzerten sitzen die Zuschauer meistens, aber auf Rock-konzerten
in jazz concerts sit the audience usually, but in rock concerts
wird eigentlich immer gestanden
is actually always stood

'In jazz concerts the audience usually sits, but in rock concerts they actually always stand'

b. ?Auf der Weide liegen die Kühe häufig, aber im Stall wird eigentlich
in the meadow lie the cows often but in the stable is actually
immer gestanden
always stood

c. *Im Lage liegen die Fahrenstangen normalerweise, aber auf Plätzen
in the depot lie the flag-poles usually but not in squares
wird immer gestanden
it is always stood

(Kaufmann 1995:404, (25))

1.6. The stative sense of posture verbs in Spanish

In this section, I discuss why the use of Spanish posture verbs in the stative sense requires the auxiliary use of *estar* 'be' to express stative meanings.[38] Specifically, the lexical restrictions applying can be understood on the basis of the lexical entry proposed for posture verbs in Spanish.

First, I would like to argue that Spanish *sentar* 'sit' cannot be used in the same configurations as English (cf. 33a and 34a), since its lexical entry contains all three subevent components (35a), thus preventing the possibility to express a state with this verb root.

(33) a. *El niño sienta en el suelo
The child sits on the floor
'The child is sitting on the floor'

b. El niño está sentado en el suelo
The child is sat on the floor
'The child is sitting on the floor'

[38] For a discussion of the differences between the copulas *ser* and *estar* 'be' in Spanish, see Arche (2006), Brucart (2017), Camacho (2012), Fábregas (2012), Fernández Leborars (1999), Gallego & Uriagereka (2016), Marín (2000), Pérez-Jiménez, et al. (2015), Silvagni (2017), Zagona (2012), among many others.

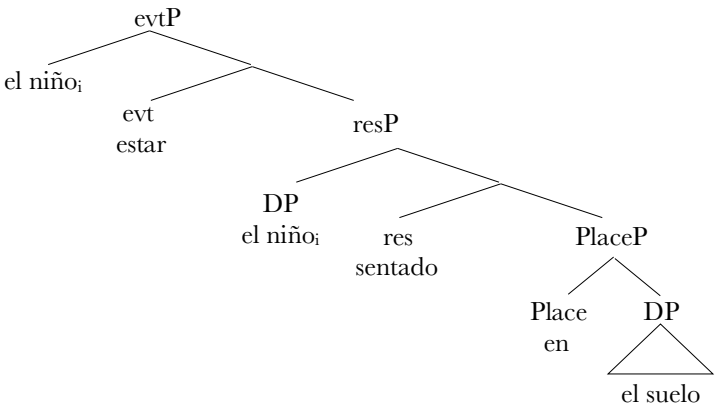
(34) a. The child sits on the floor
b. The child is sitting on the floor

(35) a. *sentar*: [init,proc$_i$,res$_i$]
b. *sit*: [proc]

This explains why we can only obtain a non-dynamic sense out of this verb through the resultative construction with the copula *estar* 'be' (33b). I assume with Ramchand (2018) that the participle instantiates the result subevent of the verb allowing, thus, a non-dynamic interpretation of the verb root in Spanish (36-37).

(36) [[sentado]] = < sentado, < res >, λe [sentado$_{res}$(e)] >

(37)



In the case of English, the option of using a copula and a result participle does not seem to be widely available for the posture verbs *sit*, *stand,* or *lie*. The lexical entry for *sit* in (35b) shows that this verb only has a process phrase. A reading with a resultative interpretation could only be obtained if the verb were coerced to include a resP in its first phase syntax. As a matter of fact, this option is available in some British English dialects, as shown in the examples below (38), where the resP has been coerced in the syntax, thus, allowing a reading that indicates a non-dynamic situation of sitting or standing. This same construction is possible in American English, as shown in (39).

(38) a. She's sat at the table eating breakfast[39]
b. We were stood at the bar waiting to be served
c. It is 2pm and I am sat in my parents' living room, talking to one of the cats
d. Three hooded kids are stood around the corner drinking alcopops and it's raining

(39) My mom and Alison were stood in the hallway watching me as I limped down the stairs[40]

Similarly, English can use the transitive posture verb *seat,* exemplified in (43), as a means to express non-dynamic meanings. In this case, the participle would instantiate the result portion of the event just as Spanish's use of the copula *estar* 'be' to express the simple position sense.

(40) A man in a gown and a mortar board is *seated* on a chair, carried above the heads of the crowd by men who *are* in turn *standing* on the heads of men also wearing academic dress[41]

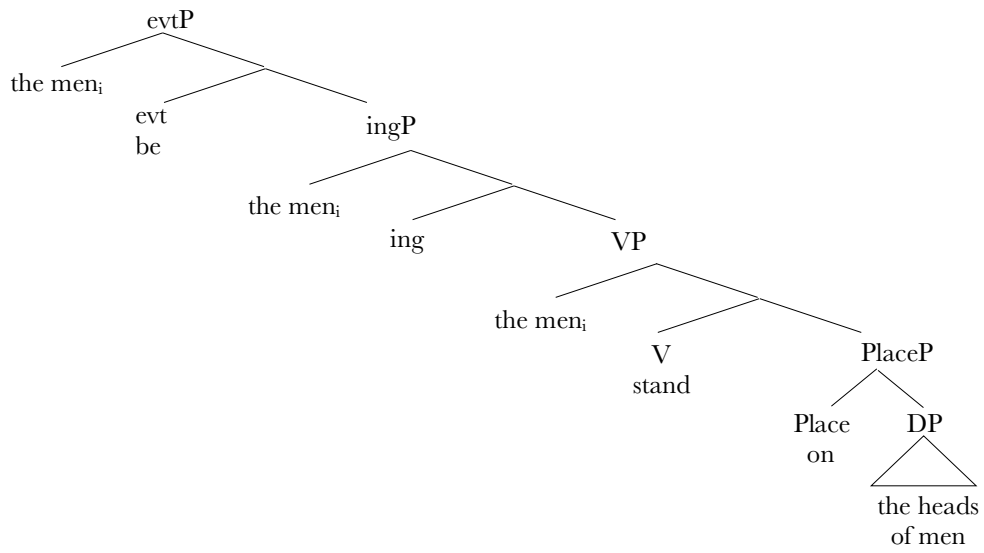
This notwithstanding, the most productive way to express non-dynamic meanings with process posture verbs in English is the progressive (40). I assume with Ramchand that *-ing* morphology is "a function from event descriptions to event descriptions such that the derived eventuality is an Identifying-State for that event" (2018:61). The *-ing* morphology in English can take scope over the event and output a non-dynamic description, allowing speakers to infer "the existence of a more complex extended eventuality in practice, given the right conditions" (2018:62). The resulting structure would have as holder of the state the DP in the highest specifier position of the first phase syntax. This element would be raised to the specifier position of evt, which would be spelled out as the auxiliary *be* in English (Ramchand 2018), that is, as the materialization of the tense, aspect, and evt nodes.

[39] The examples were obtained from https://blog.oxforddictionaries.com/.

[40] Example obtained from https://www.grammarphobia.com/.

[41] Example obtained from https://wellcomecollection.org/.

(41)



1.7. Conclusion

In summary, posture verbs in the simple position sense have been argued to denote non-dynamic process events in accord with the definition of event advanced in Silvagni (2017), making unnecessary to postulate additional event types to account for the properties of these verbs. I have also shown that the maintain position sense contains an init head to allow for the initiator role of the single argument participant of these predicates, and briefly sketched how the simple position sense is built in Romance languages such as Spanish, where posture verbs have a more complex lexical entry than English process posture verbs. This section has also attested that there exists intra-typological variation in posture verbs such as among some varieties of English. Since languages may vary as to how many of these constructions their posture verbs can appear in, it is necessary to consider what is the source of their differing behavior. This will be the subject matter of section 2, where I look at how languages express stationary motion from an intra-linguistic point of view. Additionally, a matter that has not been addressed yet about the simple position sense of posture verbs is the difference between the co-event and 'light' verb uses. That is, posture verbs have been characterized as having both the capability to express a manner (of posture) co-event in locative predications and to merely link a subject with its predicate without providing any other meaning beyond aspect. This can be exemplified with a sequence such as *George sits on the chair* and *The noun phrase sits in the specifier of procP* (Den Dikken 2010). Both examples

contain the simple position sense of the verb *sit*, which expresses a non-dynamic relation between a figure and a ground, however, they differ insomuch as only the first sentence can be said to contain a manner component predicated of the subject (*George*) in addition to the locative meaning, whereas in the second sentence there is not such a posture implication for the subject (*The noun phrase*). Therefore, it seems that the interplay of type-A and type-B meaning of the verb *sit* in these examples might be unlike. These uses of the simple position sense will be dealt with in sections 3 and 4 of this chapter, respectively.

2. *INTRA-TYPOLOGICAL VARIATION IN THE REALM OF POSTURE VERBS*

The aim of this section is to discuss the existence of differences in the resources used for the expression of location among languages from a cross-linguistic and intra-linguistic point of view. As will be shown, even if two languages belong to the same Talmyan group or language family, they may exhibit differences in the way they encode stationary motion, or stasis, since each language may have a preferred construction to do so. Among other factors, the properties of the figure or the configurational setting may trigger the use of a specific posture verb or copula in a locative predication. Additionally, it may be necessary to consider the lexical availability of these items to express posture and location in a given language. We may ask, if all languages count with a set of intransitive (process) posture verbs, why are they more productive or widely used in some languages? Furthermore, why is there intra-linguistic variation pertaining to manner saliency among Germanic languages? That is, since some languages seem to exploit the satellite-framed pattern more productively, as attested for English, is there a cognitive correlate to this linguistic tendency?

To determine if there is intra-typological variation in this domain, it is necessary to look into how languages belonging to the same group express location. For that purpose, drawing on previous dialectal and cross-linguistic studies, this section contrasts the constructions used by Germanic and Romance languages to express location. The argumentation will be organized around two main discussion points: the different

resources used for locative predication in Romance and Germanic languages, and the cross-typological and intra-typological variation among them. Finally, I will introduce the notion of co-event and consider whether it is relevant for posture verbs in these languages, building on the discussion in section 4.3 of chapter 1.

A locative predication specifies a stationary relation between a figure and a ground, in which the location of the former is determined with respect to the latter. Since stationariness is an integral part of location, that is, absence of motion is implied in this type of predication, the argument structures do not contain dynamicity. Additional configurational information about the figure such as shape, disposition, angle, etc. may be encoded in locative predications via posture verbs. Dialectal and typological studies show that languages may use different ways to express locative predication and may differ intra-typologically in the preferred strategy to encode it. According to Ameka & Levinson (2007), there are four different constructions to express location, namely, (i) use of a verbless construction, (ii) a single locative verb, (iii) a small contrastive set of locative verbs, or (iv) a large set of dispositional verbs. The four types of locative constructions used across languages are shown in table 1. To determine the preferred construction used to express location, Ameka & Levinson resort to *where*-questions to trigger unmarked locative statements, or basic locative constructions (BLC), in their terms, as the most neutral context to elicit locative statements from speakers.

TYPES OF LOCATIVE PREDICATION	LANGUAGES
Type 0 *No verb in basic locative construction*	Saliba, Austronesian, Papua New Guinea
Type I *Single locative verb (or suppletion under grammatical conditioning)*	Ia. Copula: English, Tamil, Chukchi, Tiriyó
	Ib. Locative (+Existential) verb: Japanese, Ewe, Yukatek, Lavukaleve
Type II *Small contrastive set of locative verbs*	IIa. Postural verbs: Arrernte, Dutch, Goemai
	IIb. Ground space indicating verbs: Tidore
Type III *Large set of dispositional verbs*	Tzeltal, Zapotec, German, Laz, Likpe

TABLE 1: FOUR BASIC TYPES OF LOCATIVE PREDICATION (AMEKA & LEVINSON 2007)

In table 1, we observe that the Germanic languages English, Dutch, and German are classified as belonging to types I, II, and III, respectively. The resources of which these languages make use to express location are listed below in (42). While English capitalizes on the use of the copula *be*, Dutch and German employ disparate repertoires of posture verbs and differ in the number of items, German being the one with the largest number of posture verbs.

(42) *Means to express locative predication in Germanic languages*

a. English: *be*

b. Dutch: *staan* 'stand', *liggen* 'lie', *zitten* 'sit', *hangen* 'hang', *lopen* 'run'

(van Staden et al. 2006: 475-511)

c. German: *stehen* 'stand', *liegen* 'lie', *hängen* 'hang', *lehnen* 'lean', *stecken* 'be in tight fit, be stuck', *klemmen* 'be stuck, be jammed', *kleben* 'stick by means of glue', *haften* 'adhere', *schwimmen* 'be afloat in liquid', *schweben* 'be afloat'

(Kutscher & Schultze-Berndt 2007)

The tendency to use one of the four constructions to express locative predication in a language, as reported by Ameka and Levinson, does not mean that a language disallows the use of the remainder constructions. As a case in point, consider the fact that English can use the copula *be* as well as posture verbs for this type of predication, even if it is not the default option, thus, allowing in the latter case for the inclusion of posture information in the predicate, which Talmy (2000) identifies with a co-event, that is, a secondary event that specifies a cause or manner component synchronous to the main event (see section 3.1 of chapter 1 for further discussion).

Following Slobin (2004), Berthele (2004) makes the claim that dialects can also be classified in a scale or cline of manner saliency to account for intra-typological variation.[42] For example, according to his research, the Swiss German dialect Muotathal (43) and the Standard German dialect (44) differ significantly in the way they codify movement schemata even if both can be classified as satellite-framed languages,

[42] It has been reported that manner saliency, for example in the form of a co-event, may vary among languages. This has been shown to be true not only from a cross-linguistic point of view (see Slobin 2004) but also in studies considering intra-linguistic variation such as Lewandowski & Mateu (2016), who analyze the differences in manner and path descriptions among satellite-framed languages.

since Muotathal rarely codifies manner in the verb as is the case in Standard German, thus, patterning in this respect closer to a typologically different language such as French (45), a verb-framed language. In spite of these differences in the preferred strategy to express location, the sequences elicited from speakers of these languages did not only include posture verbs, but also copular expressions followed by a participle.

(43) a. De chittel isch amene haggä ufghänht (Muotathal)
the jacket is at-a+DAT peg up-hung
'The jacket is hung up on a peg'
b. Dr Schluuch hanged über de baumwürz
the hose hangs over the stump
'The hose hangs over the stump'

(44) a. Der Schlauch liegt auf dem Baumstumpf (German)
the hose lies on the+DAT stump
'The hose lies on the stump'
b. Das tuch ist um den kopf geschlungen
the cloth is around the+ACC head wrapped
'The cloth is wrapped around the head'

(45) a. Le veston est suspendu à un crochet (French)
the jacket is hung on a peg
'The jacket is hung on a peg'
b. La cordelette gît sur le tronc
the rope lies on the stump
'The rope lies on the stamp'

Berthele (2004:108-109)

On the basis of the data collected for his study, Berthele argues that French also counts with verbs instantiating the manner co-event pattern as is the case in Muotathal and Standard German. That is, in addition to using a participle and the copula *être* 'be' to express a location state in the case of verbs whose lexical entry specifies three subevents (i.e., init, proc, and res), as proposed in chapter 2 of this dissertation, French also has

process verbs denoting non-dynamic events such as *gésir* 'lie' to predicate a location relation between a figure and a ground. If Berthele is right, co-event conflation would then be possible for both satellite-framed and verb-framed languages and, thus, a co-event would be available for non-dynamic process verbs.

Moreover, Berthele et al. (2015) argue that even if languages have a slot available for manner co-event expression in static spatial descriptions it won't necessarily be used by speakers. This conclusion is reached after studying a sample of five Germanic languages: Frisian, Standard High German, Icelandic, Norwegian, and Swiss German. In spite of the fact that these languages belong to the satellite-framed pattern, speakers do not necessarily prefer manner co-event expression to describe static spatial location. Berthele et al. report that the addition of manner (posture) information seems to be the default choice made by speakers. Nevertheless, it is possible to establish a cline of manner saliency pertaining to posture for these languages.[43] While Frisian and Standard High German show a high percentage of co-event expression in their static spatial descriptions, Swiss German and Norwegian show a limited percentage of co-event expression. In contrast, Icelandic rarely expresses co-event information. These tendencies are telling about the strategies used to express static spatial location. Frisian and Standard High German exploit the satellite-framed pattern more effectively in comparison to the rest of languages. Thus, the posture information is expressed preferentially in the verbal slot in these languages. Swiss German and Norwegian show a comparatively lower usage of the co-event pattern and prefer the use of the resultative construction. Finally, Icelandic favors the use of complex prepositions and adverbs indicating orientation.

To summarize, in Germanic languages, several resources are available for the expression of stationary motion, namely, copulas, such as *be*, and posture verbs. Even if

[43] The existence of a cline of manner saliency among these languages might suggest a cognitive bias in speakers of some languages that favors the encoding of manner information in the verbal slot. However, studies such as the one carried out by Pulverman el al. (2008) show that there is not such a cognitive bias. In their study, they show that 14-month-old children of English and Spanish can track or attend to both path and manner changes in non-linguistic dynamic events. Thus, even though Spanish does not encode manner information along with path in motion events, children are still sensitive to this information when they are tracking events in non-linguistic tasks. Similarly, Bosse & Papafragou (2010), in their study of how speakers of English and German encode static spatial relations involving inanimate entities, show that the cross-linguistic differences between these two languages do not affect the way in which speakers notice changes in the spatial position of inanimate figures in non-linguistic memory tasks, even though German speakers tend to encode posture, that is, manner, a 90% of the time, while English speakers tend to do so only a 32.3% of the time.

both these resources are available in all Germanic languages, they may still not be the default option to express location in some of them. Similarly, Romance languages such as French can express locative states by means of a copula and past participle, or a posture verb. Talmy (2000) has argued that posture verbs contain a manner component in its semantics, that is, a co-event. This option is allegedly only possible in satellite-framed languages, although this assumption has been challenged for Romance posture verbs by Berthele (2004) and for existential unergative verbs that behave as unaccusative in Romance languages (see Mateu & Rigau 2002, Acedo-Matellán 2010 for further discussion). One may ask how it is possible for some languages to include additional information, manner or causation, in the semantics of verbs denoting stationary motion and, if so, how this is achieved. I dissent from the above-mentioned point of view and argue that posture verbs in these contexts should not be considered instances of conflation of a state and a manner co-event. To be more accurate, their "stative"-like semantics derives from the presence of a (non-dynamic) process phrase in the lexical entry of these verbs, which contains a stage, that is, a spatio-temporal unit. Following up the discussion in chapter 1, in section 3 I will argue that the manner co-event component stems from the type-B meaning codified in the verb root, while the location information will be argued to derive from the presence of a locational complement. An additional possibility, which has not been dealt with yet, is that the posture verb may work not only as a full lexical verb but also as a 'light' verb or copula, in which the posture or manner information has been lost. This so-called 'light' verb use of posture verbs will be dealt with in depth in section 4 of this chapter. For now, let us qualify the claim that posture verbs do not introduce a manner co-event to later compare this full-fledged lexical use with the 'light' verb use.

3. CO-EVENT EXPRESSION WITH POSTURE VERBS

This section addresses Talmy's (2000) assumption that posture verbs in their simple position sense contain a manner co-event specifying the posture of the figure, which is being located with respect to a ground. In section 3.1, I differentiate the co-event use from the 'light' or copular verb use, where there is not an implication of a manner, or

posture, as a side event. The argument structure I will argue for this use of posture verbs will be based on Hoekstra & Mulder's (1990) copular structure for Dutch posture verbs, which is reviewed in section 3.2. Next, section 3.3 explores the existential use of Dutch posture verbs.

3.1. Introduction

Posture verbs have been argued to express a co-event along with its non-dynamic meaning and to behave as a 'light' verb. Den Dikken (2010) provides excellent examples for posture verbs in English for the co-event use (46) and the 'light' verb use (47). While the former examples can be said to have a manner component in addition to the locative predication, the latter examples do not imply a posture specific to the figure DP.

(46) a. He was lying on the couch
b. She was sitting on the sofa
c. They were standing on the corner
d. The clothes were hanging on the line

(47) a. The problem lies in the fact that S
b. The operator is sitting in SpecCP
c. Water keeps standing in the basin
d. It is hanging in the balance

(Den Dikken 2010:49, (46))

One may wonder what it is exactly that makes different the use of posture verbs as co-events and 'light' verbs. To further illustrate the difference, let us use examples from Dutch as a starting point (48). First, when the location is "an amount of space" such as *France* (Hengeveld 1992), as in (48), both copulas and posture verbs can be used. In this case, the posture verb does not contribute any information about the posture of the figure. Therefore, there is no implication of a sitting co-event in the predicate and the posture verb behaves simply as a linker between the subject (*Jan*) and the predicate (*in*

France). In a nutshell, posture verbs used as 'light' verbs do not imply that the figure is in a specific posture, that is, they are semantically empty in this specific aspect.

(48) Jan {is/zit} in Frankrijk (Dutch)
Jan cop/sit-pres-3-sg in France
'Jan is in France'

(Hengeveld 1992:238, (3))

In Den Dikken's (2010) analysis, this use of posture verbs presumes that the verb instantiates a stative aspectual operator *be*. I think that the intuition behind this analysis is correct, however, there are certain implications that need to be taken into account if we are operating under the assumption that verb roots instantiate different sub-eventive verbal phrases, as I have by adopting Ramchand's (2008) framework. I will not dwell on the discussion of posture verbs as 'light' verbs here and postpone it to section 4.

(49) BE [$_{SC=RP}$ DP [RELATOR [$_{PRED=PP}$ PLOC DP]]]

(Den Dikken 2010:49, (47a))

On the other hand, consider the use of the posture verb in (50b), showing that when the location is an object (*a sofa*), posture verbs are the preferred option rather than copulas such as *zijn* 'be' (50a). In this example, the posture verb does not only serve to carry tense, aspect, or mood marks but also indicates that the figure (*Jan*) is, specifically, in a sitting position. Den Dikken's (2010) analysis treats this use of posture verbs as the instantiation of a manner component adjoined to a stative aspectual operator equivalent to *be* (51). In this case, the posture verb contains conceptual content about the posture of the figure.

(50) a. *Jan is op de bank
Jan COP-PRES-3-SG on the sofa
'Jan is on the sofa'
b. Jan zit. op de bank
Jan sit-PRES-3-SG on the sofa
'Jan is sitting on the sofa'

(Hengeveld 1992:238, (3))

(51) BE+MANNER [$_{SC=RP}$ DP [RELATOR [$_{PRED=PP}$ PLOC DP]]]

(Den Dikken 2010:49, (47b))

In Talmy's (2000) framework, this amounts to the presence of a sitting co-event expressing manner (see figure 1).

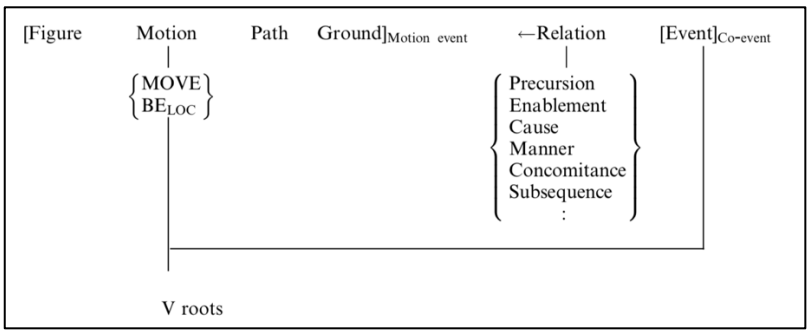


FIGURE 1: CO-EVENT CONFLATION IN TALMY (2000:28)

Under the assumption that posture verbs can express a manner co-event, it would be possible to paraphrase them using a present participle in English, thus permitting the separation of the stative-locative meaning from the manner component specifying the posture of the figure (52).

(52) a. The lamp {stood/lay/leaned} on the table
b. The lamp is {standing/lying/leaning} on the table

Talmy (2000:27, (5))

The same is true of German in which the manner component could still be expressed by means of an adverb such as *liegenderweise* 'lying-way' if a copula were used instead of a posture verb, as shown in (53).

(53) a. Heidi liegt auf dem Sofa (German)
Heidi lies on the sofa
b. Heidi ist liegenderweise auf dem Sofa
Heidi is lying-way on the sofa

Maienborn (2003: 86, (60)) *apud* Rothmayr (2009:150, (374))

Similarly, Koontz-Garboden (2009) presents a class of non-verbal predicates in Ulwa, a Misumalpan language from Nicaragua, used in locative predications that create an implication about the posture of the figure. For example, the predicate *lau* 'sit' (54) creates this implication whenever it is used along with a figure and a location.

(54) Dapak yal-ka laih û-ka kau lau ka (Ulwa)
next woman-3SG TOP house-3SG at sit SENT.KA
'And next, the woman is sitting at the house'
(Koontz-Garboden 2009:247, (2))

Clearly, these sentences are altogether impossible in Romance languages such as Spanish, which can only make use of a participle and the copula *estar* 'be' to express a meaning similar to that of the Germanic structures (55).

(55) La lámpara está en la mesa {levantada/tumbada/inclinada} (Spanish)
The lamp is on the table standing/ lying/ leaning

As it was argued at the beginning of this chapter, the possibility of using the verbs equivalent to some of the examples above in Spanish, Catalan, or French is not allowed since their lexical entries contain three subevents: init, proc, and res. For example, the verb *sentar* 'sit' couldn't be used as a stative due to its complex lexical entry (cf. (36), repeated below). Consequently, these verbs cannot be used to denote stationary motion. I put forward that this apparent restriction is due to lexical availability rather than to the absence or unavailability of an operation in the syntax or semantics to conflate a manner component and a non-dynamic event. As a matter of fact, Romance languages also have a (somewhat limited) set of non-dynamic process posture verbs such as *gésir* in French, *jeure* in Catalan, and *yacer* in Spanish, which are equivalent to the English verb *lie*; or *pendre* in French, *penjar* in Catalan, and *pender* in Spanish, which are equivalent to the English verb *hung* (56-58).[44]

[44] The examples have been obtained from www.wordreference.com.

(36) a. *El niño sienta en el suelo (Spanish)
The child sits on the floor
'The child is sitting on the floor'
b. El niño está sentado en el suelo
The child is sat on the floor
'The child is sitting on the floor'

(56) a. Les soldats morts gisaient sur le champ de bataille (French)
the soldiers dead lay on the field of battle
'The dead soldiers lay on the battle field'
b. Un fil pend de sa chemise
a thread hangs of his shirt
'A thread hangs from his shirt'

(57) a. Les pomes pengen de l'arbre (Catalan)
the apples hang of the-tree
'The apples hang from the tree'
b. El gos jeu a l'ombra d'un arbre
the dog lies at the-shadow of-a tree
'The dog lies in the shade of a tree'

(58) a. De los balcones penden banderas por toda la ciudad (Spanish)
of the balconies hang flags throug all the city
'From the balconies hang flags all around the city' (Lit.)
b. La muchacha yacía desmayada en el piso
the girl lay unconscious on the floor
'The girl lay unconscious on the floor'

Following the discussion in section 4.3 in chapter 1, I have assumed that in Ramchand's (2008, 2014) framework the existence of a co-event is dealt with assuming that a verb, realizing at least a proc head, may take an additional element, independent from the verb root, to express a result subevent, thus, creating a more complex event. The result obtained mimics the co-event semantics argued for in Talmy (1991, 2000). Remember

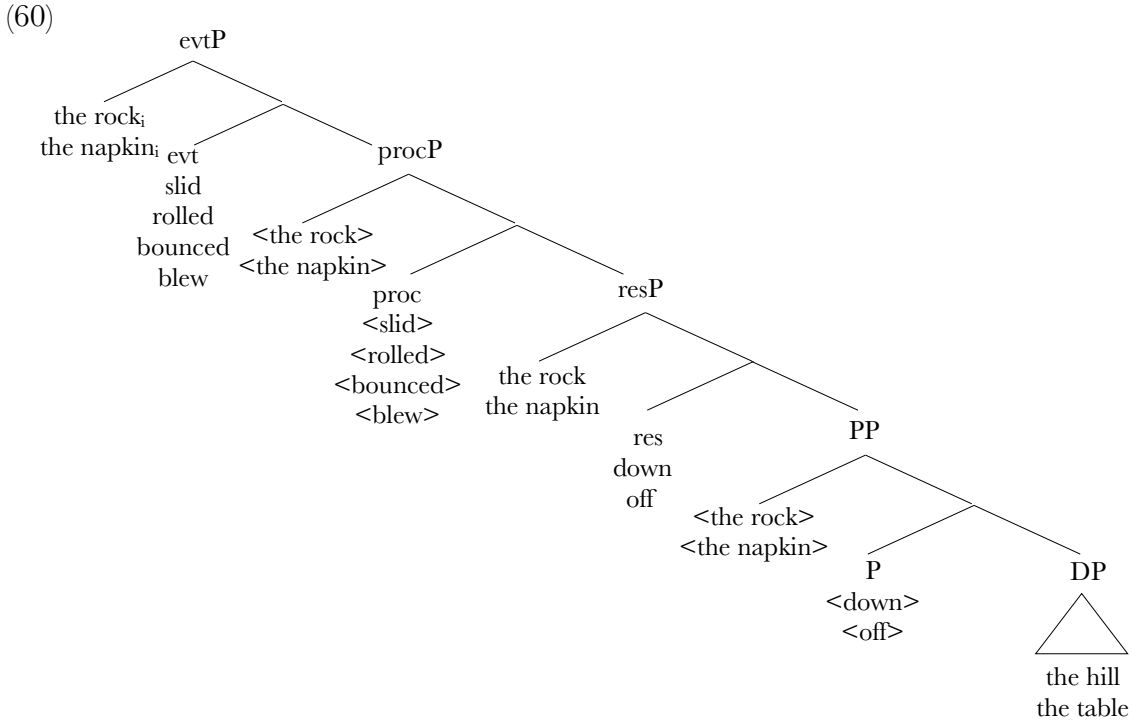
that the framing event corresponds to the bare first phase syntax, to which a co-event may be related by the existence of at least two roots with the relevant category labels instantiating process and result. The so-called manner meaning arises in the conceptual interface as the root contributes its conceptual meaning, or type-B meaning, which I assume is linked to the spatio-temporal unit introduced by process. Thus, in our framework, the relevant distinction between verb-framed languages and satellite-framed ones is the locus of the lexicalization of the path information, that is, whether the res head is instantiated by the verb root or a particle or satellite. The sequences in (59) are clear examples of co-event conflation of a manner or cause event, as denoted by the verbs *slide*, *roll*, *bounce,* or *blow*, and a result subevent, instantiating a path, realized by the particles *down* and *off*.

(59) a. The rock slid/rolled/bounced down the hill

b. The napkin blew off the table

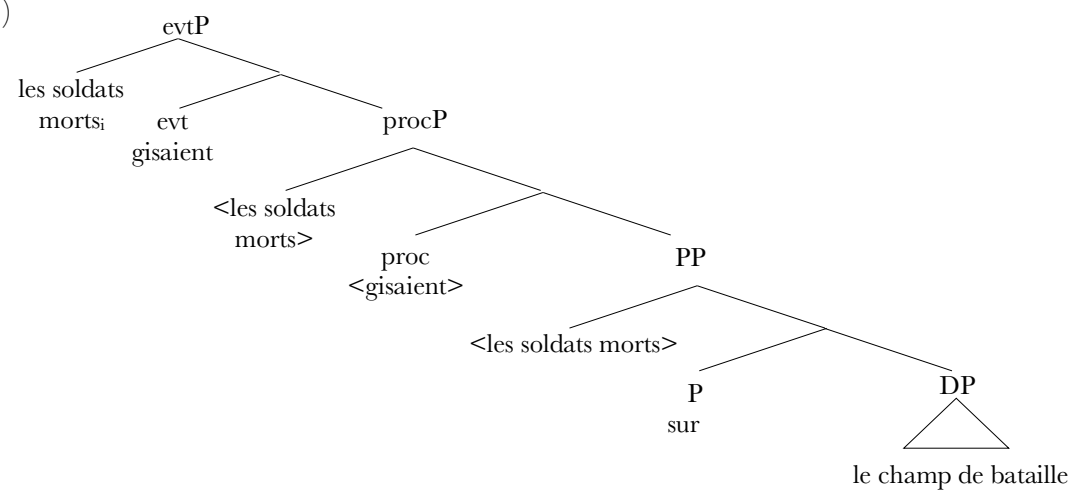
(Talmy 2000:28, (5))

(60)



As for posture verbs, they cannot be regarded equivalent to the examples of co-event presented above. Essentially, they merely consist of a manner component codifying the posture of the figure and a location without resultative semantics, that is, they simply locate the figure in space. The existence of a co-event is based on the availability of at least two subevents: a main subevent of cause or manner of motion and a secondary subevent of path of motion, which assembled together constitute a macro-event. Predicates of stationary motion with posture verbs can only be said to count with a main subevent of manner. As Berthele et al. (2015:84) point out, establishing a comparison between motion and static events is problematic since there is not a one to one correspondence in terms of the elements integrating the event schemata. For example, there are not any stative verbs with integrated path semantics expressing concepts such as 'being inside' or 'being on top', etc. That is, predicates of stationary location do not contain a path of motion but instead a place, or location. Similarly, there is no juxtaposition of two synchronous subevent components such as proc and res. Following Ramchand (2008), I would like to argue that the locational phrase that appears along with these verbs is an instance of a rhematic prepositional phrase. The figure is merged in the specifier position creating a predicational structure and, importantly, without the implication of a secondary event. Assuming the existence of a resultative state in this construction is counterintuitive since there is not necessarily a previous action of laying as a consequence of which a result subevent could be triggered. These sequences simply denote a state of location which includes the disposition of the figure according to parameters of posture and spatial coordinates with respect to a ground.

