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TOWARDS SOURCE OF MOTION IN ROMANIAN

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INTRODUCTION

The present study is centred around the notions of *space*, *location*, *direction*, and *path*, all concepts employed in the semantic description of **spatial prepositions**. My goal is to characterize from a semantic and syntactic perspective the process of the formation of source of motion (complex) prepositions in Romanian, and then provide a tentative analysis of the internal structure of these prepositions. At first sight it seems that the data – the phonological form of those directional prepositions that have a source of motion reading in Romanian – differs from the data collected in any other language that I am aware of (or that the works that I have consulted while preparing the background for my study failed to mention). In fact, it was this simple observation on my native language that lead me in directing ‘*towards source of motion in Romanian*’.

Until the past decade, directional prepositions passed almost unnoticed in linguistic research; most works were dedicated to static, locative prepositions. Moreover, to my knowledge, there is no study which deals mainly with spatial prepositions in Romanian, which is still a vast and unexplored field in the syntax and semantics of this language. My hope is that the present paper could shed some light on a few issues related to locative and directional prepositions in Romanian.

The paper is organized in three chapters: ‘General Overview on Spatial Prepositions’, ‘The Syntax and Morphology of Directional Prepositions’, and ‘Source Directionality in Romanian’. Each chapter goes further and further into the analysis of spatial prepositions, constantly bearing in mind the introductory notions that will be put forth in the first sections of the paper. Without going into pure semantics, I will try to account for the data regarding opposite directional interpretations of spatial prepositions in Romanian.

Acknowledgements

First of all, a grateful thank-you to Professor Guglielmo Cinque, for insightful comments and all the patience during the months of elaboration of my thesis. I am also deeply indebted with Professor Giuliana Giusti, who has supervised almost all my (extra)curricular activities, guided and helped me both during my Erasmus period in Venice and as a regular student of laurea specialistica (and also now as a 'laureanda') at Ca'Foscari. Looking back in time to my student years at the University of Bucharest, I cannot help feeling fortunate to have benefited from attending Professor Cornilescu's introductory classes on 'Concepts of Modern Grammar', which every semester transformed into more and more advanced classes on generative syntax. I would also like to thank the audience at the 9th Annual Conference of the English Department, University of Bucharest for their comments on the paper that I presented there and which then became part of this thesis.

CHAPTER ONE

GENERAL OVERVIEW ON SPATIAL PREPOSITIONS

1.1. PREPOSITIONS : LEXICAL OR FUNCTIONAL CATEGORIES

1.1.1. Basic notions: Parts of Speech

Within generative grammar (but also in traditional grammar), a distinction is always made between *lexical* and *functional* categories. This categorisation goes even further than merely establishing an opposition between elements that have or do not have semantic content in a language; it deals with the consequences of being a lexical or a functional item in the syntactic behaviour of categories, ranging from their distribution to the selection of complement *phrases*, projected by *heads*, with which a certain category can or must combine.

Lexical categories are those elements that share the following property in all languages: they can be freely created, that is, there is a very large number of these elements in a language and this number is presumably in continuous growth – new words can be coined either by borrowing terms, or by internal mechanisms of word formation. These elements thus form *open classes*. Universally, Nouns (N), Verbs (V) and Adjectives (and Adverbs) (A) constitute lexical categories.

- Nouns – *dog, hand, rain, etc.*;
- Verbs – *to see, to laugh, to fear, etc.*;
- Adjectives – *beautiful, red, big, etc.*;

Functional categories on the other hand include strictly grammatical elements, void of semantic contents. Their number is significantly smaller than that of lexical elements, and, importantly, they form *closed classes*. Creating new members is an extremely rare or absent phenomenon in all languages. They can be viewed as “lexeme-glue”, as their function is, by and large, to contribute in assembling together lexical elements present in the numeration in order to render constructions grammatical. Let me give an example (the items in italics are functional elements):

- (1) a. dog sit *on* floor
- b. *The* dog sits *on the* floor.
- c. Dogs were (*past, plural*) sitting *on the* floor.

Functional categories include:

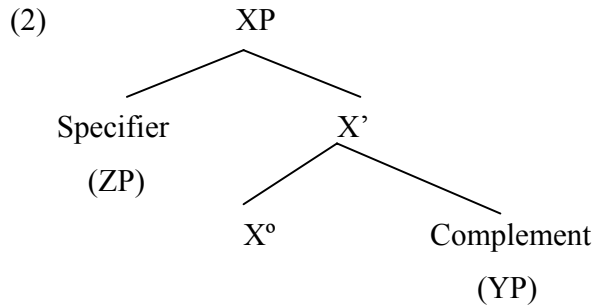
- Determiners (articles) – *a, the*, etc.;
- Prepositions – *of, at*, etc.
- Inflection – “present”, “past”, etc.;
- Complementizers – *that, for*, etc.
- *Wh*-elements – *what, how*, etc.

I will follow the major trend in the literature in considering prepositions to be a functional category throughout the paper. I will dedicate, however, the next two sections to a brief description of some opposite views.

1.1.2. The X' Theory

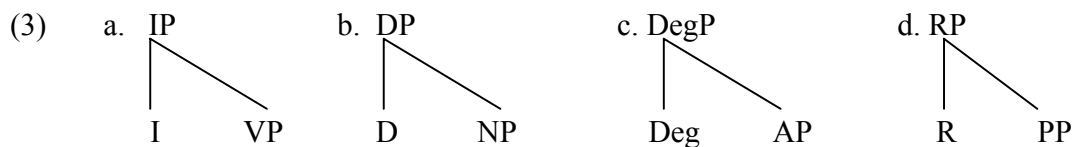
In the sense of Chomsky (1970), Emonds (1976) and Stowell (1981), all three lexical categories (N, V and A) project at intermediary and maximal level. At the X' level the Complement of the head (X^o) is selected. A Specifier position is present as sister to the XP. The selection of the Specifier and Complement phrases takes place in

accordance to the argument structure of the head of the phrase. The standard structure of a maximal projection is represented below:



Chomsky (1986) extends the X' schema to the categories of Inflection and Complementizer. With Pollock (1989) Agreement and Tense are realized as separate functional heads which can also project a maximal phrase. In the nominal domain, Hale and Keyser (1991) proposed a head for Case (KP). We thus see that both lexical and functional categories project.

Zwarts (1992) claims that there is a parallel functional structure common to the three lexical categories and the prepositions. He basically adds to the already large list of functional categories (which included Inflection (I), Determiner (D), Degree (Deg), etc.) the category of R-pronouns (R)¹ as the functional projection for PPs, thus arguing that the syntax and semantics of the four major phrases can be unified. The functional head (responsible for the referential or quantificational force of the phrases) selects the lexical complement, which provides the descriptive content.



¹ The R-pronouns were first identified as a natural class of words by Van Riemsdijk (1978). The denomination for this class is due to the fact that all elements contain the consonant *r*. Moreover, Van Riemsdijk observed that the *r*-words could stand for prepositional phrases in the same way as nominal pronouns could stand for noun phrases.

1.1.3. Prepositions: lexical or functional categories?

In order to give a fair analysis to Prepositions, some important points need to be made. One very influential study on prepositions as a strict functional category was that of Grimshaw (1991). Sometimes, however, one may find mentioned in the literature a distinction between “lexical” and “functional” prepositions. Going into the classification of prepositions (see below), it seems reasonable to make such a distinction along the lexical vs. functional dimension.

What is usually labelled as “Prepositions” actually includes (at least) five different types of elements. In fact, prepositions are a subcategory of adpositions, together with postpositions and circumpositions. The preference for the technical term “prepositions” is due to the need to avoid ambiguities when abbreviations are being used: A stands for Adjectives (and Adverbs), P (for Prepositions) stands for Adpositions in general. Moreover, there are many languages in which only *prepositions* exist, thus it is more rare to encounter languages which display all three types of adpositions².

The five types of elements collected under the label P are the following:

- Adpositions (prepositions, postpositions, circumpositions);
- Particles – *go out, get off, etc.*;
- Adverb-like prepositions – *downward, upward, etc.*;
- Case morphemes – *of*;
- Verbal prefixes.

English morphology is extremely poor, so it comes as no surprise that very few members of the last two categories can be found in this language. Romanian, the language which the present study will mostly concentrate on, is a synthetic language

² Dutch is one such language and surely one of the most intensely studied from this perspective.

and has a variety of Genitive/Dative case morphemes, while Slavonic languages are rich in verbal prefixes (see Svenonius (2003) for examples and discussions).

Grimshaw (1991), Baker (2003) and others favour the view that all Ps are functional elements. A somewhat opposite view is the one entertained by den Dikken (2003, 2006), Svenonius (2004), to mention just a few relevant studies, in which the authors argue, on the basis of the existence of ‘locative’ (also named ‘static’) and ‘directional’ Ps, and with evidence from English, German and Dutch, that spatial Ps are lexical heads to which a number of functional projections may associate. This line of research goes along the analyses of verbal and nominal categories, which have long been decomposed into a lexical layer and several (functional) projections. Van Riemsdijk (1990, 1998) considers spatial Ps as *semi-functional*, but I will leave this view aside. Campos (1991), for instance, utilizes claims of Plann (1985) who considers Spanish locatives *+N neutralized categories*. Plann notices (as reported in Terzi (2006)) similarities that locatives share with both nouns and adjectives, and since the common property of these two lexical categories is the binary distinctive feature [+N] (Chomsky 1970), she concludes that they are specified for +N, *but only* for +N, hence, the term ‘+N neutralized categories’.

Spatial prepositions (locative and directional prepositions) are those elements that clearly have a semantic content up to a relevant extent. Opposite meanings can be rendered in a minimal pair of clauses in which the direction of the change in the position of one or more entities engaged in an event of movement is determined by the preposition selected by the verb. Employing a different preposition which is able to render the opposite way along the horizontal axis of movement along a direction (consider (4.a) versus (4.b)), we notice that the same syntactic element (the object) either delimits the event in terms of its final point (4.a) or in terms of its initial point (4.b):

- (4) a. John ran *to* school.
b. John ran *from* school.

There are some other opposite pairs of spatial prepositions in English: *in / out*, *inside / outside*, *up / down*, *in front of / behind*, *towards / away from*, etc., to give just a few examples. These spatial expressions exist in all languages, so the phenomenon should not be neglected. However, most of the work so far on spatial PPs has been dedicated to locative prepositions only (see the next section for the distinction among types of spatial prepositions), while directionals were left more often than not in the shadow.

Undoubtedly, there are occurrences of items belonging to the category of Ps where these elements do not bring any semantic contribution. In the following chapters I will look at the Romanian prepositions *de* and *pe*, trying to figure out if the same element has different behaviours (it sometimes seems to be a functional preposition, in some other cases it seems to bring changes in the semantics of the PP and of the event, and *de* even seems to occur as a complementizer), or if what we are dealing with is mere homophony.

What seems beyond any doubt is the following: locative and directional prepositions certainly pose serious problems to any viewpoint that sympathises with the strict functional character of prepositions.

1.2. SPATIAL PREPOSITIONS – GENERAL DESCRIPTION

1.2.1. Locative and directional prepositions: classification. Relevant notions: *Figure, Landmark object, Place, Path*

In the context of lexical vs. functional items, it seems to be a difficult task to pin down the exact status of spatial prepositions. This is, in fact, a recurrent point in the literature. While there is a major tendency to consider spatial prepositions as lexical elements (Jackendoff (1983, 1990)), it cannot be denied that they also have a functional role in clause structure. I will follow the lines of some researchers

(Koopman (1997) and subsequent work, Terzi (2006), Den Dikken (2006), and others) in proposing (in Chapter ...) a complex structure which can account for both the lexical and the functional properties of locatives.

There is little agreement on the labeling of the prepositions which express location and change in location. I will follow Koopman (1997), Den Dikken (2006) and others in using the term ‘spatial prepositions’; **‘locative’** and **‘directional’** prepositions are the two major subclasses of spatial prepositions. Some linguists use different labels to define spatial prepositions. Nam (1995, 2000), for instance, uses the label ‘locative’ for all spatial PPs, and differentiates the two subclasses in terms of the [\pm stative] feature. Tortora (2005 and other works) calls locative prepositions ‘PLACE PPs’, which are to be distinguished from PATH or directional PPs, and the list can go on. Moreover, linguists are also divided with respect to defining spatial prepositions (and the numerous labels used by various authors testify in this respect), an issue that has given rise to many debates and unanswered questions. All controversies are caused by the certain ambiguities that are encountered in many languages between static/locative and directional interpretation of certain prepositions. I will follow Gerhke (2004) (contra Huybergts and van Riemsdijk (2002)) in interpreting apparently lexically ambiguous prepositions as static only, in the sense that directionality is always added by some other element or operation³. I will turn to this issue throughout the paper.

³ Just to give a hint about what will be more thoroughly looked at later, for instance, if a non-directional P is selected by a (certain type of) verb of motion it will derive a goal directional reading in Romanian (and not only). The same verb in English combined with the same preposition might not render directionality. The question is how much of the responsibility of deriving a motion event can be assigned to the verb and how much to the preposition in the respective languages.

1.2.2. *Locative prepositions*

From a semantic point of view, *locative*, non-directional spatial prepositions (also referred to in the literature as static locatives) **denote the position of one or more entities, which remain in the respective location or configuration** (if more than one object or entity are involved) **throughout the event time**. The key notions adopted for locatives are that of *figure*, *place* (or *region*) and *landmark object* (also named *reference object* or *ground*)⁴. Let us consider the following clause:

- (5) Dracula is *in* the castle.

The *figure* is the entity whose position in space is given in the predication. The interpretation of (5) is that Dracula is *in* the castle, namely that the *place* occupied by Dracula is (entirely) included in the *place* occupied by the *landmark object*, which is the syntactic object of the predication.

The function of these prepositions is to locate a (movable) object/entity of small dimensions of unknown position (the *figure*) with respect to a generally larger and more stable object (the *landmark*) whose position in space is known. The Figure ('Dracula' in (5)) is usually mapped into the subject position, while the landmark object is the direct object of the clause.

- **Subject of spatial relation = Figure**
- **Object of spatial relation = Landmark object**

Observe the example below:

- (5') a. Dracula is *in front of* the castle.
b. ?? The castle is *behind* Dracula.

⁴ I will adopt the more widely-used notions of *figure*, *place* and *landmark object* throughout the paper, as in Koopman (1997).

Sentence (5'.b) is grammatically acceptable, but interpretably odd. It is ok to locate a person in space by its position with respect to a castle, but the inverse is not really pragmatically felicitous. Let me provide another example for the sake of clarity:

- (5'') a. The pen is *on* the table.
b. ?? The table is *under* the pen.

Again, if one does not remember where he left his pen and wanted to find it, a piece of information such as the one in (5''.a) is a valuable one, but at the same time no one would try to describe the location of a table in the dining room with respect to a pen that is on the table. The Figure is usually smaller (and maybe also more difficult to notice or to perceive) than the landmark, which is large and stable. Implicitly, the position of the Figure is new information, while the position of the landmark object is known or supposedly known or derivable information.

Another important theoretical view needs to be underlined in the present context. Pairs of prepositions such as the ones in (5'') are said to be **converse**, since the following equivalent relations hold:

- ⇒ A is *on* B = B is *under* A
- ⇒ A is *in front of* B = B is *behind* A
- ⇒ A is *before* B = B is *after* A

This observation is strictly connected to our perception of space along the three orthogonal referential axes. Logically, there are also directional prepositions which are converse, as I will point out later on, claiming that in Romanian there is a morphologically very simple means to derive one member of the pair from the other, namely by employing the functional preposition *de*.

1.2.3. Directional prepositions

Directional prepositions entail a change of location along a trajectory, or path. Let me give some illustrations:

- (6) a. Dracula swam *in* the lake. – locative preposition
b. Dracula is going *to* the castle. – directional preposition

Intuitively, we see that in (6.a.) the position (*place*) of the subject argument Dracula is specified with reference to a *landmark object* ‘the lake’. In (6.b) the *landmark object* (or *reference object*) is described as the entity that acts as the ‘origin’ of the system of reference for the event of movement. Again, *place* denotes the physical space surrounding the reference landmark. Dracula is in motion along a *path* which has as final point ‘the castle’. Thus, the directional preposition can be decomposed into a *path* constituent, a *place* one and the *landmark object*.

Importantly, what differentiates the syntactic behaviour of directionals from that of locatives is the possibility for the latter to appear as complements of stative verbs such as *be*, *remain*, *stay*:

- (7) a. The cat *was in/on/under/behind* the box.
b. *The cat *was to/into/onto/from/out of/through* the box.