(61)



The analysis proposed here is based on previous work by Hoekstra and Mulder (1990) and Mulder and Wehrmann (1989), who argue for an unaccusative analysis of unergative verbs, where the surface subject is in fact the subject of a small-clause in complement position. Let us review the evidence they present to support the analysis above.

3.2. The small-clause complement analysis

Hoekstra & Mulder (1990) propose a small-clause as complement for motion verbs, posture verbs, and *swarm*-type verbs that appear with locational phrases in Dutch. These verbs are all argued to behave as unergative in their by-default configuration with an external argument. The way in which the lexical meaning of these verbs is deployed in the syntax turns them into what they call *copular expressions* rather than full-fledged lexical verbs. In their terms, a copular verb, such as *be, stay,* or *remain* in English, is one that selects a small-clause as its complement and cannot project a specifier to lodge an external argument (62). The subject noun phrase of the small-clause is not a true argument of the verb, but can raise from this position to satisfy the sentence's requirement to have a subject, thus triggering the movement of the noun phrase to Spec,IP to receive nominative case (63). [45]

[45] Hoekstra & Mulder propose the following diagnostics to determine the unergative status of a verb in Dutch: (i) selection of *hebben* 'have' as auxiliary for the perfect; (ii) impossibility to use the past participle of an unergative verb as prenominal modifier; (iii) use of the impersonal passive; (iv) selection of a result small-clause with a lexical subject; and (v) availability of middle formation with adjunct subjects.

(i) dat Jan heeft gesprongen/gewandeld/gezwommen/gevlogen (Dutch)
that Jan has jumped/ walked/ swum/ flown

(ii) *een gesprongen/gewandelde/gezwommen/gevlogen jongen
a jumped/ walked/ swum/ flown boy

(iii) dat er werd gesprongen/gewandeld/gezwommen/gevlogen
that there was jumped/ walked/ swum/ flown
'that people were jumping/walking/swimming/flying'

(iv) a. dat Jan zijn schoenen scheef loopt
that John his shoes worn on one side walks
b. dat Jan de matras aan barrels heeft gesprongen
that John the matras to pieces has jumped
c. dat Jan zijn tegenstanders op achterstand heeft gezwommen
that John his adversaries on arrears has swum

(62) NP V ↔ V [$_{SC}$ NP PRED]

(Hoekstra & Mulder 1990:3, (1))

(63) NP$_i$ INFL [$_{vp}$ V [$_{SC}$ t$_i$ PP]

(Hoekstra & Mulder 1990:4, (5))

The derived nature of the surface subject of these verbs and the presence of a complement small-clause can be confirmed by examining data about auxiliary selection in the perfect, the omissibility of the prepositional phrase, and the type of subject entities that might appear in this alleged configuration.

(v) a. dat deze schoenen lekker lopen
that these shoes nicely walk
'that it is nice to walk on these shoes'
b. dat zulk water heerlijk zwemt
that such water delightfully swims
'that it is a delight to swim in this water'
c. dat een trampoline hoger springt
that a trampoline higher jumps
'that one can jump higher on a trampolin'

(Hoekstra & Mulder 1990:5, (6-10))

Dutch posture verbs such as *hangen* 'hang', *zitten* 'sit', and *liggen* 'lie' would behave similarly to motion verbs inasmuch as they can take as complement a small-clause, whose subject must raise to Spec,IP to receive case. These verbs alternate between an unergative behavior by default and an unaccusative behavior when they select for a small-clause as complement. Hoekstra & Mulder note that their semantics, namely, "the absence of an activity component" (1990:12), complicates the acceptability of the various diagnostics checking for unergativity; nevertheless, it is still possible to obtain result small-clauses (vi), adjunct middles (vii), and impersonal passives (viii). This observation tallies with the event semantics put forward for these verbs in the previous sections of this chapter, according to which these verbs instantiate by default a non-dynamic proc head, to which init and res heads may be attached to denote causational events. As for the unergative behavior of *swarm*-type verbs, see chapter 4 of this dissertation.

(vi) a. dat hij zijn rug door gelegen heeft
that he his back through lied has
'He lay his back sore'
b. dat hij een gat in de stoel gezeten heeft
that he a hole in the chair sit has
(vii) a. dat hoge hakken lasting staan
that high heels cumbersomely stand
b. dat deze rekstok lekker hangt
that this horizontal bar nicely hangs

(viii) a. Er is nog nooit door iemand op deze stoel gezeten
there is not ever by anyone on this chair sit
'No one has ever sat on this chair'
b. Er wordt door echte supporters liever gestaan bij een wedstrijd
there is by real supporters preferably stood during a match
'Real supporters prefer to stand during a match'

First, the data of auxiliary selection in the perfect comes from motion verbs in Dutch and Italian (64-65). When these verbs select a small-clause as complement and, thus, behave as unaccusative, they appear with *zijn* (64b) and *essere* 'be' (65b), respectively; in contrast, when they select for an external argument, they appear with *hebben* (64a) and *avere* (65a) 'have'. Note that, in (64b-65b), the prepositional phrase behaves as the endpoint of the event.

(64) a. Jan heft gesprongen (Dutch)
Jan has jumped
b. Jan is in de sloot gesprongen
Jan is in the ditch jumped

(65) a. Gianni ha corso (Italian)
Gianni has run
b. Gianni e corso a casa
Gianni is run to home

(Hoekstra & Mulder 1990:4, (2-3))

Next, the possibility to omit (66a), move (66b), and separate (66c) the prepositional phrase element from the verb can be taken as a good indicator of the adjunct status of the prepositional phrase. The contrary should be taken as an indicator of the argument status of the prepositional phrase, that is, the prepositional phrase is part of a small-clause including the noun phrase subject and, accordingly, cannot be omitted (67a), moved (67b), or separated from the verb (67c).

(66) a. dat Jan gesprongen heft (Dutch)
b. dat Jan gesprongen heeft in de sloot
c. dat Jan in de sloot vaak gesprongen heft

(67) a. *dat Jan is gesprongen
b. *dat Jan is gesprongen in de sloot
c. *dat Jan in de sloot vaak gesprongen is

(Hoekstra & Mulder 1990:9, (14-15))

The prepositional phrases that appear with these verbs can be ambiguous and, therefore, they may be interpreted either as adjuncts or arguments of a small-clause. In the case of motion verbs, the adjunct reading of the prepositional phrase comes along with the entire VP in focus, receiving both the verb and the adjunct stress (68). By contrast, the directional reading with a small-clause bears (integrative) stress exclusively on the noun phrase inside the prepositional phrase (68b). Note also the different auxiliaries in the sentences.

(68) a. dat Jan in de SLOOT geSPRONGen heeft
b. dat Jan in de SLOOT gesprongen is

(Hoekstra & Mulder 1990:9, (16))

The same would be true for posture verbs. In the adjunct interpretation (69a), the prepositional phrase could appear either before or after the verb and both elements could receive stress. In the argument interpretation (69b), the prepositional phrase appears obligatorily in front of the verb and the noun phrase selected by the preposition receives stress.

(69) a. dat de ooievaar in de SLOOT STAAT / in de SLOOT staat
that the stork in the ditch stands
b. dat the ooievaar STAAT in de SLOOT / *staat in de SLOOT

(Hoekstra & Mulder 1990:13, (23))

The last set of examples provided by Hoekstra & Mulder (1990) suggest that this ambiguity is not always at play and that posture verbs can co-occur unambiguously with a small-clause, where the prepositional phrase would necessarily be an argument instead of an adjunct (70-71). The argument status of the prepositional phrase explains its obligatory pre-verbal position (70) and the impossibility to omit it (71).

(70) a. dat de humor op straat ligt/*ligt op straat
that the humor on (the) street lies/ lies on (the street)
b. dat er fouten in de tekst zitten/*zitten in de tekst
that there mistakes in the text sit/ sit in the tekst

c. dat dat nieuws in de krant stond/*stond in de krant
that that news in the newspaper stood/ stood in the newspaper

(71) a. Een ooievaar kan staan
a stork can stand
b. *Fouten kunnen staan
mistakes can stand
c. *Humor kan liggen
humor may lie

(Hoekstra & Mulder 1990:13, (24-25))

The obligatoriness of the small-clause complement is explained by the fact that, in these examples, the surface subjects are not selected by the verb, but rather they are raised from the specifier position of the small-clause, as shown by the fact that the verb imposes no lexical restrictions on them.[46] This is also applicable to motion verbs in (72).

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[46] Mulder & Werhmann (1989) note that an important characteristic of Dutch locational verbs in contrast to English is that they are used in contexts where English would make use of *be*. These verbs apply very specific selectional restrictions on their locations and materials, or locatums in their terms (i). These restrictions can be appreciated more clearly in the examples in (ii) through (iii).

(i) a. If the material, or locatum, is a round object, use *liggen* 'lie'.
b. If the location is an enclosed space, use *zitten* 'sit'.
c. If the material, or locatum, and the location are related to something printed or written, use *staan* 'stand'.

(Mulder & Wehrmann 1989:114)

(ii) a. De knikkers liggen/*zitten/*staan op de tafel
the marbles lie/ sit/ stand on the table
b. De tafel ligt/*zit/*staat vol knikkers
the table lies/ sits/ stands full with marbles

(iii) a. De knikkers *liggen/zitten/*staan in het zakje
the marbles lie/ sit/ stand in the bag
b. Het zakje *ligt/zit/*staat vol knikkers
the bag lies sits stands full with marbles

(iv) a. Het nieuws *ligt/*zit/staat in de krant
the news lies/ sits/stands in the newspaper
b. De krant *ligt/*zit/staat vol nieuws
the newspaper lies sits stands full with news

(Mulder & Wehrmann 1989:114, (17-19))

These uses of posture verbs in Dutch do not contain a manner component. They merely relate the figure to the ground behaving as a link between these elements to establish a predicational relation. Thus, in copular constructions, there is no implication of a co-event. The posture verb in these constructions seems

(72) a. dat het licht op groen springt
that the light to green jumps
b. dat het huis in brand bliegt
that the house on fire flies
c. dat het feest in het honderd loopt
that the party out of hand walks

(Hoekstra & Mulder 1990:11, (18-19))

Hoekstra & Mulder (1990) conclude that "[i]f the verb predicates of a state, i.e. if it takes a SC-complement, it does not impose such selectional requirements on its subject […], as its subject in those cases is a derived subject, selected merely by the predicate of the SC-complement". Finally, note that in example (71a) the omission of the prepositional phrase does not make the sequence ungrammatical. This apparent exception can be accommodated if we assume that the subject entity is an animate participant exerting control over the situation and, thus, the first phase syntax should include an initiational phrase, while with inanimate objects the first phase syntax could only contain a process phrase. Further evidence to support this assumption comes from Mulder & Wehrmann's (1989) study of locational verbs in Dutch. The authors provide the following examples, which allows us to contrast the different degrees of acceptability of animate and non-animate entities as derived subjects with posture verbs when the prepositional phrase is left out (73-75).

(73) a. Het kind zit in de stoel
the child sits in the chair
b. Het boek ligt op tafel
the book lies on table
c. De jas hang in de kast
the coat hangs in the closet
d. De lamp staat in de hoek
the lamp stands in the corner

(Mulder & Wehrmann 1989:115, (21))

to be a light version of the main verb, devoid of lexical content. See section 5 of this chapter for further discussion.

(74) a. dat het kind zit in de stoel
that the child sits in the chair
b. ?dat het boek ligt op tafel
that the book lies on table
c. ?dat de jas hangt in de kast
that the coat hangs in the closet
d. ?dat de lamp staat in de hoek
that the lamp stands in the corner

(75) a. Het kind zit
the child sits
b. ?Het boek ligt
the book lies
c. ?De jas hangt
the coat hangs
d. ?De lamp staat
the lamp stands

(Mulder & Wehrmann 1989:115, (23-24))

The examples show that the omission of the prepositional phrase does not necessarily result in the ungrammaticality of the sequence in some cases. While Mulder & Wehrmann dismiss this complication by assuming that (intransitive) locational verbs may select a small-clause or a noun phrase, the fact is that different argument structures are being realized in each case, which I have previously correlated with the presence of an initiational phrase in the case of the unergative variant. These assumptions can accommodate Mulder & Wehrmann's data showing that in the latter case these verbs select for a small-clause, as the prepositional phrase may not be left out or extraposed (76-77). Notice that the element appearing as subject is an abstract noun with no physical dimensions. The absence of the prepositional phrase specifying the location leaves out essential information about the predicate if we assume that the type-B meaning of the verb falls short in these examples (see section 4 of this chapter for further discussion).

(76) a. dat het niuws *staat in de krant/in de krant staat
that the niews stands in the newspaper
b. dat de humor *ligt op straat/op straat ligt
that the humour lies on (the) street

(77) a. *Het niuws staat
b. *De humor ligt

(Mulder & Wehrmann 1989:115, (25-26))

To summarize, following the insightful analysis by Hoekstra & Mulder (1990), posture verbs in their simple position sense have been argued to contain a process head and a rhematic prepositional phrase. The existence of a non-eventive predicational structure can account for the particular meanings of this sense in both the so-called co-event use and the 'light', or copular, verb use. Finally, in the next section, I discuss the existential use of posture verbs in Dutch as argued by Hoekstra & Mulder (1990) and show how this use may be integrated under the present proposal.

3.3. The existential use of Dutch posture verbs

Hoekstra & Mulder (1990) describe another combinatorial possibility for Dutch posture verbs with the locative adverbial *er* as subject, where both the figure and the ground appear post-verbally (78). Interestingly, in this latter order it is possible to find a bare plural or a faded partitive in the internal argument position (cf. Zwarts 1987, De Hoop 1998, van Eynde 2004, Oosterhof 2005).

(78) a. Er lagen dikke boeken op de tafel
there lay thick books on the table
b. Er lagen van die dikke boeken op de tafel
there lay of those thick books on the table

(De Hoop 1998:194, (37))

I would like to argue that this configuration follows the guidelines of the simple position sense discussed in this chapter in spite of the apparent differences, which stem from the presence of the expletive pronoun *er* 'there', which is the weak form of the distal locative adverb *daar* 'there' and whose presence seems to facilitate the existential meaning of this construction as the event is predicated of a location and, additionally, a new element is introduced in the discourse via the presence of an indefinite argument along with the verb. As shown above (78), the logical subject of the verb, with which it agrees, may be an indefinite expression such as a partitive phrase, which introduces a new element in the domain of discourse. In the example, a special type of partitive called faded partitive is found as the logical subject of the verb (78b). Zwarts (1987) considers faded partitives as a type of partitive phrase equivalent to weak or indefinite nouns inasmuch as they can appear in existential sentences and, just like bare plurals, they can also include a determiner. Zwarts' intuition regarding the semantics contributed by these elements is that they behave as bare plurals since they can introduce a new element in the domain of discourse. This notwithstanding, while bare plurals are presented as new information, faded partitives introduce information that is known or shared by the participants.[47] Let us see in more detail the properties of these elements to further confirm the position of the figure in the argument structure of the existential use. According to Oosterhof (2005), faded partitives are usually considered internal arguments of their verbs since they cannot be extraposed (79) and their appearance in (structural) subject position is somewhat degraded unless they are modified by means of an adjective or a prepositional phrase (cf. (80) and (81)).

(79) dat er in Slovenië ook van die fabrieken zijn / *zijn van die fabrieken
that there in Slovenia also of those factories are / *are of those factories
'… that such factories also exist in Slovenia'

(Oosterhof 2005:78, (40))

[47] In the same way as Zwarts (1987), Oosterhof considers that this type of partitive phrase denotes a kind in the sense that the whole of whatever is denoted by the noun phrase corresponds to a specific kind, of which only a part is picked, roughly "(of) that well known kind" (2005:83).

(80) a. ?Van die katten brengen geluk
of those cats bring good luck
b. ?Van die katten hebben gisteren de moestuin vertrappeld
of those cats have yesterday the vegetable garden trampled

(81) a. Van die zwarte katten brengen geluk
of those black cats bring good luck
'Black cats bring good luck.'
b. Van die katten met witte pootjes brengen geluk
of those cats with white paws bring good luck
'Cats with white paws bring good luck.'

(Oosterhof 2005:80, (44-45))

To further confirm the argument status of these elements, Van Eynde (2004) provides data supporting the view that faded partitives behave as noun phrases. He notes that *van* 'of' can have two different uses. It can work as an adposition that introduces prepositional adjuncts, which, as such, may be extraposed. On the other hand, *van* 'of' may coappear with a noun phrase with a demonstrative in it and, in this case, it does not behave as an adposition, but rather the whole element works as an object of a verb such as *make* (82a) or as complement of a true preposition such as *aan* 'on' (82b).

(82) a. Ze maken van die lange wandelingen
they make of those long walks
'They make such long walks'
b. Het ligt vaak aan van die kleine dingen
it lies often on of those small things
'It is often due to such small things'

(van Eynde 2004:44, (71-72))

Accordingly, faded partitives, as an argument of a verb, cannot be extraposed. The contrasts in the following examples show that a true adjunct (83a) may be extraposed, whereas a faded partitive (83b) or a bare plural (83c) may not.

(83) a. Ze heeft de hele dag zitten lezen in dit boek
she has the whole day sit read in this book
'She has been reading in this book for the whole day'
b. *Ze heeft de hele dag zitten lezen van die rare boeken
she has the whole day sit read of those strange books
c. *Ze heeft de hele dag zitten lezen Duitse boeken
she has the whole day sit read German books

(van Eynde 2004:44, (73-75))

To further confirm the argument status of this element, notice that they may only be conjoined with noun phrases (84).

(84) a. Ze heeft [zwart haar en van die grote helderblauwe ogen]
she has [black hair and of those big pale-blue eyes
'She has black hair and big pale blue eyes'
b. *Ze heeft de hele dag [in die Duitse boeken en van die
she has the whole day [in those German books and of those
rare stripverhalen] zitten lezen
strange comic-strips sit read

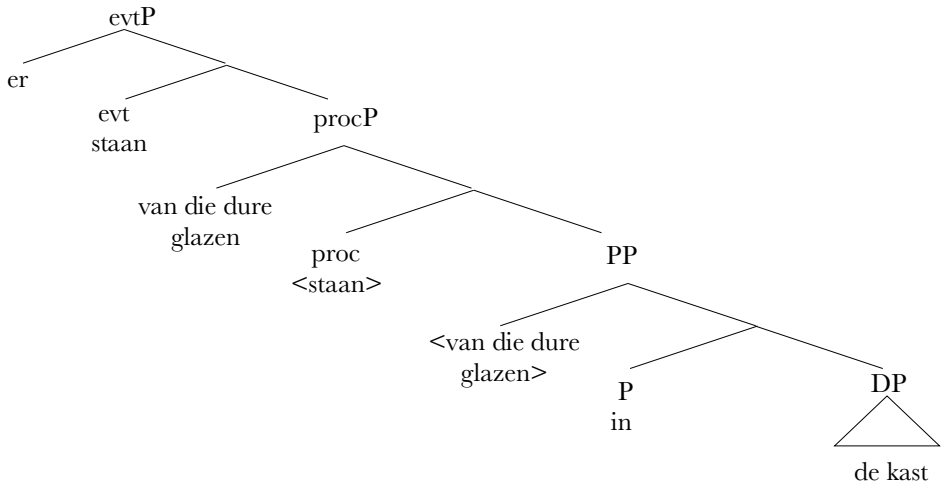
(van Eynde 2004:44, (76-77))

To summarize, the specific properties of this construction lead to the conclusion that the elements form an unaccusative configuration, where the faded partitive appears in the specifier position of the process head and the locative adverb *er* 'there' assumes the structural subject position in the structure, which later satisfies the EPP requirement of the tense head. Since Dutch complies with the EPP-requirement to have some element occupying Spec,TP, it is assumed that whenever the structural subject position has not been filled due to the absence of a subject or the presence of an indefinite expression, then an expletive element such as *er* 'it' may take up this position and satisfy the EPP-requirement (85) (Van Craenenbroeck to appear). Following Ramchand (2018), the position occupied by this element is Spec,EvtP, from where it raises to Spec,TP (86).

(85) a. Werd *(er) gedanst?
became there danced
'Was there dancing?'
b. Gedanst werd *(er)
danced became there
'There was dancing'

(van Craenenbroeck to appear:16, (70-71))

(86)



3.4. Conclusion

In this section, I have determined that type-A meaning is an important source of variation, which has allowed me to contrast the malleability of these verbs in Romance and Germanic languages. Under the assumptions made at the beginning of this chapter, posture verbs expressing stationary motion behave as non-dynamic process verbs, that is, they consist of a single spatio-temporal stage. A welcome consequence of this view is that posture verbs used in the simple position sense by means of a copula, equivalent to *be*, and a past participle are also taken to instantiate non-dynamic eventualities containing a spatio-temporal stage. The main difference between these two different strategies to encode locative predication is the presence of a process head with posture verbs only in the former. I have argued that the alleged manner component found with these predicates stems from the type-B meaning associated with the verb root, which specifies the postural configuration of the figure, in conjunction with the eventive

semantics contributed by the presence of a spatio-temporal stage in the denotation of the process head, while the locational phrase provides the spatial coordinates for the figure. In this regard, I have adopted Hoekstra & Mulder's (1990) embedded small-clause complement structure analysis to account for the locational properties of posture verbs in the co-event sense. In section 4, I will argue that in the 'light' verb construction there is no implication of a co-event. The posture verb seems to be a light version of itself. As discussed in the review of Ramchand (2014) in chapter 1, the heavy and light versions share the same type-A meaning but differ in the presence or absence of type-B meaning, respectively. Thus, light verbs instantiate only type-A meaning, that is, a subset of the information contained in the heavy version of the verb. I would like to argue that the 'light' verb use of posture verbs would resemble light verbs in their impoverished lexical-semantic content. That is, they would simply consist of a process head, which is the content they have been determined to possess in this chapter. I will use this assumption as starting point for the discussion in the following section on the 'light' verb use of posture verbs to discern how these verbs may develop into semantically impoverished items across languages.

4. 'LIGHT' USES OF POSTURE VERBS

This section examines how the 'light' verb use of posture verbs compares to copulas, since posture verbs do not only contribute to the meaning of the predicate as linkers between the figure and the ground but also as aspectual markers of unboundedness given that they provide a spatio-temporal unit to the first phase syntax of the verb, which has been argued to consist of a process head and a rhematic prepositional phrase. Following the analysis laid out in the previous sections, I argue that the 'light' verb use of posture verbs is akin to copulas and examine the evolution of posture verbs in Germanic languages into copulas.

4.1. A definition of copular verb

A copula is usually defined as a linking element appearing with non-verbal predicates and their subjects, which can either contribute no meaning to the predicate or carry some of its original (aspectual or modal) meaning, as well as accumulate verbal inflections such as tense, aspect, and mood.[48]

In Germanic languages, posture verbs seem to act as copulas, linking a prepositional phrase to the subject of the predicate. In the case of English, shown in the examples in (87), the posture verbs do not contribute any posture meaning, or manner in a broad sense, but rather help relate the figure (*New Orleans, John's house, the new building,* and *that argument*) to the ground, which locates it in space.

(87) a. New Orleans lies at the mouth of the Mississippi River
b. John's house sits at the top of a hill
c. The new building stands at the corner of First Avenue and Main Street
d. That argument rests on an invalid assumption

(Dowty 1979:174, (67))

Interestingly, when posture verbs are used to locate non-human figures, the choice of verb is determined by the geometric properties of this element. Thus, the core meaning of posture verbs is metaphorically extended. Ameka and Levinson (2007) provide the criteria in (88) for English posture verbs specifying the properties that the figure must meet (see also Newman 2002).

(88) a. *Stand*: when long axis is canonically vertical
b. *Lie*: when long axis is canonically horizontal
c. *Sit*: when there is no major axis, or object has a wide base in canonical position
d. *Hang*: when not supported from below

Jaume Mateu (p.c.) notes that these definitions are based on the type-B meaning of the verb roots, which holds no relation to the first phase syntax of these verbs. Nevertheless,

[48] See Hengeveld 1992, Pustet 2003, van Gelderen 2015, among others, for different approaches to copulas and shortcomings with this prevalent definition.

type-B information seems to conceptually constrain the resulting structure, although it has no syntactic consequences for the first phase syntax of the predicate. In addition, he observes that Talmy's (1985, 2000) typology of lexicalization patterns mentions Atsugewi, a Hokan language of California, as an instance of a language that conflates motion and figure information in the verb root to express motion or location (see figure 2), in which the physical properties of the figure are relevant for its compatibility with these verbs (89). See Talmy (1985, 2000) for further discussion.

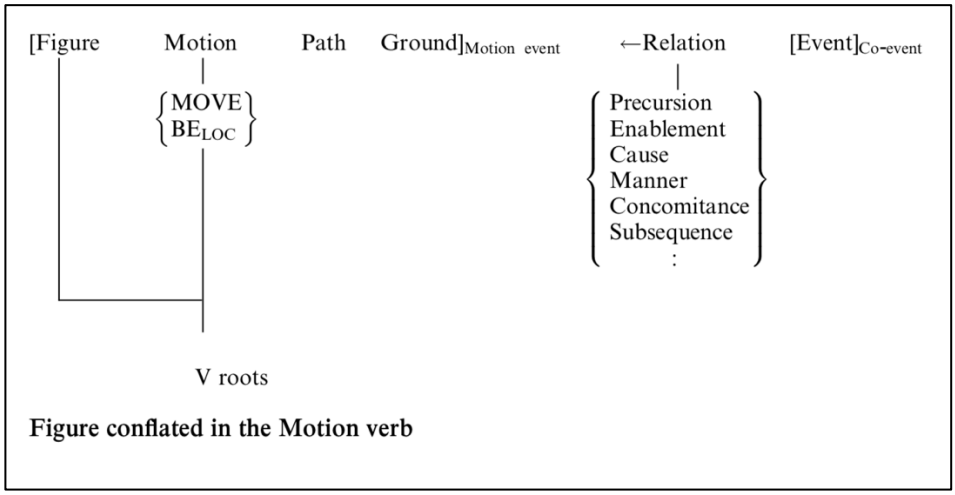


FIGURE 2: MOTION AND FIGURE CONFLATION IN TALMY (2000:57)

(89) *Atsugewi verb roots of motion with conflated Figure*

-lup- 'for a small shiny spherical object (e.g., a round candy, an eyeball, a hailstone) to move/be-located'

-t'- 'for a smallish planar object that can be functionally affixed (e.g., a stamp, a clothing patch, a button, a shingle, a cradle's sunshade) to move/be-located'

-caq- 'for a slimy lumpish object (e.g., a toad, a cow dropping) to move/be-located'

-swal- 'for a limp linear object suspended by one end (e.g., a shirt on a clothesline, a hanging dead rabbit, a flaccid penis) to move/be-located'

-qput- 'for loose dry dirt to move/be-located'

-st'aq'- 'for runny icky material (e.g., mud, manure, rotten tomatoes, guts, chewed gum) to move/be-located'

(Talmy 2000:58, (35))

In the case of posture verbs, even though these elements do not impose selectional restrictions or determine the number of participants, they still contribute semantically to the resulting construction. Hengeveld (1992) notes that this contribution is usually aspectual (ingressive, continuous, progressive, etc.) as is the case with the copula *estar* 'be' in Spanish.[49] According to Hengeveld, in the case of posture verbs, in addition to the aspectual contribution, which might be called durative, the verbs perform a localizing function. As an example, consider Dutch's use of posture verbs to convey more than tense, aspect, and mood distinctions. The posture verb *zitten* 'sit' in (90b) does in no way specify the posture of the figure *Jan* when used in combination with an amount of space such as *France*, but rather acts as a *localizing element*, relating the figure to the ground. In contrast, the use of the posture verb in (90a) corresponds to the co-event use described previously since it includes posture information about the figure.

(90) a. Jan zit op de bank
Jan sit.PRES.3.SG on DEF sofa
'Jan is sitting on the sofa'
b. Jan zit in Frankrijk
Jan sit.PRES.3.SG in France
'Jan is in France'

(Hengeveld 1992:238, (3-4))

On the basis of this evidence, we can conclude that posture verbs have at least two stable versions: a full-fledged lexical version and a copular or 'light' one. The full-fledged lexical version appears in the causative senses (see chapter 2), the maintain position sense (see section 1.5), and the so-called co-event sense (see section 3), where posture meaning, i.e. type-B meaning, is present across the board. The copular or 'light' version corresponds to a smaller set of cases, in which the posture meaning is somewhat fading, thus, allowing that the verbs arw used with inanimate or abstract figures that are not subject to be placed in any particular posture such as in the examples provided by Dowty (1979). This statement concurs with Butt and Lahiri's (2013) generalization about light verbs, briefly discussed in chapter 1, and their corresponding lexical

[49] This use of posture verbs corresponds to what Hengeveld (1992) identifies as semi-copulas. which differ from copulas in that their omission affects the meaning conveyed by the predicate.

counterparts, repeated in (91), which states that light verbs have a concurrent full lexical form, from which they stem.

(91) *Butt and Lahiri's Generalization (Butt and Lahiri 2013)*

> Unlike auxiliaries which may become grammaticalized over time to have a purely functional use, light verbs always have a diachronically stable corresponding full or "heavy" version in all the languages in which they are found.
>
> (Ramchand 2014:217, (11))

According to Butt & Lahiri, the existence of a common source for main verbs and light verbs explains why both share the same phonetic form (see Figure 3). Nevertheless, they differ in terms of the semantic information they contain. That is, 'light' verbs contain a subset of the lexical semantics of the main verb form as well as including other shades of meaning. The semantic content provided by light verbs is mainly related to event semantics such as causation or the existence of result-states, as well as the legitimization of additional event participants such as benefactives or the inclusion of distinctions such as agentive or accidental (see section 4 of this chapter for further discussion). The reduced amount of semantic information contained in light verbs makes them dependent on the presence of a *predicative element*, in Butt & Lahiri's terms. Thus, their semantics is reduced to Ramchand's type-A meaning. In the case of posture verbs in the simple position sense, that information would correspond to the process head, which provides a stage-level unit to the semantics of the verb, whence their aspectual contribution arises. The absence of a result phrase contributes to the unboundedness meaning conveyed by these verbs, which only take a rhematic prepositional phrase. Finally, the light form of the verb contrasts with the auxiliary form, if there were one, which only applies in the upper layers of the structure that pertain to tense, aspect, and mood information. Butt and Lahiri's hypothesis is that these forms do not derive from the semantically impoverished light verb but rather from the main verb form.

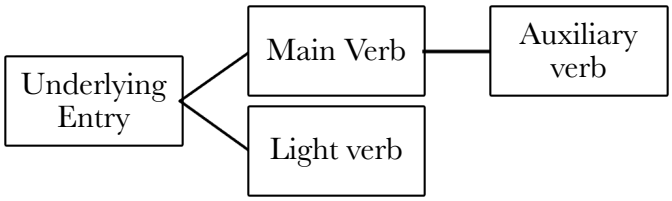


FIGURE 3: DEVELOPMENT OF LIGHT VERBS (BUTT & LAHIRI 2013)

The next section deals with the process whereby process posture verbs evolve into semantically impoverished forms to function as 'light' verbs.

4.2. How to obtain a copula from a process verb

The process whereby posture verbs can lose part of their semantic content and become 'light' verbs or auxiliaries is an instance of grammaticalization, which may involve several stages in which the posture verb may take on different complements and functions (see Kuteva 1999).[50] As an example, consider the process undergone by the Latin process posture verb *stare* 'stand' (92), which Hengeveld (1992) uses to exemplify the different stages leading to its *copularization*. The path of change involves a first stage where the lexical verb is used with locative phrases showing the verb's new function as a 'localizing copula'. The next stages expand the verb's combinatorial possibilities to

[50] Van Gelderen defines grammaticalization as "a process whereby lexical items lose phonological weight and semantic specificity and gain grammatical functions" (2009:232). Van Gelderen's definition of grammaticalization specifically addresses the phenomena under consideration and the steps whereby a new lexical form comes into being, however the term "grammaticalization" may be also used to refer to the linguistic research framework dealing with language change whose objective is to answer "questions as how lexical items and constructions come in certain linguistic contexts to serve grammatical functions or how grammatical items develop new grammatical functions" (Hopper & Traugott [1993] 2003:1). In addition, grammaticalization also studies correlations that arise throughout time and across languages. For an overview of the different approaches to grammaticalization and the evolution of the approaches see Heine, Claudi, & Hünnemeyer (1991). See also Roberts & Roussou (2003) for an account of grammaticalization within the Minimalist Program (Chomsky 1995), for whom grammaticalization should be understood as the generation of new functional items stemming from the reanalysis of lexical items into functional ones, or the reanalysis of existing functional items into new ones. For these authors, grammaticalization is conceived of as a modification of a language's parametric settings.

adjectives and nouns. In a later stage, the posture verb acting as a copula could also be used to express possession.[51]

(92) V → $(x_i)_{Loc}$ > A > N > $(x_i)_{Poss}$

(Hengeveld 1992:246, (26))

Similar stages are involved in the *copularization* of English *remain*, for which Van Gelderen (2015) provides the relevant moments of the reanalysis from its original meaning of 'stay with' (93) to its reanalysis as a copula, where it can appear with a complement such as a prepositional phrase (94).[52] The process of grammaticalization usually begins with the loss of part of the verb's specificity. In the case at hand, *remain* lost location and duration meaning indicatives, as illustrated in (95). This neutralization of its meaning would later pave the way for its subsequent reanalysis as a copula.

---

[51] See Batllori & Roca (2011) for a detailed evolution of *stare* into a copula in Latin, Catalan, and Spanish.

[52] Van Gelderen's (2009) grammaticalization process is driven by economy principles whose main goal is to make the acquisition of grammar less costly. In particular, the *Linguistic Cycle* is guided by two economy principles, the Head Preference Principle (HPP) (1) and Late Merge Principle (LMP) (2), which serve to reanalyze lexical items instantiating structural elements and change their positions.

(i) *Head Preference Principle (HPP)*
Be a head, rather than a phrase.

(ii) *Late Merge Principle (LMP)*
Merge as late as possible.

(Van Gelderen 2009:234, (8))

Van Gelderen later develops a feature-based grammaticalization cycle instead, simplifying both the HPP and LMP by means of a more general principle, the Principle of Feature Economy (3), which collapses together the two previous economy principles as shown in (iii).

(iii) *Principle of Feature Economy*
Minimize the semantic/interpretable features in the derivation

Adjunct		Specifier		Head	>	affix
Semantic	>	[iF]	>	[uF]	>	--

(Lohndal 2009:216, (35))

A subsequent stage in the grammaticalization process is possible after the conversion of the lexical verb into a copula. Copulas may develop into auxiliaries, losing their remaining features and their ability to assign theta-roles (Van Gelderen 2018:137). As a consequence, the auxiliary is merged as part of the tense, aspect, and/or mood heads. The final stage in the copula cycle would be the emergence of an affix (see Lohndal 2009 for more details). Note that the auxiliarization process argued for by Van Gelderen runs counter to Butt and Lahiri's (2013) proposal, which assumes that the auxiliary verb form derives from the main lexical verb. See Kuteva (1999), Bowern (2008), and Camilleri & Sadler (2017), among others, for further discussion on the direction of grammaticalization for these elements.

(93) To the part of this endenture *remaynand* to the forsaid Alexander
'to the part of this agreement remaining to Alexander, mentioned before'
(OED, 1388, Robertson Illustr. Topogr. & Antiq. Aberdeen & Banff III. 295)

(Van Gelderen 2015:294, (14a))

(94) Those lordes of her honorable kinne, which as yet *remained vnder arrest*
should vpon the matter examined, do wel ynough
'those lords of her honorable family, who as yet remain under arrest, should do well enough upon the matter being examined'
(Richard III)

(Van Gelderen 2015:295, (15b))

(95) V (intransitive) > Pred (copula)

remain	*remain*
[location]	[i-durative]
[duration]	[u-th]
[u-th]	

(Van Gelderen 2015:295, (16))

Among the reasons contributing to its reanalysis, Van Gelderen mentions: (i) the presence of an apposition, or secondary predicate, next to it, which could be reanalyzed as its complement (96), (ii) the existence of ambiguity as to whether the element following the verb is to be interpreted as an argument or an adjunct (97), and (iii) whether the adjective accompanying the verb is modifying the verb or the subject (98).[53]

(96) The Factour with the others did *remaine* prisoners
'the perpetrator with the others remained, prisoners'
(Visser 1963: 195, Lichefield translation, 1582)

(Van Gelderen 2015:295, (17))

[53] These reasons seem to be a common denominator among verbs undergoing *copularization*. A similar process is found with the aspectual use of the verb equivalent to *sit* in several dialects of Arabic. Camilleri & Sadler (2017) argue for a *desemanticisation* account for this verb, which initially served to locate a figure in space. The impoverishment of its semantics allowed its use to express temporary location, which caused the loss of the physical posture meaning. This, in turn, brought along a relaxation of the properties of the figure, which need not be animate. Finally, the unbounded semantics of the verb led the way to its use as a progressive aspect marker.

(97) I am yor bedman and so shall *remayn* be the grace of God all the days of myn liff
'I am your servant and so shall remain (i) by the grace of God, for all the days of my life'
(Visser 1963: 195, Gairdner's edition II p. 66)

(Van Gelderen 2015:295, (18))

(98) Since which she was removed to Kimbolton, Where she *remains* now sick
'Since when she was removed to Kimbolton, where she now remains, sick'
(Visser 1963: 195, Shakespeare, Henry VIII, 4.1)

(Van Gelderen 2015:296, (19))

The resulting grammaticalized structure is shown in figure 4, where the lexical verb is realized as a copular element in the Predication phrase.

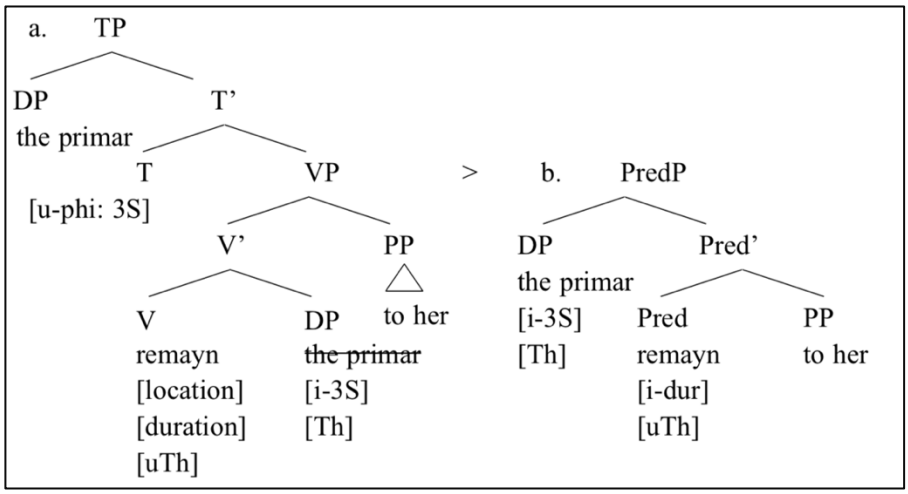


FIGURE 4: GRAMMATICALIZATION OF COPULAS IN VAN GELDEREN (2015:297)[54]

To summarize, in the case of Germanic posture verbs, the 'light' verb use has acquired impoverished semantics, since it does not necessarily imply a physical posture meaning and admits both inanimate and abstract figures. Nevertheless, as shown in the preceding sections, it still applies certain lexical restrictions on the figure. Following Ramchand's (2014) hypothesis on the dimensions of meaning in lexical items, I would like to argue that posture verbs in the simple position sense with no implication of

[54] For a discussion of PredP and small-clauses, see Bowers (1993, 2001), Den Dikken (2006), Hoekstra & Mulder (1990), Matushansky (2019), among others.

physical posture are undergoing a process of desemantisation, whereby type-B meaning is fading, while type-A meaning endures. The loss of type-B meaning is the result of the presence of a prepositional phrase acting as rheme of the process head. One could hypothesize that this element, which might have been an adjunct to the posture verb initially, similar to the maintain position sense, is being reinterpreted as a complement of the verb validating the localizing function of the construction. This reanalysis is detrimental to the physical posture meaning, i.e. type-B meaning, which will eventually become weakened. The structure shown in figure 5 schematizes both the localizing function of the simple position sense by means of a rhematic prepositional phrase and the unboundedness of the event denoted by the process head.

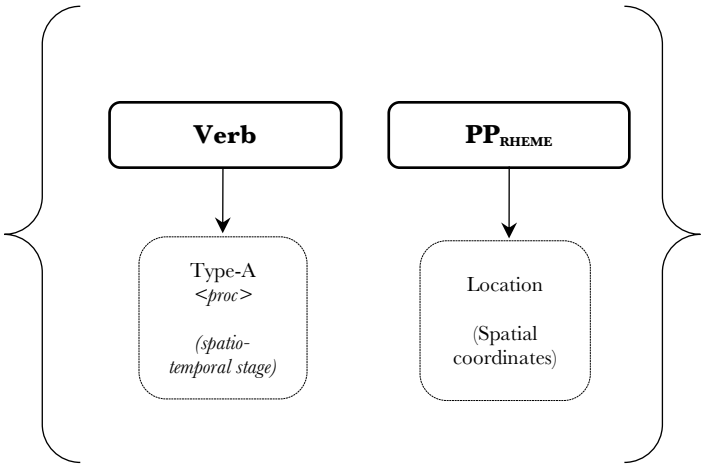


FIGURE 5: STATIONARY MOTION WITH POSTURE VERBS

5. *CONCLUSIONS*

In this chapter, I have examined the use of posture verbs in locative statements in Romance and Germanic languages as co-events and 'light' verbs. First, it was determined that posture verbs in the simple position sense in English denote non-dynamic process events, which helped account for the controversial status of these verbs in the literature on lexical aspect. The first phase syntax of these verbs in this sense contains a rhematic prepositional phrase, or small-clause, with the figure and ground arguments, following the seminal work by Hoekstra & Mulder (1990). I argued that the

difference between the co-event and 'light' verb use of posture verbs in the simple sense stems from the lack of type-B meaning in the latter, as a consequence of a process of copularization, whereby the posture verb has lost its lexical meaning. Next, the maintain position sense was argued to include an initiation phrase in English to introduce the controlling entity of the event. I also examined the differences among Romance and Germanic languages in the expression of the simple position sense and considered several instances of intra-typological variation. On the basis of the findings made in chapter 2 and 3, the following chapter deals with the use of posture verbs in the intransitive locative-alternation in both Romance and Germanic languages and considers other types of locative-alternation with internally-caused verbs in Spanish.

CHAPTER FOUR. Posture verbs with locative subjects and the stative-locative alternation

INTRODUCTION

In this chapter I examine two different instances of the intransitive-locative alternation, in which the subject of the predication is a locative element. Building on the properties ascertained for posture verbs in chapters 2 and 3, I discuss the peculiarities shown by these verbs in the intransitive-locative alternation. I also put forth that, even if the inventory of process posture verbs in Spanish is limited, this alternation is still possible in this language, reinforcing the previously introduced claim that differences in the realm of posture verbs are related to their lexical availability in these languages and their specific properties regarding path and causation encoding, that is, type-A meaning. Next, I concentrate on the so-called stative-locative alternation in Spanish, which works with verbs such as *pulular* 'swarm' or *brillar* 'shine'. In Dutch, this alternation has been argued to behave similarly to the intransitive-locative alternation with posture verbs. Drawing on the previous discussion on the intransitive-locative alternation, first, I will examine the properties of these verbs in their default configuration. Secondly, I will put to the test the hypothesis that these verbs behave as unaccusative in their alternate *Location-Subject* order configuration, mediated by the preposition *de* 'of', *with* in English. I will argue that the properties of these verbs in the *Location-Subject* order in Spanish can be accounted for if we take into consideration (i) the locative nature of the subject DP, since it is not a theta-selected element of the verb and, consequently, does not properly meet the requirements to initiate the event denoted by the verb, and (ii) the particular properties of the prepositional phrase headed by *de* 'of', following the verb, which will be considered as a cause phrase expressing the initiating entity of the process event, consistent with the diachronic development of this preposition in Romance, which took over the properties of several other prepositions in Latin, namely, *de*, *ab*, and *ex*.

1. *An overview: Posture verbs and the stative-locative alternation*

This chapter explores two alternations with intransitive verbs and locative subjects, which appear as prepositional phrases in their default order. The intransitive-locative alternation with posture verbs has been thoroughly studied in Dutch by Mulder & Wehrmann (1989), Hoekstra & Mulder (1999), and Mulder (1992), whom, except for the latter, have established a link between this alternation and the transitive-locative alternation as both appear with an adjective expressing "completeness". In section 2, I will review their analyses and extrapolate the results to study a similar construction with posture verbs in Spanish, which, I will argue, follow the same pattern as Dutch posture verbs. In chapter 3, I have argued that these verbs have a non-dynamic first phase syntax and, against Talmy (2000), I have rejected a co-event analysis for them in their simple position sense and, in its stead, proposed an analysis based on Hoekstra & Mulder's (1990) small-clause argument structure. Specifically, these verbs have been shown to have a first phase syntax consisting of a process head and a rhematic prepositional phrase, which lodges both the location and locatum arguments in the default configuration, where these elements correspond to the figure and ground elements from a cognitive semantics viewpoint. In sections 2.3 and 2.4, I will argue that this same first phase syntax is applicable to the alternation at hand. Thereafter, in section 3, I proceed to examine the so-called stative-locative alternation in Spanish, which has been claimed to follow a pattern similar to that of posture verbs in the intransitive-locative alternation with an adjective (see Mulder & Wehrmann (1989) and Hoekstra & Mulder (1990)). Section 3.1 discusses the verb classes commonly found in this alternation as described in the relevant literature and examines the two possible orders, in which the location and locatum arguments may appear. In section 3.2, I will review previous approaches to the stative-locative alternation for Dutch and Spanish to gain some insight into its properties such as the contribution of the prepositional phrase introduced by *de* 'of' in Spanish and *with* in English. Building on these proposals and bearing in mind the properties ascertained for these verbs in Spanish, in sections 3.3 and 3.4, I put forth that these verbs have a first phase syntax consisting of both initiation and process heads and hold that the prepositional phrase introducing the locatum

argument should be considered the initiating entity of the event. Section 4 concludes the chapter.

2. *THE INTRANSITIVE-LOCATIVE ALTERNATION WITH POSTURE VERBS*

Dutch posture verbs can show two alternate orders of their arguments in the simple position meaning. In the *Locatum-Subject* order (1a), which was thoroughly discussed in chapter 3 of this dissertation, the figure DP appears in subject position and instantiates the material, while the location, the ground in this case, takes the shape of a prepositional phrase in post-verbal position. This variant has been labeled the Partially-Affected alternant by Mulder (1992), since the location is only partially affected by, or filled with, the material. Consequently, the surface of the location cannot be said to be completely occupied by the material at hand. In the *Location-Subject* order (1b), the roles of these items are reversed and an additional element, the adjective *vol* 'full', appears post-verbally. In this case, the figure is no longer the material but the location; as a consequence, the location shows up as a DP in pre-verbal position and the material is mediated by the preposition *met* 'with' as the complement of the adjective *vol*.[55] Mulder uses the label Totally-Affected to identify this order, in which the complete surface of

[55] In addition to this variant, there is yet another configuration available for posture verbs in the simple position sense in Dutch, in which the dummy pronoun *het* appears as subject, followed by the adjective *vol* 'full' in post-verbal position along with the rest of elements, namely, the material as complement of the adjective *vol* 'full' and the location (i). I leave this case of the intransitive-locative alternation for future research. The reader is referred to Mulder & Wehrmann (1989), Hoekstra & Mulder (1990), and Mulder (1992) for further discussion of the argument structure of posture verbs in this particular configuration.

(i) a. Het zit vol met fouten in de tekst (Dutch)
it sits full with mistakes in the text
'The text is full of mistakes'
b. Het staat vol van de leugens in dit verhaal
it stands thick of the lies in this story
'This story is filled with lies'
c. Het ligt vol met rotzooi op het strand
it lies full with filth on the beach
'The beach is full of filth'

(Hoekstra & Mulder 1990:22, (48))

the location is said to be affected by the presence of the material, aided by the meaning of the adjective *vol* 'full'.[56]

(1) a. de slingers hangen in de zaal (Dutch)
the garlands hang in the room
b. de zaal hang vol met slingers
the room hangs full with garlands

(Mulder 1992:168, (3))

Notice that the *Location-Subject* variant is not only available in Dutch (2) but also in German (3) and English (4), as exemplified below. In line with the discussion on the co-event component and the first phase syntax argued for posture verbs in chapter 1, 2, and 3, I surmise that the *Location-Subject* alternant cannot be considered a resultative structure, but rather it should be considered as an instance of non-dynamic predication.

(2) a. De boom hangt vol vruchten (Dutch)
The tree hangs full fruits
b. De straten lagen vol sneeuw
The streets lay full snow
c. Beide honden zaten vol metastasen
Both dogs sat full metastases

(Hoeksema 2008:16, (35))

(3) a. Der Baum hängt voll Früchte (German)
The tree hangs full fruits
b. Die Strassen lagen voll Schnee
The streets lay full snow
c. Beide Hunde saβen voll mit Metastasen
Both dogs sat full with metastases

(Hoeksema 2008:16, (33))

[56] Similarly, Dowty (2000) refers to this effect as the *full occupancy effect* to characterize the stative-locative alternation. See section 3 of this chapter for further discussion.

(4) a. The tree hangs full of fruit
b. The streets lay full of snow
c. Both dogs sat full of metastases

(Sean Manning, p.c., February 11th, 2019)

This structure is also available in Spanish (5), which further supports the view against a co-event analysis for posture verbs in Germanic languages, against Talmy (2000).

(5) El libro que se compró en un arranque de intelectualismo absurdo (Spanish)
the book that REF bought in an outburst of intellectualism absurd
por el Día del Libro yace lleno de aburrimiento él también, criando
for the day of-the book lies full of boredom it too, growing
polvo al igual que todo lo demás[57]
dust to-the same that all the rest

To summarize, in addition to the basic configuration, that is, the *Locatum-Subject* variant, described in chapter 3, Germanic posture verbs in their simple position sense may appear with the adjective *full,* and its equivalent forms in Dutch and German. In this seemingly different argument structure, the order of the locatum and the location is altered as the latter appears as the subject. In consonance with the discussion in chapter 3, Germanic posture verbs cannot express a co-event in the simple position sense as their first phase syntax simply consists of a process head and a rhematic predicational phrase. This seems to be further corroborated by the fact that a Romance language such as Spanish (5) may have process posture verbs that allow a similar configurational option.

In the following section, I review previous work by Mulder (1992) on the intransitive-locative alternation in Dutch to determine the configurational and aspectual properties of this construction with posture verbs. Following Mulder's insight, I will compare the intransitive-locative alternation to the transitive-locative alternation to determine to what extent it is possible to establish a parallel between the two types of locative alternation. Afterwards, in section 2.4, in light of the discussion on the type-A

[57] Example retrieved from https://blogs.diariovasco.com/.

and B meaning encoded in posture verbs in chapter 3, I consider new data from Spanish to confirm the possibility to use a limited number of process posture verbs in the intransitive-locative alternation.

2.1. Previous studies on the intransitive-locative alternation in Dutch

Mulder (1992) assumes that the intransitive-locative alternation in Dutch with intransitive agentive verbs, motion verbs, and posture verbs has a resultative syntax and semantics based on its similarities with the transitive-locative alternation, which also takes the adjective *vol* 'full' in Dutch in the *Location-Subject* order, or Totally-Affected variant in Mulder's terms. This notwithstanding, I will argue that, while this may be true for transitive verbs, agentive verbs, and intransitive motion verbs, this analysis does not hold true for posture verbs. As shown in chapter 3, these verbs behave as non-dynamic process verbs in the simple position sense, which hinders the possibility to obtain a resultative meaning by means of the addition of a path phrase. Let us see it in detail. Mulder's analysis of the intransitive-locative alternation in Dutch with motion verbs such as *stromen* 'flow' (6) and *schieten* 'shoot, rush' (7), and process posture verbs such as *zitten* 'sit' (8), *standen* 'stand' (9), and *liggen* 'lie' (10) seem to show similar properties in their argument structures as all of them allow a locative subject when the adjective *vol* 'full', accompanied by a prepositional phrase expressing the locatum, follows the verb.

(6) a. het water stroomt in het bad (Dutch)
the water pours in the bath
b. het bad stroomt vol met water
the bath flows full with water

(7) a. de tranen schieten in zijn ogen
the tears shot in his eyes
b. zijn ogen schieten vol met tranen
his eyes shoot full with tears

(Mulder 1992:168, (8))

(8) a. de knikkers zitten in de zak
the marbles sit in the bag
b. de zak zit vol met knikkers
the bag sits full with marbles

(9) a. het nieuws staat in de krant
the news stands in the paper
b. de krant staat vol met nieuws
the paper stands full with news

(10) a. de boeken liggen op de tafel
the books lie on the table
b. de tafel ligt vol met boeken
the table lies full with books

(Mulder 1992:168, (4-6))

Mulder adopts the view that posture verbs contain a small-clause complement in their argument structures, where the location and locatum arguments are enclosed. The argument structure proposed by Mulder for the *Location-Subject* order of these verb classes in the intransitive locative-alternation is similar to the one proposed by Hoekstra & Mulder (1990) and Mulder & Wehrmann (1989), who argue for an unaccusative argument structure, since the DP in subject position, in either order, does not seem to be properly selected by the verb; thus, this DP would be required to raise from its subject position in the small-clause to Spec,IP to receive nominative case (11).

(11) *Totally Affected Reading*: V [$_{SC}$ NP_{loc} A PP_{mat}]

The novelty of their approach lies in the assumption that in the Totally-Affected alternant, that is, in the location as subject variant, the adjective *vol* is the head of the small-clause complement, which may as well be realized either as a phonetically null element or as the affix *be-* (see section 2.2). Additionally, it is argued that the "completeness" meaning is conveyed by the small-clause, which is consistent with the meaning of the adjective. In the configuration, the adjective *vol* 'full' is considered to be

the head of the small-clause and its omission results in the unacceptability of the sequences, as shown below for the agentive verb *gieten* 'pour' (12). An additional proof of the head status of the adjective is the fact that it may incorporate into the verb, an option which is restricted to heads (13).[58]

(12) dat hij de tank *(vol) gooit (met benzine)
that he the tank full throws with gasoline

(Mulder 1992:177, (34))

(13) a. dat hij de tank {vol wil gooien/wil volgooien} met benzine
that he the tank full wants throw/ wants full-throw with gasoline
b. dat hij de kast {snel wil schilderen/*wil snelschilderen}
that he the closet fast wants paint/ wants fast-paint

(Mulder 1992:176, (33))

In contrast, the material, expressed by means of a prepositional phrase with the preposition *met* 'with', may be omitted or extraposed without affecting the grammaticality of the sequence. As a matter of fact, the preposition *met* and its material complement may appear either pre- or post-verbally (14). Thus, this element is shown to play the role of an adjunct, or modifier of the small-clause.

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[58] Equivalent results are obtained with the Partially-Affected alternant of intransitive motion verbs and agentive verbs in Dutch, for which Mulder (1992) also argues for a small-clause analysis containing the location and locatum arguments (i), based on the ungrammatical results of extraposing the prepositional phrase that denotes the location (ii-iii), which can be conceived as the final location of the material in the event.

(i) *Partially Affected Reading:* V [SC NPmat PPloc]

(ii) a. *dat het water stroomt in het bad (Dutch)
that the water flows in the bath
b. *dat det tranen schieten in zijn ogen
that the tears shoot in his eyes

(ii) a. *dat hij het water giet in het bad
that he the water pours in the bath
b. *dat hij de boeken zet op de plank
that he the books puts on the shelf
c. *dat hij de snoepjes doet in de tas
that he the candies puts in the bag

(Mulder 1992:169-170, (13-14))

(14) a. dat hij het bad vol (met water) giet (met water)
that he the bath full with water pours with water
b. dat hij zijn brood (met boter) besmeert (met boter)
that he his bread with butter full-spreads with butter

(Mulder & Wehrmann 1989:112, (8))

Mulder's conclusion is that the two possible orders are not related derivationally to each other, but rather they are resultative structures containing a small-clause argument, whose subject and complement may vary in the way they appear realized depending on the intended semantics, namely, if the material is conceived to undergo a change of location, the Partially Affected-alternant, i.e., the *Locatum-Subject* variant, is selected; however, if the location is conceived to be completely affected, or occupied by the material, then the Totally Affected-alternant, i.e., the *Location-Subject* variant, is chosen instead. Note that it is not immediately clear how this interpretation may be applied to process posture verbs as these verbs are non-dynamic. Additionally, Mulder holds that this analysis is also applicable to the transitive locative-alternation, which is also argued to instantiate a small-clause complement along with a true external argument to the verb (see section 2.2). In clear resemblance to the intransitive-locative alternation, these verbs also allow the presence of the resultative particle *vol* 'full' in the Totally-Affected alternant (15), that is, in those cases where the location is realized as the subject of the small-clause complement, or the prefix *be-* in Dutch as an alternative to express the resultative meaning component (16). The same would also be true for the agentive verbs that take *vol* 'full' in Dutch, among which Mulder includes *gieten* 'pour' (17), *zetten* 'set' (18), and *doen* 'do' (19).

(15) hij laadde de wagen (vol) met hooi
he loads the wagon full with hay

(16) a. hij (be-)laadde de wagen met hooi
he be-loaded the wagon with hay
b. hij laadde het hooi op de wagen
he loaded the hay on the wagon

(Mulder 1992:178-179, (42a, 36))

(17) a. hij giet het water in het bad
he pours the water in the bath
b. hij giet het bad vol met water
he pours the bath full with water

(18) a. hij zet de boeken op de plank
he puts the books on the shelf
b. hij zet de plank vol met boeken
he puts the shelf full with books

(19) a. hij doet de snoepjes in de tas
he does the candies in the bag
b. hij doet de tas vol met snoepjes
he does the bag full with candies

(Mulder 1992:168, (9-11))

In summary, intransitive agentive verbs, motion verbs, and posture verbs are argued to have a resultative syntax and semantics based on their similarities with the transitive-locative alternation, which also takes the adjective *vol* 'full' in Dutch in the Totally-Affected variant, i.e., *Location-Subject variant*. While this may be true for agentive verbs and intransitive motion verbs, posture verbs behave as non-dynamic process verbs in the simple position sense, which disqualifies them to have resultative semantics. In the next section, I look at what other linguists have said about the transitive-locative alternation to conclude that posture verbs in the intransitive-locative alternation do not share the same first phase syntax as transitive and intransitive verbs in the same configuration.

2.2. The transitive-locative alternation

At the core of the proposals of Mulder (1992), Mulder & Wehrmann (1989), and Hoekstra & Mulder (1990) is the idea that the intransitive use of posture verbs with the "completeness" sense shares important similarities with the argument structure of the

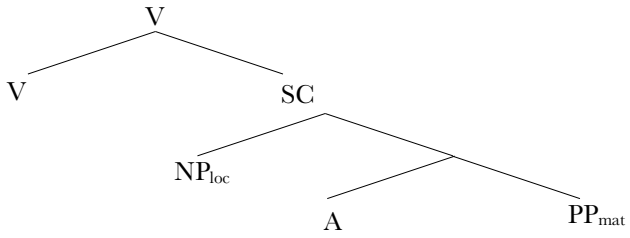
transitive locative-alternation. This can be illustrated using a causative transitive verb such as *hangen* 'hang' (20), which allows both versions of the Totally-Affected alternant with the adjective *vol* 'full' and the prefix *be-*.

(20) a. hij hangt de muur vol (met foto's) (Dutch)
he hangs the wall full with photos
b. hij be-hangt de muur (met foto's)
he be-hangs the wall with photos

(Mulder 1992:180, (43))

These examples instantiate the structure in (21) proposed by Mulder (1992), based on the work by Mulder & Wehrmann (1989) and Hoekstra & Mulder (1990), where the adjective *vol* and the particle *be-* instantiate the head A conveying the "completeness" meaning. Furthermore, note that they are found in complementary distribution, that is, if *vol* appears in the sentence, the particle *be-* cannot coappear with it, and vice versa (22). It goes without saying that transitive verbs such as the one above will include an external argument, which initiates the event.

(21) *Totally Affected Reading*



(22) *hij be-hangt de muur vol (met foto's)
he be-hangs the wall full with photos

(Mulder 1992:180, (43))

Following Hoekstra & Mulder's (1990) and Mulder's (1992) intuition, other linguists have implemented this approach in their research of the transitive locative-alternation. Mateu (2017) argues that both variants of the transitive-locative alternation contain a result phrase in their argument structures but differ in the positions occupied by the

material and the location arguments. The relevant argument structures proposed in Mateu for the alternation are shown in (23).

(23) a. … [$_{vP}$ v [$_{ResultP}$ DP_{THEME} [$_{RESULT'}$ √X $PP_{LOCATION}$]]]
b. … [$_{vP}$ v [$_{ResultP}$ $DP_{LOCATION}$ [$_{RESULT'}$ √X PP_{THEME}]]]

(Mateu 2017:11, (18))

Mateu (2017) predicts that, due to the typological differences that set apart Romance and Germanic languages, the availability of certain patterns of the locative alternation will not be possible in verb-framed languages, which cannot express co-events in the syntax via the conflation of a root and a light verb or a Path by means of a satellite (see chapter 1 of this dissertation and references therein for a detailed discussion of the cross-linguistic differences between Romance and Germanic languages). In particular, Romance languages lack the variant whose result event portion is realized by an element independent from the verb such as a satellite. In Ramchand's framework, this amounts to the impossibility of having a non-verbal element realizing the result subevent in the first phase syntax. In the Catalan example below (24), the verb realizes all three subevents of the first phase syntax.

(24) a. En Ramon carregà els rocs al carrro (Catalan)
DET. Ramon loaded the stones at.the cart
'Ramon loaded the stone on the cart'
b. En Ramon carregà el carro de rocs
DET. Ramon loaded the cart of stones
'Ramon loaded the cart with stones'

(Mateu 2017:11, (17))

By contrast, in Germanic languages, the satellite may be realized in the form of a prefix such as *be-* 'full', *über* 'over', or *vol* 'full' as shown for German and Dutch in (25) and (26), respectively, or a particle such as *up* as shown for English in (27). Note that the omission of the satellite in these examples of the transitive-locative alternation creates ungrammatical sequences since this element legitimizes the result state portion of the argument structure as head of the phrase.

(25) a. John goss Wasser über die Blumen (German)
John poured water over the flowers
b. John {begoss / übergoss} die Blumen mit Wasser
John be-poured/ over-poured the flowers with water

(Mateu 2017:2, (2))

(26) a. hij hangt foto's op de muur (Dutch)
he hangs photos on the wall
b. hij behangt de muur met foto's
he be-hangs the wall with photos
c. hij hangt de muur vol met foto's
he hangs the wall full with photos

(Mateu 2017:25, (49))

(27) a. Gertrude sewed buttons on the dress
b. Gertrude sewed *(up) the entire dress with buttons

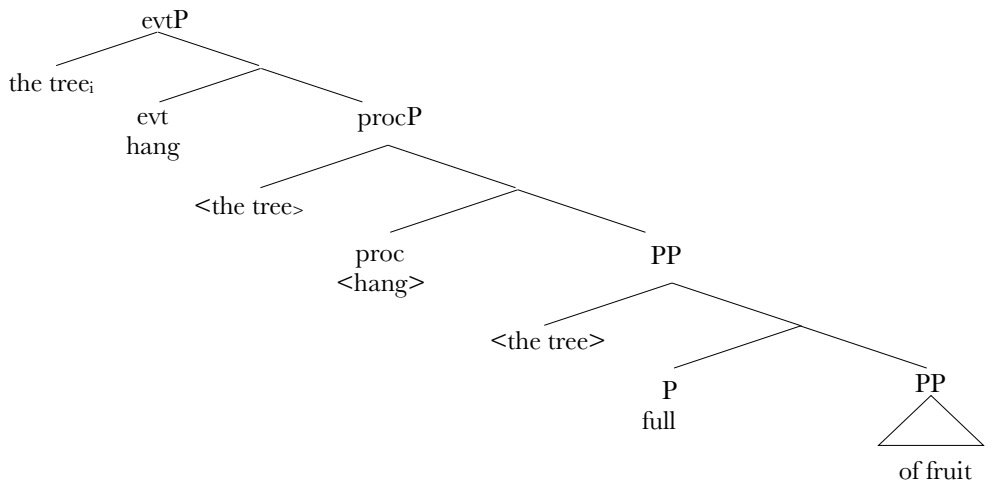
(Mateu 2017:2-3, (1,3))

Mateu's important insight is that the transitive locative-alternation involves a result state subevent in its argument structure, which might be differently realized depending on the properties of the languages at stake, that is, Romance languages require the result portion of the event to be realized via the verb's morphology, which characteristically incorporates the path of motion (see chapter 1 and 2 of this dissertation), in contrast Germanic languages, hinging on the properties of the verbs used, may implement this option as well or use a satellite to realize the result state portion of the event. Thus, the first phase syntax of these verbs in the Totally-Affected reading involves three subevents corresponding to the initiation, process, and result heads.