On the basis of what has been said so far, we can put forth the following observation (along the lines of Koopman (1997), Gehrke (2006) and many others): **the notion of *place* can be seen as a necessary theoretical complement to the notion of *path*.** We will have the chance to look into more detail into the structure of locative and directional prepositions later in this study, when we will see how the internal structure of spatial prepositions is built. For the time being, I will use the (more formal) definitions in Gehrke (2006:1) to give a first account of the functional structure of spatial prepositions:

“The denotation of locative PPs can be treated as a set of locations (places) in semantics, thereby licensing functional place structure in syntax, whereas directional PPs denote set of paths made up of locations and therefore license functional path structure which embeds place structure.”

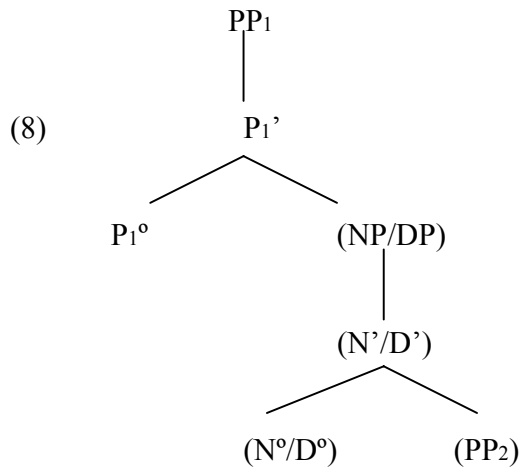
1.2.3.1. Goal, Source and Route motion

Turning back to the description and classification of spatial PPs, let us further decompose directional prepositions.

Directional prepositions are usually sub classified in *Goal of motion* PPs and *Source of motion* PPs, which designate the final point and the initial point of the trajectory, respectively, and *route* (as labelled by Gehrke (2004) or *symmetric* (in Nam’s (2004) terms) directionals. Zwarts (2006) gives a more fine grained classification of directional prepositions, adding to the three already mentioned subclasses those of Comparative, Constant, Holistic and Periodic directional prepositions. I will provide more details on various other classifications (as provided in studies starting with more than two decades ago) at the beginning of Chapter Two.

1.2.4. Spatial prepositions and Complement selection

There are several possibilities of combining spatial prepositions with (optional) complement constituents. These possibilities are described below, based on the structure in (8):



The parentheses above indicate optionality. There are four possible construction depending on whether certain constituents are present or not:

→ If both constituents are omitted, the PP in this case (also labelled ‘intransitive’ PP) is an adverb-like constituent; members of this class are *outside*, *downstairs*, *afterward*, etc. The examples below are taken from Svenonius (2004), but Huddleston & Pullum (2002) provide an almost exhaustive list as far as English is concerned.

- (9)
- a. As the group approached the final summit, Espen stayed behind (them).
 - b. There was a box in the table. Inside (it) was fine Swiss chocolate.
 - c. We stood on a bridge. Below (it) we could see barges laden with port wine.
 - d. Nils looked over the snowdrift. The frozen fjord beyond (it) was dotted with seals.

→ Secondly, if the NP/DP is present while the second PP is absent, the resulting PP-NP constituents are the most familiar ones like ‘*in the park*’, ‘*under the table*’.

→ Thirdly, if there is no NP but there is a PP complement then we obtain forms like ‘*over here*’, ‘*from within*’, or ‘*from out of the darkness*’ – in the latter case the inner PP₂ is also decomposed into a P₂ head and a PP₃ complement phrase.

→ And the last case, when both the NP and the PP complement of the NP are present, constructions like ‘*across the street toward north*’, or ‘*up the road from the town center*’ are obtained.

An obvious observation is that the more complex the structure the more complicated the interpretation gets. One natural consequence of enlarging the phrasal structure of PP₁ is the adjunction of spatial features that impose a directional reading of basically static prepositions (see section 2.3. in Chapter Two).

1.3. SPATIAL PREPOSITIONS AND EVENT MODIFICATION

1.3.1. Verbs of motion and spatial semantics

I have already briefly mentioned in the previous sections that verbs of motion and spatial prepositions collaborate semantically. In fact, there are cross-categorical semantic properties that are not restricted to one particular part of speech, but apply to different categories. Hence the importance of emphasizing the idea that motion verbs actually share spatial properties with prepositions and adverbs. As an illustration, I will report below a pair of examples which Zwarts (2006)⁵ borrows from Jackendoff (1983).

- (10) a. The bear entered the cave.
b. The bear went into the cave.

⁵ An interesting point is that in Zwarts (2006) ‘*Event Shape: Paths in the Semantics of Verbs*’ the author underlines that ‘the shape of an event is the trajectory or contour that is associated with that event in space or in a scalar or conceptual domain’, in opposition with the view that events have subevents and internal structure. However, I will not go into Zwarts’ view, as he develops a framework different from the one I follow.

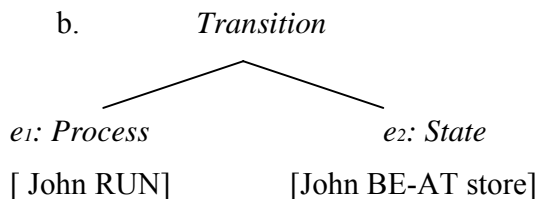
The meanings of the two sentences in (10) are more or less equivalent, since the semantics of the Goal of motion preposition ‘*into*’ is incorporated into the semantics of the motion verb ‘*enter*’ (which is a verb of inherently directed motion). The same semantic relation holds between the verb ‘*approach*’ and the adverb ‘*nearer*’, the verb ‘*rise*’ and the adverb ‘*up*’, etc.

1.3.2. Decomposing the event

One option for a formal account of the equivalency between the two clauses in (10) above is to assume along the lines of Pustejovsky (1991) and others that the event in (10.a) can be decomposed in two subevents $\langle e, e' \rangle$, of which the first one denotes the *process* of motion, and the second one the *state* of being in the cave. Let me illustrate below Pustejovsky’s decomposition of the event:

- (11) a. John closed the door.
 b. E: *Transition* = e_1 : *Process* = [act (John, the-door) & not-closed (the-door)]
 + e_2 *State* = [closed (the-door)]

- (12) a. John ran to the store.

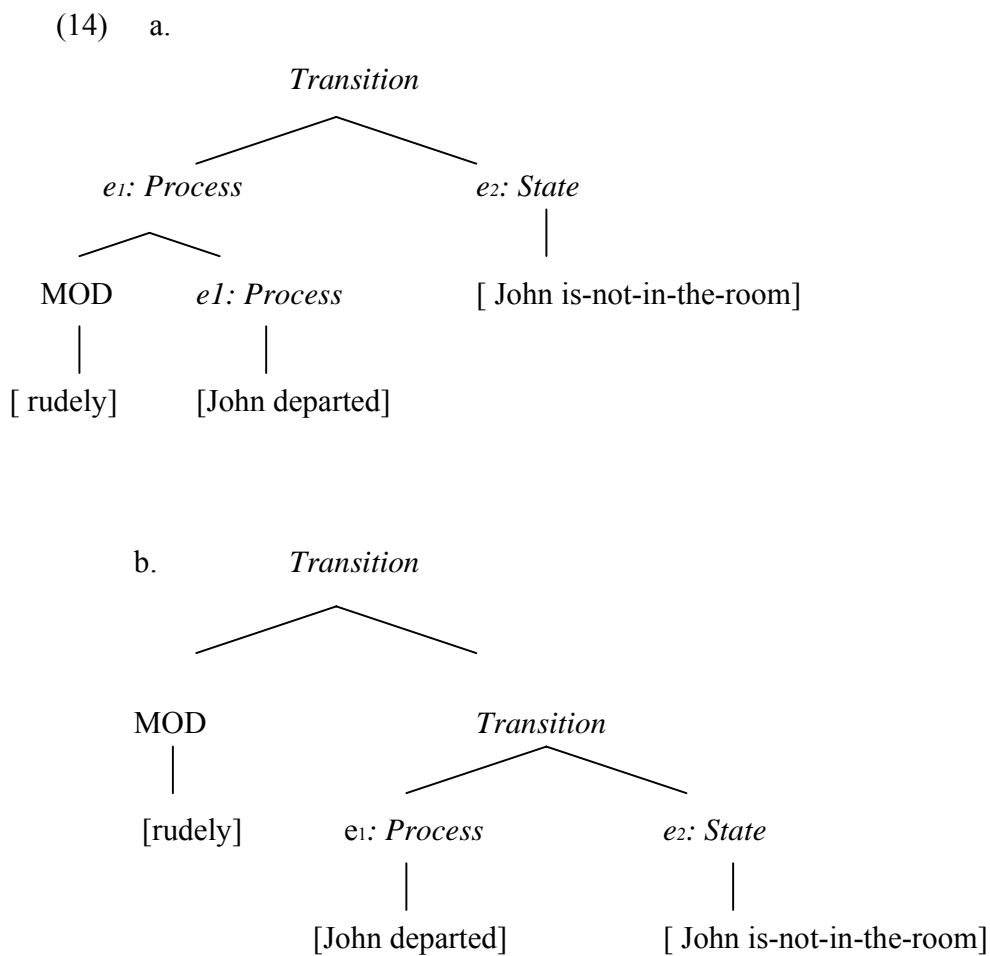


From (11.b) and (12.b) we see that what Pustejovsky (1991) proposes is to conjoin sub-events in parallel. The whole event (*Transition*) contains two conjoined subevents, none of which embeds the other.

Pustejovsky (1991) further argues that a more fine-grained event structure is necessary. This is required by the scopal ambiguity of manner adverbs which modify the event. Consider (13) and its two possible interpretations:

- (13) John departed the room *rudely*.
- (i) John’s way of departing the room was rude.
 - (ii) The event of John’s departing the room was rude

The ambiguity suggests that the adverbial modifier is generated into two distinct positions in the (extended) verbal structure. The representations of the two readings available in (13) are given in (14.a) and (14.b):



(14.a) represents the manner reading of ‘rudely’, while (14.b) is the structure of the event when the modifier takes scope over the whole event.

Let me now try to account for (10.a) and (10.b), repeated here for convenience, in a structure like the one proposed in Pustejovsky (1991).

- (10) a. The bear entered the cave.
b. The bear went into the cave.

A *state* (like ‘love’, ‘know’, ‘be tall’, etc.) denotes a single event (no reference is made to any other event), while a *process* identifies a sequence of events corresponding to the same semantic expression (‘run’, ‘push’)⁶. According to this view, the event in (10.b) has a bipartite structure. Both events are telic; the difference between (a) and (b) would then reside in *where the splitting event takes place: in the verb or in the preposition*. Zwarts (2006) challenges this option by putting forward the following pair of examples:

- (15) a. The balloon rose (for hours)⁷
b. The balloon went up (for hours).

With these two (atelic) activities it is impossible to decompose the event structure, since semantically no split between e and e' can be identified. Zwarts’ proposal seems justified: instead of assuming a bipartite event structure with these motion verbs, it is more appropriate to assume a sequence of states e_1, \dots, e_n over which a certain progression is observed. In this particular case, by progression is intended that every state e_i is higher than the state e_{i-1} with reference to the landmark object. The conclusion that the author reaches is that the spatial notion of trajectory (or

⁶ Higginbotham (2000) adds to this classification a third type of event, namely a *transition* event, which is evaluated with respect to its opposite (‘open/close’, ‘give/take’, ‘create/destroy’).

⁷ The *for/in* syntactic test is more thoroughly presented in section 1.3.2.2. below.

path) is a property common to verbs, adverbs and prepositions, which goes beyond event structure.

This conclusion is strengthened by the following observation: typically, verbs of motion can be each other's opposites in terms of the *direction* or, more widely, function of the *spatial* properties that they specify. This type of spatial opposition is not specific to the category of Verbs, but it is also a property of Adverbs and Prepositions.

- a. rise ≠ fall, ascend ≠ descend, up ≠ down, above ≠ below;
- b. enter ≠ leave, inside ≠ outside, into ≠ out of;
- c. advance ≠ retreat, forward ≠ backward, front ≠ back.

This is an important observation to which I will turn later in this paper.

1.3.2.1. Adding telicity

With all these in mind, let me shed some light over which spatial prepositions turn unbounded events (processes) into bounded events (along the temporal dimension). It is important to underline that the aspectuality of a verb is not separate from its lexical meaning, but actually follows from it. First of all, let me sketch the classification of motion verbs according to the [\pm telic] coordinate, which will also be needed in the following sections.

- A. **atelic motion verbs**: swim, run, walk, follow, etc.
- B. **telic motion verbs**: arrive, leave, reach, cross, etc.
- C. **either telic or atelic motion verbs**: jump, rise, etc.

The interpretation of the events employing the verbs in C above depends on whether or not an implicit endpoint is assumed:

- (16) a. The balloon rose (for hours) - atelic
b. The submarine rose (*for hours) – telic (the upper level is the surface of the water).

The available interpretations with *jump* are that of a telic semelfactive event (17.a) or an atelic iterative reading (17.b) (see Chapter Two of the present paper for more details):

- (17) a. Alex jumped (*for hours). – ‘jumped only once’
b. Alex jumped (for hours). – ‘jumped repeatedly’.

There is often the case that (some) directional PPs (namely Goal of motion PPs, comparative PPs – see the table in the first section of the next chapter) contribute to event composition, specifying the endpoint of the event. Naturally, this does not happen with simple static PPs. Let me illustrate again with examples drawn from English:

- (18) a. Dracula danced *in* the hallway. – locative, atelic event
b. Dracula stepped *into* the castle. – directional, telic event

The difference in interpretation of the two events is obvious. The first activity is unbounded in time, while in the second case there is an overtly expressed endpoint (introduced by the preposition *into*), hence it is bounded.

1.3.2.2. The *for/in* test

We can verify syntactically our intuition by applying the durative adverbial *for X Time* or the time-frame adverbial *in X Time* tests. According to these tests, the adverbial modifier *in X Time* is a measurer of the duration of an event before it reaches its final point. *For X Time*, on the other hand, measures out the duration of a

homogeneous process which is not related to any culminating or final point. Accordingly, in (19.a.) Dracula could be dancing in the hallway for an hour, while in (19.b.) no such reading is available; the opposite result in terms of grammaticality are obtained if the time adverbials are inverted:

- (19) a. Dracula danced *in* the hallway (for an hour/ *in an hour).
b. Dracula entered *into* the castle (in a second/ *for a second).

The verbs in the examples above have an atelic (*to dance*) or a telic (*to enter*) nature themselves, so one might argue that the PP simply does not change the default interpretation of the events. The illustration in (19.a) does demonstrate, however, that as far as static prepositions are concerned, they bring no contribution of their own in aspectual interpretation.

Let me give another pair of examples using the same verb in both of the following constructions and comparing now an atelic event and [e + Goal PP] on the one hand, and [e + Source PP] on the other hand, in order to show that telicity is indeed added by both types of directional prepositions. In the case of Goal PPs it is the endpoint of the event that is added, while a Source PP specifies the initial point of the event:

- (20) a. Dracula walked (for an hour/ *in an hour). – atelic event
b. Dracula walked *to* the castle (in an hour/ *for an hour). – directional (goal), telic event (endpoint specified)
c. Dracula left *from* the castle (in an hour/ *for an hour). – directional (source), telic event (initial point specified).

(20.a.) denotes an unbounded activity, thus its impossibility to combine with ‘in an hour’. (20.b.), however, exemplifies the change in the aspectual character of the verb due to the adjunction of the Goal PP, now denoting a telic accomplishment, so ‘in an hour’ goes fine, while ‘for an hour’ is unacceptable. The last example supports the alignment of Source PPs with Goal PPs: ‘from the castle’ contributes to verb

aspectuality (so (18.c.) behaves exactly like (18.b.), with the already mentioned difference (specification of the final or initial point, respectively).

Some directional PPs cannot add telicity to the event, though. *Towards* is one such preposition:

- (20) d. Dracula walked *towards* the castle (for hours / *in hours) – directional (goal), atelic

In (20.d) the subject gets closer and closer to the castle at the end of the moving event, but no information is given as to its final location, we only know where the mover is located during the event.

It can be noticed that the telic directionals are ‘phase-like’, in the sense that the path can be decomposed into phases (for instance, in (20.b.) the goal PP denotes the last phase of the movement along a path), while atelic ones (*towards*, *along*, and maybe also *through*, *around*, *across* etc.) imply a more complex relation between the path and the landmark object.

1.4. OTHER PROPERTIES AND USES OF SPATIAL PREPOSITIONS

There is more to spatial prepositions than what may seem at a first glance. This section is dedicated to those particular instances which add complexity to the study of locatives and directionals: ‘fictive motion’ (apparent directional reading of PPs), some non-locative uses of *in*, orientation (a more fine-grained view of the relations between the prepositional phrase and the syntactic elements in the clause), and idiomatic or figurative uses of prepositions.

1.4.1. Fictive motion

Jackendoff (1983), Zwarts (2006) and others point out a particular type of event modification by directional PP, namely what has been called ‘fictive motion’.