I would like to argue that the argument structures argued for the transitive-locative alternation cannot be applied in full to the intransitive locative-alternation with posture verbs in the simple position sense. While they may be applicable to those instances of the intransitive locative-alternation with dynamic motion verbs such as *stromen* 'flow' and *schieten* 'shoot, rush', which contain a result subevent in their first phase syntax, posture verbs in this construction do not denote a telic event (see chapter 3) and,

therefore, cannot comply with the argument structure proposed for the transitive locative-alternation. Let me recast the properties so far presented in terms of the formal framework of this dissertation. As argued for in chapter 3, I take these verbs to instantiate a procP along with a rhematic PP, a sort of predicational structure, in which the figure is merged in the specifier position of both phrases (28). Thus, in addition to denoting a state of location with information about the disposition of the figure in terms of posture, this construction also provides ground information as a relation of full measure. These properties about its first phase syntax are consistent with the examples in (29), which prove that these verbs denote an atelic event since, as shown by the addition of the temporal phrases, they reject the adverbial modifiers introduced by *in*, characteristically acceptable with telic events. Once again, their structure in the Totally-Affected alternant, i.e., *Location-Subject* variant, consists of a process head followed by a prepositional phrase, whose head is the adjective *full*, which, as argued by Mulder (1992), provides the completeness meaning characteristic of this construction. Thus, their event structure does not consist of a succession of subevents, and no change of state or location can be presupposed for them as the rhematic PP only predicates a synchronous property of the figure along with the posture, or disposition, information asserted by the posture verb root in its type-B meaning.

(28)



(29) a. The tree hangs full of fruit for/*in the whole season

b. The streets lay full of snow for/*in weeks

c. Both dogs sat full of metastases for/*in months

Regarding the status of the prepositional phrase specifying the nature of the "completeness", Hoekstra & Mulder (1990) note that the material PP may be omitted without affecting the grammaticality of the *vol* variant (30), which is also true in German (see the examples in the following section).[59] The semantics conveyed by each of the phrases in the argument structure will be further pinpointed in the following section.[60]

(30) a. dat de jas in de kast hangt (Dutch)
that the coat in the closet hangs
b. dat de kast vol hang (met jassen)
that the closet full hangs with coats

(Hoekstra & Mulder 1990:23, (50))

To conclude this section, let me recast the argument structure of the locative alternation with intransitive motion verbs and transitive verbs in the terms of Ramchand's first phase syntax. I am assuming that the first phase syntax of both transitive verbs (31) and intransitive motion verbs (32) in the Totally-Affected alternant have process and result phrases but differ inasmuch as only the former count with an initiation phrase. Dynamicity with intransitive motion verbs results from the sequential ordering of the process and results subevents in the macro-event. In both cases, the result subevent

---

[59] The PP *of fruit* in (28) plays the role of a further modifier of the figure in the first phase syntax. While it is not an obligatory syntactic element, it is conceptually relevant to the construction at hand. Jaume Mateu (p.c.) notes that these elements may be left out or appear as long as they are informationally required (i).

(i) a. La sala está llena (de gente)
the room is full of people
b. El río está lleno *(de peces de colores)
the river is full of fishes of colors

[60] However, in contrast to motion and agentive verbs, Mulder notices that the location PP in the *Locatum-Subject* form may be extraposed (i) or omitted (ii) altogether under certain circumstances. See chapter 3 of this dissertation for further discussion of this fact.

(i) a. dat de slingers hangen in de zaal (Dutch)
that the garlands hang in the room
b. dat de boeken liggen op de tafel
that the books lie on the table
c. dat de ooievaar staat in de sloot
that the stork stands in the ditch

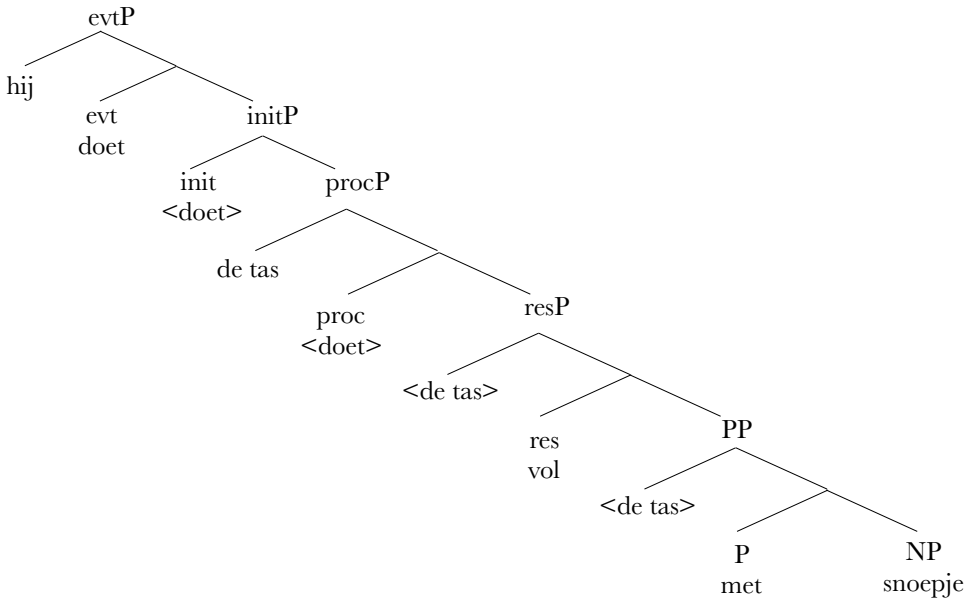
(ii) de ooievaar staat
the stork stands

(Mulder 1992:169, (12))

portion is realized by the adjective *full*, which means that the verb root underassociates its result subevent portion to be realized by the adjective.

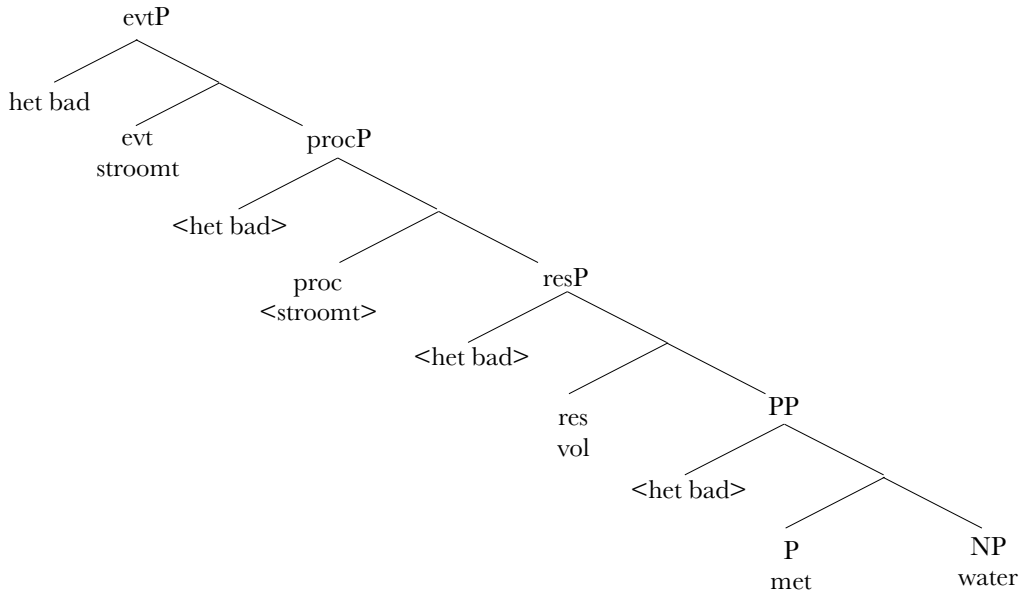
(31) a. hij doet de tas vol met snoepjes
he does the bag full with candies

b.



(32) a. het bad stroomt vol met water
the bath flows full with water

b.



2.3. The semantics of posture verbs in the intransitive-locative alternation

As yet, I have argued that intransitive posture verbs can enter the alternation with the adjective *vol* 'full' in the complement position of the Totally-Affected alternant with no resultative syntax or semantics, in stark contrast to dynamic verbs. I have also followed in Mulder's characterization of the adjective *full* as the head of the rhematic PP. Now, I look at the properties of this construction in German, which shares several commonalities with Dutch in order to consolidate the semantics ascribed to it in the preceding sections.

In his analysis of the *vol* variant in German, McIntyre (2004) notes that intransitive posture verbs (33) allow an adjective post-verbally such as *voller* 'full of' and *halbvoll* 'half full' or the adverb *zu* 'full of' followed, optionally, by the material, which confirms the adjunct status advocated for *met* 'with' phrases in Dutch by Mulder (1992).[61]

(33) a. die Wand hängt *(voller Bilder) (German)
the wall hangs full.of pictures
b. der Keller steht *(halbvoll)
the cellar stands half-full
'The cellar is half full (of furniture, large objects)'
c. der Fuβboden lag *(zu mit Papier)
the floor lay full with paper
'There was paper lying all over the floor'

(McIntyre 2004:544, (44))

[61] Relatedly, Hoeksema mentions the existence of an idiomatic expression with the posture verb *staan* 'stand' and the adjective *bol* 'round, full' in Dutch, which can be predicated of "such things as newspapers, magazines and similar names for texts and containers of texts, although other subjects also occur" and which means *be round*, *pumped up*, or *bloated* (2008:12), showing that this posture verb may be used along with an adjective different from *vol* 'full' to predicate a state of affairs.

(i) a. De kranten staan bol van de geruchten over Berlusconi (Dutch)
the papers stand round of the rumors about Berlusconi
'The papers are replete with rumors about Berlusconi'
b. Het Nederlands elftal staat bol van het talent
the Dutch team stands round of the talent
'The Dutch team is overflowing with talent'

(Hoeksema 2008:16, (33))

The analysis proposed in McIntyre takes these sentences to denote two synchronous states (34): one state denoted by the posture verb and another state denoted by the adjective *voll*, which mediates the relation holding between the figure and the ground. Notice that the examples under discussion involving a small-clause with the adjective *vol* 'full' in Dutch or *voller* 'full', etc. in German do not presuppose the involvement of an initiating entity in the event, but rather these should be considered non-dynamic process events, as argued for in chapter 3 of this dissertation.

(34) [STATE HANG(PICTURES)] &$_{contemp}$ [STATE BE (WALL, FULL OF PICTURES)]

(McIntyre 2004:544, (44))

This semantics is consistent with Hoekstra & Mulder's (1990) view, according to whom these sentences denote a state of affairs regardless of the personal or impersonal meaning of the sequence, that is, even if the dummy pronoun *het* 'it' is used in Dutch (35).

(35) a. De mensen zijn in de kamer (Dutch)
'The people are in the room'
b. De kamer is vol met mensen
'The room is full of people'
c. Het is vol met mensen in de kamer
'It is full with people in the room'

(Mulder & Wehrmann 1989:113, (12))

In addition, Hoekstra & Mulder mention that, while Dutch favors posture verbs to express a locational predication, other languages make use of a copula such as *be* to express similar meanings. At first sight, this construction might seem to be equivalent to the copula *be* followed by the adjective *full* in English, equivalent to *vol* in Dutch. Following the hypothesis presented in section 4 of chapter 3 about the existence of light uses of posture verbs, we could assume that these examples brandish a semantic impoverished verb with no physical posture meaning inasmuch as a copula could be used to express somewhat the same meaning. Under that assumption, the posture verb would behave as a 'light' verb with no type-B meaning. Nevertheless, this idea does not

seem to be true. According to Hole (2013), there exists a difference in meaning between the following pair of sentences in German in (36). The first example is an instance of the stative-passive, which contains the copula *sein* 'be' and a participle. By contrast, the second example uses a posture verb in the Totally-Affected reading, that is, an adjective, *voll* 'full' in this case, along with the verb. The difference between them pertains to the region that seems to be "affected" by the presence of the material. In particular, in (46a) "[t]he oil may be outside on the surface, and the cream inside", whereas in (46b) "[t]he sticky notes and the cream must be on the same substructure of the fridge" (Hole 2013:5).

(36) a. Der Kühlschrank ist verschmutzt mit Öl und umgekippter Sahne (German)
'The fridge is dirty with oil and spilled cream'
b. Der Kühlschrank klebt voll mit Zetteln und umgekippter Sahne
'The fridge is full of sticky notes and spilled cream'
(Hole 2013:5, (15))

A similar example was obtained from the paper by Bücking & Frauke Buscher (2015), who present additional data contrasting the use of the copula *sein* 'be' and posture verbs in the Totally-Affected alternation in German (37).

(37) a. Die U-Bahn ist voll mit Menschen (German)
the subway is full with people
b. Die U-Bahn sitzt voll mit Menschen
the subway sits full with people
(Bücking & Frauke Buscher 2015:98, (20))

In their own words, "(b) is true if the subway is full in relation to pragmatically salient seating-accommodations, more precisely, it must be full of sitting people. Therefore, in a scenario where dozens of people are in the subway, but nobody is sitting, (a) would be true, but (b) would not" (Bücking & Frauke Buscher 2015:97-98). It seems to be the case that the small-clause has not been reinterpreted as the main predicate of the clause, and therefore the posture verb cannot be said to behave as a 'light' verb in the sense argued

for in chapter 3. This fact is confirmed by the existence of the same construction in Spanish, which is examined in the following section.

2.4. The Totally-Affected alternant in Spanish

The Totally-Affected alternant with process posture verbs in Spanish has properties that are similar to those of Dutch, English, and German. First, the posture verb is followed by an adjective such as *lleno, repleto,* or *pleno* 'full', which I assume to take the position of head of the rhematic PP, or small-clause, and is consequently not realized by the verb root. Secondly, the adjective triggers the completeness or fullness inference in the construction. The fact that there is no result state implied makes unfeasible the existence of a co-event structure in Spanish, thus conforming to the Talmyan typology as a verb-framed language. This also holds true for Dutch and German is spite of the fact that these languages conform to the satellite-framed pattern and could utilize this strategy; nevertheless, this would have as a consequence a resultative interpretation for posture verbs in this construction which as I have extensively argued is not the correct semantic characterization (see section 3 in chapter 3 and section 4.3 in chapter 1 for further discussion). On the other hand, the structure with a result state implication would only be available under the assumption that a verb may underassociate (38) some of its category features, in this case, the identifiers corresponding to result semantics. As a matter of fact, this possibility is allowed in Spanish with verbs such as *poner* 'put' or *dejar* 'leave' (39), which have impoverished semantics and may be considered 'light' verbs. As argued in chapter 2, the verb *poner* 'put' has a deficient resP and must necessarily underassociate in the syntax and adopt an independent path phrase to denote the result state.

(38) *Underassociation*

If a lexical item contains an underassociated category feature,

(i) that feature must be independently identified within the phase and linked to the underassociated feature, by Agree;

(ii) the two category features so linked must unify their lexical-encyclopedic content.

(Ramchand 2008:136, (61))

(39) a. Puso todo lleno de barro (Spanish)
put everything full of mud
'He got everything covered in mud'
b. Dejó todo lleno de barro
left everything full of mud
'He left everything covered in mud'

Returning to posture verbs, the examples shown below contain the process posture verb *yacer* 'lie' (40) in both the *Locatum-Subject* and *Location-Subject* orders, or Mulder's Partially-Affected alternant and Totally-affected alternant. Similarly, these examples are only acceptable as long as the material phrase is kept as a complement of the adjective equivalent to *full*, otherwise the omission of this element leads to degraded acceptability judgements.[62]

(40) a. Los cuerpos yacen en la tierra
the bodies lie on the land
b. La tierra yace llena *(de cuerpos)[63]
the land lies full of bodies

In addition, note that the inventory of verbs in process posture verbs in Spanish seems to be somewhat smaller than the inventory in Germanic languages such as German (see chapter 3 for further discussion). This notwithstanding, I was able to find several examples with *yacer* 'lie' (41) and the process posture verbs *pender* 'hung' (42) and *colgar* (43) 'hung' in Modern and Medieval Spanish.

[62] See footnote 59 in this chapter about the status of these PPs.

[63] Jaume Mateu (p.c.) notes that this construction may not be acceptable to all speakers and there might exist variation in grammaticality judgements. Nevertheless, note that it is not at all infrequent to find similar examples in written texts in Spanish as shown in example (i), repeated from chapter 1, which confirms the existence of this construction in Spanish.

(i) El paseo […] yace repleto de casitas de estilo vasco (Spanish)
the promenade lies full of little-houses of style basque

(41) a. El balneario de lodos yace lleno de polvo[64]
the health resort of mud lies full of dust

b. Yace lleno de sombra / quien fue luz / pasada la rivera del horror[65]
lies full of shadow / who was light / past the creek of.the horror

c. el respondio / esti seruidor maluado me auie aparellado lecho / çerca el
he answered / this server evil me had seemed lain / close the
lecho de aquel / embriago parthari qui yaze pleno de tanto uino
bed of that / intoxication parthari that lies full of so.much wine
(CORDE, 1385, Fernández de Heredia, *Gran Crónica de España*, I)

(42) Agua corriente, rematada por el verde que pende
water running finished-off by the green that hangs
lleno de flores y frutos[66]
full of flowers and fruits

(43) a. Este artículo fue escrito por Sergio Delgado, licenciado en
this paper was written by Sergio Delgado, graduate in
Filología Hispánica y con un Máster de ELE que cuelga
Philology Hispanic and with a master of ELE that hangs
repleto de polvo en la pared de su casa[67]
full of dust on the wall of his house

b. [E]l caimito, cual enorme perla viuda, cuelga lleno de dulcísima jalea
the caimito, as big pearl widow, hangs full of sweetest jelly
de la hojosa rama[68]
of the leafy branch

[64] Example retrieved from https://www.elmundo.es/.

[65] Example retrieved from https://www.diariocordoba.com/.

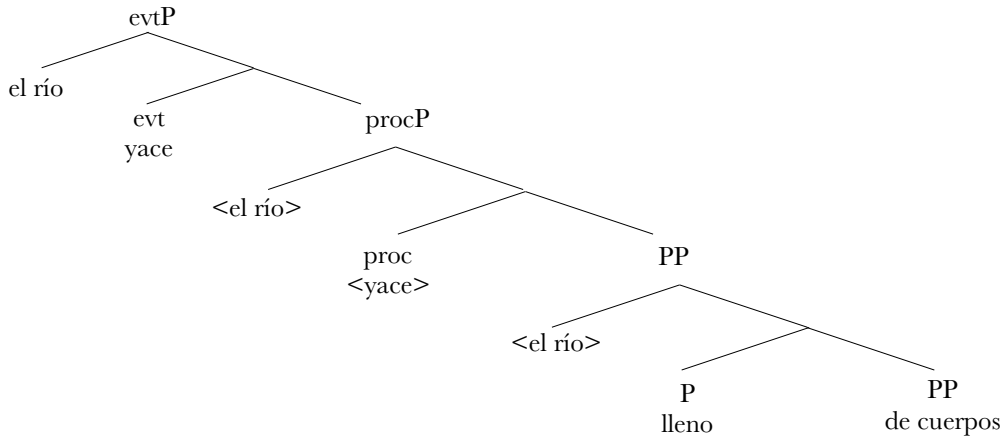
[66] Example retrieved from https://studylib.es/.

[67] Example retrieved from https://unidiomacadavez.com/.

[68] Example retrieved from https://books.google.com/.

The first phase syntax for posture verbs in the *Location-Subject* order is shown in (44). Importantly, there is no difference between the first phase syntax of Spanish process posture verbs in this variant and the equivalent verbs in Germanic languages.

(44)



2.5. Conclusions

In this section, I have examined the properties of posture verbs in the simple position sense when they enter the intransitive-locative alternation and discarded that they behave in a similar way to intransitive motion verbs or to agentive verbs in the transitive-locative alternation. The reason of the differing behavior is the lack of a result phrase in the first phase syntax of this construction with posture verbs. I have also shown that Romance languages such as Spanish have a similar construction with posture verbs, in spite of not being as productive as in Dutch and other Germanic languages.[69]

In the following section, I delve into another instance of the intransitive-locative alternation: the so-called stative-locative alternation, or *swarm*-alternation. This alternation, where a locative DP takes up the structural subject position, has been studied in Dutch and argued to show a similar argument structure to the intransitive-locative alternation. These verbs have been analyzed as unaccusative or unergative in

[69] As a matter of fact, I have been unable to find examples of this construction in other Romance languages. Yet, as to the reason why this construction might have different degrees of productivity across languages, I can't offer an explanation at this point. One could hypothesize that the different degrees of grammaticalization of these verbs across languages, that is, the loss of type-B meaning, could be a factor influencing their productivity.

different languages and have proved to resist a uniform analysis across languages. For example, Mulder & Wehrmann (1989) and Hoekstra & Mulder (1990) initially considered this specific type of locative alternation as another instance of the intransitive-locative alternation. On the other hand, Mulder (1992) would later reject this analysis and propose a different approach. Recently, some authors such as Mayoral Hernández (2010) have set forth a derivational approach for this alternation in Spanish.

3. THE STATIVE-LOCATIVE ALTERNATION IN SPANISH

This section examines yet another instance of the intransitive-locative alternation, which has been analyzed both as an independent construct and as related to other constructions such as the ones reviewed in section 2 of this chapter. This alternation appears with verbs internally-caused verbs such as *pulular* 'swarm' or *brillar* 'shine' in Spanish. First, in section 3.1, I review the general properties of this alternation across languages drawing on the work by Dowty (2000). In section 3.2, I compare several approaches to this construction in Dutch, namely, Hoekstra & Mulder (1990), Mulder & Wehrmann (1989), and Mulder (1992), and the proposal for Spanish by Mayoral Hernández (2010). Section 3.3.1 offers a corpus of examples of the alternation in Spanish coming from written texts ranging from Medieval Spanish to Modern Spanish, showing that this construction is well established in the language. After examining the verb classes that enter the alternation in Spanish, I endeavor to provide a thorough characterization of the syntax and semantics of these verbs to better understand their properties and thereby solidly underpin their first phase syntax in both the *Locatum-Subject* order and the *Location-Subject* order. In section 3.3.2, I show evidence of both the unergative nature and non-stative semantics of these verbs in Spanish. In section 3.4 I present my proposal for the first phase syntax of these verbs in both the *Locatum-Subject* and *Location-Subject* in Spanish. I show that the properties of these verbs in the *Location-Subject* order in Spanish are determined by (i) the locative nature of the subject DP, which does not meet the requirements to initiate the event but rather it can only play the role of an undergoer, and (ii) the particular properties of the prepositional phrase

headed by *de* 'of', which will be argued to introduce the initiating entity of the process event. Finally, section 4 concludes the chapter.

3.1. An overview of the properties of the stative-locative alternation

The stative-locative alternation is an ubiquitous phenomenon across languages and can be found in Dutch (Mulder & Wehrmann 1989, Hoekstra & Mulder 1990, Mulder 1992), English (Dowty 2000, Salkoff 1983), French (Boons et al. 1976), Hebrew (Halevy 2013), Romanian (Poponet 2016), Spanish (Di Tullio 2001, Mayoral Hernández 2010), Czech (Fried 2005), and Hebrew (Halevy 2013), among other languages.[70] As an example, consider the following sentences from Spanish (45), Dutch (46), German (47), and English (48). The first sentence of each pair presents the *Locatum-Subject* order that denotes an event with an initiator, instantiated by a DP, at a definite location in the form of a post-verbal PP (see section 3.3.1). The second sentence of each pair follows the *Location-Subject* order, in which the initiator appears embedded in a prepositional phrase introduced by *de* 'of' in Spanish, *van* 'of' in Dutch, *von* 'of' in German, and *with* in English, and where the location takes the form of a DP, as subject of the verb.

(45) a. La basura rebosa en los contenedores (Spanish)
the garbage teems in the dumpster
b. Los contenedores rebosan de basura
the dumspers teem of garbage

(46) a. De bijen zwermen in de tuin (Dutch)
the bees swarm in the garden

[70] Nevertheless, as Dowty (2000) notes, there are important differences and degrees of productivity across verb classes among languages belonging to the same family such as Germanic languages, or even cross-linguistically. Thus, in English the construction is highly productive in contrast to other Germanic languages. The same is true about French, where this construction allows a high number of verbs in comparison to other Romance languages such as Spanish, where, even though the construction exists and is productive, the degree of productivity would not be comparable to that of French. See Boons et al. (1976). Interestingly, Dowty (2000) lays the claim that the existence of the stative-locative alternation in English might have been brought into existence by French influence, from which it might have been borrowed during the fourteenth and sixteenth centuries. On another note, Dowty notes that a non-trivial difference between these languages is the preposition used: English uses *with* to introduce the locatum in the *Location-Subject* variant, while French uses the preposition *de* 'of'. For further discussion see section 3.1 of this chapter.

b. De tuin zwermt van de bijen
the garden swarms of the bees

(Mulder & Werhmann 1989:111, (4))

(47) a. Ameisen wimmeln in der Küche (German)
ants swarm in the kitchen
b. Die Küche wimmelt von Ameisen
the kitchen swarms of ants

(Hoeksema 2008:3, (6))

(48) a. Bees are swarming in the garden
b. The garden is swarming with bees

(Salkoff 1983:288, (1))

Regarding the status of the prepositional phrases that appear in both variants, they seem to behave as adjuncts but differ importantly in the properties of the nominal element they host. In the *Locatum-Subject* variant the prepositional phrase denotes a location and has definite semantics. Diametrically differently, in the *Location-Subject* variant the prepositional phrase lodges either a mass noun or a plural nominal, as in the Spanish (45) and Dutch (46) examples above; alternatively, a singular term may appear making possible a reading with multiple instantiations of the event, as in English example shown below in (49).

(49) a. The wall crawled with roaches/*a roach
b. The whole school buzzed with the rumour about the principal and the librarian

(Dowty 2000:117, (13a, 14a))

Furthermore, note that Spanish and Dutch consistently select the prepositions *de* and *van* 'of', respectively, in the *Location / Locatum* order, which is also true for French, Italian, and German as the alternation appears with the prepositions *de*, *di*, and *von,* respectively. By contrast, in English the most-common preposition is *with*, except for some verbs such as *reek*, which selects *of*. The source of this variation may be deemed a lexical idiosyncrasy with no further consequences for the properties of the alternation. Nevertheless, I would like to cast doubt on this assumption and entertain the hypothesis

that the preposition used in each language might have a bearing on the properties of the alternation. Accordingly, I will study the properties of the preposition *de* in Spanish to establish its contribution to the predicate. See section 3.4 for further discussion.

Another important property of the alternation is that the verbs that partake in it usually denote processes or states that may occur repetitively (Dowty 2000).[71] Dowty identifies five meaning traits that are constant in the verbs that enter this alternation and provides several examples taken from Salkoff's (1983) examination of the alternation for each of the classes. [72]

(50) *Semantic classes of verbs*

a. *Physical movements visually recognizable readily and at a 'small scale', usually found occurring repetitively*: crawl, drip, bubble, dance, dribble, erupt, flow, foam, froth, gush, heave, hop, jump, ripple, roil, rumble, run, shake, shiver, throb, vibrate, pulsate

b. *Animal sounds and other perceptually simple sounds*: hum, buzz, twitter, cackle, chirp, whistle, hiss, fizz, creak, boom, rustle, resonate, resound, echo

c. *Conceptually simple visual perception of some kind of light emission*: beam, blaze, brighten, flame, flow, flicker, flare up, flash, glimmer, glisten, glitter, light up, shimmer

d. *Smells*: reek, smell, be fragrant

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[71] Levin & Rappaport Hovav (1995) concur that these verbs should be classified as atelic; specifically, some of them would qualify as statives while others would behave as processes. The more stative like are verbs of smell and light emission, while verbs of sound and substance emission are considered more similar to process events. In their view, the lexical aspectual status of these classes of verbs seems to be controversial as it would bring about the existence of unergative state predicates (see Rappaport Hovav & Levin 2000). See section 3.3 in this chapter for further discussion of their lexical aspect.

[72] The alternation is also possible with adjectives in English as reported in Salkoff (1983). In the following examples, the alternation is instantiated with the adjectives *thick* and *heavy*, which allow both variants, that is, the *Locatum-Subject* in the a-examples and the *Location-Subject* order in the b-examples. These instances of the alternation won't be dealt with in the dissertation and are left for future research.

(i) a. Snow is thick in the air
b. The air is thick with snow

(ii) a. Gnats are thick in the air
b. The air is thick with gnats

(iii) a. Responsibilities are heavy on his shoulders
b. His shoulders are heavy with responsibilities

(Salkoff 1983:298, (57))

e. *Predicates indicating degree of occupancy or abundance*: abound, teem, be rich / rife / rampant (with)

(Dowty 2000:115, (9))

Interestingly, it seems that not every language that has this alternation allows the same verb classes to participate in it. For example, Fried (2005:489) notes that in Czech verbs of abundance (50e) cannot enter the alternation. In similar manner, in Spanish verbs codifying smells (50d), which are part of the set of verbs that enter this alternation in both English and Czech, cannot be used in the *Locatum-Subject* order but may be used in the *Location-Subject* alternant exclusively with the preposition *a* 'to'. Regarding this latter class of verbs, the examples in (51) from Czech show the two possible orders: (i) the *Locatum-Subject* order in (51a), where the location appears with locative case and the locatum appears with nominative case, and (ii) the *Location-Subject* order in (51b), where the location assumes nominative case and the locatum takes instrumental case. By contrast, the examples from Spanish in (52) show that only the *Location-Subject* order is possible with these verbs.[73]

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[73] In addition, Fried (2005) mentions two more possible configurations for the alternation in Czech: the existential use and the transitive use. First, in the existential construction (i), the location PP appears preposed to the verb with locative case and the locatum appears post-verbally with instrumental case; thus, the verb does not show agreement with any of these elements. Second, Czech allows a transitive use of this verb (ii), in which the locatum is assigned nominative case and the location receives accusative case.

(i) V kuchyni (za)vonělo skořici (Czech)
in kitchen.LOC.SG.F (PF).smell.PPL.SG.N cinnamon.INS.SG.F
'In the kitchen, there was the smell of cinnamon'

(ii) celou kuchyň provoněla skořice
whole.ACC.SG.F kitchen.ACC.SG.F PF.smell.PPL.SG.F cinnamon.NOM.SG.F
'The whole kitchen was filled with the smell of cinnamon'

(Fried 2005:491-492, (10))

The existential use is also possible in Spanish with a similar distribution of cases (iii). In this configuration, the location appears as a preverbal PP and the locatum shows up post-verbally as a PP as well. Similar to Czech, the verb does not show agreement with any of these elements. One could assume with Fernández Soriano (1999:135) that in this case T takes third-person singular form by default as it cannot establish an agreement relation with any of the elements in the configuration. Finally, the transitive use is only possible with *atufar* and *apestar* 'stink' (iv), where the locatum is assigned nominative case and the location receives accusative case.

(iii) En la cocina huele / atufa / apesta /hiede / corrompe a canela (Spanish)
in the kitchen smells / stinks / reeks / stinks / stinks of cinnamon

(iv) Un hedor a inmundicia *huele / atufa / apesta / *hiede / ??corrompe la cocina
a stench of filth.NOM smells / stinks / reeks / stinks / stank the kitchen.ACC

(51) a. V kuchyni (za)voněla skořice[74] (Czech)
in kitchen.LOC.SG.F (PF).give.off-fragrance.PPL.SG.F cinnamon.NOM.SG.F
'CINNAMON smelled in the kitchen'

b. Kuchyň (za)voněla skořici
Kitchen.NOM.SG.F (PF).smell.PPL.SG.F cinnamon.INS.SG.F
'The kitchen smelled of cinnamon.'

(Fried 2005:491-492, (10))

(52) a. *La canela huele / atufa / apesta / hiede / corrompe en la cocina (Spanish)
the cinnamon smells/stinks / reeks / stinks / stinks in the kitchen

b. La cocina huele / atufa / apesta / hiede / #corrompe a canela
the kitchen smells / stinks / reeks / stinks / stinks of cinnamon

Thus, the availability of the alternation with the verb classes identified by Dowty might be lexically constrained by reasons obeying to the type-B meaning codified in the verb roots that enter the alternation across languages, the prepositions the verbs select for, or the preposition that characteristically appears in the alternation, which, as discussed, may vary from language to language.

Concerning the atelic character of the verbs, Dowty notices that the verbs that enter this alternation denote an event with no telos, in either alternate form, thus rejecting the existence of an incremental theme interpretation as is the case in the transitive-locative alternation (see Dowty 2000). However, there is a specific type of semantic effect in this alternation, which Dowty refers to as the *full occupancy effect* in the *Location* order, in which the action arguably occupies completely the location (53b) (cf. (53a)) (see Fillmore 1968, Chomsky 1970, Anderson 1971).

One caveat is in order concerning the verb *oler* 'smell', which can only be used in its transitive sense with a sentient entity as subject in its sense of perceiving a smell.

(v) Los niños olieron las flores
the children.NOM smelled the flowers.ACC

[74] The parentheses around the prefix *za* indicate its optionality in the sentence (Fried 2005).

(53) a. Fish abound in the pond

b. The pond abounds with fish

(Dowty 2000:114, (8a))

Dowty's argumentation is built around the tenet that argument alternations are due necessarily to the existence of a meaning difference. In the case of the *Location-Subject* order, the meaning conveyed would be the characterization of the location DP with a property referring to the instantiation of some activity in its interior. Thus, the activity, or event, would be ascribed to the location, which appears as the subject of the predicate, as an abstract property. To this respect, building on Dowty's account of the alternation, Fried (2005:489) indicates that the characterizing activity is related to a "sensory effect of a particular kind" pertaining to "the appearance and perception of (a kind of) movement, color, smell, light, or sound in a location". For Fried, the alternation is equivalent to an *event pattern*, in which its participants are arranged in a specific configuration depending on the speaker's choice of viewpoint from which the situation is represented, resulting in a particular morphosyntactic configuration, which in turn might correlate with the assignment of morphological case as a way to establish a hierarchy of prominence among the event participants, namely, the *stimulus* and the *location*. Events patterns stand on their own as a construction with a specific meaning even if the lexical items they are applied to are not properly related to the meaning of the pattern. As such, the stative-locative alternation would simply be a complex lexical item stored in the lexicon, a sort of black box, whose syntactic and semantic properties could not be ascertained from the verb roots that partake in it. In this chapter, I depart from this point of view and argue that the properties of the alternation must necessarily stem from the type-A meaning of these verbs. Additionally, I surmise that the contribution of the prepositional phrase containing the locatum is relevant to the interpretation of the predicate. I will build my argumentation using data from Spanish and resort to data from other Romance languages, which share important similarities with it, to support the view that the prepositional phrase instantiates the initiating entity of the event.

3.2. Previous analysis of the stative-locative alternation

The analysis of the stative-locative alternation has been approached from different angles in the literature. I will first review the approaches dealing with the Dutch stative-locative alternation and then proceed to discuss those that deal with its counterpart in Spanish.

3.2.1. Analyses of the stative-locative alternation in Dutch

This section contains an overview of the properties of the stative-locative alternation in Dutch as described in Hoekstra & Mulder (1990), Mulder & Wehrmann (1989), and Mulder (1992). I concentrate on the properties of the verbs, the status of the prepositional phrases, and the argument structure argued for each form.

Hoekstra & Mulder (1990) classify the verbs that enter this alternation in Dutch and English as unergatives with a PP adjunct in their by-default *Locatum-Subject* order (54), since these verbs typically select *hebben* (Dutch) and *avere* (Italian) 'have' as the auxiliary for the perfect (1990:16, footnote 8).

(54) a. De bijen zwermen in de tuin (Dutch)
the bees swarm in the garden
b. De tuin zwermt van de bijen
the garden swarms of the bees
(Mulder & Wehrmann 1989:111-112, (4))

As evidence of the unergative nature of these verbs, Hoekstra & Mulder show that in the *Locatum-Subject* order the prepositional phrase expressing the location can either precede or succeed the verb (55).

(55) dat er mieren in de tuin wemelen/wemelen in de tuin
that there ants in the garden teem/ teem in the garden
(Hoekstra & Mulder 1990:16, (34))

As for the *Location-Subject* order, their analysis is based on the transitive-locative alternation (56), for which a small-clause headed by the adjective *vol* 'full' is presumed (see section 2.2 in this chapter). Accordingly, they propose an unaccusative argument

structure, in which the location is raised to Spec,IP from its original position of subject of the small-clause in order to receive nominative case. Following in Hoekstra & Mulder's footsteps, Mulder & Wehrmann (1989) propose a similar analysis.

(56) *Hoekstra & Mulder's (1990) small-clause analysis*

V [$_{SC}$ NP_{loc} A PP_{mat}]

This construction is taken to be essentially identical to the *vol*-alternation with intransitive posture verbs in Dutch, in which a silent adjective would appear as the head of the small-clause containing the locatum and location (see (56) again) and where the adjunct introduced by the preposition *van* 'of' would work as the complement of the empty adjectival head. In spite of the fact that Dutch does not count with the presence of an adjective in the alternation, in Chinese (57) the adjective *man* 'full' can be found in the alternation with verbs such as *pa* 'crawl' (57c), which Hoekstra & Mulder (1990) take as sufficient evidence to support their claim even if Dutch does not count with an adjective in the alternation with *swarm* verbs.

(57) a. Ta zai zhuozi-shang pa(-zhe) (Chinese)
he at table-top crawl-DUR
'He is crawling on the table'

b. Ta pa(*-zhe) zai zhuozi-shang
he crawl- DUR at the table-top
'He crawls onto the table'

c. Qiang-shang pa man changchunteng
wall-top crawls full ivy

d. *Qiang-shang man changchunteng pa

e. *Qiang-shang zai huayuan-li pa-zhe
wall-top in garden-inside crawl- DUR
'The wall is crawling in the garden'

(Hoekstra & Mulder 1990:18, (37))

Nevertheless, there are important differences between the stative-locative alternation and the (in)transitive-locative alternation, which hamper the viability of this analysis. For example, consider the following sets of sentences showing the dissimilar behavior

regarding the compatibility of the preposition *van* 'of' with the Totally-Affected reading of the intransitive-locative alternation (58) and the transitive locative-alternation (59), which obligatorily takes the preposition *met* 'with'.

(58) De kamer staat vol met/?van rook (Dutch)
the room stands full with of smoke
'The room is filled with smoke'

(59) a. Hij smeert boter op zijn brood
he spreads butter on his bread
b. Hij besmeert zijn brood met boter
he (off)-spreads his bread with butter
(Mulder & Wehrmann 1989:111-112, (6, 3))

Another important reason why this analysis is not feasible has to do with the impossibility of having the adjective *vol* 'full' in the stative-locative alternation in Dutch (60). Thus, a resultative analysis cannot be maintained for these verbs as they do not allow the presence of the adjective *vol* 'full' as is the case in the transitive-locative alternation.

(60) *de tuin krioelt vol van de mieren
the garden crawls full of the ants
(Mulder 1992:184, (50))

In contrast to Hoekstra & Mulder (1990) and Mulder & Wehrmann (1989), Mulder (1992) rejects an analysis based on the presence of a *vol*-clause contributing resultative semantics to the construction, and puts forward that both variants of this alternation should be classified as unergative argument structures that take prepositional adjuncts, which denote a location in the *Locatum / Location* order (61a and 62a) and a source in the *Location / Locatum* order (61b and 62b).

(61) a. de stenen rammelen in de zak
the stones rattle in the bag

b. de zak rammelt van de stones
the bag rattles of the stones

(62) a. de sterren glinsterden aan de hemel
the stars twinkle at the sky
b. de hemel glinsterde van de sterren
the sky twinkled of the stars

(Mulder 1992:189, (65-66))

As Hoekstra & Mulder (1990), Mulder confirms the adjunct status of the prepositional phrase thanks to the possibility of leaving out the prepositional phrase in the *Locatum-Subject* order (63), along with the possibility of extraposing the prepositional phrase (64) and the fact that both the prepositional phrase and the verb receive stress, as indicated with uppercase for the examples in (64).[75]

(63) a. dat de mieren krioelen in de tuin
that the ants crawl in the garden
b. ?dat de mieren krioelen
that the ants crawl

(Mulder 1992:187, (60))

(64) a. dat de mieren in de TUIN KRIOELEN
that the ants in the garden crawl

[75] Hoekstra & Mulder (1990) compare the position of the location PP in the argument structure of the *Locatum-Subject* variant (ia) and in the version with a dummy pronoun *it* as subject of the predication (ib). As evidenced by the examples, the location PPs seem to have different merging positions in the argument structures as the latter seems to rank higher the locatum PP (*with bees*) than the location PP, as shown in (ic). Thus, while in both structures the location PP behaves as an adjunct, in the *Location-Subject* variant this element seems to be more prominent in the structure. See section 3.4 for the representation of this element as a rhematic participant of the process head, that is, as a further predicational element contributing no aspectual information (cf. section 2.3 in chapter 1). As for the analysis of the variant with the dummy subject (ib-c), I won't delve into its properties here but leave it for future research.

(i) a. Which garden were bees swarming in?
b. *Which garden was it swarming with bees in?
c. What type of insect was it swarming with in your garden?

(Hoekstra & Mulder 1990:15, (30))

b. *dat de mieren in de TUIN krioelen
that the ants in the garden crawl

(Mulder 1992:188, (62))

Mulder's conclusion is that these verbs are not another instance of the locative alternation, but rather they behave as unergatives that can undergo a metaphorical meaning extension that allows the selection of subjects other than the ones characteristically appearing with these verbs, thanks to the presence of a source phrase, which, nevertheless, might be omissible. One may ask what the particular contribution of the source phrase to the semantics of the predicate is and whether its omission has truly no effect over the sequences. In section 3.4, I will relate the presence of the source phrase to the initiating entity of the event, which is semantically relevant for the interpretation of the sequence; hence the degraded readings.

3.2.2. Analyses of the stative-locative alternation in Spanish

The stative-locative alternation in Spanish has been dealt with in Mayoral Hernández (2010), who proposes a derivational approach to account for the properties of the two variants. The analysis is contingent on the properties of the preposition *de* 'of', which appears exclusively in the *Location-Subject* order, but which is argued to share the same underlying structure as the preposition *en* 'in' in the *Locatum-Subject* order. The derivational account is justified on the basis of Freeze's (1992) analysis of locative and possessive predicational relations, which establishes a direct link between them. The relevant argument structures proposed by Mayoral Hernández, consisting of a prepositional phrase that in turn embeds a locative prepositional phrase, are shown in (65).

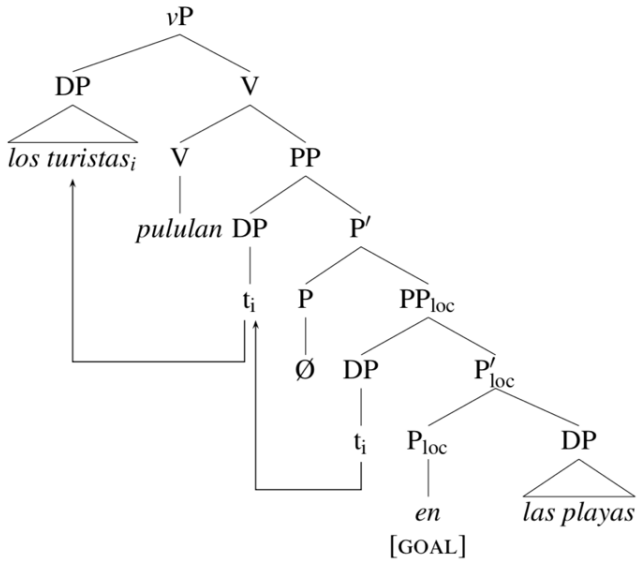
(65) a. Locative: $[_{PP}\ DP_i\ [_{P'}\ P\ [_{PPloc}\ t_i\ [_{P'loc}\ P_{loc}\ DP\ ]]]]$
b. Possessive: $[_{PP}\ DP_i\ [_{P'}\ P\ [_{PPloc}\ DP\ [_{P'loc}\ P_{loc}\ t_i\ ]]]]$

The different spell-outs of the prepositions in the alternation and the different word orders would be the result of the syntactic derivational process that makes possible the two variants. As illustrated in the structures below, the *Locatum-Subject* order is obtained

when the locatum rises to Spec,vP to satisfy the EPP (66), whereas in the *Location-Subject* variant the location rises to Spec,vP only after the locative preposition "moves up to P, acquiring then a possessive connotation" (67) (Mayoral Hernández 2010:231), which is related to a source meaning.[76]

(66) a. Los turistas pululan en las playas[77]
the tourists swarm in the beaches

b.

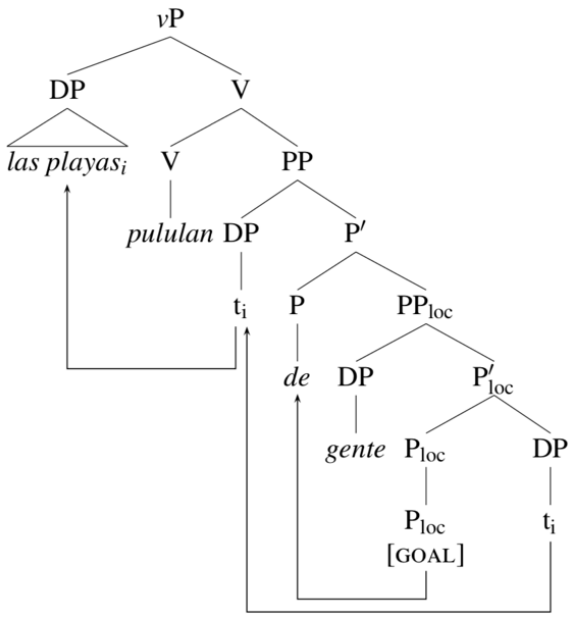


(67) a. Las playas pululan de gente
the beaches swarm with people

[76] The same underlying argument structure is assumed for the transitive-locative alternation, which in addition to the locative prepositional phrase would include a directional one to instantiate the change of location, or state, meaning of the construction. By contrast, in the stative-locative alternation the prepositional phrase would denote a locative state of the locatum, which cannot turn into a change of location event since the verb's meaning does not express change.

[77] Jaume Mateu (p.c.) notes that Mayoral Hernández's example in (66) would be more natural with the path preposition *por* 'by' in Spanish, instead of *en* 'in', in accord with the meaning of the verb in this context. Similarly, he observes that examples such as (67) might not be acceptable to all speakers since the location DP can hardly be conceptualized as the subject of the verb *pulular* 'swarm'.

b.



(Mayoral Hernández 2010:233, (41-42))

According to Mayoral Hernández (2010), the *Location-Subject* order instantiates an unaccusative argument structure, which is presumed to derive from the properties of the preposition *de* 'of' as it would provide the underlying skeleton. Additionally, the preposition would also contribute the particular semantic effects of this alternation, that is, Dowty's *full occupancy effect.* Mayoral Hernández also refers to statistical analysis to argue that these verbs behave as unaccusative since their subjects usually occur post-verbally in the locative alternation. His argumentation is based on Perlmutter's (1978) classification of these verbs as unaccusative since unergative verbs usually count with agentive subjects and, by contrast, unaccusative verbs have themes, patients, or undergoers. Allegedly, this characterization of the subjects of unaccusative verbs seems to match that of the subjects of the verbs that enter the alternation such as *brillar* 'shine'. Therefore, the unaccusativity of the stative-locative alternation seems to derive from the unaccusative properties of the verbs. Against the assumptions made in Mayoral Hernández (2010), I will argue that these verbs behave as unergatives in their default use, that is, in the *Locatum-Subject* variant. Similarly, Mayoral Hernández's analysis fails to explain why the preposition *de* 'of' is the element facilitating the derivation. If the preposition *en* 'in' in the *Locatum / Location* order is an adjunct, one may wonder how it turns out to have such a relevant role in the derivation. Mayoral Hernández does not

provide any evidence which leads to the conclusion that the preposition *en* 'in' introduces an argument of these verbs.

3.2.3. Conclusions

The approaches reviewed in this section not only offer varying perspectives on how to analyze these verbs in the *Location-Subject* order, that is, either as unergative or unaccusative, but they also differ in the properties ascribed to these verbs in their default *Locatum-Subject* order. Regarding the status of the locative DP subject in the *Location-Subject* order, Mulder & Wehrmann (1989), Hoekstra & Mulder (1990), and Mayoral Hernández (2010) take this element to be a derived subject coming from an underlying prepositional phrase; by contrast, Mulder (1992) ascertains that this element is not a derived subject but the logical subject as a result of a metaphorical extension of the meaning of the verb. Either way, this element seems to behave as the subject and topic of the sentence. Similarly, the PP denoting the locatum in the *Location-Subject* order has been argued to behave as an adjunct without explaining its inclusion in the argument structure of the verb, and why it is indispensable in most cases. Finally, as it transpires from Mulder (1992) and Mayoral Hernández (2010), one may as well ask why this element is taken to be a source path phrase and how it relates to the meaning of the verbs that enter the alternation.

In keeping with the previous discussion, I will review the properties of the verbs that characteristically enter the stative-locative alternation in Spanish and put forth an analysis that incorporates these properties. First, in section 3.3 I will establish that these verbs behave as unergative predicates cross-linguistically. Once their properties have been ascertained, I will discuss the alleged unaccusativity of the *Location-Subject* order in section 3.4, where I will also deal with the syntax and semantics of the prepositional phrase introduced by *de* in the *Location-Subject* order and argue that its characteristics arise as a consequence of its source semantics. In sections 3.4.2 and 3.4.3 I will examine interesting data from auxiliary selection in Italian that will help underpin the argument structure argued for these verbs in both variants. Section 3.4.4 presents the first phase syntax for the *Location-Subject* order in Spanish. Finally, section 3.5 concludes the discussion about the properties of the stative-locative alternation in Spanish.

3.3. Properties of the verbs that enter the stative-locative alternation in Spanish

This section provides an overview of the properties of the verbs that enter the stative-locative alternation in Spanish. First, I include a corpus of written examples of this alternation in Spanish ranging from Medieval Spanish to Modern Spanish. Next, I determine that these verbs behave as unergative dynamic process verbs in their default configuration, that is, the *Locatum-Subject* order. Building on the proposed first phase syntax for this variant, I put forth that the *Location-Subject* variant has the same basic lexical entry consisting of initiation and process heads in accordance with the syntactic and semantic properties displayed by these verbs. The analysis does not presuppose any derivational relation between both variants, but rather they are the result of the different roles undertaken by the locatum and location arguments.

3.3.1. Semantic verb classes in Romance languages that enter the stative-locative alternation

Among the verbs that enter this alternation in Spanish, it is possible to find verbs that codify (i) physical movement (68), which might be conceived as repetitive, such as *bullir* 'boil', *hervir* 'boil', *hormiguear* 'swarm', *pulular* 'swarm', *titilar* 'tremble', (ii) sounds (69) such as *reverberar* 'reverberate', *rimbombar* 'resound', *restallar* 'crack', (iii) light emission (70) such as *brillar* 'shine', *relucir* 'glitter', and (iv) abundance (71) such as *rebosar* 'overflow'. As mentioned in section 3.1, the alternation does not seem to be available with verbs codifying sounds in Spanish. The following examples illustrate their use in the *Location / Locatum* order followed by an obligatory prepositional phrase introduced by *de*.[78]

(68) *Verbs of physical movement* (Spanish)

a1. En enjambres bullía de centellas / el rostro del humilde peregrino
in swarms boiled of sparks / the face of.the humble traveler
'In swarms boiled with sparks /the face of the humble traveler'
(1659, Domínguez Camargo, *San Ignacio de Loyola. Poema heorico*)

[78] The Spanish examples have been obtained from *Google Books* and *CORDE* (Corpus Diacrónico del Español), which corroborates the existence of this construction for centuries in Spanish. All texts with no date specified belong to Modern Spanish.

a2. La playa bullía de hombres desnudos, de gesto feroz y flecha pronta
the beach boiled of men naked of gesture fierce and arrow ready
'The beach boiled with naked men, with fierce gesture and ready arrow'

a3. El padre Quintas bullía de indignación
the father Quintas boiled of outrage

b1. El secreto maíz / en vaina fresca hierve / y hierve de unos crétalos
the secret corn / in pod fresh boils / and boils of some snakes

b2. En este Gran Buenos Aires que hierve de vivísimos hijos de tanos,
in this great Buenos Aires that boils of true sons of Italians,
gallegos, turquitos y rusos
Galicians, Turkish and Russians

b3. La ciudad hierve de violencia contenida y conspiraciones contra
the city boils of violence contained and conspiracies against
el invasor francés
the invader French
'The city boils with contained violence and conspiracies against the French invader'

c1. Por la plaza que hormiguea / De multitud, como un cubo de ranas
on the square that teems / of crowd, as a bucket of frogs
'On the square that teems with masses, as a bucket of frogs'

c2. Mas güélgome (sic.) que va con tantos y más elogios el dotor
but pleases.me that goes with so.many and more praises the doctor
Felipe de Godínez, y que hormiguea de letra menuda
Felipe de Godínez and that teems of writing small
en las márgenes
on the margins
'But it pleases me that the Doctor Felipe de Godínez goes with so many and more praises and that it teems with small writing on the margins'
(1632, Quevedo, *Perinola*)

c3. algunos dellos hormiguean de peojos (sic.)
some of.them teem of lice
'Some of them teem with lice'
(1528, Huete, *Comedia Tesorina*)

d1. En 1810 Buenos Aires pulula de revolucionarios avezados en todas las
in 1810 Buenos Aires swarms of revolutionaries experienced in all the
doctrinas antiespañolas, francesas, europeas
teachings anti-Spanish, French, European
'In 1810 Buenos Aires swarmed experienced revolutionaries in all the anti-Spanish, French, European teachings'

d2. La obra de Salas Barbadillo pulula de fantasmas literarios
the work of Salas Barbadillo swarms of ghosts literary
'The work by Salas Barbadillo swarms with literary ghosts'

d3. Las carreteras pululan de hambreados por la codicia
the roads swarm of starving by the greed
'The roads swarm with people starving from greed'

e1. Los músculos de sus mejillas titilan de pánico
the muscles of his cheeks tremble of panic

(69) *Verbs of sound*

a1. cuando mi vista de la suya reverbera
when my sight of the hers reverberates
'When my sight with hers reverberates'
(1550, Figueroa, *Poesía*)

a2. En triángulo admirable hoy tres soles reverberan deste
in triangle remarkable today three suns reverberate of.this
miraglo inefable
miracle ineffable
'In remarkable triangle today three suns reverberate with this ineffable miracle'
(1508, Fray Ambrosio Montesino, *Cancionero*)

a3. sin estos soberanos rayos que de tu presencia reverberan
without these sovereign beams that of your presence reverberate
en mi bajeza
in my vile deed
(1613, San Juan Bautista de la Concepción, *Diálogos entre Dios y un alma afligida*)

b1. Todo rimbombaba de trompas, clarines, flautas y sambucas
everything echoed of horns, bugles, flutes and sambucas
c1. El mismo kiosco de los tebeos restalla de colorines
the same newstand of the comic.books boils of colors
c2. Mi sangre restalla de libertad
my blood boils of freedom

(70) *Verbs of light emission*

a1. El suelo brillaba de alfileres regados
the floor shone of pins scattered
'The floor shone with scattered pins'
a2. [El Oliverio] brillaba de vida insurrecta
The Oliverio shone of life rebel
'[The Oliverio] shone with rebel life'
b1. La penumbra reluce de suspiros
the semi-darkness gleams of sighs
b2. Su garganta reluce de pulido color negro
his throat gleams of polished color black
'His throat gleams with a polished black color'

(71) *Verbs of abundance*

a1. el mar rebosa de inmundos cadáveres
the sea overflows of filthy corpses
a2. Mi alma rebosa de gratitud y de consuelo
my soul overflows of gratitude and of relief

Similar examples were obtained for Catalan (72), Italian (73), and French (74-77), which appear below classified according to Dowty's semantic verb classes as well.[79] Note that in these examples Catalan uses the preposition *de* 'of' as well to express the locatum, which is also true for French. As for Italian, it uses the preposition *di* 'of'. I will examine the prepositions that appear with these verbs in section 3.4 of this chapter, where I put

[79] The Catalan and Italian examples have been obtained from the *Corpus Textual Informatitzat de la Llengua Catalana* and the *Instituto Treccani*, respectively. The French examples have been obtained from the work by Boons et al. (1976:242-251).

forth that they all share a common origin, which can be traced back to the Latin preposition *de* 'from', used with the ablative to refer to sources, and from which a partitive marker was later derived.

The following examples from Catalan contain verbs of physical movement such as *bullir* 'boil' and *formiguejar* 'swarm'.

(72) *Verbs of physical movemen*t (Catalan)

a1. Totes les andanes bullen de gent amb farcells i paquets
all the platforms boil of people with bundles and packages
'All platforms boil with people with bundles and packages'

a2. En Roc se la mirava de fit a fit, tenint-li agafades les
the Roc CL. her watched from fixed to fixed, having-her.DAT held the
mans, bullint de desig i de felicitat
hands, boiling of desire and of happiness
'Roc looked at her straight in the eye, holding her hands, boiling with desire and happiness'

a3. Les vies de la ciutat bullen de gernació
the roads of the city boil of multitude
'The roads of the city boil with many people'

b1. El camí formigueja de convidats
the path swarms of guests
'The path swarms with guests'

b2. S'apinyen en el canal central, que formigueja d'activitat
REF-dive in the channel central, which swarms of-activity
'They dive in the central channel, which swarms with activity'

Similarly, in Italian the alternation includes also verbs of physical movement such as *brolicare* 'swarm', *formicolare* 'crawl', and *pullulare* 'crawl'. See section 3.4 of this chapter for further discussion of the alternation in Italian.

(73) *Verbs of physical movement* (Italian)

a1. La piazza brulicava di gente
the square swarmed of people
'The square swarmed with people'

b1. In giorno di mercato, la piazza formicola di gente
in day of market the square crawls of people
'In market day, the square crawled with people'

b2. Il cielo formicolava di stelle
the sky crawls of stars
'The sky crawls with stars'

c1. Le nostre città pullulano di turisti
the our cities crawl of tourists
'Our cities crawl with tourists'

c2. Le strade pullulavano di gente festosa
the street crawled of people festive
'The streets crawled with festive people'

Finally, the French corpus includes examples of verbs of physical movement (74) such as *bourgeonner* 'sprout', *dégoutter* 'drip', *dégouliner* 'drip', *grouiller* 'swarm', and *pulluler* 'swarm', verbs of sound (75) such as *carillonner* 'ring', *couiner* 'squeak' *résonner* 'resonate', and *vrombir* 'buzz', verbs of light emission (76) such as *briller* 'shine', *éclater* 'burst', *étinceler* 'sparkle', *scinteller* 'sparkle', and *chatoyer* 'sparkle', and verbs of abundance (77) such as *regorger* 'overflow'.

(74) *Verbs of physical movement* (French)

a1. La branche bourgeonne de bourgeons
the branch sprouts of buds
'The branch sprouts with buds'

a2. Le toit dégoutte d'eau
the roof drips of.water

a3. Ce mouchoir dégouline du sang de Jean
this handkerchief drips of blood of Jean
'This handkerchief drips with Jean's blood'

a4. Cette salle grouille de monde
this room teems of people

a5. Le magasin pullule de marchandises
the warehouse swarms of merchandise

(75) *Verbs of sound*

a1. Tout la plaine carillonne de le bruit de les cloches
all the plain peals of the sound of the bells
'All the plain is ringing with the sound of the bells'

b1. Le grenier couine de cris aigus
the attic squeaks of cries high-pitched
'The attic squeaks with high-pitched cries'

c1. La rue résonnait de bruits divers
the street resonated of sounds divers
'The street resonated with various sounds'

d1. Le piste vrombissait de le bruit de ces motos
the track buzzed of the sound of these motorcycles

(76) *Verbs of light emission*

a1. Sa robe brillait de diamants
her dress shone of diamonds
'Her dress shone with diamonds'

b1. Le visage de Kean éclate de joie
the face of Kean bursts of joy
'Kean's face bursts with joy'

c1. Ce diamant étincelle d'un éclat particulier
this diamond sparkles of.a brilliance particular
'This diamond sparkles with a particular brilliance'

d1. Cette étoile scintille de une lueur étrange / mille feux
this star sparkles of a glow strange / thousand fires
'This star sparkles with a strange glow / thousand fires'

e1. Beaucoup d'étoffes chatoient de mille couleurs
many of.fabrics shimmer of thousand colors
'Many fabrics shimmer with a thousand colors'

(77) *Verbs of abundance*

a. Son esprit regorge d'idées géniales
his mind overflows of.ideas brilliant
'His mind overflows with great ideas'

The goal of the following section is to establish the syntactic and semantic commonalities among these verbs, which consistently appear in this alternation across languages. I will work towards determining the first phase syntax of these verbs in their default use as starting point to later discuss their configuration and their arguments in the stative-locative alternation.

3.3.2. The unergative first phase syntax of the verbs that enter the stative-locative alternation

The evidence presented in this section contains primarily data from Spanish, but I will also consider data from other languages, since I am assuming that a correlation can be established between the behavior of these verbs across Romance languages.

3.3.2.1. Evidence coming from case marking, auxiliary selection, the impersonal passive, and other diagnostics in several languages

To start the discussion, let us consider Di Tullio's (2001) evidence to classify these verbs as unaccusative. Following Perlmutter (1978), she considers that the verbs entering this alternation are unaccusative based on the inability of most of them to have result participles. This notwithstanding, some of them may count with other type of adjective using the suffix *-nte*, which has an active interpretation (78). She also notices that some verbs that enter this alternation do have result participles such as *rebosar* 'overflow', *chorrear* 'drip', or *desbordar* 'overflow' (79).

(78) a. *hormigueado, refulgido, retumbado (Spanish)
swarmed shone resounded
b. hormigueante, refulgente, retumbante
swarming, shining, resounding

(79) a. rebosado, chorreado, desbordado
overflowed dripped overflowed

b. rebosante, chorreante, desbordante
overflowing, dripping, overflowing

(Di Tullio 2001:139)

Thus, the evidence presented is inconclusive regarding their status, especially since in languages such as Basque, these verbs show unergative behavior even if their subjects are not agentive entities. According to Berro (2010), internal causation is considered to be the semantic basis licensing the merging of their argument in the external argument position.[80] That is why verbs such as *distiratu* 'shine' (80) and *irakin* 'boil' (81), two of the

[80] Levin & Rappaport Hovav (1995) distinguish between internally and externally caused eventualities. Internally caused events are initiated by some inherent property of the verb's argument. Among the members of this class, Levin & Rappaport Hovav include agentive verbs such as *play* and *speak* and non-agentive verbs such as *blush* and *tremble,* whose single argument and its inherent properties are the source of the event. Among the verbs whose inherent properties are the source of the onset of the event, they list verbs of emission (i), which may be further classified according to the substance emitted (1995:91, (19)).

(i) a. *Sound*: burble, buzz, clang, crackle, hoot, hum, jingle, moan, ring, roar, whir, whistle
b. *Light*: flash, flicker, gleam, glitter, shimmer, shine, sparkle, twinkle
c. *Smell*: reek, smell, stink
d. *Substance*: bubble, gush, ooze, puff, spew, spout, squirt

Internally caused eventualities do not normally causativize (ii-iii), but they may do so in the appropriate context. See also the discussion on Spanish unergative verbs that can causativize in this same section.

(ii) a. The jewels glittered/sparkled
b. *The queen glittered/sparkled the jewels

(iii) a. The doorbell buzzed/rang
b. The postman buzzed/rang the doorbell

(Levin & Rappaport Hovav 1995:92, (20); 115, (82))

By contrast, externally controlled events are triggered by an external entity, or cause, and thus the onset of the event does not depend on the affected entity. Among them, Levin & Rappaport Hovav include verbs of change and verbs of motion (iv), which are able to transitivize (v-vi).

(iv) a. *Verbs of change*: bake, blacken, break, close, cook, cool, dry, freeze, melt, open, shatter, thaw, thicken, whiten, widen
b. *Verbs of motion*: bounce, move, roll, rotate, spin

(v) a. The baker cut the bread
b. *The bread cut

(vi) a. The nurse sterilized the instruments
b. *The instruments sterilized

(Levin & Rappaport Hovav 1995:95, (28-29))

Whereas internally controlled verbs are considered monadic (viia), externally caused verbs are characterized as dyadic (viib). Thus, the adicity of these verbs hinges on their lexical semantic properties (1995:94, (27)).

(vii) a. [*x* PREDICATE]
b. [[*x* DO-SOMETHING] CAUSE [*y* BECOME STATE]]

verbs found in the stative-locative alternation, assign ergative case to the subject predicate.