- (21) a. The missile zigzagged to the village.
b. The road zigzagged to the village.

(Zwarts (2006) 7:11)

The second example adds another question mark to the appropriateness of defining the contribution of directional PPs to event structure. In (21.a.) *e* (the first subevent in the pair $\langle e, e' \rangle$ that has been proposed by Pustejovsky (1991)) would correspond to the process of ‘zigzagging’, while *e'* would be the result state of being at the village. The problem of extending such an analysis with (21.b.) is that there is no temporal implication in the zigzagging of a road to the village. In fact, (21.b.) is atelic along the time dimension.

This pair of examples actually strengthens the role of *paths*: the two events above share a specific trajectory of the subject; what changes is the relation between the subject and the path: as a ‘path of motion’ or as a ‘path of extension’ (Zwarts (2006)).

Talmy (2000) associates fictive motion to the familiar concept of ‘line of sight’. The prepositions in (22) indicate a motion in the line of sight, from the natural interpretation of ‘straight ahead’ to ‘downward’, and then ‘once my line of sight is oriented at a downward angle, the fictive motion of my vision then proceeds away from me axially along the line of sight, thus entering the well’ (*into*) (Talmy (2000): 111).

- (22) I quickly looked down into the well.

Clearly, in this case there is no Figure object moving, so what Talmy names ‘fictive motion’ is different from what has been exemplified in (21).

1.4.2. Non-locative readings of spatial prepositions

The complexity of uses and interpretations of (apparently) locative or directional prepositions is emphasized by those contexts in which their readings have little in common with the spatial dimension. For instance, those directional prepositions which usually denote the source of motion along a trajectory (I refer the reader to the classification of directionals given in the next chapter) headed by *from* often have non-spatial readings:

- (23) Vampires could die *from* sun exposure.
- (24) People could benefit *from* sun exposure in May.
- (25) We have been invited *from* the chairman to attend the council meeting.

The source PP in (23) denotes a causing event that leads to a certain resulting state of the subject, which bears the theta-role of Patient. In (24) the PP refers to the source of a benefactive event and no spatial semantic component is involved. Example (25) illustrates a passive construction in which the preposition introduces the Agent.

Another case of non-spatial reading involves the locative preposition *in*. Consider the following example:

- (26) I will arrive *in* Transylvania *in* two days.

The first prepositional phrase denotes the result location of the motion (achievement) event. The second *in* instead introduces an adjunct that refers to the temporal rather than the spatial dimension of the event. It has to be underlined though that the concept of ‘inclusion’ holds in both instances: spatial and temporal.

1.4.3. Idioms and figurative uses

One of the properties that I pointed out for directional prepositions was their impossibility to combine with static verbs such as *be*, *stay*, *remain*. There are, however, constructions in which we do find a PP complement of *be* introduced by a directional preposition⁸:

(27) John was very much *into* gambling.

Of course, the preposition in (27) does not refer to a spatial relation between the subject and the object of the clause, nor to a change in location of the subject during an event of motion. Rather, the PP complement denotes a property of John, and the ‘be into something’ expression is possibly listed in the lexicon as such.

1.4.4. The orientation of spatial prepositions

In Nam’s (2004) study many syntactic arguments are brought in support of the following idea: Goal of motion Ps behave more like true complements than Source of motion Ps, which more often than not have the syntactic behaviour of adjuncts. He also observes that Goal PPs are always oriented to the object/theme argument, while Source PPs may be oriented to the subject, where orientation refers to the element which is modified by the PP. He thus draws the conclusion that Goal PPs can be treated as internal arguments that participate in the aspectual composition of the verb.

There are two elements of which we can express the orientation, namely the Subject (S) and the Object (O) of the clause. There are four possible types of orientation with locative prepositions, considering also the spatial configuration of the two entities:

⁸ I thank Norbert Corver for pointing this out at the 9th Annual Conference of The English Department of the University of Bucharest, May 31st – June 2nd 2007, where I presented part of this study.

1. Subject modification;
2. Object modification;
3. Subject to Object modification;
4. Subject and Object modification.

Subject (Object) orientation expresses the place where a Subject (Object) is located during event time. It is expressed by prepositions such as: ‘on’, ‘to’, ‘at’, ‘under’, ‘over’, etc. Many illustrations (drawn from English) have already been provided.

Subject to Object orientation is expressed by prepositions such as ‘between’. The *place* where the entity is located is situated between the *places* where other two entities are located.

Since this paper will be later on dedicated to the study of Romanian spatial prepositions (mostly concentrating on directionals), let me already introduce the reader into some Romanian data to which I will refer again later. Accordingly, the examples below illustrating the Subject to Object orientation are given in both Romanian and English.

- (28) România este între Ungaria și Republica Moldova. (Rom.)
‘Romania is situated between Hungary and the Moldavian Republic’

Subject and Object modification expresses the positions of both the subject and the object:

- (29) Castelul este în munți în Transilvania. (Rom.)
‘The castle is in the mountains in Transylvania’.

When it comes to directional prepositions, orientation is determined by the ordering of subplaces on which a path is delineated. The initial or final locations are contextually-given in the case of Source and Goal PPs, respectively (see (30) below).

As for other types of directionals, such as *towards*, *along*, *through*, *across* etc., it has to be added that the landmark object may also correspond to intermediary subplaces. This intuition is mirrored in the data in (30):

(30) Dracula merge la castel⁹. (Rom.)

‘Dracula goes to the castle’.

(31) Dracula walked *towards* the castle.

1.5. INTERMEDIARY CONCLUSIONS

This chapter was dedicated to introductory notions related to spatial prepositions. In the first sections I dealt with assigning a status to prepositions in general along the lexical-functional dimension, underlining those factors that incline the balance in one direction or the other. One aspect is certain, though: spatial prepositions have a semantic component which, if it does not suffice to treat them as lexical categories, it leads us to question their pure functional character.

Next I attempted to provide the best descriptive definitions of the two major classes of spatial prepositions: locative (or static) and directional. I would like to emphasize again how difficult this task turned out to be, since there is little agreement in the literature on the labels, definitions and classification of spatial prepositions.

Section 1.3. looked into the role of spatial prepositional phrases in event composition. The *for / in* syntactic texts have been applied in order to split PPs in two types: those which add telicity to events (Goal directionals), and those which are not able to change verb aspectuality (locatives and some directionals such as *towards*).

⁹ The preposition *la* was used both as locative and as directional. A large part of the next chapter is dedicated to such ambiguities in Romanian.

Chapter 1 – *General Overview on Spatial Prepositions*

The subparts of section 1.4. dealt with a number of particular semantic properties of spatial prepositions. Naturally, it is wrong or incomplete to think of these PPs as a neat class with a neat behaviour, so I thought it necessary to tackle issues such as ‘fictive motion’, contexts in which the readings are definitely non-locative, figurative uses, and a thorough look into the relation between spatial PPs and the other participants in the event (in particular the Subject and the Object).

The next chapter is dedicated to the classification, morphology and syntax of locative directional prepositions in Romanian.

CHAPTER TWO

THE SYNTAX AND MORPHOLOGY OF DIRECTIONAL PREPOSITIONS

2.1. EARLY AND RECENT CLASSIFICATION OF DIRECTIONAL PREPOSITIONS

One of the most recent and thorough studies on directional PPs is that of Zwarts (2006c). He proposes a finer-grained division of directional prepositions in seven sub-classes. As already mentioned, few works have been dedicated to the syntax and semantics of directionals, so there is still a long journey ahead. The table below mirrors the steps that have been taken since Jackendoff's (1983, 1990) classification of directionals:

	Jackendoff (1990)	Kracht (2002)	Zwarts (2006c)
<i>From</i>	FROM	Coinitial	Source
<i>To</i>	TO	Cofinal	Goal
<i>Through</i>	VIA	Transitory	Route
<i>Towards</i>	TOWARDS	Approximative	Comparative
<i>Along</i>			Constant
<i>Around</i>			Holistic
<i>Up and down</i>			Periodic

➤ **Jackendoff (1983, 1990)** was one of the first linguists to sketch a syntactic and semantic classification and analysis of directional prepositions, formalizing their conceptual structure. As far as I know, he was the first to propose a segmentation of prepositional phrases into *path* and *place* functional layers, which are also mapped to the respective constituents. However, not many details in terms of internal structure are provided, as the works concentrate on other issues, but it is surely worth mentioning as it constitutes a starting point in the study of spatial expressions. The semantic classification of spatial prepositions that Jackendoff provides is quite thorough though; he points out distinctions between pairs of preposition of location (that otherwise have very similar syntactic behaviour) in terms of semantic features, such as [\pm distributive] (for instance ‘*on* the floor’ is [-distributive], ‘*all over* the floor’ is [+distributive]), [\pm contact], [\pm impact], etc.

In (1) below I will use one of Jackendoff’s examples to illustrate the conceptual formalization as proposed in Jackendoff (1990):

- (1) a. The mouse ran under the table and stayed there.

(Jackendoff (1990) 72:3)

- b. [_{Path} TO ([_{Place} UNDER ([_{Thing}]_j))]]

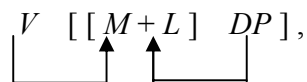
The preposition denotes the Path of motion (the verb of motion ‘run’ imposes the directional reading on ‘under’), the ending point of which is denoted by the Thing component of the PP (that is, ‘the table’). In this reading, ‘the table’ is the Goal of motion. Similarly, the Source, Route and Comparative prepositions are conceptually formalized through FROM, VIA and TOWARDS, respectively.

➤ **Kracht’s (2002)** study works on the semantics of locative cases in various languages through a fairly detailed analysis of the syntax and semantics of spatial expressions in general. He argues that the structure of these expressions consists of two layers: the *configuration* and the *mode*. The configuration refers to the way in which

(several) entities are positioned with respect to each other (this location can be defined without reference to the path of motion), while the mode describes the way in which the entities move with respect to the given configuration. Naturally, static prepositions are used to describe configuration, while mode is rendered by prepositions which denote change in location¹. Accordingly,

- a mode is *coinitial* if the entity moves *from* the configuration during event time;
- a mode is *cofinal* if the entity moves *into* the configuration during event time;
- a mode is *transitory* if the entity moves *in and out* of the configuration (*through*);
- a mode is *approximative* if the entity is described as approaching the configuration (*towards*).

The structure of locative expressions proposed by Kracht (2002) is the following:



where M specifies the *mode* (M stands for *Modaliser*), L specifies the *configuration* (L is a *Localiser*), and DP is a Determiner Phrase. Generally, Kracht observes, the DP forms a unit with $[M + L]$ ², which is either an adposition or a case; actually, the DP can be either preceded or followed by $[M + L]$, so languages are differentiated according to this parameter. Thus, the equations below hold (in Kracht's (2002), (2004) terms):

¹ Note that a mode can be static, if the entity remains in the same configuration during event time.

² With the exception of Chinese where $[L + DP]$ excludes M .

- DP = object
- [L DP] = parametrized neighbourhood (inside this constituent, the DP serves as a landmark by which the localizer defines the location)
- [[M + L] DP] = a set of events.

Accordingly, Kracht analyzes the prepositional phrase in (2) below as a Modalizer Phrase, embedding a Localizer Phrase:

(2) The cat appeared [_{MP} from [_{LP} under [_{DP} the table]]].

➤ In **Zwarts (2006c)**³ (a further elaboration of Zwarts (2005)) the first four of the seven classes are the basic ones. Their formal descriptions are equivalent to those given in Kracht (2002), but I shall briefly rephrase them here together with the definitions for the other three classes of directional prepositions:

- a *source* directional defines the position of an entity at the beginning of a moving event;
- a *goal* directional defines the position of an entity at the end of a moving event;
- a *route* directional defines the position of an entity during a moving event;
- a *comparative* directional defines the position of an entity as getting closer to the landmark object, during the moving event;
- a *constant* directional defines the position of a moving entity as constant on one axis with respect to the landmark object;
- a *holistic* directional defines the position of an entity with respect to the landmark object as a whole, without specifying other properties;
- a *periodic* directional consists of complex PPs denoting sequences of directionals.

³ Zwarts' study is elaborated in the framework of the Vector Space Semantics (VSS).

The last three classes of directionals will be put aside for the remainder of the work.

According to Zwarts (2006c), only goal and source directionals are telic (but not all members of these classes, depending on the semantic context). He argues that these two types of directionals are exclusively based on *in* or *on* or *at* locatives, which are bounded in their length. *Towards* is a comparative directional in Zwarts' terms, clearly distinguished from other goal-like Ps; alongside with the constant directional *along*, they are unbounded and atelic. An important observation has to be made: in the VSS framework that Zwarts' adopts, locatives are all unbounded, with the exception of the three mentioned above. The [+bounded] or [-bounded] feature percolates up to the directional level, thus determining the character of the prepositions whenever directionality is added. In another study, Zwarts (2005) builds on the Algebra of Paths and underlines the distinction between locatives and directionals in terms of their contribution to lexical aspect by investigating their algebraic properties, thus defining the conditions that impose a telic, atelic (the terms are synonymous and interchangeable with bounded/unbounded) or an ambiguous interpretation on directionals.

2.2. LOCATIVE PREPOSITIONS IN ROMANIAN

2.2.1. The semantic features of locative PPs

Many approaches to directional prepositions propose an extended structure based on that of locatives (Koopman (1997), den Dikken (2003, 2006), Tortora (2006) and many others). Hence, dealing with locative prepositions is a necessary prior step before going to directionals. I will first characterize some (Romanian) static PPs in terms of semantic features, and then adopt a structure which mirrors the observed characteristics. After a schematic description of locatives, I will introduce the two opposite views that have been claimed in the literature, namely that simple spatial

prepositions are *ambiguous* between a locative and a directional reading, on the one hand, and that these prepositions are actually *purely locative* (while directionality is imposed by some component of the VP). Later on (in Chapter Three), I will derive their (source) directional counterparts by adding the functional prepositions *de*, and account for this derivation both in semantic and in syntactic terms.

2.2.1.1. *În* ‘in’ and *pe* ‘on’, *la* ‘at’: static and directional

According to several studies published by Zwarts in the past two years, *in*, *on* and *at* are the three basic static prepositions, bounded in nature. On the top of these Ps more structure can be added (licensed by additional directional prepositions, verbs of motion, certain movement operations, case, etc.) thus obtaining directional readings. Without going into pure semantics of static spatial prepositions and all the concepts involved, I will turn to their Romanian counterparts: *în*, *pe* and *la*.

To characterize the spatial relation between two entities (one of which is the landmark or reference object) several features must be taken into account: distance, curvature of a path, force dynamics, direction, etc. I will follow Zwarts (2005) in formulating readings by means of *primitive features*, arbitrarily lexicalized in the overwhelming majority of cases.

It is important at this point to introduce the distinction suggested in Winter and Zwarts (2000) between projective locative prepositions such as *under* and *behind* and non-projective ones, such as *in*, *on* and *at*. Non-projective prepositions only require some spatial knowledge about the position of the Figure and the landmark object with respect to one another, whereas projective Ps require some further indications on the directions from the reference object. Gehrke (2006) argues that the “definition of projective modifiers [...] additionally involves a certain axis which can be modelled along the lines of three orthogonal unit vectors in the vector space V for *up*, *right* and *front*. [...] It is this additional axis element in the definition of projective modifiers that enables these placePs to have a directional trajectory reading (but crucially not a goal reading), since this axis provides information about the direction from the

reference object in space. Such extra (directional) information is absent in non-projective modifiers”.

➤ Let me start with the semantic description of *în* ‘in’ and *pe* ‘on’. Basically, their semantics refers to *spatial inclusion* (or containment) and *contact* (or support), respectively. Zwarts (2005) takes [CONT(AIN)] and [SUPP(ORT)] to be primitive features; [CONT] is lexically associated with *în*, and [SUPP] is lexically associated with *pe*.

- (3) Jacheta este *în* dulap. (Rom.)
 ‘The jacket is in the closet’.
- (4) Cartea este *pe* masă. (Rom.)
 ‘The book is on the table’.