(80) Eguzkia-k distiratu d-u-ø (Basque)
sun-ERG shine x-have-3SG-ERG
'The sun has shined'

(Berro 2010:1,(3))

(81) Ura-k irakin d-u-ø
water-ERG boil x-have-3SG-ERG
'The water has boiled'

(Berro 2010:47,(113))

Similarly, auxiliary selection data in Italian supports the view that these verbs are unergative, although there is some variation attested (see section 3.4.3 in this chapter for further discussion). As an example, consider the following examples from verbs of sound emission in Italian, which allow both the selection of *avere* 'have' and *essere* 'be' as auxiliaries of the perfect (82). In contrast, French (83) only allows *avoir*. Similarly, verbs of light emission appear with *have* in Dutch (84).

(82) a. Il telefono ha/ ?è squillato (Italian)
the telephone has/ is rung
b. L'eco ha/ è risuonato nella caverna
the echo has/is resounded in.the cave
c. Il tuono ha/ è rimbombato
the thunder has /is rumbled
d. La campana ha/ è rintoccata
the bell has/is tolled

(Sorace 2000:877-878, (47))

(83) a. L'écho a résonné (French)
the.echo has resonated
b. Le réveille-matin a sonné
the alarm-clock has rung

c. Le tonerre a grondé
the thunder has rumbled

(Legendre 2007:154, (20))

(84) a. De zon heeft geschenen (Dutch)
the sun has shined
'The sun shone'
b. De cello heft geglansd, maar hij is nu oud, end of geworden
the cello has gleamed but he is now old and dull geworden
'The cello gleamed, but it is old now, and has become dull'

(Levin & Rappaport Hovav 1995:139, (14))

Another diagnostic supporting the unergative status of these verbs is provided by Levin & Rappaport Hovav (1995), against Perlmutter (1978), who argue that the inability of verbs of emission to appear in the impersonal passive is not a valid argument to consider these verbs unaccusative. As shown by Zaenen (1993), the impersonal passive requires verbs whose subject can exert control over the process and, hence they must be human entities, thus, explaining the anomaly of (85) and the acceptability of (86) if *krengen* is interpreted as 'nasty women', instead of 'carcasses', as only the former entity could be in control of such process.[81]

(85) *Er werd (door de man) gegloed
there was (by the man) bled
'There was bled (by the man)'

(Zaenen 1993:131, (7b))

(86) Er werd door de krengen gestonken
there is by the nasty women/*carcasses stunk
'There is stunk by the nasty women/*carcasses'

(Zaenen 1993:139, (37))

[81] Keller & Sorace (2003) reach a similar conclusion and concur that the availability of the impersonal passive correlates with the existence of a controlling subject and an aspectually atelic predicate, or a detelicized one.

Finally, the application of several diagnostics for unaccusative behavior can provide additional evidence to support the unergative status of these verbs in other languages such as English, where this group of verbs not only allows *-er* as a derivational morpheme (87), but can also appear in the resultative structure (88-89), all of which have been considered a conclusive proof of unergative behavior (Levin & Rappaport Hovav 1995).

(87) beeper, buzzer, clicker, ringer, squeaker, blinker, flasher, sparkler, stinker, bubbler, gusher

(88) [T]hey swarmed themselves into an inextricable jam on the stairways […][82]

(89) On April 16, thousands of Spanish cattle breeders swarmed into Madrid[83]

3.3.2.2. Evidence for the unergative behavior of the verbs that enter the stative-locative alternation in Spanish

Even though these diagnostics do not apply to Spanish, it is possible to find evidence supporting the view that these verbs behave as unergative in Spanish as well. First, consider the fact that these verbs may be used as transitive, thus, confirming the presence of an external argument in their first phase syntax. In the following examples, the verbs *reverberar* 'reverberate' (90), and *titilar* 'tremble' (91) can appear with both an external argument and an internal one, which may be instantiated by an accusative clitic pronoun such as *lo* 'it'.

(90) a. tu luz lo reverbera (Spanish)
your light it.ACC.M reverberates
'Your light reverberates it'
b. Los lugares cóncavos no reverberan la boz
the places concave don't reverbate the voice.ACC
'Concave places do not reverberate the voice'

[82] Example retrieved from New York Times, February 11th, 1886, p. 8.

[83] Example retrieved from http://www.momagri.org/.

c. mármoles que reverberan al sol
marbles that reverberate to.the sun.ACC
'Marbles that reverberate the sun'

(91) Ese vocal instrumento que tan dulcemente titila nuestros oídos
that vocal instrument that so sweetly trembles our ears.ACC

The following diagnostic is based on the behavior of unergative verbs that appear with locative subjects in Romance languages (92). As described in Torrego (1989), unergative verbs can appear with an obligatory locative adverbial in preverbal position and a bare plural in post-verbal position as the logical subject, which triggers agreement with the verb.[84]

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[84] Ortega-Santos (2016) notes that temporal adverbs may also be possible as subjects in this construction:

(i) Antes anidaban palomas en este lugar (Spanish)
before nestled pidgeons in this place
(Ortega-Santos 2016:130, (112))

On another note, Torrego (1989) notices that the locative adverbial in pre-verbal position must always be specific, otherwise the sentences turn out to be ungrammatical.

(ii) a. *En ninguna habitación juegan niños
in no room play.3pl children
b. *En cuevas duermen animales
in caves sleep.3pl animals
c. *En un árbol anidarán cigüeñas
in a tree will-shelter.3pl storks
(Torrego 1989:258, (11))

In this regard, Husband (2010, 2012) has recently identified a key characteristic of stative predicates. To wit, the internal argument must be quantized in order that the subject can receive an existential interpretation. In his terms, the "existential interpretation is an interpretation where a new individual who was not presupposed in the context or shared as part of the common ground is introduced into the discourse" (2010:10). Specifically, Husband argues that the stage or individual level nature of a predicate is compositionally determined from the properties of its object and the telicity effects triggered by the quantized nature of a verb's internal argument (iii). Thus, the existential interpretation of the subject of a stative predicate hinges on the internal argument's quantized nature. A demonstrative object *qua* quantized argument could license an existential interpretation of the subject (iv). If the object were homogeneous, such as in the case of bare plurals, the subject could only be interpreted generically (v).

(iii) John built {this house/*houses} in six months

(iv) a. Monkeys live in these trees (existential possible)
b. Tycoons own this bank (existential possible)

(v) a. Monkeys live in trees (generic only)
b. Tycoons own banks (generic only)
(Husband 2012: 375, (1) ;376, (3-4))

(92) a. *(Aquí) han dormido animales (Spanish)
here have slept animals
b. *(En este parque) juegan niños
in this park play children
c. *(En este árbol) anidan cigüeñas
in this tree shelter storks

(Torrego 1989:255, (5))

It is a well-known fact that the subject of an unaccusative verb is characteristically generated in object position, which explains the contrasts of grammaticality shown below with unaccusative and unergative verbs with a post-verbal bare plural subject (93), as only unaccusative verbs allow the presence of such elements post-verbally. The behavior of unergative verbs with a pre-verbal locative adverbial in Spanish resembles that of unaccusative verbs under normal circumstances (93c).[85]

The novelty of Husband's proposal consists in pinpointing the importance of objects in the availability of the existential interpretation. Notice that the notion of object in Husband encompasses not only direct objects but also prepositional phrases as long as they are part of the first phase syntax of the verb, in the terms of this dissertation (iva). On the other hand, Husband's proposal is based on data from English, which allows bare plurals in subject position; nevertheless, in Spanish, bare plurals can only appear in object position. I would like to argue that this fact does not hinder the applicability of Husband's correlation between the quantization of the internal argument and the availability of an existential interpretation of the subject. As a matter of fact, the examples retrieved from Torrego (1989) in (99) precisely show that the existential interpretation of the bare plural in internal argument position, as logical subject of the unergative verb, is facilitated by the presence of a quantized demonstrative DP in the locative phrase. This notwithstanding, note that (99c) does not render an acceptable sequence, even though it is a quantized noun phrase, due to its unspecificity. It seems, then, that quantization and specificity for the pre-verbal locative adverbial are two required properties in this construction.

[85] As noted by Ortega-Santos (2016), the subjects of unaccusative verbs may appear post-verbally without apparent semantic consequences or altering the neutral information structure. The same holds true for unergative verbs with a pre-verbal locative adverbial, whose presence is fundamental for the grammaticality of the sequence with a bare plural NP (cf. 94-96). This evidence is particularly telling of the position of the bare plural NP in the verbal phrase as an internal argument. The incidence of the locative adverbial with unergative verbs is not reduced to Spanish but rather it is also of vital importance in Catalan. Mateu & Massannell i Messalles (2005) argue for an unaccusative argument structure for unergative verbs with pre-verbal locative adverbials in Catalan. As the examples in (ia) and (ib) show, unergative verbs cannot have post-verbal bare plural subjects unless a locative phrase such as *hi* 'there' appears pre-verbally. The possibility of using the clitic pronoun *en* to substitute the NP would provide additional evidence for the internal status of this element. See Mateu & Rigau (2002) for the original proposal and further examples in Catalan and Italian dialects.

(i) a. Els joves canten (Catalan)
the boys sing.3PL
b. *Canten joves
sing.3PL boys

(93) a. Pasan camiones / Llegan invitados
pass.3PL trucks / arrive.3PL guests
b. *Trabajan mujeres / *Ríen niños
work.3PL women / laugh.3PL children
c. *(Aquí) anidan cigüeñas
here shelter storks

Torrego (1989) and Ortega-Santos (2016), among others, have argued that the locative adverb satisfies the EPP feature in T, which requires some element to occupy the sentence-initial position, normally realized by the external argument of transitive and unergative verbs. Unergative verbs in the existential construction behave as unaccusative verbs whose subject remains in-situ in the internal argument position without altering the neutral information structure. The examples in (94-96) illustrate the analogous behavior of unergatives with post-verbal bare plural NPs and unaccusative verbs. On the other hand, a comparison between the information structure of transitive verbs and unergative verbs with a pre-verbal locative leads Ortega-Santos to the conclusion that the locative adverbial assumes the same role as that of a transitive verb's pre-verbal subject, that is, both the pre-verbal locative and the subject occupy the specifier position of T.[86]

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c. (En aquesta coral) hi canten joves
in this choir LOC.CL sing.3PL boys
'There are boys singing (in this choir)'
d. (En aquesta coral), (de joves) n'hi canten molts
in this choir of boys PART.CL.-LOC.CL sing.3PL many
'There are many boys singing (in this choir)'
(Mateu & Massannell i Messalles 2015:198-199, (22))

[86] Additional evidence for the presence of a locative adverbial in Spec,TP in Spanish has been provided by Fernández Soriano (1999), who argues that the EPP feature in T, the agreement of φ-features, and the assignment of nominative case can be satisfied by different elements in the derivation. Specifically, T's requirement for a specifier can be satisfied by a non-agreeing, non-nominative phrase such as a locative adverbial, as a consequence of which, the assignment of nominative case would be satisfied by an element appearing post-verbally. This element may well be a non-definite noun phrase such as a bare plural. Fernández Soriano applies this analysis to impersonal predicates such as *faltar* 'lack', *sobrar* 'be left', etc., with preverbal locative adverbials.

(i) Aquí falta / sobra café / un vaso (Spanish)
here misses / is-extra coffee / a glass
'Coffee / a glass is missing here'
(Fernández Soriano 1999:103, (1b))

(94) A: ¿Qué ocurre?
'What's going on?'
B1: Ha llegado Pedro / un hombre
has arrived Pedro / a man
'Pedro / A man has arrived'
B2: (#)Pedro / un hombre ha llegado
Pedro / a man has arrived

(Ortega-Santos 2016:126, (100))

(95) A: ¿Qué ocurre?
'What's going on?'
B: *(En esta casa) anidan palomas
in this house nest pigeons
'Pigeons nest in this house'

(Ortega-Santos 2016:129, (107))

(96) A: ¿Qué ocurre?
'What's going on?'
B1: Pedro está leyendo un libro en esta casa
Pedro is reading a book in this house
'Pedro is reading a book in this house'

In these predicates, the locative adverbial behaves as the subject of the predication, since its preverbal position does not alter the neutral information structure of the sentence, that is, the locative occupies the position of "normal" subjects.

(ii) A: ¿Qué pasa/pasó?
B1: En esta casa falta café
B2: #En el parque me regaló el anillo

(Fernández Soriano 1999:105, (4a, e))

Therefore, according to Fernández Soriano, the event is not predicated of an entity but instead of the locative adverbial that plays the role of subject of the predication. The same is true of unergatives in the existential construction, in which an event is predicated of a contextually determined location.

(iii) "[T]he event/state is predicated of the locative, which therefore behaves as the subject of the construction in a wider sense, because it not only raises to [Spec,TP] but also is generated in the highest position within the clause."

(Fernández Soriano 1999:115)

B2: #En esta casa {Pedro está leyendo / está leyendo Pedro} un libro
in this house Pedro is reading / is reading Pedro a book
(Ortega-Santos 2016:129, (108))

Another piece of evidence confirming the internal position of the bare plural is the possibility of using a post-verbal partitive phrase such as *de todo* 'of everything' or a *de*-DP 'of-DP' as the logical subject of the verb.

(97) a. Aquí anida de todo (Spanish)
here shelters of everything
b. Aquí anidan de esos pequeños gorriones de plumas café
here shelter of those small sparrows of feathers coffee

According to Treviño (2004, 2010), these nominal elements appear exclusively in the internal argument position of transitive verbs (98-99), unaccusatives, reflexives, impersonal *se,* etc. Unsurprisingly, they may also appear in the transitive-locative alternation as the internal argument of the verb (100). As a consequence of their internal position in the VP, they are rejected in the external argument position as subject of unergative and transitive verbs (101).[87]

[87] This notwithstanding, there are some differences in the properties of these items. Briefly, *de todo* denotes an indefinite variety of items but may not include proper nouns, or work with certain verbs due to lexical restrictions (see Treviño 2004 for further discussion). Bare partitives' behavior would be closer to that of full partitives in Spanish since, as the latter, they denote a subset of a superset.

(i) Me voy a mudar de casa y estoy vendiendo de todo (Spanish)
CL.1SG go to change of house and am.1SG selling of everything
a. desde chácharas hasta aparatos eléctricos
from junk to appliances electric
b. libros, cacerolas, plantas …
books, pots, plants
c. *# libros y discos
books and records

(ii) Varios de mis estudiantes asistieron a la reunión
several of my students attended.3PL to the meeting
'Several of my students attended the meeting'
(Treviño 2004:391, (34); 50, (1a))

In contrast to *de todo* and *de*-DP, notice that full partitives may appear as the external argument of the predicate. In turn, *de todo* and bare partitives contrast with full partitives in Spanish inasmuch as they trigger an atelic reading of their verb, while the former are capable of rendering a telic interpretation.

(98) Comió / llegó / se hizo / se vendió de todo
ate / arrived / CL. made / CL. sold of everything

(99) a. No hemos conseguido *de esos cactus miniatura* en ninguna parte
Not have.1PL gotten of those cactus miniature in any place
'We have not gotten [any] of those miniature cactus anywhere'
b. Te traje del chocolate que te gusta
to.you brought.1SG of.the chocolate that to.you like3SG
'I brought you [some] of the chocolate that you like'
(Treviño 2010:50, (2a, b))

(100) a. *Ya cargamos de todo con libros
already loaded of everything with books
b. Ya cargamos de todo en el camión
already loaded of everything in the truck

(101) a. *Trabajó de todo
worked of everything
b. *De todo vendió en la tienda
of everything sold in the store

Treviño (2010) characterizes *de* in the *de*-DP phrase as a determiner rather than as a preposition on the basis of data such as (102), where the bare partitive triggers agreement with the verb.[88] This is consistent with the previously discussed examples

(iii) a. Andrea picó algunas de las cebollas moradas (en cinco minutos)
Andrea chopped.3SG some of the onions mulberry (in five minutes)
'Andrea chopped some of the mulberry onions (in five minutes)'
b. Andrea picó de las cebollas moradas / de todo (#en cinco minutos)
Andrea chopped.3SG of.the onions mulberry / of everything (in five minutes)
(Treviño 2010:60, (14a, 15a))

[88] Another important insight from Treviño's research is that these elements cannot appear in preverbal position unless they are topicalized, since they represent new information in the discourse.

(i) a. Llegaron de las/esas plumas que solicitaste en el embarque de ayer (Spanish)
arrived.3PL of the/those feathers that requested.2SG in the shipment of yesterday
'There arrived [some] of the/those feathers you requested in yesterday's shipment'
b. ??De las/esas plumas que solicitaste llegaron en el embarque de ayer
of the/those feathers that requested.2SG arrived.3PL in the shipment of yesterday

where the bare plural NP triggers agreement with the verb as well (103). It seems then that the bare plural NP agrees with inflection and receives nominative case in its in-situ position in the verbal phrase.

(102) a. Aquí anida de todo
here shelters of everything
b. Aquí anidan de esos pequeños gorriones de plumas café
here shelter of those small sparrows of feathers coffee

(103) Aquí *ha/han dormido animales
here has/have slept animals

Now that we have established a background on how the *de todo* 'of everything' partitive phrase works, it can be used to test whether the verbs that enter the stative-locative alternation pattern with unergative verbs that take locative subjects and behave as unaccusative verbs. The following examples with *pulular* 'swarm' (104), *brillar* 'shine' (105), and *hervir* 'boil' (106) show that this diagnostic also applies to the verbs entering the stative-locative alternation, confirming vicariously their unergative status.[89] These examples conform to the pattern displayed by unergative verbs with locative subjects, where a locative adverbial or prepositional phrase appears preverbally to satisfy the EPP and an indefinite noun phrase such as *de todo* 'of everything' appears in the post-verbal position and establishes agreement with the verb as its logical subject.

(104) *En su conformación* participaron una serie de grupos y organizaciones
in its configuration participated a series of groups and organizations
"sociales", así como poderes fácticos y hasta atencos.
social as well powers real and even atencos
Pululó de todo, excepto ciudadanos realmente comprometidos
swarmed of everything except citizens truly committed

c. DE LAS/ ESAS PLUMAS que solicitaste, llegaron en el embarque de ayer
OF THE/THOSE FEATHERS that requested.2SG, arrived.3PL in the shipment of yesterday
(Treviño 2010:72-73, (34))

[89] The mentioned examples were obtained via www.google.com.

'In its configuration a series of groups and "social" organizations participated, just as real powers and even *atencos*. It swarmed with everything, except for truly committed citizens'

(105) y en ese momento, en sus ojos brilla de todo menos cloro de piscina
and in that moment in his eyes shines of everything except chlorine of pool
'And in that moment, his eyes swarm with everything except chlorine'

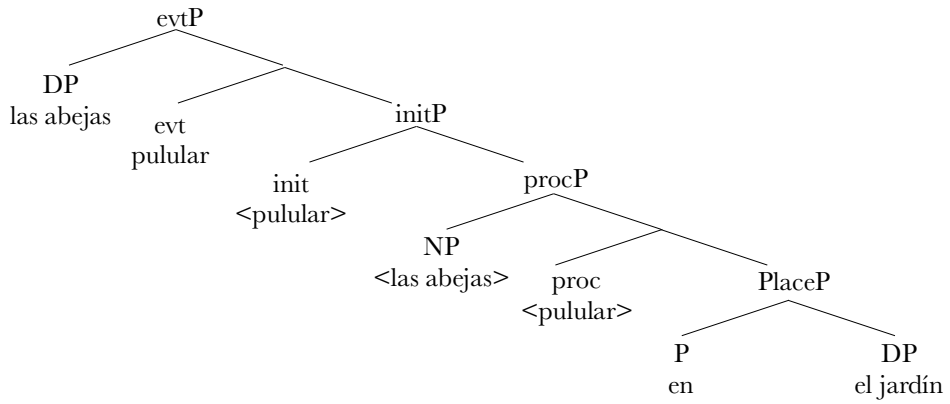
(106) una suerte de olla podrida en la que hierve de todo
a sort of pot rotten in which boils of everything
'A sort of rotten pot in which it boils with everything'

To sum up, the verbs that enter the stative-locative alternation are classified as internally caused unergative verbs; as a consequence, their single argument cannot be said to be agentive or show control over the event. This characterization of the subject is not problematic in Ramchand's first phase syntax as initiators are, simply, entities whose properties, or behavior, allow them to bring into existence the event regardless of its ability to display agentivity. As specified in the lexical entry for the verb, the DP is linked in the syntax with the role of initiator of the event. Another important property of the subjects of these verbs is that they are not only self-initiating, but they also undergo change, which allows them to occupy the position of specifier of process as well. Thus, their first phase syntax would consist of an initiation and process head (107). Inasmuch as there is no change of state or final location implied in these events, they are characterized as atelic.[90]

(107) a. Las abejas pululan en el jardín
the bees swarm in the garden

[90] This characterization does not prevent them from having a path or res phrase, which may further specify the nature of the event and facilitate a telic reading, as it would be case with verbs such as *run*, *dance*, *swim*, etc., which may appear together with a path prepositional phrase or res head such as *into X,* or a rheme DP such as *a mile* (Ramchand 2008:71). See chapter 1 for further discussion.

b.



3.3.2.3. The non-stative nature of unergative verbs

After examining the properties of the verbs appearing in the stative-locative alternation in Spanish, it has been determined that they behave as unergative verbs. Yet this alternation is characterized as stative, which raises the question of how to reconcile these apparently conflicting notions.

Following up with the discussion in chapter 3, I assumed with Silvagni (2017) that states and events differ in terms of the presence or absence of a stage, or spatio-temporal unit (Carlson 1977, Kratzer 1989), instead of being based on the notion of dynamicity, since as argued by Silvagni there does not seem to exist a linguistic correlate of such extra-linguistic notion in language. Thus, dynamicity is considered an epiphenomenon of events rather than their defining property. As a consequence, eventualities can be classified in states and events, which in turn can be subclassified in non-dynamic and dynamic events. Silvagni's definition of dynamicity, which obtains whenever a sequence of stages or spatio-temporal units is triggered by the action of an entity able to produce a specific event, is a property encoded in the event's first phase syntax and identified with Ramchand's initP. Remember that the ability of an entity to become an initiator does not depend on agentivity, but rather on their ability to generate such an event. Thus, in Silvagni's account dynamicity is correlated with the notion of action, as a necessary condition to obtain a succession of stages. In accordance with this definition of event, in chapter 3, I redefined the denotation of Ramchand's process head as a subevent that contains a spatio-temporal unit, to which an initiation event may be attached if the event is the result of an action carried out by an entity able to fulfill such an event.

Let us test the availability of the init and proc heads assumed for these verbs according to the criteria established by Silvagni (2017). I will first put to the test the presence of spatio-temporal stage, and finally I will examine the availability of an action component, that is, an init head in their first phase syntax.

To establish the existence of a stage, or a spatio-temporal unit, Silvagni (2017) proposes a series of diagnostics such as the compatibility with the copula *estar* 'be' (108), locative and comitative adjuncts (109), depictives (110), verbs of perception (111), quantification (112), the availability of an eventive interpretation in the present tense (113), and the possibility to embed a predicate in the sentence *"what happens is …"* (114). To establish a comparison with internally-caused verbs, I will use an event predicate with the verb *correr* 'run' and a predicate with the verb *saber* 'know', as an instance of state. The first diagnostic puts to the test the compatibility of the verbal predicates with the copula *estar* 'be' in Spanish, which is characteristically compatible with predicates that contain a stage in their denotation (Silvagni 2017:121). As shown in (108), only stative predicates such as *saber* 'know' are incompatible with the copula.[91]

(108) *Estar* 'be'

a. está corriendo / *sabiendo
   is running / knowing

b. está pululando / hirviendo / rebosando / brillando / resonando
   is swarming / boiling / overflowing / shining / resonating

[91] Interestingly, internally caused verbs have adjectives formed with the suffix *-nte*, which denotes an entity with an active involvement. These adjectives characteristically appear with the copula *ser* 'be' in Spanish as they denote Individual-Level properties (ia,b,c). Some of them may also appear with the stage-level copula *estar* 'be' (id), while others may be coerced to be used with this copula as well (ie,f,g).

(i) a. *está/es hirviente (Spanish)
   is boiling
b. *está/es titilante
   is trembling
c. *está/es resonante
   is resonating
d. está / es rebosante
   is overflowing
e. #está / es corriente
   is running
f. #está / es pululante
   is swarming
g. #está / es brillante
   is shining

The next diagnostic tests the compatibility of verbs with event modifiers targeting the spatio-temporal stage available only in eventive predicates. Silvagni (2017:123) singles out locative and comitative adjuncts as the only types of modifier restricted to events, that is, eventualities with a spatio-temporal unit in their denotation, which explains the incompatibility of the state *saber* 'know' (109b).

(109) *Locative and comitative adjuncts*

a. Ana corre en la pista con su entrenadora
   Ana runs in the track with her trainer

b. *Ana sabe la respuesta en clase con sus compañeros
   Ana knows the answer in class with her classmates

c. La abeja pulula entre las flores con las mariposas
   the bee swarms among the flower along.with the butterflies

d. El agua hierve en el cazo con las verduras
   the water boils in the pot along.with the vegetables

e. La leche rebosa en el cazo con el arroz
   the milk overflows in the pot along.with the rice

f. El fluorescente titila en la sala junto con los leds
   the fluorescent trembles in the room along with the leds

g. La luna brilla en el cielo junto con las estrellas
   the moon shines in the sky along with the stars

h. El altavoz principal resuena en la sala junto con los otros altavoces
   the speaker main resonates in the room along with the other speakers

Similarly, depictives are only compatible with events such as *correr* 'run' (110a) and internally caused verbs (110c-h). By contrast, they are incompatible with states as shown in (110b) for the verb *saber* 'know'.

(110) *Depictives*

a. Ana corre angustiada en la pista
   Ana runs worried in the track

b. *Ana sabe la respuesta cansada
   Ana knows the answer tired

c. La abeja pulula nerviosa entre las flores
the bee swarms nervous among the flowers
d. El sol hierve, pesado y candente, en mi enflaquecido cerebro
the sun boils, heavy and red-hot, in mi thin brain
e. El café rebosa espumoso por el borde
the coffee overflows frothy over the bream
f. Una luz titila incandescente en la noche
a light trembles incandescent at the night
g. La estrella brilla temblorosa entre las nubes
the star shines flickering among the clouds
h. El altavoz resuena distorsionado en mitad de la multitud
the speaker resonates distorted in middle of the crowd

Other instances of diagnostics targeting the spatio-temporal unit of events are perception verbs (111) and quantification over the eventive variable by means of *siempre* 'always' (112), which show comparatively identical results as the previous tests.

(111) *Verbs of perception*

a. Vi a Ana correr en la pista
saw to Ana run in the track
b. *Vi a Ana saber la respuesta
saw to Ana know the answer
c. Vi la abeja pulular entre las flores
saw the bee swarm among the flowers
d. Vi el agua hervir
saw the water boil
e. Vi la leche rebosar
saw the milk overflow
f. Vi el fluorescente titilar
saw the fluorescent tremble
g. Vi el sol brillar
saw the sun shine

h. #Vi el altavoz resonar
saw the speaker resonate

As reported by Silvagni (2017:127), only predicates with an event variable can be bound by quantifiers such as *cada vez que* 'everytime that' or *siempre que* 'whenever' in the absence of any other variable.

(112) *Quantification*

Cada vez/ siempre que …

a. Ana corre en la pista, sus amigos la animan
Ana runs in the track, her friends her.ACC cheer.up

b. *Ana sabe la respuesta, el profesor está contento
Ana knows the answer the teacher is satisfied

c. las abejas pululan entre las flores, el perro sale corriendo
the bees swarm among the flowers the dog leaves running

d. el agua hierve, baja el fuego
the water boils, turns.down the heat

e. la leche rebosa en el cazo, tengo que limpiar todo
the milk overflows in the pot, have to clean everything

f. el fluorescente titila, voy a comprar uno nuevo
the fluorescent trembles go to buy a new.one

g. El sol brilla, salimos a pasear
the sun shines, go.out to stroll

h. El altavoz resuena, cierro las ventanas
the speaker resonates close the windows

In the present tense, only events can be interpreted as happening in the present moment, independently of their dynamicity, which is the reason why all predicates in (113), both states and events, are compatible with this reading.

(113) *Eventive interpretation in the present tense*

a. Ana corre en la pista (aquí y ahora)
Ana runs in the track here and now

b. Ana sabe la respuesta (aquí y ahora)
Ana knows the answer here and now
c. La abeja pulula entre las flores (aquí y ahora)
the bee swarms among the flowers here and now
d. El agua hierve (aquí y ahora)
the water boils here and now
e. La leche rebosa en el cazo (aquí y ahora)
the milk overflows in the pot here and now
f. El fluorescente titila sin parar (aquí y ahora)
the fluorescent trembles without stop here and now
g. El sol brilla en todo su esplendor (aquí y ahora)
the sun shines in all its brightness here and now
h. El altavoz resuena a 423MHz (aquí y ahora)
the speaker resonates at 423MHz here and now

Similarly, these predicates can be embedded in the phrase *"lo que pasa es que …"*, referring to a happening of an event (114).

(114) *What happens is …*
Lo que pasa es que …
a. Ana corre en la pista
Ana runs in the track
b. Ana sabe la respuesta
Ana knows the answer
c. Las abejas pululan entre las flores
the bees swarm among the flowers
d. El agua hierve
the water boils
e. El fluorescente titila
the fluorescent trembles
f. El sol brilla
the sun shines

g. El altavoz resuena
the speaker resonates

To determine the presence of an action component, Silvagni (2017) uses as diagnostics the compatibility of a predicate with the paraphrasis with *hacer* 'do' (115), the imperative mood (116), the availability of a habitual interpretation in the present tense (117), and the availability of a prospective reading in the future (118). To establish a comparison, I will use a predicate with the verb *correr* 'run', which I think can be uncontroversially regarded as an instance of an active event, and a predicate with the verb *estar cansada* 'be tired', as an instance of a predicate lacking an action component. The diagnostics consistently show that the verbs that enter the stative-locative alternation contain an action component, here identified with the presence of an init head in their first-phase syntax.

(115) *Paraphrasis with* hacer *'do'*

a. Lo que hace Ana es correr
what does Ana is run
b. *Lo que hace Ana es estar cansada
what does Ana is be tired.F
c. Lo que hace la abeja es pulular
what does the bee is swarm
d. ?Lo que hace el agua es hervir
what does the water is boil
e. Lo que hace la leche es rebosar en el vaso
what does the milk is overflow in the glass
f. Lo que hace el fluorescente es titilar
what does the fluorescent is tremble
g. Lo que hace el sol es brillar
what does the sun is shine
h. Lo que hace el altavoz es resonar a 423MHz
what does the speaker is resonate at 423MHz

Note that the abnormality of using the imperative mood (116) with internally caused verbs can be explained away assuming that the initiating entity needs to be able to produce an intentional action. That is why only the predicate with the verb *correr* 'run' is grammatical in this diagnostic, as internally-caused verbs do not presuppose an intentional involvement of their subject entity.

(116) *Imperative*

a. ¡Corre!
run

b. *¡Está cansada!
be tired.F

c. # ¡Pulula!
swarm

d. # ¡Hierve!
boil

e. # ¡Rebosa!
overflow

f. # ¡Titila!
tremble

g. # ¡Brilla!
shine

h. # ¡Resuena!
resonate

In the present tense, predicates with an active reading can be interpreted as happening in the present moment or as a habitual event, that is, as a frequently occurring situation (Silvagni 2017:170). The examples in (117) are compatible with both these readings except for the non-active event with *estar cansada* 'be active'.

(117) *Habitual interpretation in the present tense*

a. Ana (normalmente) corre durante una hora
Ana usually runs for an hour

b. #Ana (normalmente) está cansada
Ana usually is tired.F

c. La abeja (normalmente) pulula entre las flores
the bee usually swarms among the flowers

d. El agua (normalmente) hierve cuando alcanza los 100ºC
the water usually boils when reaches the 100ºC

e. La leche (normalmente) rebosa en el cazo
the milk usually overflows in the pot

f. El fluorescente (normalmente) titila sin parar
the fluorescent usually trembles without stop

g. El sol (normalmente) brilla en todo su esplendor
the sun usually shines in all its brightness

h. El altavoz (normalmente) resuena a 423MHz
the speaker usually resonates at 423MHz

Finally, active events have a default prospective reading in the future tense, while non-active events, such *as estar cansada* 'be tired', trigger only an epistemic reading (Silvagni 2017:171).