In (3) the Figure object (the jacket) is totally contained in the Ground object (in Zwarts’ terms) (the closet). That is, the jacket is included in the spatial region occupied by the closet. The SUPP feature implies spatial contact. In (4) the book is supported by the table (from underneath, given the law of gravity), but the same relation would hold if we were talking about a lamp on the ceiling. We can safely put forward the following generalizations:

- *în* PPs always lexicalize [CONT]
 → *pe* PPs always lexicalize [SUPP]

As expected, there are situations in the middle, in which the relation established between the Figure and the Ground is of both containment and support. One such situation is exemplified below:

CONTAIN	-----	CONTAIN + SUPPORT	-----	SUPPORT
‘un pește <i>în</i> apă’		‘un măr <i>în</i> bol’		‘o carte <i>pe</i> masă’
a fish <i>in</i> the water		an apple <i>in</i> the bowl		a book on the table

The space occupied by the apple can be contained by the space occupied by the bowl, but not necessarily (imagine a bowl full of apples, some of which exceed the interior of the bowl). Also, the Figure object is located *on* the Ground object, in the sense that it is supported by the Ground from below. Romanian (and English, as well) prefers to express such cases by *în* PPs, but it may not be valid for all languages. A tentative account for this fact would be that [SUPP] is less marked than [CONT], since our knowledge of the laws of gravity allows the semantic feature of [SUPP] to be taken for granted, so when both containment and support have to be lexicalized we have to express that lexical element which denotes containment. Thus an ‘*în* PP’ is preferred over a ‘*pe* PP’.⁴

Another interesting case of ‘A is *în* B’ is exemplified in the following:

- (5) Copacul este *în* pământ. (Rom.)
Tree-the is in ground

This example shows that the way we perceive an object can be reduced by metonymy to one of its parts, since obviously it is not the case that the entire tree is in the ground, but only its roots.

Without departing from the locative readings of *în* PPs, let me point out two other occurrences that are relevant for our discussion on ‘containment’:

- (6) Pasărea zboară *în* câmp. (Rom.)
Bird-the flies in field

⁴ There are other situations of possible ambiguities, in which *pe* ‘on’ is in competition with *deasupra* ‘above’. The relevant feature in this case is [SUPERIOR], which captures the intersection between the [SUPP] feature and a vertical axis (namely, *deasupra* implies no support nor contact between the Figure and the Ground in a static situation like ‘*Becul este deasupra mesei*’ – ‘The lamp is above the table’).

Simply put, in sentence (6) we pragmatically assign the interpretation that the space occupied by the landmark may include the air above it.

By far the most unexpected occurrence of an *în* PP is the one we find in (7), which clearly contrasts with the English gloss. The roles of the Figure and the landmark object (the Ground) seem to be inverted: the sock is the container of the foot, and not the other way around:

- (7) Ion își pune șosetele *în* picioare. (Rom.)
Ion refl-3sg puts socks in feet
'Ion puts his socks on'.

I do not have a formal account of (7), so I will leave the question open.
From all of the above, we conclude that the following statement holds:

- A este *în* ('is in') B if the landmark B (partially) contains A

➤ As for *la* 'at / to', the semantic interpretation is that the Figure entity is located outside the landmark object, and possibly very close to it. I propose that the primitive semantic feature associated with locative *la* is [ADJACENCY]. Note that assigning this feature to *la* rather than to *lângă* 'near' is motivated by the fact that the DP introduced by *lângă* does not imply adjacency of the Figure to the landmark object, it merely implies that they are located closely.

Comparing the minimal pair provided in (8) below, we intuitively note the difference between a *în* PP and a *la* PP:

- (8) a. Ion este în magazin. – containment (Rom.)
'Ion is in the store'
b. Ion este la magazin. – adjacency (Rom.)
'Ion is at the store'

In (8.b) the space occupied by Ion can be included in the space occupied by the store, but not necessarily, since Ion may very well sit outside the store waiting for it to open.

2.2.1.2. Are *in* and *on* purely locative or ambiguous?

One very important distinction (which I have already mentioned in the first chapter) between static and directional readings of spatial prepositions is that locative prepositions can appear as complements of stative verbs such as *be*, *remain*, *stay*, while this use is not acceptable with directionals.

- (9) a. The cat was in/on/under/behind the box.
b. *The cat was into/onto/from/out of/through the box.

The general assumption is that the prepositions in (9.a) are not purely locative, in the sense that they can always license a Path structure when combined with verbs of directed motion. Thus, Ps such as *in* and *on* are viewed as ambiguous (Koopman (1997), van Riemsdijk and Huybregts (2001) and others). Moreover, the same authors claim that some languages permit directional prepositions (of the (9.b) type) to combine more or less freely with any verb of motion (in Germanic languages, Chinese, Finno-Ugric), and that there are other languages in which the directional interpretation of prepositions is more restricted (Romance, Japanese, Korean, Semitic). I will confront English (from the Germanic branch) and Romanian (a member of the Romance family) throughout the study, and try to argue against a strict division of language types in the sense of Talmy (1985, 2000).

2.3. ‘SATELLITE-FRAMED’ AND ‘VERB-FRAMED’ LANGUAGES

2.3.1. English versus Romanian

Talmy (1985, 2000) proposed different lexicalization patterns for motion verbs, by analyzing the relations between meaning and overt expression. Notions like ‘motion’, ‘path’, ‘figure’, ‘ground’, ‘cause’ are viewed as semantic elements, while verbs, adpositions etc. are surface elements. The purpose of Talmy’s works is to examine which semantic elements are expressed by which surface elements and thus classify languages according to this criterion, if typological or universal principles hold. Naturally, the relation between semantic and surface elements is not one-to-one, in the sense that a single surface element can lexicalize several semantic elements, or that one semantic element can be expressed by a combination of surface elements.

According to the two major studies conducted by Talmy (1985, 2000) the following classification holds among language types:

➤ all Germanic languages belong to the class of “**satellite-framed languages**”, in the sense that the verbal root encodes only **manner** and **motion**, while paths are rendered by other elements, namely particles or affixes (the so-called ‘satellites’) (see (10.b, c) and (11.a, b) below). In English, the ‘satellite’⁵ can be either a bound affix (such as the prefix in ‘to *misplace*’) or a free word (‘to start *over*’). Those elements that can function as satellites in English often overlap with other categories (usually with prepositions, but not only). For instance, ‘together’, ‘apart’, ‘forth’ serve only as satellites, while ‘of’, ‘from’, ‘towards’ serve only as prepositions.

The satellites in English are mostly involved in the expression of Path of motion. The sentences under (10) are taken from Talmy (2000), chapter 7 (417:4), and

⁵ Talmy (2000) claims that Latin and Russian verbal prefixes, Chinese resultative complements and different other elements in various languages are clearly ‘satellites’, while there are other less adequate possible candidates (such as French pronominal clitics). (cf. (Talmy (2000) for arguments and discussions).

are provided in order to illustrate that the particle-satellite in (10.c) can also participate in the force-dynamics of an event on a par with other ‘grammaticalized’ elements.

- (10) a. The ball kept rolling
 b. The ball was *still* rolling
 c. The ball rolled *on*
- } despite the stiff grass.

The adverbial particle *still* and the verb satellite *on* play a highly important role in the force-dynamics of the event. Moreover, we will not be wrong in treating the almost grammaticalized verb *to keep* (in (10.a) (the evolution of which appears to be similar to that of *use to* and *have to* in terms of change in status from lexical to (partially) grammatical) to be very close to the closed-class items in (10.b, c), thus emphasizing the role of such categories in ‘satellite-framed’ languages.

➤ Romance languages are “**verb-framed languages**” and conflate **motion** and **path** in the verbal root (many verbs of inherent motion are present in these languages) and need to employ other means to express manner of motion (11.e).

Talmy (1985) argues that satellite-framed languages differ from verb-framed languages in several respects. The table below illustrates the properties that an English-type language has that a Romance language does not have:

	Germanic (English)	Romance
verb-particle constructions	Yes: e.g. get off, turn on, etc.	No
resultatives	Yes: e.g. to paint the wall green.	No
manner of motion verbs + path of motion PPs	Yes: resultative: e.g. run into the store non-resultative: e.g. slide down the rope	No

Coming now to empirical data, consider (11):

- (11) a. Mary jumped into the lake. – directional/*locative (English)
 b. Mary danced into the room – directional/*locative
 c. Maria a sărit în lac. – locative/directional (Rom.)
 Maria aux3sg jumped in lake
 d. Maria a dansat în cameră. – locative/*directional (Rom.)
 Maria aux3sg danced in room
 ‘Maria danced inside the room’
 e. Maria a intrat în cameră dansând. (Rom.)
 Maria aux3sg entered in room dancing

Other researchers have since claimed that there is no such strict distinction between language types, namely that there are circumstances in which English behaves like a verb-framed language (Gehrke (2005) and subsequent work), while Italian, for instance, may sometimes use satellite-framed strategies to derive directionality (Folli (2002)). I will address this issue later on, when trying to see where Romanian stands.

2.3.2. Classes of verbs of motion and modification by spatial prepositions

Folli (2002), Zwarts (2005, 2006), Noonan (2006), Gehrke ((2005) and subsequent work) claim that the English prepositions *in* and *on* are *purely locative* (contra van Riemsdijk and Huybregts (2001) and others), which is why an *in* PP or an *on* PP cannot render directionality (nor telicity, for that matter) with some verbs of motion such as *swim*, *run*, *walk*, *dance*, *crawl* (henceforth *run*-verbs). This behaviour contrasts with Romanian *în* and *pe*:

- (12) a. John ran in the forest. – locative⁶

⁶ Contrast (12.a.) (repeated here as (i)) with (ii) below:

- (i) John ran in the forest. – locative

- a'. Ion a alergat⁷ în pădure. – directional/locative (Rom.)
b. John crawled on the roof. – locative
b'. Ion s-a târât pe acoperiș. – directional/locative (Rom.)

This observation holds only for *run*-verbs (as Gehrke (2006) pointed out), but not for (a small class of) verbs of motion such as *kick* (non-iterative) *jump*, *fall* (henceforth *jump*-verbs), which allow both locative and goal of motion readings in English:

- (13) John jumped on the porch.
– directional: John jumped and ended up on the porch.
– non-directional: John jumped while being on the porch.
(14) John kicked the ball in the yard.
– directional: John kicked the ball and the ball ended up in the yard.
– non-directional: John kicked the ball while being in the yard.

Unsurprisingly, Romanian also allows both readings with *jump*-verbs:

- (15) Ion a sărit pe verandă. – directional/locative (Rom.)
Ion aux3sg jumped on porch
(16) Ion a aruncat mingea în curte. – directional/locative (Rom.)
Ion aux3sg threw ball-the in yard

The readings of (15) and (16) are identical to the readings I pointed out for the English sentences in (13) and (14), respectively.

(ii) John ran into the forest. – directional

⁷ *Run* can also be translated with *a fugi*, but an event such as ‘Ion a fugit în pădure’ is not equivalent to the one in (12.a’), because there is a semantic difference between *a fugi* and *alerga*; the first one of these verbs implies an interpretation similar to ‘escape’, thus ‘Ion a fugit’ can be read as ‘Ion ran away, in order to escape from smth’, and not simply ‘Ion ran’.

Looking closely to some verbs in Romanian corresponding to the ones mentioned under *run*-verbs and *jump*-verbs for English, we notice that some of the *run* verbs have a particular behaviour in Romanian⁸. Consider (17):

- (17) a. Ion a schiat în pădure. – locative/*directional (Rom.)
Ion aux3sg skied in forest
- b. Ion s-a plimbat pe plajă. – locative/*directional (Rom.)
Ion refl-aux3sg strolled on beach

Applying the *for/in x time* test, our intuition is confirmed:

- (18) a. Ion a alergat în pădure în 10 minute (directional) / timp de 10 minute (locative)
John aux3sg ran in forest in 10 minutes / for 10 minutes
- b. Ion a schiat în pădure *în 10 minute (directional) /ok timp de 10 minute (locative)
John aux3sg skied in forest in 10 minutes / for 10 minutes

Other verbs which only allow for locative interpretation in Romanian are *a înota* ‘to swim’, *a rătăci* ‘to wander’, *a dansa* ‘to dance’ (*swim*-verbs).

⇒ **Data summary**

English: *run*⁹-verbs + *in/on* → locative (atelic activity¹⁰)

⁸ The distinction has also been noticed for Italian (Folli (2002)):

- (i) Gianni è corso nel bosco. (directional (telic), aux. *essere* ‘to be’) – ‘run’
(ii) Gianni ha corso nel bosco. (locative (atelic), aux. *avere* ‘to have’)
(iii) Gianni ha/*è passeggiato nel bosco. (only locative, *avere*) – ‘stroll’

⁹ *Swim*-verbs in English behave exactly like *run*-verbs.

¹⁰ Vendler (1967) characterized four classes of Aktionsarten: states, processes or activities, achievements and accomplishments (a fifth class would be that of semelfactives). In terms of

+ *into/onto*¹¹ → goal of motion (telic accomplishment)

jump-verbs + *in/on* → locative/goal of motion

Romanian: *run*-verbs + *în/pe* → locative/goal of motion

swim-verbs + *în/pe* → locative

jump-verbs + *în/pe* → locative/goal of motion

2.3.3. Obligatory goal of motion interpretation in Romanian

The question that logically arises concerns whether or not there are verb classes that obligatorily impose a directional reading on the PP, without allowing a locative reading. The answer is ‘Yes’. The PP designates the endpoint of a telic motion event. Crucially, the head of the PP is the same (locative) preposition that I have discussed so far, which is forced to project *path* structure, licensed by verbs of inherently directed motion, thus there is no ambiguity in interpreting the events in (19):

- (19) *a cădea / coborî / ieşi (în curte)*
to fall / descend ‘go down’ / exit ‘go out’ (*în* yard)
a intra / pleca / sosi / urca / veni (în casă)
to enter / leave / arrive / ascend ‘go up’ / come (*în* house)

Interestingly, with some verbs of inherently directed motion the preposition is omitted in English, since these verbs *do* encode the *path* component of the motion

boundedness (or telicity) the first two classes where inherently [- bounded], while the last two where [+ bounded].

¹¹Higginbotham (2000) proposes that English *into* and *onto* are “accomplishment” prepositions (see section 2.3.4.).

event¹², alongside with manner and motion. Thus, the goal of motion argument occurs in direct object position (20.b). This is not the case in Romanian, in (21) the presence of the preposition introducing the goal argument is obligatory:

- (20) a. John walked *(to) the store.
b. The president entered the main hall through the back door.
- (21) Președintele a intrat *(în) sala principală prin ușa din spate. (Rom.)
President-the aux entered *(in) hall-the main through door-the from back

2.3.4. Revisiting Talmy (1985, 2000)

Going back to Talmy's (1985, 2000) classification of language types, Romanian should only be able to express goal of motion using verb-framed strategies only. This is indeed the case with *enter*-verbs which are inherently directional (the PP complement identifies the final point of the *path*), but it is not that clear what happens with *run*, *swim* or *jump* verbs. I suggest on the basis of the data examined in section 2.3 and summarized in section 2.3.2. (and following Gehrke (2005) and subsequent studies on English, German and Dutch) that whenever directionality is one of the readings available in Romanian (with *run* and *jump*), *Path* is rendered compositionally by the verb and a **locative PP**. The same holds for English *jump*-verbs + *in/on*. This observation constitutes a problem for Talmy's two-way distinction: the same strategy is adopted in two languages presumably belonging to two different typologies.

Along the same lines, Ramchand and Folli (2004) argue that all simple spatial prepositions in Italian are locative¹³ and are always able to give rise to locative (that is, non-directional) interpretations, in the sense that they can all occur as complements of stative predications. This translates into the generalization that there are no morphologically simple Ps in Italian that have obligatory non-stative interpretations. I

¹² The presence *path* component in the semantics of the verb 'to enter' may be due to its Romance origin.

¹³ The reader is referred to Ramchand and Folli's (2004) study for arguments and discussion.

believe that this generalization holds for Romanian, too. It does not hold, however, for English, in which *to* clearly has only a directional denotation. Compare the following examples:

- (22) a. Dracula walked to the castle.
b. *Dracula was to the castle.
- (23) a. Dracula merge *la* castel. (Rom.)
Dracula goes at castle
'Dracula goes to the castle'.
b. Dracula este *la* castel. (Rom.)
Dracula is at castle

This account is strengthened by the fact that there are prepositions that have obligatory locative readings even when combined with verbs of motion (see again the discussion on *swim* verbs in Romanian). Anyhow, I take it the generalization to be debatable, but to my mind there is no strong evidence against its appropriateness to Romanian. One possible objection would be that there is one morphologically simple preposition which denotes directionality, which is *spre* 'towards'. This preposition however does not derive goal of motion interpretation, but rather route interpretations, along the same lines as its English ('toward(s)') or Italian ('verso') counterparts. Moreover, although somewhat marginal, a *spre* PP can appear as a complement of 'be' in contexts of the following type:

- (24) Q: Unde sunt Ion și George? (Rom.)
'Where are Ion and George?'
A: ?George este încă aici, dar Ion este deja spre casă.
George is still here, but Ion is already towards home
'George is still here, but Ion is already on his way home'.