(118) *Prospective reading of the future*

a. Ana correrá durante una hora
Ana will.run for an hour

b. #Ana estará cansada
Ana will.be tired.F

c. La abeja pululará entre las flores
the bee will.swarm among the flowers

d. El agua hervirá cuando alcance los 100ºC
the water will.boil when reaches the 100ºC

e. La leche rebosará en el cazo
the milk will.overflow in the pot

f. El fluorescente titilará sin parar
the fluorescent will.tremble without stop

g. El sol brillará mañana
the sun will.shine tomorrow
h. El altavoz resonará a 423MHz
the speaker will.resonate at 423MHz

3.3.3. Conclusions

The evidence presented in section 3.3.2.1 and 3.3.2.2 confirms that the verbs that enter the stative-locative alternation in Spanish are unergative predicates in their default configuration with a locatum subject DP and a locative adjunct in the form of a prepositional phrase. Additionally, according to the sets of data discussed in section 3.3.2.3, it has been determined that these verbs are not stative but rather they should be characterized as dynamic since they contain a spatio-temporal unit and an action component instantiated by a process head and initiation head, respectively. Following this characterization of the first phase syntax of these verbs in their *Locatum-Subject* order, in section 3.4 I present my proposal for the *Location-Subject* variant.

3.4. The first phase syntax of the stative-locative alternation

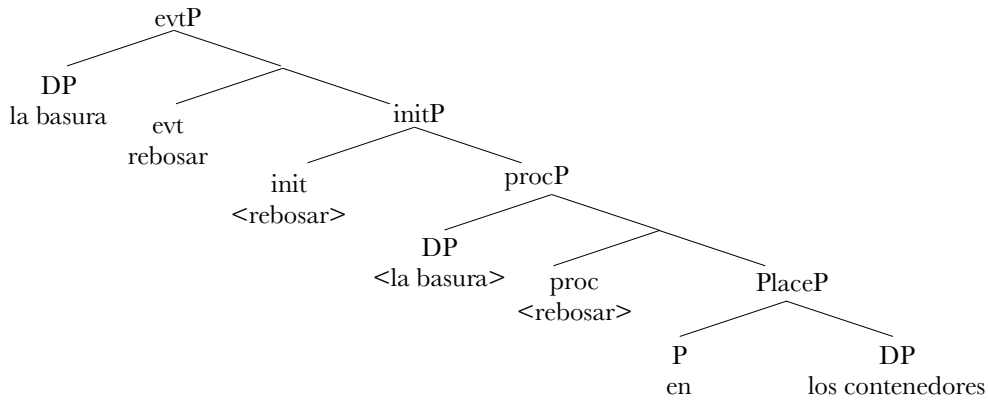
My proposal for the verbs that enter the stative-locative alternation in Spanish is that they have the same basic lexical entry in both the *Locatum-Subject* and *Location-Subject* variants. Specifically, the lexical entry for these verbs contains an init and proc category labels in accordance with the syntactic and semantic properties displayed by these verbs, which have been examined in the previous section (119). The first phase syntax comprises two event participants, initiator and undergoer, which, I hold, are present in both variants of the alternation. Note that I do not presuppose a derivational relation between the two variants as there is no evidence supporting the view that the locative phrase in the *Locatum-Subject* order is more than an adjunct place phrase. What sets apart the two variants are the roles undertaken by the entities partaking in the event.

(119) *Internally-caused verbs:* [init$_i$,proc$_i$]

For ease of exposition I repeat the first-phase syntax of the *Locatum-Subject* variant below as (120). As shown, the verb root instantiates the init and proc heads of the event and the location is instantiated as an adjunct PlaceP. The init head introduces dynamicity in the structure and determines the interpretation of the locatum argument as the initiator of the event, which appears realized in the specifier position of evtP. Note that, in addition to the role of initiator, the locatum is also conceptualized as the undergoer of the event.

(120) a. La basura rebosa en los contenedores
the garbage teems in the dumpsters

b.

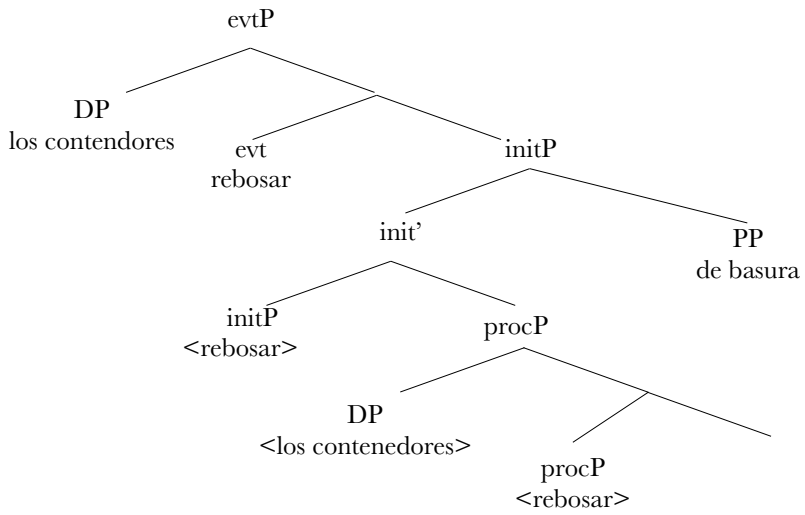


The *Location-Subject* variant presents several differences when compared to the previous structure. As can be observed in the representation of its first-phase syntax in (121), the roles of the event participants are somewhat altered. First, the location argument appears as the specifier of evtP, a position to which it raises from the specifier of the proc head. Thus, this element assumes the function of subject of the predicate and triggers agreement with the verb as no other element is available to assume this position. In terms of the current configuration, the location is not a proper initiator of the event but rather an undergoer and, consequently, does not properly meet the requirements to initiate the event denoted by the verb. Yet, the event remains being internally caused by an entity whose properties or behavior endows it with the capability of bringing it into existence regardless of the entity's ability to display agentivity. This element can be found as a modifier of the init head, which I will identify as a prepositional cause phrase, and which Mulder (1992) had previously characterized as a source phrase. The argued causative meaning of the prepositional phrase headed by *de* 'of' stems from its basic

meaning of origin or separation between two independent entities with different prominences. The apparently ambivalent meaning of the labels cause and source will be discussed in the following section, where I present evidence supporting the view that causes and sources are related concepts as expressed in the preposition *de* 'of', consistent with the diachronic evolution of this preposition in Romance, which took over the properties of several other prepositions in Latin, namely, *de*, *ab*, and *ex*.

(121) a. Los contenedores rebosan de basura
the dumpsters teem of garbage

b.



In the following sections, first, I provide support for the claim that the prepositional phrase introduced by *de* 'of' codifies causative meaning and examine how this meaning arises in Spanish in the context of Romance languages. Following Carlier & Lamiroy (2014), in section 3.4.1, I will briefly review the evolution of the preposition *de* 'from' from Latin to Romance languages. Interestingly, note that in Dutch and German the preposition introducing the *Location-Subject* variant would also have a source meaning, Sections 3.4.2 examines data from Italian internally-caused verbs in the stative-locative alternation. Section 3.4.3 present auxiliary selection data, which corroborates the existence of differences between the two variants of the alternation lending arguments to reject Mulder's (1992) view, according to whom the two orders share the same argument structure except for the presence of a source phrase in the *Location-Subject* variant. Finally, section 3.4.4 discusses the structural ambiguity between source paths and the cause PP argued for the *Location-Subject* variant.

3.4.1. The fine line between source paths, the ablative case, and partitives

As in most Romance languages, the Spanish preposition *de* 'from' joined together the Latin prepositions *de*, *ab*, and *ex*, whose common ground was a meaning of separation from a point of origin. Specifically, in Latin, *de* indicated a downward movement, *ab* indicated an outward movement from a point outside the referent (without contact with it), and *ex* indicated an outward movement from inside the referent. According to Company & Sobrevilla (2014:1377), the grammaticalization of *de* 'from' and its capability to join together these various semantic relations was facilitated by the origin and separation meanings of the Latin preposition *de* followed by the ablative, which among its various meanings included one of separation of an entity from a point of origin, that is, an asymmetrical relation between two independent entities, where one is more prominent than the other (Company & Sobrevilla 2014). In a certain way, the separation meaning of the ablative case makes it close to the partitive case with which it shares the metaphoric meaning of *wholes as origins*, from which part-whole relations can be metonymically derived (Company & Sobrevilla 2014, Luraghi & Kittilä 2014). In fact, according to Luraghi & Kittilä (2014), it is not at all uncommon that partitives develop diachronically from ablatives, expressing source or origin, to denote part-whole relations. Thereafter, the next possible stage of the grammaticalization cline would be the evolution of the partitive marker into a marker of indefiniteness, which effectually happened in the evolution from Latin to Romance in French and, in some measure, in Italian. Nevertheless, note that in Italian the paradigm is slightly more complex as two different prepositions were obtained instead, *di* and *da*. *Di* stems from the Latin preposition *de* as a marker of genitive case, whereas *da* is the result of the Latin preposition *de* and the ablative case (Carlier & Lamiroy 2014).[92] In addition to the partitive meaning developed from the combination of the preposition with the ablative case, the preposition *de* is also capable of codifying several other meanings including cause, source, agent, part-whole relations such as the ones denoted by the partitive, among others. To understand how this is possible, let us briefly sketch the grammaticalization cline of the preposition into a partitive marker from Latin to

[92] In Late Latin, there were both a partitive genitive for adnominal complements and a prepositional partitive introduced by the preposition *de* 'of', with different degrees of productivity. According to Carlier & Lamiroy (2014), the use of the prepositional partitive in object position instead of using an accusative noun phrase would be the source of the prepositional partitive form with *de* in Romance languages.

Romance with special reference to its development in Spanish. The proposed chronology is based on Carlier & Lamiroy's (2014) study on the grammaticalization cline of this preposition, who put forth the existence of five stages with different degrees of completion for Spanish, French, and Italian.

In the first stage of the development of the preposition, the spatial meaning expressing downward movement begins to disappear to simply codify separation from a referent. This use of *de* is attested along with uses of the ablative with noun phrases and uses of the prepositions *ex* and *ab* with the ablative case. Among the verbs that appeared with the preposition *ab*, we may include the verb *pullulare* 'sprout' (122), from which the Spanish verb *pulular* 'swarm' stems and used with the preposition *de*, not only in Spanish but also in French.

(122) Pullullat ab radice (Latin)
sprouts from root
(Virgil, *Georgicon*, 2)

Carlier & Lamiroy note that a consequence of this new function of *de,* followed by the ablative to express separation from an origin, is the loss of the distinction between the ablative and the genitive case in Spanish and French, which would eventually end with the substitution of the genitive for the ablative.

Due to the increasing loss of the spatial meaning of the preposition, in the second stage of the grammaticalization process *de* begins to be consistently used to introduce the oblique complement of the verb. Carlier & Lamiroy (2014:483) note that the preposition includes now new meanings such as "lineage, extraction and partition, and temporal meaning".

In the third stage, the preposition *de* experiences another loss of meaning and begins to work as an adverbal "relator" appearing with verbs denoting processes such as *eat*, *drink*, or *take*, without any spatial implication and simply serving to indicate a "partition set" out of which an indefinite portion is selected. At this point, the use of the preposition with this sense of partition is only attested with mass and countable nouns such as *agua* 'water' (123). According to Sánchez Lancis (2009), the partitive meaning of the preposition arose during Medieval Spanish, when *de* took over the uses of the Latin preposition *ex.*

(123) E pretar los has fuertemente que no *y* quede del agua (Spanish)
and press them have.to tightly. so.that no there left of.the water
'and press them together tightly so that there is no water left in them'
(1380-1385, Ferrer Sayol, *Libro de Palladio*, CORDE)

(Sánchez Lancis 2009:421, (12))

During the fourth stage, *de* does not behave as a preposition anymore as it has eventually become an article; thus, it cannot serve to introduce oblique arguments of the verb, but to introduce direct objects. Another characterizing property of *de* at this stage is the loss of the partition meaning in favor of an indefiniteness feature.

Finally, in the fifth stage, the partitive article *de* can be used with mass, countable, and abstract nouns to express indefiniteness.

In the case of Spanish, the grammaticalization process only reached the third stage and, thus, the preposition never turned into a full-fledged article. However, according to Treviño (2010), there still might exist an instance of partitive determiner in Spanish, bare partitives (see section 3.3.2). Romance languages, thus, differ in the degree of grammaticalization experienced by *de*. While French reached the fifth stage in the grammaticalization cline, Italian has not completed this stage yet, and makes optional use of the partitive, which is subject to dialectal variation among Italian dialects as well.

The partitive marker *de* developed intertwined with the homophonous complement introducing preposition *de* 'of' from Latin to Romance. While their story is one and the same, their paths went astray to some extent across Romance languages. Along with the partitive meaning of *de*, other meanings developed as well. Thus, while the evolution of *de* from preposition to partitive determiner may have reached different grammaticalization stages, Spanish, French, and Italian all share to some degree certain derived meanings for the preposition *de* as well as functions associated with it, among which we might include: expression of cause and agent, verbal complement, origin and source, and complement of preposition, among others. I will assume with Company & Sobrevilla (2014) that the associations between function and meaning arise in context. Specifically, the cause, agent, and source meanings arise in context, depending on the properties of the verb, or other type of head to which the phrase is attached. In what

follows, I will first discuss the associated meanings to the preposition *de* in Spanish and, afterwards, consider their appearance and evolution in Spanish.

Company & Sobrevilla (2014) propose a meticulous classification of nuances and meanings of *de*, including static ones such as possession, filiation, part-whole, and ascription, and dynamic ones such as provenance, source, agent/cause, and point of reference, which converge on the previously mentioned abstract notion of asymmetric relation between two independent referents. Any enrichment is argued to stem from the lexical meaning of the verb. Similarly, any idea of movement originates from the dynamicity included in the verb meaning, as a displacement of one referent from another entity that serves as point of origin. If no dynamicity is implied by the verbal element, the preposition only signals an inclusion relation between the two entities, where one of the referents acts as the point of origin facilitating the existence or location interpretation of the other referent. For example, the source meaning stems in the context of verbs such as *salirse* 'get out' (124a), *sacar* 'extract' (124b), *tomar* 'take' (125), etc.

(124) a. Y tambien dixo que savía que frayles dexavan los abitos y
and also said that knew that friars left the habits and
se salian de los monasterios
SE.ACC left of the monasteries
'And also said that he knew that friars gave up the habits and left the convent'
(1576, *Documentos Lingüísticos de la Nueva España*, 53.194)

b. Don Pedro sacó del bolsillo unos papeles, y leyó lo que sigue[93]
Don Pedro take out.of.the pocket some papers and read what follows
(Company & Sobrevilla 2014:1441, (78))

(125) e después tomen del buen vino annejo e lávenles con ellos
and after take of.the good wine mature and wash.them.dat with them
los paladares con los cabos de los dedos e fréguenlos bien
the palates with the ends of the finger and wash.them well
(1250, Abraham de Toledo, *Libro de los animales que cazan*)
(Company & Sobrevilla 2014:1443, (82a))

[93] All texts with no date specified belong to Modern Spanish.

By contrast, the agent or cause meaning appears with animate (126) or non-animate entities (127), whether or not they are volitional, provided that such entity can be interpreted as the circumstance facilitating the event (Company & Sobrevilla 2014:1444). Furthermore, Company & Sobrevilla point out that the preposition *de* 'of' can also express the entity emitting a certain object (128), either abstract or concrete, which is necessarily conceptualized as non-volitional with verbs such *reverberar* 'reverberate'.

(126) Muy poco tardaron; regresaron acompañados de una mujer gruesa, alta,
very short took came.back accompanied of a woman corpulent tall
de opulento pecho
of sumptuous chest

(Company & Sobrevilla 2014:1446, (85b))

(127) Se moría de sed, pero temía beber agua
se died of thirst but feared drink water

(Company & Sobrevilla 2014:1446, (87))

(128) al reverberar de los relámpagos, al retumbar el trueno
to.the trembling of the lightnings to.the beating the thunder

(Company & Sobrevilla 2014:1446, (86))

Whether the entity introduced by the preposition *de* is a partitive phrase, a source, a causer, or an emitting entity, those interpretations stem from the same basic meaning of an asymmetric relation between two independent entities in the context of a verbal head, with which they may appear. We may also hypothesize that the interpretation is dependent on the merging point of the preposition in the structure, which might affect the make-up of the preposition as well. Consider the following examples where the interpretation of the *de*-phrase depends on the abstract or non-abstract nature of the selected noun phrase. In the first example (129a), in addition to the concrete nature of the noun phrase *la sierra* 'the mountains', the source reading is obtained thanks to the presence of an *hasta* 'until' phrase as well, clearly denoting the spatial range of the event. By contrast, the abstract nature of the noun phrase *tu presencia* 'your presence' in (129b)

makes possible the interpretation of the *de*-phrase as a cause or an abstract source. In both cases, the interpretations are aided by the lexical meaning of the verb *reverberar* 'reverberate'. As mentioned earlier, I am assuming that the *de*-phrase expressing a source occupies a different position in the first phase syntax than the one expressing a cause and, moreover, their phrase structures are different as well. Before further elaborating this hypothesis, I will examine the evolution of the functions and meanings of the preposition *de* in Spanish to better qualify my claims.

(129) a. El radio KDCE […] que reverbera de la sierra Jémez
the radio KDCE. that reverberates from the sierra Jémez
hasta el valle del Río Chama[94]
to the valley of.the river Chama

b. Pero en esta soledad, donde sólo me veo yo sin estos soberanos
but in this solitude where alone myself see I without these sovereign
rayos que de tu presencia reverberan en mi bajeza[95]
rays that of your presence reverberate in my lowness

A chronology of these different functions and meanings has been established by Sánchez Lancis (2009) for Spanish, who examines the evolution of *de* as a partitive marker, an agent or cause introducing head, an adverbal complement, and a complement of prepositions and adverbs, from the beginnings of the language to its modern time. The data about the preposition collected by Sánchez Lancis is graphically represented in figure 1, where the grey colored bars indicate the frequency of a particular function's use from the XII to the XX century. The darker the shade the higher the frequency of that particular use. By contrast, the lighter the shade the lower the frequency. Note that no comparison among the frequency of use of the different functions of the preposition *de* is intended.

[94] Example obtained from http://www.cervantesvirtual.com/.

[95] Example obtained from CORDE.

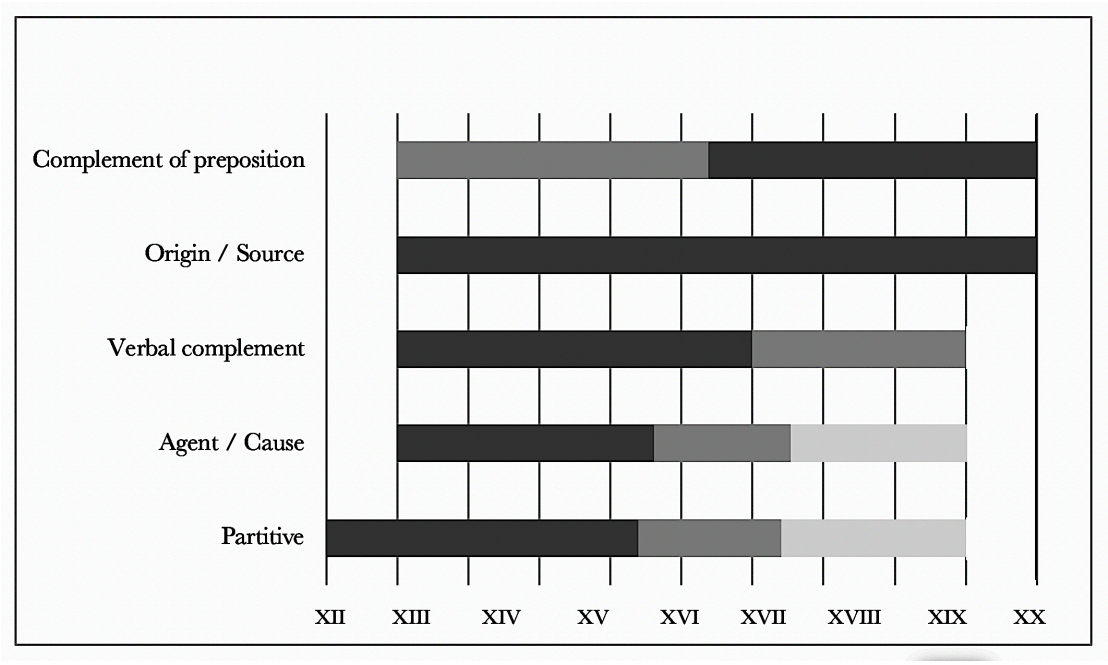


FIGURE 3: EVOLUTION OF THE MEANINGS OF THE PREPOSITION DE IN SPANISH

As shown in the figure, the partitive use of *de* declined over time and did not reach the end of the grammaticalization cline as an indefiniteness determiner. Similarly, its use as an adverbal link with verbs such as *pensar* 'think' experienced a decrease in use in its evolution (130). By contrast, the use of *de* to link an adverb (131) or preposition (132) to its complement comparatively increased, but of the examples presented, only (133), showing the use of *de* as a complement of the adverb *delante* 'in front', is currently used in Modern Spanish.

(130) y púsose a pensar de qué modo los acometería
and started.himself to think of which way them attack
con menos peligro de su persona
with less risk of his persona
'And started thinking how to attack them without putting himself at risk'
(1615, Cervantes, *Segunda parte del ingenioso caballero don Quijote de la Mancha*, CORDE)
(Sánchez Lancis 2009:439, (32e))

(131) se arrodilló delante de la cocinera, le besó un extremo de la falda
se.ACC knelt.down in.front of the cook, her.DAT kissed one end of her skirt
(Sánchez Lancis 2009:443, (35h))

(132) a. Si no, tomen del tomiello e muélanlo, e ciérnanlo e rocíenles
if not, take of.the thyme and grind.it, and sift.it and sprinkle.them
los logares de los piojos con de las fezes del uino
the place of the lice with of the sediments of.the wine
'If not, take thyme and grind it, and sit it and sprinkle the places with lice with the wine sediments'
(1250, Abraham de Toledo, *Libro de los animales que cazan*)

b. […] e úntenlas con de la manteca[96]
and spread.them.ACC with of the lard
(1250, Abraham de Toledo, *Libro de los animales que cazan*)

The preposition was used as well to express the agent in passive sentences in Medieval and Classic Spanish (133-134) (cf. (126-127) as well). In this case, the use was inherited from the Latin preposition *ab* and assumed effectually by *de*, but at the same time shared with the preposition *por* 'by', which would eventually become the only possible option. Sánchez Lancis reports a tendency noticed by Keniston (1937), who attributes the use of *de* to indefinite actions, which are characterized as universal, durative, or iterative with indefinite agents or causes, whereas *por* is used with definite actions, that is, perfective, and definite agents.

(133) Es compuesta del agua y de la tierra
is composed of.the water and of the dirt
'It is made of water and dirt'
(c. 1450, Anónimo, Traducción castellana del Libro de El Kuzari de Yehudah Halevi, CORDE)

(Sánchez Lancis 2009:427, (19))

(134) […] nadie será juzgado sino por juez competente
nobody will.be judged but by judge competent

(Sánchez Lancis 2009:436, (29g))

[96] These examples were obtained from CORDE.

A similar function is found in French since the beginnings of the language. Carlier, Goyens, & Lamiroy (2013) report that French *de* 'of' can be used with a causal meaning (135) and to express the agent with all sorts of eventualities (136-137). As reported for Spanish, in Middle French the agent could be expressed by both the prepositions *de* 'of' (138) and *par* 'by'. Calier, Goyens, & Lamiroy note that in Modern French *de* 'of' is now exclusively used in stative contexts, while *par* 'by' has assumed the rest of contexts.

(135) De paör me tres arriere (French)
of fear CL. draw back
'I step back in fear'
(1100-1200, Chrétien de Troyes, *Le Chevalier au lyon* 285)
(Carlier, Goyens, & Lamiroy 2013:29, (93))

(136) Il furent[...]regardé de maintes gens
they were watched of many people
'They were watched by many people'
(1200-1300, Geoffroi de Villehardouin, *La conquête de Constantinople* 16,4)

(137) Li plais fu [...] contredit de ceus qui ...
the plea was contradicted of those who ...
'The plea was questioned very much by those who...'
(1200-1300, Geoffroi de Villehardouin, *La conquête de Constantinople* 38,16)
(Carlier, Goyens, & Lamiroy 2013:30, (95-96))

(138) Les dis des anciens doivent estre desclairiez amiablement
the words of.the ancients must be explained kindly
de leur successeurs
of their successors
'The words of the Ancients must be explained kindly by their successors'
(1300-1400, *La Chirurgie de Maître Henri de Mondeville*, I)
(Carlier, Goyens, & Lamiroy 2013:30, (97))

Thus, the expression of cause by means of *de* 'of' in Modern French is reduced to a handful of contexts such as passive sentences, psychological verbs, and resultative or iterative events (139) (Carlier, Goyens, & Lamiroy 2013:48).

(139) a. Il est mort d' une crise cardiaque
he is died of a attack heart
'He died of a heart attack
b. Elle pleure de chagrin
she cries of sorrow
'She is crying with sorrow'
c. Ce professeur est aimé / apprécié de ses élèves
this teacher is loved / appreciated of his pupils
'This teacher is loved / appreciated by his pupils'

(Carlier, Goyens, & Lamiroy 2013:48, (172))

Interestingly, Carlier, Goyens, & Lamiroy consider the *de*-phrase appearing with internally-caused verbs in the stative-locative alternation (140) and other verbs entering the locative alternation (141) as an instance of genitive object as it can be substituted by the clitic *en*.

(140) a. Le jardin grouille d' abeilles
the garden swarms of bees
'The garden is swarming with bees'
b. Les abeilles grouillent dans le jardin
the bees swarm in the garden
'The bees are swarming in the garden'

(141) a. Max a chargé le camion d' oranges
Max has loaded the truck of oranges
'Max has loaded the truck with oranges'
b. Max a chargé les oranges dans le camion
Max has loaded the oranges in the truck
'Max has loaded the oranges in the truck'

(Carlier, Goyens, & Lamiroy 2013:46, (163-164))

An account along the same lines is put forward by Haspelmath and Michaelis (2008) for French, German, Italian, and Latin, for whom this element introduces a background theme, a cognitive-semantics term referring to the lesser relevance of the locatum when introduced by the preposition *de* in comparison to that of a subject and a direct object.[97] Another argument that could be adduced in favor of this view is the fact that in Italian the stative-locative alternation takes the preposition *di*, which usually marks partitive objects, to introduce the locatum argument in the *Location-Subject* order (142).

(142) a. Il vino è traboccato dal vaso (Italian)
the wine is overflowed.M from.the glass
b. Il vaso ha traboccato di vino
the glass has overflowed of wine

Nevertheless, I think that there is compelling evidence not to follow this analysis. First, consider the fact that the *Location-Subject* variant does not allow the presence of the *de*

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[97] While in German, Italian, and Latin, this function is introduced by the prepositions equivalent to *de* 'of' (*von, di, ab*, respectively), in English the preposition *with* assumes this role, as evidenced by the glosses of the examples. Relatedly, Haspelmath & Michaelis (2008) note that in some of these languages the function of introducing this element is being overtaken by other prepositions such as *mit* 'with' in German. Interestingly, in Spanish it is possible to find the equivalent preposition, *con* 'with', with internally-caused verbs (i).

(i) [Parla Este] … bullía con centenares de niños dedicados a sus actividades extraescolares
Parla East swarmed with hundreds of children dedicated to their activities extracurricular

Nevertheless, I think it would be mistaken to consider these cases as an exact instance of the stative-locative alternation as these sentences do not always allow both orders as shown in (ii). On the other hand, rather than a cause, these PPs seem to instantiate a manner complement, which further specifies the nature of the event as the DP complement of *con* cannot work as the initiating entity of the event.

(ii) a. El amor pulula con el viento
the love swarms with the wind
b. #El viento pulula en el amor
the wind swarms in the love

Relatedly, Lewandowski (2014:281) observes that in Spanish the preposition *con* 'with' that appears in the locative-alternation implies an agentive entity (iii), in contrast to the preposition *de* 'of'. We may as well include a purpose clause introduced by *para que* 'in order that' to avoid any ambiguities in the agentive nature of the subject.

(iii) Manolo cubrió la mesa {con un mantel / *de un mantel}
Manolo covered the table with a tablecloth / of a tablecloth
(Lewandowski 2014:281, (155a))

(iv) Manolo cubrió la mesa con un mantel para que no se manchara
Manolo covered the table with a tablecloth in.order that NEG REF stained

todo 'of everything' partitive phrase in place of the locatum argument (143b). Remember that the *de todo* phrase characteristically occupies the internal argument position, thus, if the locatum expressed by a prepositional phrase in this variant were a true internal argument, specifically, a partitive object, these elements should be interchangeable. See section 3.3.2.2. of this chapter for further discussion on the status of the *de todo* phrase.

(143) a. El jardín pulula de abejas (Spanish)
the garden swarms with bees
b. *El jardín pulula de todo
the garden swarm of everything
c. En el jardín pulula de todo
in the garden swarms of everything

Second, obtaining a cause interpretation for a noun phrase introduced by the preposition *de* 'of' is not at all uncommon and is, in fact, possible with unergative verbs such as *gritar* 'yell, *llorar* 'cry', *sufrir* 'suffer', *comer* 'eat', etc. Importantly, this element cannot be interpreted as the internal argument of the predicate.

(144) a. Gritar / Llorar de pena
yell / cry of sorrow
b. Sufrir / Comer de ansiedad
suffer / eat of anxiety

I would like to propose that the previous characterization of the locatum *de* phrase as a causative entity can be recast as the initiator of the event in the *Location-Subject* order. To qualify my claim, I will resort to a set of data from Italian, in which auxiliary selection correlates with the initiator or container interpretation of the subject of the verb *traboccare* 'overflow' (142).

3.4.2. Data from Italian

The following examples from Italian show the verb *traboccare* 'overflow' in the *Locatum-Subject* order (145) and the *Location-Subject* order (146).[98] The selection of *essere* 'be' correlates with the initiator interpretation of the subject of the predicate. By contrast, if *avere* 'have' is selected, the subject is interpreted as the container, or location. What is more, those interpretations are dependent on the properties of the subject entity, which must confer it the capability to initiate the event in question. Note that, along with the difference in auxiliary selection, the initiator subjects in (145) coappear with source phrases, which denote the container and are instantiated by the preposition *da* 'from', while container subjects in (146) coappear with cause prepositional phrases introduced by the preposition *di* 'of'.

(145) a. L'acqua è trabocatta / ?ha traboccato dalla caraffa (Italian)
the.water is overflowed.F / has overflowed.M from.the bottle
b. La gioia è trabocatta / *ha traboccato dai suoi occhi
the joy is overflowed.F / has overflowed.M from his eyes

(146) a. La pentola *è traboccata / ha traboccato di brodo
the pot. is overflowed.F / has overflowed.M with broth
b. Il teatro *è / ha trabocatto di spettatori
the theatre is / has overflowed.M with audience

Interestingly, in (147), the subject may be interpreted as either an initiator or a container, which makes possible to find both auxiliaries with this verb. Again, the established correlation is between *essere* 'be' and an initiator interpretation of the subject and *avere* 'have' with a container interpretation of the subject. If the subject were interpreted as an initiator, the prepositional phrase would realize a cause adjunct. Otherwise, if the prepositional phrase works as an initiator, then the subject could only be interpreted as the container.

[98] I am grateful to Federico Silvagni for the data, judgements of grammaticality, and interpretations of these examples.

(147) Il mio cuore è / ha traboccato di gioia
the my heart is / has overflowed.M with joy

Finally, likewise, in the absence of a cause prepositional phrase, an entity such as *il torrente* 'the stream' in (148) can be again interpreted as an initiator, which requires the appearance of *essere* 'be', or as a container as long as *avere* 'have' is selected. In this case, the initiator subject interpretation is facilitated by the absence of a cause prepositional phrase.

(148) Il torrente ?è / ha traboccato
the stream is / has overflowed.M

The auxiliary selection facts following from the Italian examples point to the conclusion that the selection of *essere* with internally caused verbs is triggered whenever there is an entity that undergoes a change of location, that is, a displacement. As a consequence, the subject is not only the initiator but also the undergoer of the event, whose path, for which the initial limit is given, is provided by the source phrase appearing as complement of the process head. I surmise that the notion of *boundary crossing* (of the initial limit) is the relevant factor contributing to the displacement interpretation obtained with these predicates. To qualify my claim, I will briefly review how auxiliary selection in Italian correlates with verbs that include this notion of displacement.

3.4.3. A note on auxiliary selection in Italian

Languages pattern differently in terms of auxiliary selection in the perfect tenses. While some languages exclusively use *have*, others only use *be*, and yet others select either *have* or *be* depending on the properties of the main predicate (McFadden 2007).[99] In her seminal study of auxiliary selection, Sorace (2000) throws light on the fact that verb classes do not behave uniformly across languages, and that every language shows

[99] Among the languages that select *have*, we find English, Spanish, Swedish, Portuguese, some varieties of Catalan, and some Italo-Romance dialects. On the other hand, Scottish Gaelic, Welsh, the Italo-Romance dialect Terracinese, Bulgarian, Shetland English, and Tamil use exclusively *be*. Finally, Dutch, French, German and Italian show a split in auxiliary selection depending on the type of predicate. For further discussion see Mateu (2016) and McFadden (2007), among others.

subtleties regarding auxiliary selection. She proposes an Auxiliary Selection Hierarchy (ASH) of intransitive verbs (149) based on their aspectual and thematic properties and concludes that the higher and lower ends of the hierarchy select for the same auxiliaries across languages. These correspond to telicity and agentivity, respectively. The rest of verbs show varying behavior depending on which property, that is, telicity or agentivity, the language is responsive to.

(149) CHANGE OF LOCATION *selects BE (least variation)*
CHANGE OF STATE
CONTINUATION OF A PRE-EXISTING STATE
EXISTENCE OF STATE
UNCONTROLLED PROCESS
CONTROLLED PROCESS (MOTIONAL)
CONTROLLED PROCESS (NONMOTIONAL) *selects HAVE (least variation)*

(Sorace 2000:863, Table 1)

For our purposes, regarding the class of internally-caused verbs that can imply some notion of displacement, Sorace notes that uncontrolled process verbs such as *tremble, cough,* or *shine* seem to consistently select *have* across languages. For example, in German, uncontrolled processes such as *rumple* 'rumble', *brummen* 'buzz', and *klappern* 'rattle' appear with *have* by default (150a,b), but they may also take *be* if the event is telecized by means of a path phrase as in (150c), which has a subject that can be conceptualized as an initiating and undergoing entity and implies some sort of boundary crossing as part of the event.

(150) a. Der Zug hat / *ist laut gerumpelt (German)
the train has is noisily rumbled
'The train rumbled noisily'
b. Der Zug hat / *ist im Bahnhof gerumpelt
the train has / is in.the.DAT station rattled
'The train rattled in the station'

c. Der Zug ist / *hat in den Bahnhof gerumpelt
the train is / has in.the.ACC station rattled
'The train rattled into the station'

(Keller & Sorace 2003:69-70, (21-22))

Intestingly, Sorace notices that non-agentive uncontrolled process verbs may allow *be* in Italian as well (151). Note that non-agentive does not necessarily imply lack of an initiator, but rather the absence of intentionality in the initiation of the event. In addition, these verbs fall in Ramchand's verbs with undergoer-initiator subjects, a composite role that accounts for both the subject's capability to initiate the event and undergo it (2008:53).

(151) a. Mario ha / *è tossito (Italian)
Mario has / is coughed.M
'Mario coughed'

b. Il telefono ha / è squillato
the telephone has / is rung.M
'The telephone rang'

c. L'eco ha / è risionato nella caverna
the.echo has / is resounded.M in.the cave
'The echo resounded in the cave'

d. Il tuono ha /è rimbombato
the thunder has / is rumbled.M
'The thunder rumbled'

e. La campana ha rintoccato / ?è rintoccata
the bell has tolled / is tolled.F
'The bell tolled'

(Sorace 2000:877-878, (46a), (47))

Motional controlled process verbs such as *run*, *walk*, or *swim* may appear with *be* provided that they are telecized by a directional path phrase (152). In (152b) the selection of this auxiliary comes with the path phrase, which necessarily involves a displacement of the subject and a boundary crossing.

(152) a. Maria ha corso / è corsa velocemente
Maria has run.M / is run.F fast
'Maria ran fast'
b. Maria è corsa / *ha corso in farmacia
Maria is run.F / has run.M in pharmacy
'Maria ran to the pharmacy'
c. Paola ha nuotato / *è nuotato con perfetto stile
Paola has swum / is swum with perfect style
'Paola swam with perfect style'
d. Paola ha nuotato / *è nuotata a riva
Paola has swum / is swum to shore
'Paola swam to the shore'

(Sorace 2000:876, (41))

Against Sorace (2000), McFadden (2007), Lewandowski (2018), and Randall (2007) note that telicity may not be the relevant factor to all languages for *be* selection, but instead some notion of displacement as in German (153a) or Italian (154), explaining why Dutch (153b) is unaffected by it as this language requires telicity for *be* selection. This might also be true to a certain extent in Italian, as shown by the auxiliary selection behavior displayed by the verb *traboccare* 'overflow', attested in (145) through (146), and the behavior of manner of motion verbs in (152). Therefore, rather than telicity, some notion of displacement, tied to a boundary crossing, might be sufficient to trigger the selection of *be* in Italian.

(153) a. John ist stundenlang durch den Saal herumgetanzt (German)
John is hours.long through the hall around-danced
b. John heeft urenlang door de zaal rondgedanst (Dutch)
John has hours.long through the room around-danced
'John has been dancing around the room for hours'

(McFadden 2007:7, (20))

(154) Mario è rotolato / ha rotolato per evitare l'auto (Italian)
Mario is rolled.M / has rolled.M to avoid the.car
'Mario rolled to avoid the car'

(Sorace 2000:875, footnote 24)

The fact that unergative motion verbs show varying behavior is then connected to the presence of an undergoer in the first phase syntax as Ramchand has observed:

(155) "Thus, the verbs in this class [intransitive verbs of motion] that are termed 'unergative' in the literature do not have DP subjects that are identical semantically to the subjects of transitives, but rather have semantic entailments in common with both 'external' arguments and 'internal' arguments in the traditional sense. This, I believe, is the reason why motion verbs exhibit ambiguous behaviour across languages, with different linguistic diagnostics being sensitive either to initiator or undergoer structural positions, giving rise to different options and a certain amount of Janus-like behaviour."

(Ramchand 2008:116, footnote 5)

Assuming that the displacement of an entity presupposes the presence of an undergoer in the first phase syntax, I tentatively surmise that the selection of *essere* in Italian with internally-caused verbs (145-146), repeated below for ease of exposition, is possible whenever there is such an entity, which can be conceptualized to undergo a displacement via the crossing of a boundary such as an initial limit as provided by a source phrase, although other factors may be at play as well depending on a language's auxiliary selection determinants for *be* or *have* with intransitive verbs.

(145) a. L'acqua è / ?ha traboccata/o dalla caraffa (Italian)
the.water is / has overflowed.F/M from.the bottle
b. La gioia è / *ha traboccata/o dai suoi occhi
the joy is / has overflowed.F/M from his eyes

(146) a. La pentola *e / ha traboccata/o di brodo
the pot. is / has overflowed.F/M with broth

b. Il teatro *è / ha trabocatto di spettatori
the theatre is / has overflowed.M with audience

3.4.4. The ambiguity of the preposition de

Returning to the stative-locative alternation in Spanish, both alternants show the preposition *de* 'of' (156), unlike Italian's distinction between cause and source by means of *di* 'of' and *da* 'from', respectively. To account for the meaning difference attested in Italian triggered by the use of these two prepositions, it is necessary to assume that in Spanish the preposition *de* 'of' is merged at two different positions in the first phase syntax of these verbs. In addition to the different merging positions of the prepositional phrase, the phrase structure of these elements should differ in complexity as well. This assumption is necessary to account for the path semantics inherent to the source phrase if the initiator is also the undergoer of the event, which is predicated to undergo a change of location from a source or point of origin.

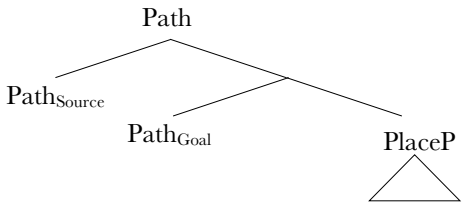
(156) a. El vaso rebosa de vino (Spanish)
the glass overflows with wine
b. El vino rebosa del vaso
the wine overflows from.the glass

Following Pantcheva (2010), I surmise that source paths are the highest layer of a goal path phrase. Pantcheva's argumentation is built around the assumption that the morphological markers of source paths contain the markers for goal paths cross-linguistically, as inferred from the study of the possible permutations of location, goal, and source markers across several typologically different languages. On the one hand, as widely held in the literature, Pantcheva assumes that goal path markers contain a place, or location, projection in its syntactic structure (see Jackendoff (1983), Svenonius (2010), Den Dikken (2010)). On the other hand, following Zwarts (2005, 2008), Pantcheva takes the source preposition to indicate that the starting point of the path is the location denoted by the place phrase, whereas in the case of goal paths the location would indicate the ending point of the path instead. The fact that in several languages

source paths are built by adding a source marker to a path is accounted for by building a source phrase on top of a path phrase, which in turn includes a place phrase (157).[100]

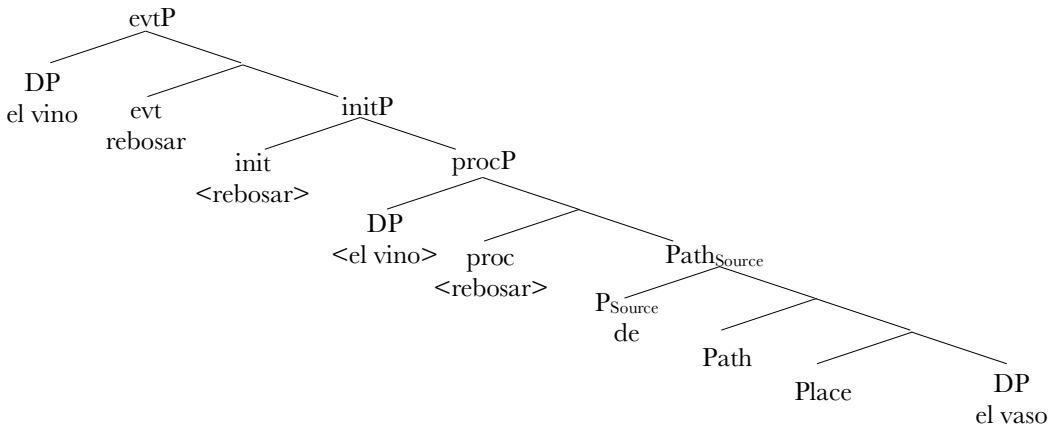
[100] The question of whether goal and source phrases have the same status in argument structure has received different answers. On the one hand, it has been argued that source phrases have a different status in argument structure than goal phrases (cf. Nam 2004). The asymmetry in the expression of goals and sources in the representation of events is a tendency to give priority to the expression of the goal over the source in the linguistic domain and other cognitive domains. That is, it is presumed that goals are psychologically more relevant than sources. The validity of the goal bias is grounded on data from language acquisition and data on the expression of these elements in several languages (cf. Papafragou 2010, Johanson, Selimis, & Papafragou 2009). During the learning and acquisition of a first language, the goal bias seems to be inoperative since both goal and source phrases are acquired at the same stage. Lakusta & Landau (2005) provide evidence from English and Korean to confirm this circumstance. In these languages, infants as young as 14 to 21 months can express the path of a movement event using either a source or a goal by means of a preposition in English or a verb in Korean. In English, children prefer to use *out*, *up* and *down* to express their own paths, whereas the prepositions *on*, *in* and *off* are preferred to describe the path of events where other objects constitute the figures in motion. Similarly, in Korean infants tend to use the verbs *anta* 'sit down' and *ancta* 'sit down' to express their own paths, whereas *kkita* 'get stuck' and *ppayta* 'take out of' are used to express other objects' paths. Thus, Lakusta & Landau conclude that in both languages infants can make use of paths that refer to the source of motion. This notwithstanding, Papafragou (2010) puts forward that there exist data that suggest that the asymmetry is operating at an earlier age than it was thought, since prelinguistic infants tend to pay more attention to goal changes than to source changes when they are processing motion events. This is also true for preschool children and adults, who tend to prime or remember better objects that work as the endpoint of a movement event. See Papafragou (2010:1066) for further discussion of this evidence. On the other hand, Landau & Lakusta (2005) and Papafragou (2010) provide new evidence that points to the conclusion that the goal bias is a psychological phenomenon rather than a linguistic one. This new evidence is gathered from experiments with children and adults, along with children with Williams syndrome, patients with brain damage, and congenitally deaf children that have never been exposed to a conventional language. Papafragou concludes that all this evidence suggests a strong parallelism between spatial cognition and language, but it does not necessarily mean that in both levels the asymmetry shows up in the same way, implying that the asymmetry can have a different manifestation in the linguistic level. If, as expected, the goal bias is a psychological phenomenon, then it must be present cross-linguistically. Papafrafou (2010) and Johanson, Selimis, & Papafragou (2009) add evidence in favor of this conclusion studying the languages classified according to the Talmyan typology. Their conclusion is that in both verb-framed and satellite-framed languages the expressions referring to the source of motion are much more frequently omitted than the expressions referring to the goal. Linguistically, the asymmetry in the expression of goal and source shows up in different ways. Papafragou (2010) mentions that if a language has an element to express source, for example *out* in English, then it must also have an element to express the corresponding goal, such as *in* in English, but the opposite situation is not attested. Similarly, Talmy (2000:87-88) notes that there is a tendency to denote state entry over state departure. That is, generally, there are more forms available to express the entry into a state such as *die* or *hide* than forms to express the departures from those states. For example, in English *hide* cannot be used to express the departure from a state (*hidden*) using a preposition denoting source. Furthermore, Talmy relates this to the fact that some languages use the same preposition to express both location and goal, but never to express source (cf. Bosque (1997) for similar observations on Romance languages). Similarly, Jackendoff (1983) and Gehrke (2008:233-235) observe that a locative prepositional phrase can receive a goal reading if the preposition is incorporated into a goal preposition, but this is impossible with source prepositions, which, allegedly, are never incorporated. Finally, Stefanowitsch & Rohde (2004) hold the view that the presence of a goal or source phrase depends on the conceptual information stored in the verb. That is, the conceptual information contained in each verb determines the kind of path expressed. As Gehrke (2008:233-235) argues, the evidence presented cannot lead to conclude that the expression of goal and source have a different status in the argument structure. The differences between the two types of path simply reflect the asymmetry between goal and source in the conceptual level, which tends to rank higher the expression of paths over sources. Importantly, even if the reason for this asymmetry has no linguistic grounds, it still comes with linguistic consequences (Jaume Mateu, p.c.).

(157) *Source phrases (Pantcheva 2010)*



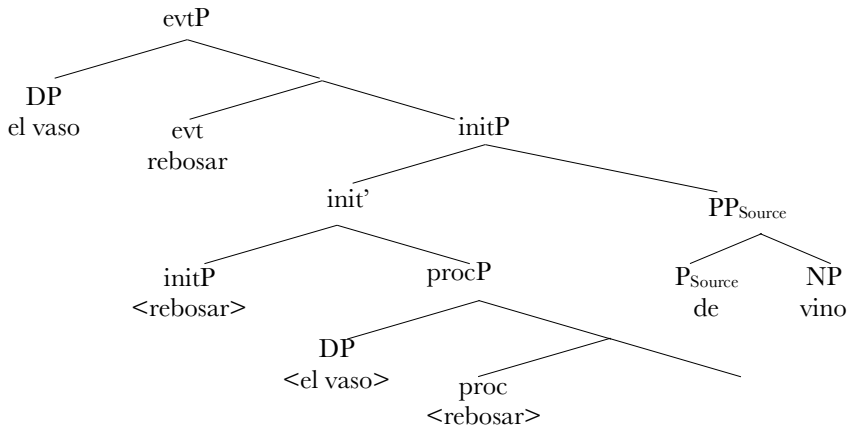
The first phase syntax of the *Locatum-Subject* alternant is shown in (158), which now includes the source path phrase as complement of the process head. Note that internally-caused verbs count with undergoer-initiator subjects, thus the DP in Spec,procP is internally merged in Spec,evtP as the initiator of the event as well.

(158)



Regarding the *Location-Subject* order, the first phase syntax consists of initiation and process heads (159) but diverges from the previous structure in two related aspects. First, the subject only receives the role of undergoer of the event, which is indicated by its presence in Spec,procP, since its properties cannot initiate the event denoted by the verb root. Afterwards, the evtP is merged, which in Ramchand (2018) instantiates a property of events that is applied to a subject, in this case, the location, which is internally merged in Spec,evtP, rising from Spec,procP. Remember that evtP closes up the first phase syntax and deploys its content to denote a property of events. As argued in section 2 of chapter 1, evtP is independent of the init head, which serves to introduce the causative semantics in the first phase syntax.

(159)



As subject, the locative DP is the element, over which the property denoted by the verbal phrase is predicated. In this regard, Dowty (2000) remarks that the location in the *Location-Subject* order acquires the role of discourse topic thanks to this newly acquired property (160).

(160) "CLAIM 4. More specifically, the LS-form ascribes an abstract property (expressed by the predicate) to a Location (denoted by the subject NP): the property a place or space has when it is 'characterized' by an activity taking place within it – that is, when the extent, intensity, frequency and/or perceptual salience of this activity takes place there is sufficient to categorize the Location in a way that is relevant for some purpose in the current discourse."

(Dowty 2000:122)

Second, the role of initiator of the event is undertaken by the locatum, which appears as a prepositional phrase in Comp,initP. The semantics for the interpretation of this element is provided in (161) and it indicates that the initiation phrase takes as participant the prepositional phrase introduced by *de* 'of' containing the locatum, that is, the entity whose specific properties make it a viable initiator of the event. Note that the prepositional phrase does not contain path information but rather it simply works as a relator between the locatum entity and the event, between which a causational relation is established, as the preposition denotes an asymmetrical relation between two independent elements, the DP in Spec,PP$_{Source}$ and the denotation of initP, that is, the embedded macro-event. Therefore, the prepositional phrase found in the *Location-*

Subject order is structurally simpler than the source path phrase found in the *Locatum-Subject* order.

(161) [[initP]] = λe∃e_1,e_2[e=(e_1→e_2)&rebosar(e_1) & participant (de vino, e_1) & rebosar (e_2) & participant (el vaso, e_2)]

3.5. Conclusions

Assuming the same basic lexical entry in both the *Locatum-Subject* and *Location-Subject* variants in Spanish, I have presented an account of the first phase syntax of the stative-locative alternation. The lexical entry proposed has been based on the syntactic and semantic properties displayed by the verbs that enter this alternation. Specifically, it is essentially composed of an initiation and a process head. It has also been determined that what distinguishes the variants of the alternation are the roles undertaken by the arguments.

4. CONCLUSIONS

In this chapter I have examined two different instances of the intransitive-locative alternation. On the one hand, I have put to the test the viability of assuming the same argument structure for posture verbs and motion verbs that enter the stative-locative alternation in Dutch. I concluded that posture verbs in this alternation do not share the same first phase syntax as motion verbs as these verbs contain a single process head and have no implication of a result outcome. Thus, it is not possible to maintain that posture verbs instantiate the same first phase syntax as intransitive motion verbs and transitive verbs in the transitive-locative alternation. In addition, I called attention to the possibility of having process posture verbs in the intransitive locative alternation in Spanish, which further confirms the absence of a result phrase in the first phase syntax of the alternation, as result augmentation is not available for verb-framed languages. On the other hand, I delved into the properties of the stative-locative alternation in Spanish. In my account, I argued that the first phase syntax of both alternants differed

minimally. Specifically, the *Locatum-Subject* order instantiates a first phase syntax with initiation and process heads, whose specifiers contain the locatum entity, whereas in the *Location-Subject* order the first phase syntax counts with a process head which has the location as specifier and an initiation phrase which takes the prepositional locatum argument as participant. Finally, I called into question the suitability of the label stative for this alternation, and held that internally-caused verbs should be characterized as atelic dynamic processes, as evidenced by their behavior under several diagnostics testing the presence of a stage, or spatio-temporal unit, and an entity whose properties make it a viable initiator of the event.

CHAPTER FIVE. Conclusions

INTRODUCTION

The final chapter gathers together the findings and main contributions of the dissertation and discusses the future directions of research. Section 1 revises the objectives and theoretical framework laid out in chapter 1 and presents a brief summary of the chapters. Section 2 briefly sketches the main contributions of the dissertation to the current research on linguistics addressing matters such as the representation of cross-linguistic variation in Ramchand's first phase syntax, the place of co-event information in this framework, the aspectual properties of posture verbs and internally-caused verbs, the relevance of causation and path encoding across languages, the difference between type-A and type-B meanings and its significance for the grammaticalization process of posture verbs cross-linguistically. Section 3 examines the future directions of research regarding the locative alternation found with internally-caused verbs in Germanic languages, the productivity of lexicalization patterns, and the mind-language divide.

1. SUMMARY OF FINDINGS

The dissertation has studied cross-linguistic variation in the realm of posture verbs and internally-caused verbs in Romance and Germanic languages. I have concentrated on (i) the causative and non-causative senses of posture verbs, (ii) the process of grammaticalization undergone by non-dynamic posture verbs into copulas, (iii) the lack of a co-event with posture verbs in the expression of static meanings, (iv) the unergative syntax of internally-caused verbs, (v) the interpretation of locative subjects, and (vi) the contribution of the locatum PP in the stative-locative alternation in Spanish.

The research questions tackled throughout the chapters of this dissertation were the following:

A. What is the place of Talmy's co-event in the Ramchandian first phase syntax?
B. Is there a co-event in stationary motion predicates with posture verbs?
C. Is path encoding the only relevant factor determining cross-linguistic variation in the verb phrase?
D. Is there intra-linguistic variation within Romance and Germanic languages? What parameters are relevant to determine intra-linguistic variation?
E. How can posture verbs evolve into copulas? Why are posture verbs so prone to copularization across languages?

In chapter 1 I presented the Ramchandian first phase syntax, the theoretical framework under which the present proposal is formulated. I explored how cross-linguistic variation regarding path expression, following Talmy's (1991, 2000) dichotomous typology, could be accounted for in Ramchand's (2008, 2014, 2018) constructivist approach to argument structure, which would later help me underpin the first phase syntax of the causative sense of posture verbs in English and Spanish. I also delved into the difference between type-A and type-B meaning, that is, structural in contrast to encyclopedic meaning components. Building on Ramchand's (2014) provisional distinction among structural meaning, pre-linguistic cognitive conceptual content, and encyclopedic meaning (see table 1), I considered the place of Talmy's (1991) co-event in the first phase syntax and concluded that a co-event is dependent on the existence of at least a subevent of process and a subevent of result, consequently, a first phase syntax denoting a dynamic event, which is instantiated by at least two roots, whose conceptual content is attached to the process head and to the result head, thereby providing either manner or result information, respectively. Note that under this view event structure is not orthogonal to argument structure (cf. Hale & Keyser (2002)).

Domains of conflation II		
Syn-Sem (Type-A meaning)	*Cognitive Defaults*	*Lexicon (Type-B meaning)*
Cause	Caused positional transfer	Everything else
Non-change vs. change	Locations	
	-Manners of motion	
Non-scalar vs. scalar change	Change of location	
Multivariate vs. bivariate transition		
Source of scale		
Result of change		

TABLE 1: DOMAINS OF CONFLATION II (RAMCHAND 2014)

In chapter 2 I endeavored to show how causativity and path encoding were both relevant parameters to account for the cross-linguistic variation attested in the causative sense of posture verbs in Romance and Germanic languages. It was determined that there exist intra-linguistic differences in the realm of posture verbs. In this regard, English behaved differently from the rest of Germanic languages such as German, Swedish, or Icelandic, inasmuch as the latter did not only count with posture verbs encoding path information in their type-A meaning but they did also encode causativity, or an initiation category label in the Ramchandian framework. Romance languages' posture verbs were also argued to contain init, proc, and res heads (1a). In addition, I discussed the "reflexive" pronoun appearing in the autocausative sense of posture verbs in Romance languages and Germanic languages, whose presence was related to the initiation category label contained in the pattern instantiated by posture verbs. Finally, I examined how the satellite-framed nature of English conditioned the way the causative senses of posture verbs were obtained. Specifically, the single process head specified in the lexical entry in (1b) was shown to appear along with a result head instantiated by a satellite, or particle, in the first phase syntax.

(1) a. *sentar*: [init,proc$_i$,res$_i$]
b. *sit*: [proc]

In chapter 3 I further explored intra-linguistic variation in the expression of stationary motion with posture verbs. All languages, both Romance and Germanic languages, were shown to count with posture verbs following the pattern indicated in (1b), which was taken to denote a non-dynamic type of eventuality following Silvagni's (2017) redefinition of the notion of event based on the existence of a spatio-temporal unit. From this basic aspectual characterization, I was able to account for the existing cross-linguistic tendency, whereby posture verbs grammaticalize into copulas. Succinctly, the reinterpretation of adjuncts as complements of the posture verb along with the loss of type-B meaning were held as the main triggers of the copularization process. Copulas, or 'light' verbs, simply consisted of type-A meaning, that is, structural meaning identifiers, specifically, a process head and a rhematic prepositional phrase, reminiscent of a small-clause (see figure 1). On the other hand, in consonance with the discussion on chapter 1, I discarded the existence of a manner co-event in the simple position sense of posture verbs as the first phase syntax contained a single verbal root instantiating the process head. When process posture verbs are used in stationary motion predicates, the alleged manner component arises from the type-B meaning, that is, the encyclopedic information about the postural configuration of the figure, codified in the verbal root, which is combined with the aspectual information contributed by the process head, containing a spatio-temporal stage. Finally, I put forth that the spatial coordinates for the figure were provided by the locational phrase.

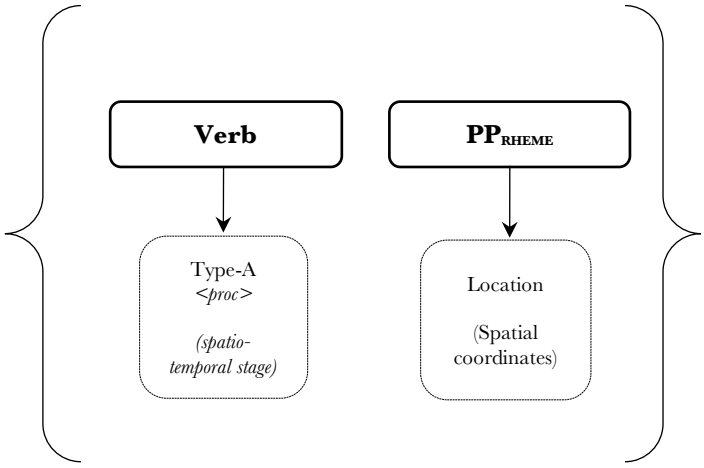


FIGURE 1: STATIONARY MOTION WITH POSTURE VERBS

In chapter 4 I concentrated on two different types of the intransitive-locative alternation. I contended that process posture verbs in both Romance and Germanic languages partake in this construction, which once more confirmed the absence of a co-event with posture verbs when they denote stationary motion. This follows from the lack of a result phrase in the first phase syntax of this construction, which was consequently deemed different from that of the transitive-locative alternation. The arrangement of the location argument as subject of the predication was also found with internally-caused verbs in the so-called "stative"-locative alternation. I put forward that this construction also denoted dynamic process events in both alternants, in consonance with the lexical entry of the verb root. The *Location-Subject* variant's peculiarities stemmed from the cause semantics argued for the preposition *de* 'of' as introducer of the initiator of the process event, whose undergoer was the locative subject. While both language families allow the "stative"-locative alternation, the construction's degree of productivity differed among languages, which I tentatively considered to be a consequence of the different nature of the prepositions *with* in English and the preposition *de* 'of/from' and its equivalent forms in Romance languages and Germanic languages, such as German and Dutch, in all cases introducing the locatum argument.

2. MAIN CONTRIBUTIONS

The dissertation has contributed to unambiguously characterized the aspectual properties of posture verbs and internally-caused verbs. First, I have put forth that posture verbs may be associated with one of the lexical entries in (1). If the pattern consisting of a single process head is instantiated by the posture verb (1b), then its aspectual properties are those of a non-dynamic event, that is, an event consisting of a single spatio-temporal unit (Silvagni 2017). This is the simple position sense, using Levin & Rappaport Hovav's (1995) nomenclature. English exploits the satellite-framed pattern to create events of change by syntactically including an initiation phrase in the first phase syntax and a result phrase via *result augmentation* (Ramchand 2008) thanks to a particle, or satellite, which in turn is able to take an argument. By contrast, the rest of languages in the sample have been proved to instantiate the pattern in (1a). These

languages possess "reflexive" pronouns, which serve to provide a link between the entities occupying the specifier positions of the first phase syntax, thus allowing the creation of the so-called autocausative sense of posture verbs, in which the same entity can be said to cause and undergo the process event, owing to which a result state is obtained.

Second, I have argued that internally-caused verbs have a lexical entry containing initiation and process category labels that are instantiated by the verbal root in the syntactic derivation. Such a first phase syntax presumes the existence of an initiator, whose inherent properties trigger the process subevent, which in turn creates a sequence of spatio-temporal units, that is, a dynamic event. In this sense, dynamicity exists as an epiphenomenon of the action carried out by the initiator regardless of notions such as agentivity. The fact that dynamicity with these verbs is not perceptible in the extralinguistic reality cannot be considered a proof against their dynamicity at the linguistic level, which in Silvagni's (2017) theory is an epiphenomenon of the action component, and which has been considered here as equivalent to Ramchand's (2008) initiation phrase.

Regarding the availability of a co-event in the simple position sense of posture verbs, the research carried out has established the lack of a co-event in the first phase syntax. Specifically, I propounded that a co-event can only be held to exist if a macro-event consists minimally of two subevents, namely, a process and result phrase, which form Talmy's (1991, 2000) framing event and to which the encyclopedic content of the roots realizing the terminal nodes will be related as manner and result, respectively. By contrast, a co-event of manner is possible in the causative sense of posture verbs, whenever the English verbs take a particle to instantiate the result portion of the first phase syntax. In such a framing event consisting of initiation, process, and result heads, the root instantiating initiation and process provides manner encyclopedic meaning.

Finally, I have provided a non-derivational approach for location subjects with posture verbs and internally-caused verbs in the *Location-Subject* variant. These elements have been placed in the specifier position of the process head, which is conceptually associated with the role of undergoer in the first phase syntax. Using the lexical entry of these verbs in their default configuration as the basis for the alternating structure, I argued that their characterization as undergoers along with their roles of subjects of the

predication can help clarify the non-literal meanings for these verbs without assuming additional post-syntactic interpretation rules.

3. FUTURE DIRECTIONS

Several future venues of research have arisen in the chapters of the present dissertation. First, the stative-locative alternation in English is also instantiated by adjectives as discussed by Salkoff (1983:298-306). The examples below show the alternation in the *Locatum-Subject* and *Location-Subject* variants with a verbal form (2) and an adjectival form (3), respectively. In this regard, Salkoff (1983:299-300) mentions that the use of the prefix *a-* is still a productive piece of derivational morphology in English.

(2) a. Stars are blazing in the sky
    b. The sky is blazing with stars

(3) a. Stars are ablaze in the sky
    b. The sky is ablaze with stars

(Salkoff 1983:301, (65))

Questions about the nature of the prefix *a-* or the contribution of the preposition *with* in this construction are of utter importance in order to determine its first phase syntax. My intuition is that the contribution of the preposition might be of a different nature than the one put forth for the preposition *de* 'of' in the stative-locative alternation with source semantics in Spanish, or even some Germanic languages, which share an equivalent element such as Dutch or German (see chapter 4). Further research on these prepositions is necessary to establish a comparison between the alternations in Romance and Germanic languages. Another open question is the role of non-aspectual rhematic complements in the first phase syntax such as in the case of the above-mentioned prepositional phrases and other complements discussed throughout the dissertation. In spite of being conceptually relevant, most of these elements are non-argumental as they can appear optionally or be left out without further repercussion

(see chapters 1 and 2 for further discussion). Whether they should appear as complements of the subevents or as adjuncts requires further research beyond the limits of this dissertation.

Another related question, addressed to some extent in the present dissertation, is the degree of productivity of lexicalization patterns. As discussed in chapters 2 and 3, there is intra-linguistic variation pertaining to manner saliency among Germanic languages, suggesting that languages may exploit the satellite-framed pattern differently. This matter has been explored in Lewandowski & Mateu (2016), who study intra-linguistic variation among satellite-framed languages. The answer given to the matter at hand in the present dissertation has considered the existence of factors such as lexical availability as is the case with posture verbs and additional sources of variation such as the anticausativizing strategy, or voice morphology. Future research should determine what other factors might be at work to explain the productivity of a given lexicalization pattern.

Finally, another future venue of research is whether the linguistic representation of events is predetermined by pre-linguistic cognitive defaults and, if so, how they may interact with language. The Ramchandian first phase syntax assumes that a limited number of semantic primitives are relevant in the syntactic decomposition of predicates. As such, event structure is not conceived of as orthogonal to argument structure. Yet, it is necessary to answer whether semantic primitives, such as cause, transfer, motion, etc., are exclusively part of the system of language, or rather they are independent core components of human cognition to which language has recourse. Future research should help understand how pre-linguistic cognitive defaults might be at play during language production and comprehension, and how they might intertwine with it and have a bearing in grammar.

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