MacDonald (2006) argues that the difference between a genuine Goal PP like ‘to’ in English and a directional like ‘toward(s)’ stands in the possibility to entail *possession* (‘*on/with*’ entailment). Examples (25.a) and (25.b) are eloquent:

(25) a. *on/with* entailment:

I threw the ball [*to* John]. → ball *necessarily with* John

b. * *on/with* entailment:

I threw the ball [*toward(s)* John]. → ball *not necessarily with* John

Closing the parenthesis on ‘towards’, let me briefly underline the point that has been made in this section on locatives. Accordingly:

All simple spatial prepositions in Romanian are locative,

-> there are no simple spatial prepositions that have obligatory directional interpretation

The implication is that there are no ambiguous simple prepositions in the lexicon, which is a desirable conclusion to reach. Again, when spatial prepositions (in Romanian) introduce a goal of motion complement and thus express the final point of the motion event, *path* is rendered compositionally by the VP complex. It is difficult to say if this is a ‘satellite-framed’ or a ‘verb-framed’ strategy to render directionality. The picture is also complicated by the availability of both locative and directional interpretation in English (a ‘satellite-framed’ language, according to Talmy (1985, 2000)) with *jump*-verbs. These observations suggest that the distinction between the two language types needs to be revisited¹⁴.

¹⁴ This need has also been suggested by Gehrke (2005) on the basis of Dutch and German data. I refer the reader to Gehrke’s work for details and discussion.

2.3.4. ‘Accomplishment’ prepositions

I have already introduced in a footnote what Higginbotham (1995, 2000) has labeled ‘accomplishment’ prepositions, of which *into* and *onto* are the typical English examples. These compound elements are subeventally complex, containing both a direction (*to*) and a final location (*in/on*). Folli and Ramchand (2002) parallel these prepositions to accomplishment predicates, and propose that the two categories share the same event structure $\langle e_1, e_2 \rangle$ (along the lines of Pustejovsky (1991); see also Ch. One section 1.3.2. of the present paper), and therefore ‘accomplishment prepositions’ enter syntactic derivation with two event projections. The structure of these prepositions is given in (29) below.

Folli (2002) argues that the Italian *fino a* and the French *jusqu’à* are also accomplishment prepositions. If one accepts her view and analysis, then one may turn to the Romanian counterparts of *fino a* and *jusqu’à*, and immediately notice that *până* ‘until’ can basically combine with a surprisingly wide range of spatial prepositions, not just *la* ‘at/to’.

- (26) Gianni ha/*è camminato fino a casa (in un secondo). (Italian)
Gianni aux-3sg walked until at home (in one second).
‘Gianni walked up until (he was) home (in one second).

The example in (26) is eloquent, since in Italian (as in Romanian, see the data summarized at the end of section 2.3.2.) ‘camminare’ does not allow a goal of motion interpretation with simple locatives. Thus the morphologically complex *fino a* allows the formation of a goal reading irrespective of the ability of the verb to license a ‘result’ component. Other such prepositions in Italian are *dietro a* (behind to), *al di là* (‘to the other side’).

To show how unrestricted the formation of complex accomplishment prepositions in Romanian is, I will first look at *până + în* PPs below. *În* PPs are morphologically complex prepositions the first component of which is *în* (analyzed

earlier in this paper in terms of the primitive feature [CONTAINMENT]). The list of these prepositions below is a non-exhaustive list:

- *înspre* ‘towards’
- *între* ‘in between’
- *înauntru* ‘inside’
- *în afară* ‘outside’
- *în fața/spate* ‘in front/behind’
- *în stânga/dreapta* ‘to the left/right’
- *în mijloc* ‘in the middle’

It is important to see which of the prepositions listed above are locative and which ones are directional. In order to do so, I will apply the *for/in* test:

- (27) a. *Ion este *înspre* casă. (Rom.)
Ion is towards house
- b. Ion este *între* doi prieteni.
‘ Ion is in between two friends’
- c. Ion este *înăuntrul* / *în afara* / *în fața/spatele* / *în stânga/dreapta* / *în mijlocul* camerei.
Ion is inside / outside / in front/back / to the left/right / in the middle of the room

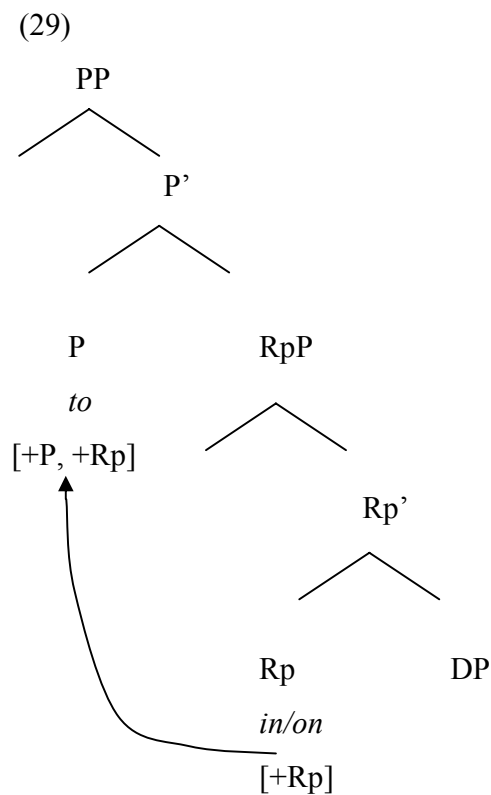
Apart from *înspre* (derived from *spre* ‘toward’), all other *în* PPs behave in the same way with respect to the test above, which shows that they are all locative prepositions. In fact, *înspre* has already been treated alongside with its English (‘towards’) and Italian (‘verso’) counterparts.

The attempt to derive the accomplishment preposition from the purely locative *în* PPs is a very fruitful one. Basically, *până* can combine with all of them. Moreover, it can also combine with *înspre*, introducing the endpoint of the motion event heading ‘towards’ the landmark. The landmark, however, is not the DP *casă* ‘house’, but the

spatial region of all places that are *înspre casă*. *Până* in this case establishes the limit of the trajectory, and this limit is ‘towards the house’.

- (28) a. Ion merge *până înspre casă*. (Rom.)
 Ion walks until towards house
 b. Ion merge *până între doi prieteni*.
 Ion walks until in between two friends
 c. Ion merge *până înăuntrul / în afara / în fața/spatele / în stânga/dreapta / în mijlocul camerei*.
 Ion walks until inside / outside / in front/back / to the left/right / in the middle of the room

The structure that Folli and Ramchand (2004) and Ramchand (2006) propose for accomplishment prepositions in English is given under (29):



This structure is very much like Koopman's (1997) proposal, given below under (31):

- (30) Het vliegtuig is [_{PathP} [_{PlaceP} *vlak onder de brug*] *door*] gevlogen. (Dutch)
the airplane is right under the bridge through flown
'The airplane flew right under the bridge'.

- (31) [_{PathP} [_{PlaceP} [_{DP}]]] (Koopman (1997))

Koopman (1997) argued for the need of two functional heads for spatial adpositions in Dutch, the Path head for directional PPs and the Place head for locative ones. Since there is a crucial difference between prepositions and postpositions in Dutch (namely that only *postpositions* can have a directional interpretation), Koopman's claim is that prepositional PPs only contain the Place functional projection, while postpositions consist of a functional projection Path embedding the PlaceP.

With the exception of the labels that Ramchand (2006) (following Folli and Ramchand (2004)) and Koopman (1997) assign to the functional projections of the PPs, the two proposals are identical: the PP in (29) is Koopman's PathP in (31), while the RpP is the PlaceP. A directional preposition such as *into* is assumed by Ramchand (2006) to be formed by the incorporation of *in* (which has a [+Rp] feature) into the preposition *to* (which has a [+P] and a [+Rp] feature). Ramchand further argues that whenever prepositions seem to have an ambiguous behaviour (both locative and directional), it is because the [Rp] feature is optional. According to Ramchand, verbs of motion in English never licence a result phrase as part of their lexical specification, which is instead encoded in the complex prepositional forms. Moreover, 'telos' is also encoded in the PP. The logic is that with events such as 'John *ran* in the forest' the Rp feature is not present, so the preposition is only locative and gives rise to locative interpretation.

In a footnote of Folli and Ramchand's (2004) study, the authors tackle the possibility that the incorporated preposition might be the head of a predicational

phrase complement of RpP. This head would first incorporate into the Rp, and then move on to incorporate into P. Folli and Ramchand further observe that if this was indeed the case, then it is very surprising that only few such prepositions exist in English, whereas one would expect the process to be much more productive. In fact, the expectation is that there should exist accomplishment prepositions such as *overtto*, *alongto*, *behindto*, etc. Since this is not the case, the authors assume that “*into* and *onto* are formed with *in* and *on* being the only lexical items in English that are directly mergeable in Rp. We assume that the other strategy simply does not exist in English” (Folli and Ramchand (2004): 11, fn.4).

Let me now put all observations together:

- a. Romanian: deriving accomplishment prepositions from *în* PPs is very a productive process;
- b. English: *in* and *on* are the only lexical items that are directly mergeable in Rp (Folli and Ramchand (2004));
- c. The incorporated preposition might be the head of a predicational phrase complement of RpP.

But there is one piece of information missing:

- d. Romanian: is accomplishment preposition formation productive apart from *în* PPs?

This piece of information is needed in order not to jump to hasty conclusions. A first (already known) piece of data comes from (unsurprisingly) the availability of deriving *până la* ‘until at/to’ and *până pe* ‘until on’.¹⁵ Consider now (32) below:

- (32) a. Mingea s-a rostogolit *până sub* masă (în zece secunde). (Rom.)
ball-the refl3sg – aux3sg rolled until under table (in ten seconds).

¹⁵ This is unsurprising given the properties of *pe* and *la* discussed in section 2.2. of the present chapter.

- b. Mingea a zburat *până peste* gard (în zece secunde).
ball-the aux3sg flew until over fence (in ten seconds).

I have given the two examples in order to illustrate two facts:

1. accomplishment preposition formation in Romanian is productive by deriving them from (probably) all simple locative prepositions that are also able to derive *goal* directionality (under the necessary conditions);
2. accomplishment prepositions can also be derived from those locatives which acquire a *route* of motion reading (under the necessary conditions).

Based on these facts, I will assume that what differentiates Romanian from English is the fact that any locative preposition can merge at Rp and then incorporate to P in order to check the [Rp] feature. However, this tentative proposal (actually, its technical aspect) will be reviewed later.

2.4. LEXICAL AND FUNCTIONAL STRUCTURE OF SPATIAL PREPOSITIONS

Koopman (1997, 2000), Den Dikken (2006), Terzi (2006) and many others assume that spatial prepositions have a lexical layer and an extended functional projections layer. I will introduce below some of the arguments of this approach, starting with locatives and then turning to directional prepositions (which, as I have already pointed out, are consistently analysed as having an extended structure embedding that of static prepositions).

2.4.1. The structure of spatial prepositions. Evidence from Greek

On the basis of synchronic and diachronic distributional similarities between locatives and extended nominal domain in Greek, Terzi (2006) argues that locatives are part of a structure similar to that of nouns. She further claims that locatives are modifiers of a phonologically null noun which she calls *Place*, which projects a DP structure with an empty determiner in Greek (a position that in other languages, such as Spanish, may be filled). This DP containing *Place* is the complement of a functional head, P_{Loc}.

Greek locatives occur in three syntactic contexts. First, they are followed by a ‘light P’ (*se* and *apo*), which assigns Accusative case to its complement.

- (32) a. Stathika piso apo ti Maria. (Modern Greek)
 stood-1s behind *apo* the Mary-acc
 ‘I stood behind Mary.’
- b. Kathomun epano ston Petro.
 was-sitting-1s on *se*-the Peter-acc
 ‘I was sitting on Petro.’
- (Terzi (2006) 2:1)

Second, the locative is followed by a DP, which is always a clitic bearing Genitive case. This means that locatives cannot take a full DP as their complement in Greek.

- (33) a. Stathika piso tis/*tis Marias.
 stood-1s behind she-cl-gen/the Mary-gen
 ‘I stood behind her/Mary.’
- b. Kathomun epano tu/*tu Petru.
 was-sitting-1s on he-cl-gen/the Peter-gen
 ‘I was sitting on him/Peter.’
- (Terzi (2006) 2:2)

Thirdly, locatives are not followed by any complement; in such a case they are usually referred to as intransitive prepositions or adverbs:

- (34) a. Stathika piso.
stood-1s behind.
'I stood behind.'
- b. Kathomun epano.
was-sitting-1s on
'I was sitting on.'

(Terzi (2006):3:3)

The second type of occurrences of locatives is revealing for the structure of locatives, Terzi argues. In Modern Greek, Genitive is the case associated exclusively with complements of nominals, and this fact constitutes the first indication that Greek locatives may be part of some nominal structure. The distributional similarities between locatives and adjectives can be noticed once the distribution of complements of locatives (either clitics or full DPs) and the complements of nouns (possessor clitics or full DPs) are compared in the presence of an adjective. The two positions in which possessors can be found in the nominal domain in the presence of an adjective in Greek are exemplified in (35) below. (35.a) illustrates the possibility for the possessor to follow the noun in the form of a clitic or as a full DP, while (35.b) shows that it can also follow the adjective, but only in the form of a clitic, (35.b).

- (35) a. To oreo spiti tu/tu Petru.
the nice house he-cl-Gen/the-Gen Peter-Gen
- b. To oreo tu/*tu Petru spiti.
the nice he-cl-Gen/the-Gen Peter-Gen house
'His/Peter's nice house.'

(Terzi (2006) 3:4)

Terzi underlines that the ungrammatical second part of (35.b) was grammatical in earlier stages of Greek. Furthermore, during the same (earlier) stages of the language, locatives could be followed by a genitive DP as well, while only a genitive clitic can immediately follow them in contemporary Greek, as was illustrated in (33).

The structure proposed by Terzi for (33.b) repeated here for convenience under (36) is given in (37):

- (36) Kathomun epano tu/tu Petru.
 was-sitting-1sg on he-cl-Gen/the Peter-Gen
 ‘I was sitting on him/Peter.’

- (37) ... [SC [DP \emptyset [XP epano [X [NP *Place*]]]] [PP \emptyset [DP tu]]]
 on ↑ he-cl-Gen
-

The small clause (SC) is the structure Terzi adopts (following den Dikken (1998, 1999)) for nominal possession, as one of her claims is that “what surfaces as the complement of the locative is the possessor of *Place*” (Terzi (2006):4). The arrow specifies the obligatory movement of the Genitive clitic from the position after *Place* to the position after the locative¹⁶.

Therefore, clitics that follow locatives always surface in the position after the locative, rather than after *Place*. This is in fact the position that corresponds to adjectives in the DP. We have seen in (33) that a full DP complement of locatives is

¹⁶ I will quote Terzi’s (2006) account for the obligatory nature of this movement: “Remember [...] that the possessive clitic may surface in two positions in the nominal domain, namely, either following the adjective or following the noun. Ideally, one would expect the same to hold for locatives, if we adopt (7) to be their structure. It is not necessarily the case that the situation is identical in the domain of locatives, however, since, when following the noun, i.e., *Place*, clitics would have to cliticize on a non-phonologically realized element, and the latter is not a legitimate host for clitics.”

not ungrammatical, and that a possessor full DP cannot replace a possessive clitic after the adjective in the nominal domain, (36.b) in Modern Greek.

Terzi then adds other elements to the structure of Greek locatives. She argues that the grammaticality of locatives modified by adverbs/degree phrases such as *akrivos* ‘right/precisely’ is a clue of a more complex structure, since *akrivos* cannot modify adjectives (if the structure of locatives was just that of an adjectival element modifying an (unpronounced) noun, locatives should not be modified by adverbs/degree phrases such as *akrivos* ‘right/precisely’). (The examples below are taken from Terzi).

(38) *To vivlio ine *akrivos* kokino/megalo.
the book is right red/big

(39) O Petros kathise *akrivos* dipla/brosta/piso mu.
the Peter sat right besides/in front/behind me

Terzi’s analysis of this piece of data is that *akrivos* modifies a PP_{Loc} projection, which takes as its complement the whole SC. The head of this functional projection is phonologically null, while its specifier is the landing position for the adverb/degree phrase *akrivos*. The structure of locative prepositions in Greek would then be the following:

(40) [P_{Loc} [P_{Loc} ∅ [SC [DP ∅ [XP *pisō* [tis_i [X [NP *Place*]]]]]] [PP ∅ [DP e_i]]]]]
behind she-cl-Gen

The structure in (40) proposes the fact that there is both a lexical and a functional component to the structure of Greek locatives. The functional layer is contributed by the head P_{Loc} and the lexical layer is contributed by the (unpronounced) noun *Place*. Both layers are instantiated overtly in Greek, as we have just seen (again, the heads of the two projections are null, but their specifiers can be filled by overt elements). Terzi’s proposal does away with van Riemsdijk’s (1990, 1998) analysis of

spatial prepositions as semi-lexical categories, demonstrating that there are both a lexical *and* a functional layer simultaneously present in the structure of spatial PPs.

2.4.2. Null *Place*

In the structure proposed by Terzi (2006) there is a null *Place* projection which instantiates the lexical component of the PP. Kayne (2004) has also proposed (on independent grounds) the existence of an ‘unpronounced PLACE’ noun (in his terminology) which is modified by English demonstratives ‘here’ and ‘there’. Kayne also notes that some dialects of English express overtly this unpronounced PLACE noun (‘this here place’, ‘that there place’). (Standard) English also has some means to instantiate overtly the *Place* head in a different syntactic context, though:

- (41) The (very) front part/side.

The analysis is that ‘front’ modifies the noun ‘part/side’. Along the lines of Terzi (2006), I assume that the complement of ‘(in) front’ is the possessor of *Place*. I depart from Terzi (2006) in what concerns the upper projections of the extended prepositional phrase, since I want to keep the twofold partition proposed in Koopman (1997), which I believe is empirically motivated.

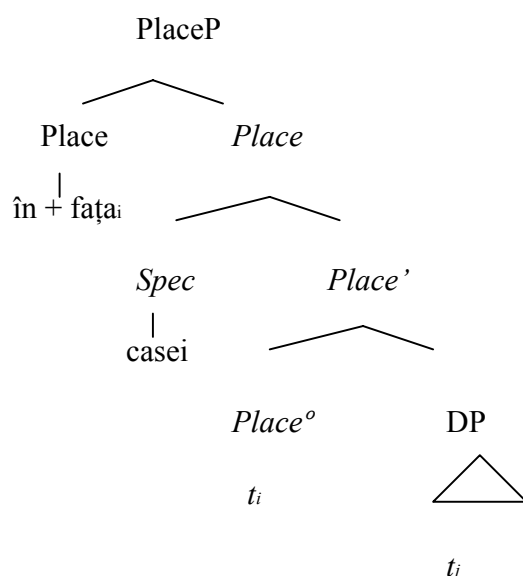
In a parallel manner, I claim that Romanian compound PPs (*în afară* ‘outside’, *în fața/spate* ‘in front/behind’, *în stânga/dreapta* ‘to the left/right’, *în mijloc* ‘in the middle’, *la/pe/spre/înspre... afară/ fața/spate / stânga/dreapta / mijloc*) provide evidence for the lexicalization of the otherwise¹⁷ null *Place* head.

The other important assumption with respect to the structure of complex PPs is that *în*, *la*, *pe* (the ‘non-projective’ prepositions) phonologically realize the P_{Loc} functional head (using Terzi’s (2006) labels).

¹⁷ Obviously, *Place* is not phonologically realized in the case of morphologically simple spatial prepositions.

The structure that I propose at this point for a preposition such as *în fața* ‘in front (of)’ is the following:

- (42) a. Ion este *în fața* casei.
 Ion is in front house-the-Gen
 b.



2.5. INTERMEDIARY CONCLUSIONS (CHAPTER TWO)

Chapter Two was dedicated to the status and structure Romanian locative PPs, on the one hand, and to the ways to render directional readings from locative PPs, on the other hand.

First of all, I confronted some early and recent classifications of directional prepositions, starting with Jackendoff’s (1983) and (1990) studies that dealt only secondarily with spatial PPs, turning then to Kracht (2002) and Zwarts (2006c), papers in which the authors not only had a thorough look into the semantics of directional PPs, but also made proposals with respect to their internal structure, of which I will make a certain use later on.

Moreover, the two recent studies that I mentioned earlier shared a view of utterance significance in the study of spatial PPs: (the structure of) directional PPs (is) are built on (the structure of) locative PPs. Bearing this in mind, I then dedicated section 2.2. to the syntactic and semantic analysis of the three non-projective locative PPs in Romanian: *în* ‘in’, *pe* ‘on’ and *la* ‘at’. I argued (along the lines traced by Folli (2002) in the study of Italian spatial PPs) that Romanian morphologically simple spatial prepositions are unambiguously locative, and that their homophonous directional counterparts are derived in the presence of (certain classes of) verbs of motions.

This led me to the classification of language types (in section 2.3.) according to Talmy (1985, 2000) in ‘satellite-framed’ (Germanic languages) and ‘verb-framed’ (Romance) in their ability to render path of motion. Based on observations first made by Gehrke (2005) and extending her arguments to Romanian, I emphasized the need to revisit Talmy’s strict two-way classification, since Romanian seems to be able to use in certain contexts the same strategies that are specific to English. One piece of evidence for the observation mentioned above was the (so far unnoticed) existence of ‘accomplishment prepositions’ in Romanian (section 2.3.4.).

In the last section of Chapter Two I proposed (following a study conducted by Terzi (2006) on Greek spatial PPs) an internal structure of morphologically complex locative prepositions in Romanian, including a nominal *Place* component which is either null or overt (*în fața/spatele* ‘in front/back’). This was a necessary step before going to Chapter Three, entirely dedicated to Goal and Source of motion PPs in Romanian.

CHAPTER THREE

SOURCE DIRECTIONALITY IN ROMANIAN

3.1. EVENT COMPOSITION

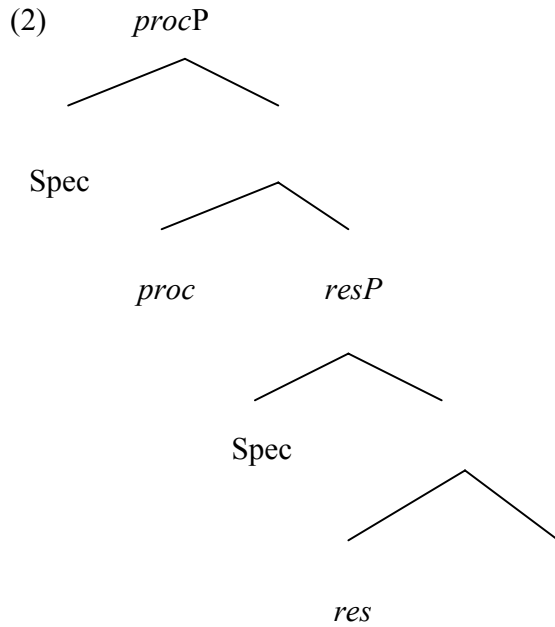
3.1.1. The structure of the events modified by Goal of motion PPs in Romanian

In the previous chapters I have already introduced the event structure proposed by Pustejovsky (1991) and adopted by Svenonius (2004), Folli and Ramchand (2004) and others, according to whom the VP structure corresponds to the three subevents (or phases) that are built in a hierarchical order:

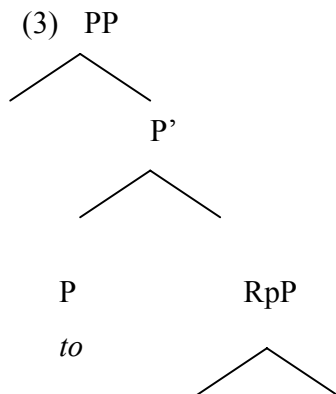
- (1) (causing subevent) [process subevent (result state)]

Turning back to the assumption that directional events are ‘phase-like’, in the sense that the path can be decomposed into phases, when a Goal PP is present in the structure it denotes the last phase of the movement along the path. Simply put, Goal PPs change verb aspectuality, adding telicity to the event. According to Folli and Ramchand’s (2004) view, Goal PPs (derived from locative prepositions) introduce a result state and are crucially dependent on what they label ‘Result phrase’ in receiving directional interpretation, which means that they obligatorily occupy the complement position of a Result head. I will follow Ramchand (2006) (who in turn was inspired by Dowty (1979), Pustejovsky (1991), Higginbotham (2000)) in claiming that the

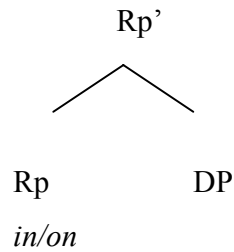
complex verb types can be decomposed into a *process* and *result state*¹ component. This structure is illustrated in (2):



On a par with the verbal structure, Ramchand (2006) proposes a parallel structure for spatial prepositions which has been given in Chapter Two:(29) and is repeated here under (3) for convenience:



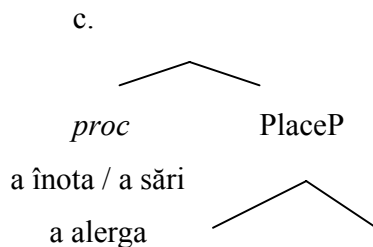
¹ I will leave aside the third projection (the highest) in the structure proposed by Ramchand for all event types is (that of the *initiator*, the Cause Phrase) since it is not relevant at this point of the present discussion.



My proposal is that (at least) in Romanian no optional feature is involved. Simple spatial propositions always license a *Place*² structure. Whenever the verb encodes a resultative phase (that is, whenever a *resP* is projected in the verbal structure) the *PathP* of the preposition is licensed. My claim is essentially that the *resP* introduces the path conceptual component into the spatial preposition (which is locative by default)³.

Below I provide the structures for (atelic) process events that do not have a *result* component (4) and for directed (telic) events the subject of which moves along a path reaching a final point of the trajectory. The diagnostic for the presence of the result state in the event structure is the by now familiar *for/in X time* test which has already been applied (Ch. One, section 1.3.2.2.) on the sentences below.

- (4) a. Ion a înotat / sărit în lac. – locative (Ion swam/jumped while being in the lake)
 ‘Ion swam / jumped in the lake’
 b. Ion a alergat în pădure. – locative (Ion run while being in the forest)
 ‘Ion ran in the forest’

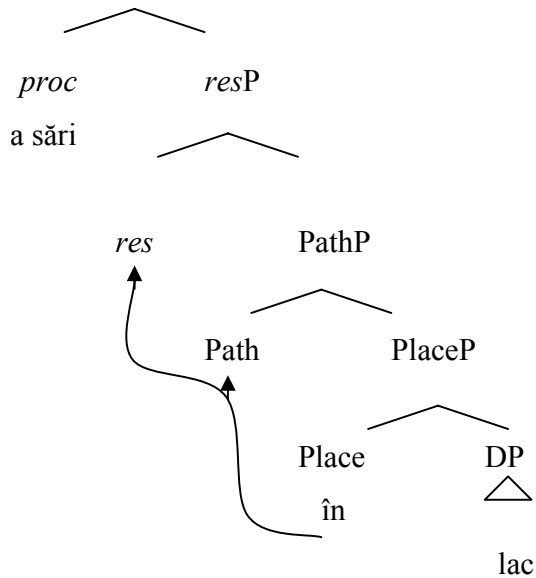


² I will use the labels proposed in Koopman (1997, 2000).

³ I also refer the reader to Markovskaya (2006) for a similar proposal (drawn on data from Russian).

Place	DP
în	△
	lac
	pădure

- (5) a. Ion a sărit în lac. – directional (Ion jumped and ended up in the lake)
 ‘Ion jumped in the lake’
 b. Ion a alergat în pădure. – directional (Ion ran into the forest)
 ‘Ion ran in the forest’



3.1.2. Other evidence in favour of the proposal

Some more evidence in favour of the proposed structure comes from the distribution and interpretation of other simple locative prepositions – the ‘projective’ locatives (‘under’, ‘over’, ‘across’, etc.) that are also compatible with directional readings. With motion verbs indicating manner English allows for two interpretations, none of which is, however, a goal of motion reading:

- (6) The boat floated under the bridge. – directional (route) / locative

The PP in (6) does not designate the final point of the motion path (some point located under the bridge)⁴, but rather the trajectory of the movement from one side of the bridge to the other. Interestingly, Romanian has a different means to express route directionality (*pe*), disambiguating between the two readings:

- (7) a. Barca a plutit *sub* pod.. – locative (Rom.)
 boat-the aux floated under bridge
 b. Barca a plutit *pe sub* pod. – directional (route)⁵
 boat-the aux floated *pe* under bridge

With a different choice of the verb, however, the *sub* PP may also indicate goal of motion (8.a.), apart from the locative reading. Again, adding *pe* conveys route directionality (8.b):

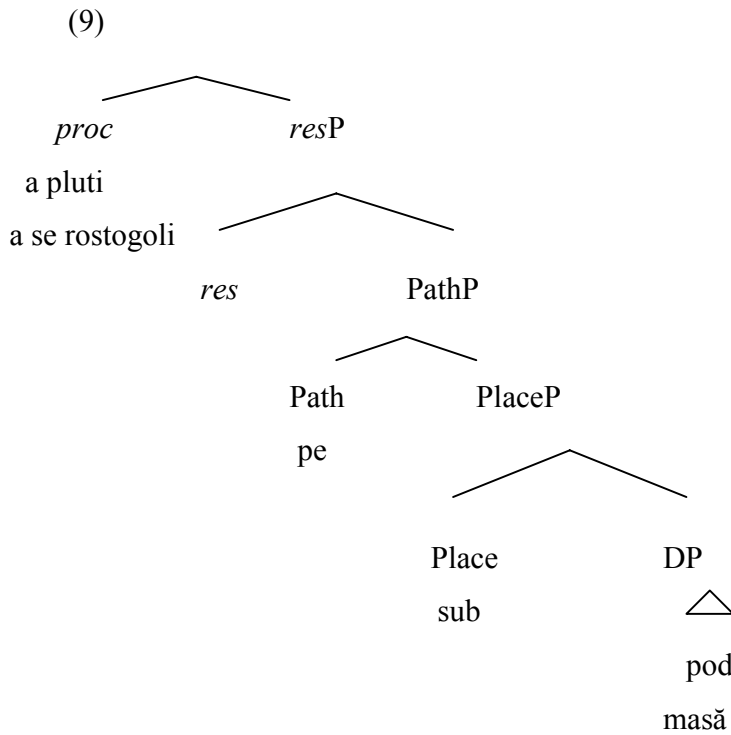
- (8) a. Mingea s-a rostogolit *sub* masă. – locative / directional (goal) (Rom.)
 ball-the refl-aux rolled under table
 b. Mingea s-a rostogolit *pe sub* masă. – directional (route)⁶

The structure of (7.b) and (8.b) is given under (9):

⁴ Folli and Ramchand (2004) argue for a goal of motion reading of (6), but their view seems to me inadequate.

⁵ A route directional indicates the position of an entity *during* an event of motion (without expressing its endpoint).

⁶ Ramchand and Folli (2004) also observed that in Italian ‘La palla rotolò sotto il tavolo’ (The ball rolled under the table) is ambiguous between a goal of motion and a locative reading, contrasting this example with ‘La barca galleggiò sotto il ponte’ (locative) and ‘La barca passò sotto il ponte galleggiando’ (goal of motion).



Reconsidering now the distinction between ‘satellite-framed’ and ‘verb-framed’ languages⁷, the data in (7) and (8) seems to indicate that Romanian is not a well-behaved ‘verb-framed language’, as Talmy (1985, 2000) suggests for all Romance languages. This is so since the ‘functional’ preposition *pe* is apt to add (route) directionality, much like a ‘satellite’ would do.

⁷ This classification has been described in some detail in section 2.3. of Chapter Two.

3.2. SOURCE OF MOTION PREPOSITIONS IN ROMANIAN

3.2.1. The Vector Space Semantics

There is a debate in the literature regarding the asymmetry between goal and source prepositional phrases. The questions the answers of which are often diametrically opposite are: is there such an asymmetry? And if yes, then is it based on syntactic or on semantic properties? I will sketch the two major views with respect to this issue and argue in favour of one of them.

I have already shown (both in the first and, briefly, in the second chapter) that in general events modified only by Source PPs are never telic. There are, however, apparent counterexamples:

- (10) a. Dracula walked *from / out of* the castle in three minutes / *for three minutes.
b. Dracula a ieșit *din* castel în trei minute / *timp de trei minute. (Rom.)

These counterexamples (that is, exceptions) to the rule served Gehrke (2005)⁸ in sustaining that the asymmetry between Goal and Source PPs is not syntactic. Moreover, it is neither based on the possibility of the two PPs to induce telicity (see (10)), but it is related to the nature of the result state that they imply, as formally described in Winter and Zwarts' (2000) Modification Condition. Leaving aside formal details, the crucial difference resides in the following:

- Goal PPs denote non-upward monotonic states
- Source PPs denote upward monotonic states

⁸ Gehrke (2005) has extensively criticized the approach put forward by Nam (2004) and others regarding the asymmetry between Goal and Source prepositional phrases. The reader is referred to her study for arguments and discussions.

where by ‘monotonic state’ Winter and Zwarts (2000) mean that a vector denoted by a directional preposition is ‘upward monotonic’ if any lengthening of the vector preserves the truth conditions initially assigned. It thus comes as an obvious observation the fact that the lengthening of a vector denoted by a Source PP would not change the truth conditions of the preposition, since the vector would still be ‘outside’ or ‘away from’ the landmark object, while the lengthening of a vector denoted by a Goal PP, on the other hand, would cause the vector to exceed the borders of the landmark object, resulting in the violation of the truth conditions that required the vector to be ‘in’, ‘on’ or ‘at’ the landmark.

3.2.2. *Path* – formal description

Throughout the present paper I assumed (along the lines of most current studies⁹) that the interpretation of directional prepositions is crucially dependent on the notion of *Path*, namely that a directional preposition denotes a set of *paths*. Zwarts (2006c) defines a path in the following way:

‘A path can be taken as a directed curve, corresponding to a sequence of positions in space. [...] a path is formally defined as a continuous function p from the real interval $[0,1]$ to some domain S of places, which is a common mathematical way to define a path. [...] A path has a starting point, that we indicate with $p(0)$, an end point $p(1)$, the two extremes of the path, and for every i between 0 and 1, $p(i)$ is an intermediary point of the path, between the extremes.’

(Zwarts (2006c):2)

Zwarts (2006c) emphasizes the opposition between Source and Goal PPs in his ‘set of paths’ schema. Source prepositions impose a locative condition on the initial part of the path. A formal definition of (11.a) is given in (11.b):¹⁰

⁹ For instance Jackendoff (1983, 1990), Nam (1995), Kracht (2002) and many others.

¹⁰ The formalization in (11.b) is taken from Zwarts (2006c).

(11) a. The boat floated [PP from under the bridge].

b. $[[\text{from under the bridge}] = \{ \mathbf{p} : \text{there is an } I [0,1] \text{ that includes 0 and that consists of all the } i [0,1] \text{ for which } \mathbf{p}(i) \text{ is under the bridge} \}$

The path is basically divided in two phases¹¹, the first of which is ‘positive’ and corresponds to the positions located ‘under the bridge’, while the second phase is ‘negative’ and refers to locations that are *not* ‘under the bridge’, (12):

(12) + + + + + + - - - - - - - Source PP
0 1

Naturally, the opposite pattern is obtained when mapping Goal PPs: phase 0 is ‘negative’, while phase 1 (which corresponds to the final point of the path) is ‘positive’, (14). The formal definition (as proposed in Zwarts (2006c)) of (13.a) is given in (13.b).

(13) a. John ran [into the house].

b. $[[\text{into the house}] = \{ \mathbf{p} : \text{there is an interval } I [0,1] \text{ that includes 1 and that consists of all the indices } i [0,1] \text{ for which } \mathbf{p}(i) \text{ is inside the house} \}$

(14) - - - - - - + + + + + + - Goal PP
0 1

Source prepositions map on their ‘positive’ part spatial conditions that are specific to each preposition. For example, the ‘positive’ of ‘off’ is ‘on’, while the ‘positive’ part for ‘away from’ is ‘near’. More often than not, the lexicon of a language contains both lexical forms that map opposite spatial relations. In what follows I will provide a description of English and Romanian with respect to the way in which Goal and Source PPs are lexicalized.

¹¹ The notion of ‘phase’ was first introduced by Fong (1997).

3.2.3. Lexicalization of Goal and Source PPs

In Chapter Two I have adopted a generalization which stated that in Romanian¹² all morphologically simple spatial prepositions have a default locative reading, which implicitly claims that when a locative and a goal preposition are homophonous, the Goal reading is derived.

There are two question that I wish to address now, and the answers of which need a (formal) account:

1. Are Source of motion prepositions in Romanian homophonous to locative prepositions, namely that is there such a correspondence between Source and locatives similar to the one observed between Goal and locative prepositions?
2. How is the Source of motion interpretation of a PP in Romanian implied/derived?

In order to answer to the first question, I will put forth in the form of a table a (non-exhaustive) inventory of spatial prepositions in Romanian.

Locative	Goal of motion	Source of motion
<i>pe</i> – ‘on’	<i>pe</i> – ‘on’	<i>de pe</i>
<i>la</i> – ‘at’	<i>la</i> – ‘at’	<i>de la</i>
<i>în</i> – ‘in’	<i>în</i> – ‘in’	<i>din</i> (<i>de+în</i>)
<i>lângă</i> – ‘near (to)’	<i>lângă</i> – ‘near (to)’	<i>de lângă</i>
<i>după</i> – ‘behind’	<i>după</i> – ‘behind’	<i>de după</i>
<i>sub</i> – ‘under’	<i>sub</i> – ‘under’	<i>de sub</i>
<i>în fața</i> – ‘in front (of)’	<i>în fața</i> – ‘in front (of)’	<i>din</i> (<i>de+ în</i>) <i>fața</i>

¹² The generalization was adapted from Folli (2002) and Folli and Ramchand (2004) who looked at Italian data.

<i>peste</i> – ‘over’	<i>peste</i> ¹³ – ‘over’	<i>de peste</i>
-----------------------	-------------------------------------	-----------------

The data in the table speaks for itself. I have used italics in order to emphasize that what Romanian exhibits is a perfect pattern established between locative, goal and source prepositions. Locatives and Goal prepositions are homophonous, while Source PPs are complex prepositions formed along the following algorithm:

➤ ***DE* + Locative/Goal P → Source P**

It can logically be deduced that the responsibility for the Source interpretation of an otherwise locative or Goal PP belongs to *de*. Section 3.2.5. below will provide some details of how this process takes place, and a tentative analysis of the phenomenon.

Before going to the proposal of the internal structure of Source of motion prepositional phrases in Romanian, let me sketch the lines of the analyses that have been put forward for English Source PPs.

3.2.4. English Source of motion PPs: empirical data and analysis

With the exception of ‘to’ and ‘toward(s)’, English Goal PPs also have a locative PP correspondent, either as a homophonous form or as a component of a compound (as in the case of ‘into’ and ‘onto’). Source PPs contrast with Goal PPs in this respect, in the sense that they do not correspond to any of the locative PPs nor do they contain any locative component in their phonological representation. Below I provide some examples:

¹³ In section 3.1.2. I have provided contexts in which some directional prepositions acquire either a Goal of motion or a Route of motion reading, depending on the class of verbs of movement with which they combine. *Peste* ‘over’ is normally a Route of motion directional P, but for the sake of simplicity I have included it in the table together with Goal Ps.

(15) Locative PP	-	Goal PP	-	Source PP
at		to		from
in		into		out of
near		near		away from

The analysis that has been proposed for English and on the grounds of which I have built a proposal applied to Romanian event composition was the one put forward by Folli and Ramchand (2004) and Ramchand (2006). The lines of their approach to event structure are based on decomposing the event into three hierarchically ordered subevents, the last one of which introduces a Result. Ramchand's (2006) claim was that the RP not only rendered a resultative meaning to the event, but was also responsible for imposing a Goal directional reading on the locative PP. Markovskaya (2006) further infers that Goal PPs emerge from locative PPs during the building of the event. In her analysis of Russian directional prefixes¹⁴, Markovskaya (2006) assumes that it is the merge of the prefix in the structure that triggers the necessity of realizing the result state, having R picking the only available delimiting point (which could be identified as a temporal bound) in the structure that is able to mark the Transition point (associated with the resultative meaning). This way, the Result state component is always lexicalized by the Goal preposition.

As far as Source PPs are concerned, we have seen that their phonological forms have little or nothing in common with those of locative prepositions, which translates in the assumption that they are separate lexicon entries. From this perspective, Markovskaya (2006) assumes that the source reading of Source PPs is present before the process of event structure building, since they denote directed motion on independent grounds¹⁵. She then further claims that since a Source

¹⁴ Russian employs verbal prefixes in order to render directionality; in the absence of these verbal prefixes, the event will always have an atelic interpretation, regardless of the fact that there is either a Goal or a Source PP which modifies the event (cf. Markovskaya (2006)).

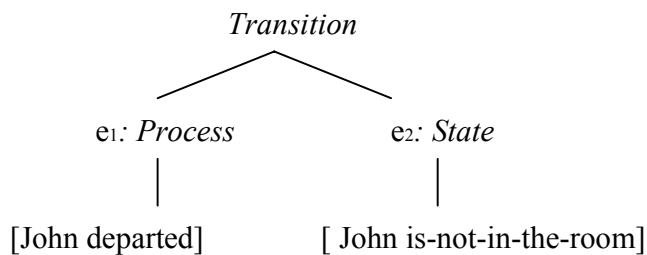
¹⁵ By 'independently' I refer to the fact that Source PPs in English do not seem to require the RP in order to receive Path of motion reading, which means that they contain a Path layer already in their structure.

preposition contains the path component already in the lexicon, there is no reason to assume that it enters the derivation embedded under the RP (in order to get a path interpretation). Thus the Source PP might originate as a complement of the verb of motion, whereas Goal PPs must originate within the RP (actually, locative PPs that are projected in RP receive a goal of motion reading) hence they cannot occur in the complement position of V nor in adjunct position (outside the RP).

Let me put forth again the event decomposition proposed by Pustejovsky (1991):

(16) a. John departed the room.

b.



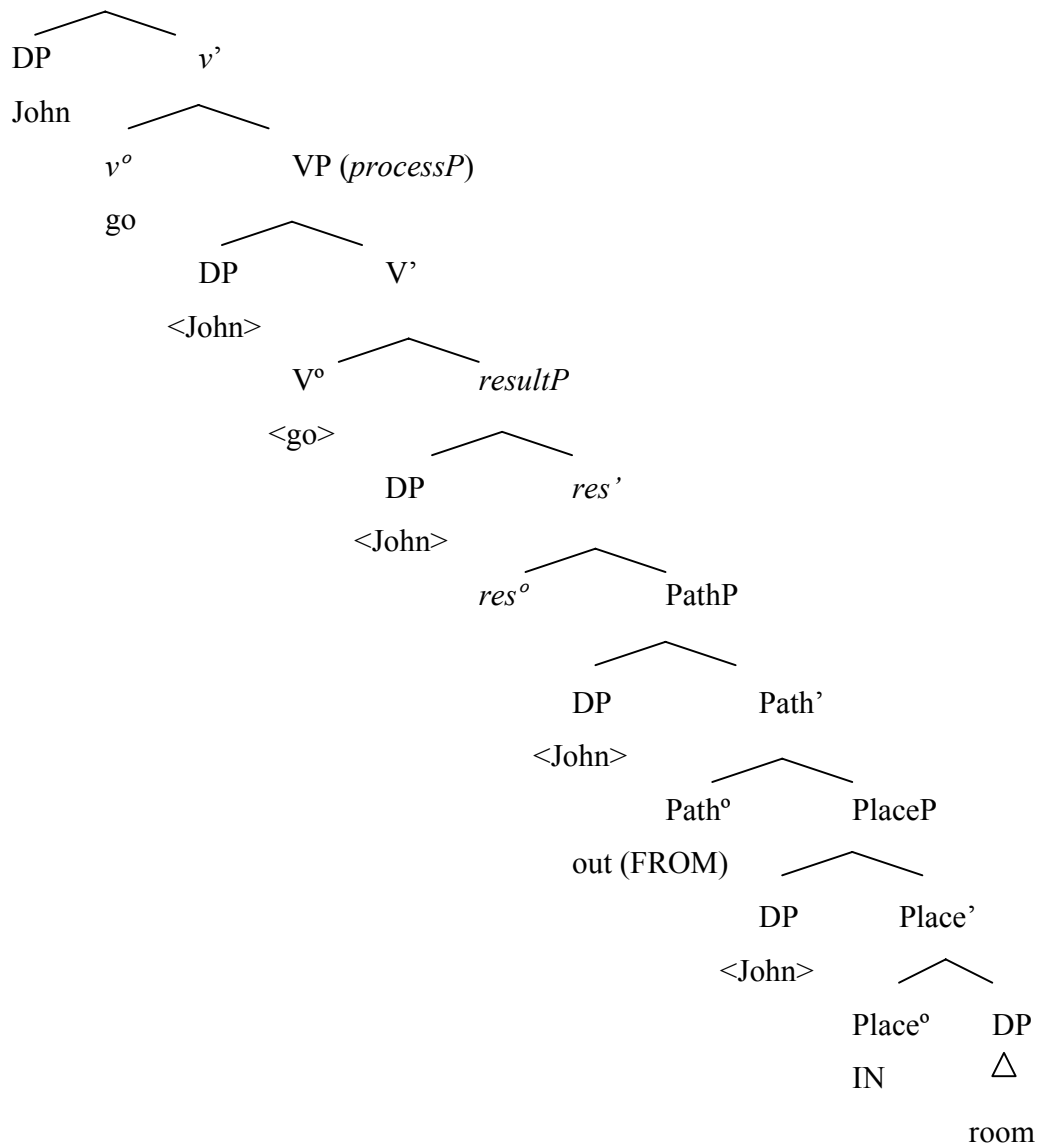
The movement of John in (16.a) along the horizontal axis initiates *in* the room and ends once out of the room, thus resulting in John's not being in the room. The same fact can be lexicalized by a motion verb and a Source PP, as in (17).

(17) John went out of the room.

The result state of the event of going out of the room is again that of 'John is-not-in-the-room'. The Result State component of the event needs to be identified. Ramchand and Svenonius (2002) claim that the syntactic element which represents the Figure must move into the [Spec, RP] for this purpose. The Specifier of R is the holder of the result state or the 'subject of result'. Ramchand and Svenonius (2002) work in the framework of *l*-syntax, the lines of which I also follow in the present study. *L*-syntax is the level at which the event is built up and where theta roles are assigned. Due to

Remerge, a DP can get ‘composite’ thematic interpretations, occupying more than one Spec position. Accordingly, the structure of (17) is given in (18):

(18) *vP (causeP)*



Contrary to Markovskaya (2006), I claim that even with a Source PP in the structure, the *resP* is still needed, as in the case of Goal PPs. This is motivated by one important undeniable fact, namely that there is a (temporal) transition point in events modified by Source PPs, thus the Figure will be characterized by a result state

different from the state in which the Figure found itself at the initial point of the event. I will further use this argument for the analysis of Romanian Source PPs.

3.2.5. Romanian Source PPs: analysis

3.2.5.1. Deriving Source PPs

In section 3.2.3. I provided a non-exhaustive list of Source of motion prepositions in Romanian, and generalized over Source PP formation from a locative/Goal of motion PP left-modified by *de*. This section will be dedicated to the following points:

1. Are Source PPs derived from locatives or from Goal PPs (given the identity in the phonological form between locative and Goal PPs)?
2. How does *de* contribute in the formation of Source PPs? What is its status?

I have shown in the previous section that English source of motion prepositions are independent entries in the Lexicon and are already specified with respect to the Path component, entering the numeration as such. Since Romanian Source PPs are always morphologically built on locative or Goal PPs, it is clearly not the case that we find separate lexicon entries. Actually, there is not even one such independent Source PP in Romanian.

In order to answer the first of the two questions above, I will make reference to one of the points that I have made at the end of the second chapter, namely that the Path component of Goal PPs is licensed by the resultative component of the motion event. However, it is hardly intuitive to assume that an event modified by a Source PP also has a resultative component. At this point, two different paths can be pursued in the present analysis: either Source PPs are derived from locative PPs and there is some means (other than the one employed by Goal PPs) to license the *path* component in

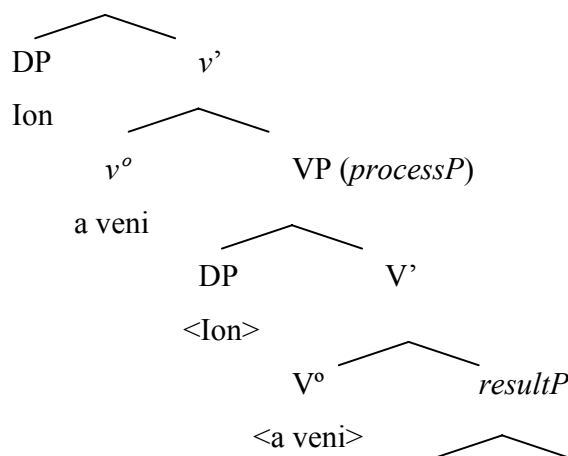
their internal structure, or try to analyze more closely the decomposition procedure (as in Pustejovsky (1991)) applied to events modified by a source of motion preposition and see where it can lead us.

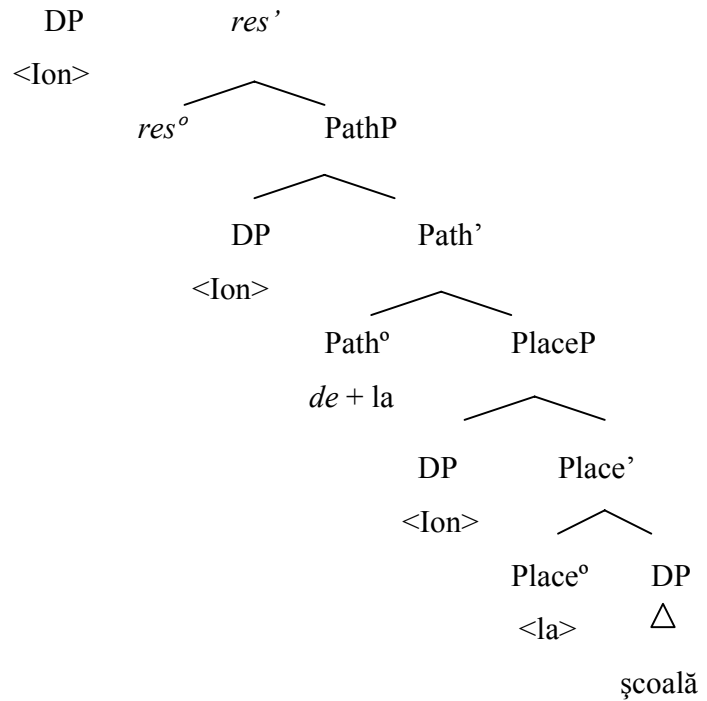
Given what has been said in the previous section, there is a result phrase in the structure of the event modified by a source of motion preposition, in the specifier of which the DP subject (which will eventually be remerged in [Spec, *v*P]) is merged. Moreover, the RP is absolutely needed in order to license the path structure of the directional PP in Romanian, as it has been argued for Goal PPs earlier in this chapter.

My proposal of answer to the first question that I formulated earlier is the following: Romanian **Source PPs are derived from locative prepositions**, in the same manner as goal interpretation of a preposition is attributed (compositionally by the VP complex). The presence of *de* in the morphologically complex form of source prepositions forbids the assignment of goal reading of the PP, forcing the source of motion reading. In the absence of *de*, the unmarked (default) directional reading – the goal of motion reading – is licensed. I further propose that *de* is projected in Path°, to which the preposition in PlaceP right-adjoins. The structure of (19.a) is given in (19.b):

- (19) a. Ion vine *de* la școală.
 ‘John is coming from school’.

- (20)b. *v*P (*cause*P)





3.2.5.2. The semantics of Source PPs. The role of *de*

Let me turn now to the second question formulated earlier, namely how does *de* contribute in the formation of Source PPs, from a semantic perspective. I will try to account for the observations that were introduced earlier using a simplified version of the Vector Space Semantics framework (as in Winter and Zwarts (2000)).

A spatial preposition denotes a set of vectors located in the landmark object, in the sense that it has its starting or final point in the topological boundary of the *place* occupied by reference object. The vectors can point either to an external ('out of') or to an internal ('into') region with respect to the landmark.

In the sense of Zwarts (2005), paths are sequences of vectors corresponding to the sequence of positions that characterize a moving entity with respect to a (generally) fixed landmark object¹⁶. Both projective ('under', 'behind', 'across',

¹⁶ A reviewer of Zwarts (2005) has put forth the example below, suggesting that paths may also be time-dependent:

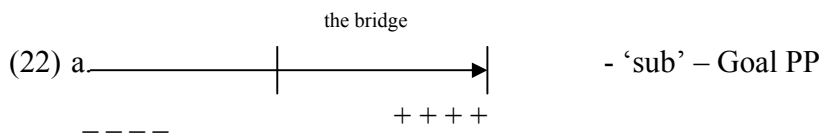
- (i) The bird is flying around the balloon.

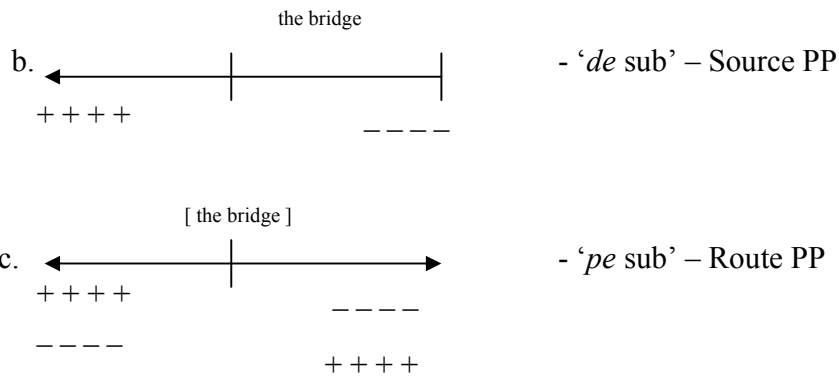
‘towards’, ‘all around’, ‘into’, ‘from’ etc.) and non-projective (‘in’, ‘on’ and ‘at’) prepositions denote the (sequence of) positions with reference to the spatial axes that are represented by three free orthogonal unit vectors: *up*, *right* and *front*. Those locatives that are non-projective describe a one-dimensional path from the reference object to the subject entity. Directional prepositions are ‘projective’ modifiers, and may also involve an additional axis which captures those changes in the path of motion that the other three axes cannot capture (‘all around’, ‘through’, etc.).

Summing up, a directional preposition maps an object to a set of (bounded) paths, and a path is a sequence of vectors. Consider (21) which exemplifies the three major classes of directional prepositions in Romanian:

- (21) a. Pescarul s-a dus sub pod. – directional (Goal)
 ‘The fishman went under the bridge’.
- b. Pescarul a venit de sub pod. – directional (Source)
 ‘The fishman came from under the bridge’
- c. Pescarul a trecut pe sub pod. – directional (Route)
 ‘The fishman passed under the bridge’.

As already pointed out, a Goal PP (‘sub’) and a Source PP (‘de sub’) both denote a sequence of positions along a path. The two vectors corresponding to the two directional prepositions have the same reference point (the external boundary of ‘the bridge’) but point in the opposite directions. Section 3.2.2. described paths in terms of two phases, a ‘positive’ and a ‘negative’ phase (as in Fong (1997)). Detailing the analysis along those lines, the switching in direction from goal to source is due to the change in the perspective of the speaker. The two phases in (21.a) and (21.b) can be represented as follows:





Throughout the paper I argued that Romanian directional prepositions are derived from locative prepositions in specific contexts of events¹⁷. When the path component is licensed in the internal structure of a spatial preposition, it imposes Goal directionality, unless something prevents from it. Conceptually, specifying the *up*, *right* or *front* vector is unmarked, so when a verb of motion is combined with a spatial prepositions (which comes into the numeration as a locative) the default directionality always tends towards the positive phase that indicates goal. What *de* does is to specifically prevent from this to happen, pointing the vectors *down*, *left* or *back*.

The representation that I proposed in (22.c) for a route directional is slightly more complicated. The positive or negative value of the two phases is interchangeable. The additional morpheme *pe* (literally ‘on’) marks the landmark as a one-dimensional object reduced to a point in space, its boundaries are fused. Again, the vectors point (by default) upwards, toward right or front, but in this case there is a symmetry between *up* and *down*, *right* or *left*, and *front* or *back*, which does away with the directional opposition.¹⁸

¹⁷ Remember that not all verb classes can license goal and source directionality in Romanian (section 2.3.2. of Chapter Two).

¹⁸ Section 1.2.3.1. of Chapter One provides a more detailed description, explanations and illustrations of route directionality.

3.2.6. Other occurrences of *de*

In Romanian (as in all Romance languages), *de* is multi-functional. In what follows, I will briefly point out several other occurrences of *de*, without claiming to exhaust the list of its uses.

- *de* functions as a case assigner in constructions involving nominalization. The deverbal noun inherits the verb's internal argument, to which it cannot assign case, so *de* is introduced as a last resort:

- (23) atribuirea *de* responsabilități membrilor echipei
 assignment-the *de* responsibilities members-theGen-pl team
 'the assignment of responsibilities to the team members'

- *de* is used to introduce the optional argument (the Agent) in passives, by itself or in a complex PP formed with *către* (literally meaning 'towards'):

- (24) Castelul a fost atacat *de* (*către*) inamici
 castle-the was attacked *de* (*către*) enemies
 'The castle was attacked by the enemies'

- *de* is the invariable morpheme¹⁹ used to introduce the supine mode in Romanian:

- (25) Onoarea este *de* apărat în orice circumstanță.
 pride is *de* defend-part in any circumstance
 'One's pride is to be defended under any circumstances'

¹⁹ Its status is not clear to many linguists: for some it is a complementizer, for others it is an inflectional free morpheme. Cf. Dobrovie-Sorin (1994) for discussions.

▪ *de* may introduce adverbial adjuncts (this looks like a particularly interesting case, since there is a temporal opposition between ‘*curând*’ and ‘*de curând*’, in terms of future reference versus past reference, respectively; this opposition has a similar flavour with the one discussed for source vs. goal of motion PPs)

- (26) a. Te-am văzut *de* curând.
 ‘I have seen you *de* recently’
 b. Te voi vedea curând.
 ‘I will see you soon’

3.3. THE SYNTACTIC ASYMMETRY BETWEEN GOAL AND SOURCE DIRECTIONAL PREPOSITIONS

3.3.1. An early proposal

Although Jackendoff (1983, 1990) does not take the Goal and Source theta-roles to be grammatical primitives, he does define the two roles in his lexical-conceptual structure. I have already introduced (at the beginning of the second chapter) the conceptual formalization that Jackendoff proposed for an argument constituting the endpoint of a motion event (the Goal of motion argument). In (28) below I illustrate the conceptual structure of the sentences in (27.a) and (27.b).

- (27) a. John came to the store. → Goal of motion
 b. John came from the store. → Source of motion

- (28) [Event GO [Thing JOHN], [Path TO/FROM ([Place STORE])]]

Crucially, the representation in (28) proposes an identical structure for goal and source arguments. In what follows I will try to put forth reasons for which assigning an identical structure to Goal and Source of motion arguments is inadequate.

3.3.2. Syntactic evidence for the asymmetry

The syntactic asymmetries between Goal and Source directional PPs have been pointed out in a study by Nam (2004), using data from various languages. In what follows I will briefly sketch Nam’s arguments for the behaviour of the two prepositional phrases and extend them to Romanian (when applicable), which will eventually lead me to propose (along the lines of Nam (2004)) two different positions in which Goal and Source arguments are projected.

3.3.2.1. Availability of ambiguous readings

First of all it is necessary to reconsider some typical examples of ambiguous readings (locative or directional):

- | | | |
|--|---|-----------------|
| (29) a. John jumped in the lake. | } | location / goal |
| b. John drew the box behind the house. | | |
| (30) a. Ion a alergat în pădure. | } | location / goal |
| Ion aux3sg ran in forest | | |
| b. Ion a sărit pe verandă. | | |
| Ion aux3sg jumped on porch | | |

The natural observation that needs to be underlined (in the context of a comparison between goal and source arguments) is that whenever a directional reading is implied in the sentences above it can only refer to a Goal of motion, never to the

Source. This can be intuitively accounted for on the basis of the fact that, conceptually, specifying an endpoint of an event is less marked than specifying its initial point. In fact, of the four classes of Aktionsarten proposed by Vendler four decades ago two are unbounded and two are bounded in their length, none of which though having their initial point inherently contained. In order to specify the starting point of an event there are other means available in natural languages, one of which are the prepositional phrases that we are analyzing.

Going back to ambiguous readings, consider also (31) below, again an already familiar example:

(31) The boat floated under the bridge. – location / route²⁰

The available directional interpretation in this case is that of Route or Symmetric motion (namely they denote a symmetric path whose initial and final point are in symmetric relation, in the sense that the source location of the boat is on the other side of the bridge from its goal location).

My first point is that those prepositions that can bear either a directional or a non-directional reading *can only render Goal or Route directionality, never Source directionality*. In fact, when those prepositions that typically introduce Source arguments ('from', 'from behind / under / below', 'off') participate in event structure there is never a static reading of the event available.

(32) The boat floated from under the bridge. – source / *location

The sentence in (32) sharply contrasts with (31), both in not allowing a locational reading, and in having a source directional reading, in contrast with the route reading in (31).

²⁰ In Chapter Two section 2.3 I argue that there is only one reading available (that of static location) for the Romanian clause corresponding to (31), because Romanian employs a 'functional' preposition (*pe*) to express route motion.

3.3.2.2. Prepositional (Pseudo) Passives

Quoting data from Couper-Kuhlen (1979), Nam (2004) shows a further contrast between Goal and Source PPs. The examples²¹ in (33) and (34) below illustrate active-passive²² pairs, where the passive shows a stranded preposition. The object in the active clause is moved into subject position in (33.b) and (34.b):

- (33) a. Several magistrates spoke to him. – goal
b. He was spoken to by several magistrates.
- (34) a. His surviving brother provided for John's widow. – benefactive
b. John's widow was provided for by his surviving brother.

When it comes to events of motion, there is a strong contrast between goal and source directionals:

- (35) a. The store can be run to in a matter of minutes. – goal of motion
b. *The store can be run from in a matter of minutes. – source of motion
- (36) a. If the boat is jumped into it may capsize. – goal of motion
b. *If the boat is jumped from it may capsize. – source of motion
- (37) a. The house was moved into three weeks ago. – goal of motion
b. ?*The house was moved from three weeks ago. – source of motion

There is even stronger evidence for a different behaviour of locative and directional PPs. In (38) and (39), the minimal pairs illustrate cases in which the same PP may give a directional reading or a non-directional reading.

- (38) a. The road could be driven across only at great risk. – directional

²¹ All English examples in this section are quoted from Nam (2004).

²² The phenomenon of preposition stranding in passive constructions is not found in Romanian.

- b. *The road could be played across only at great risk. – locative
- (39) a. The gate mustn't be gone beyond. – directional
- b. *The gate mustn't be played beyond. – locative

This piece of data shows that only directional PPs and not locative PPs can be passivized, leaving the preposition stranded. Nam (2004) argues that some possible objections (like the ones in (40)) are only apparent counterexamples, since the PPs in (40) are semantically selected by the verb ‘live’ or ‘sit’, which is not the case in (41). The directional PP ‘in New York’ is an adjunct of the verb ‘to sleep’ rather than a true argument.

- (40) a. This house cannot be lived in any longer.
- b. This cart must not be sat in by more than two people at once.
- (41) a. John slept in New York yesterday.
- b. *New York was slept in by John yesterday.

3.3.2.3. Dislocation and scrambling

Dislocation to the left periphery of the clause is a syntactic process specific to non-arguments. In fact, when topicalized, Source PPs can be moved to the left, while Goal PPs resist dislocation (42.b, 43.b).

- (42) a. From Los Angeles John sent the letter to Chicago.
- b. ??To Chicago John sent the letter from Los Angeles.
- (43) a. De la Los Angeles Ion a expediat scrisoarea la Chicago. (Rom.)
- de at/to Los Angeles John aux3sg sent letter-the to Chicago.*
- b. ?? La Chicago Ion a expediat scrisoarea de la Los Angeles.
- to Chicago Ion aux3sg sent letter-the de at/to Los Angeles.*

Clearly, Romanian (43) sentences are similar in terms of acceptability to their English counterparts. It thus becomes even more evident that the ungrammaticality of clauses in which a Goal PP has been fronted to the topmost position is not due to specific language restrictions in word order but to the (argumental) character of the prepositional phrase. This is also verified in the case of motion events:

- (44) a. Din sufragerie Ion a venit în dormitor. (Rom.)
de+in dining room Ion aux3sg came in bedroom
 ‘From the dining room Ion came into the bedroom.’
 b. */??În dormitor Ion a venit din sufragerie.
 in bedroom Ion aux3sg came *de+in* dining room

Furthermore, when a durative adverbial (*for X time*) or a time-frame adverbial (*in X time*)²³ is present in the clause specifying an event of motion, a Source PP can more or less easily scramble with the adverbial, whereas if the adverbial intervenes between the verb and the Goal PP the clause becomes odd at the very best:

- (45) a. He ran from the library for ten minutes. – source directional
 b. He ran for ten minutes from the library.
 (46) a. He ran to the library in ten minutes. – goal directional
 b. ??He ran in ten minutes to the library.

Again, Romanian data goes along the lines of the English data. Consider the examples below:

- (47) a. Ion a alergat timp de zece minute de la școală (până acasă).

²³ It has already been argued that when goal directionals are present in the event structure that event is telic, thus it felicitously combines with an *in X time* adverbial, whereas a source directional does not inflict upon the [\pm telic] character of the event, thus a *for X time* adverbial is used. The reader is referred to section 1.3.2. of Chapter One (and in particular section 1.3.2.2.) of the present paper for discussions.

b. ?? Ion a alergat în zece minute (până) la școală.

3.3.2.4 Preposition incorporation

Another piece of evidence for the different syntactic behaviour of Goal and Source PPs comes from Dutch.

In a very recent study, Den Dikken (2006) provides a thorough view of Dutch adpositions, a very complex system and a fertile domain for the investigation of spatial prepositions. The fact that in Dutch only postpositions can have a directional reading is crucial. Koopman (1997) shows that Dutch postpositions and particles incorporate into the verb deriving a directional interpretation, whereas prepositions cannot be incorporated due to their locative character. Importantly, while Goal PPs can be incorporated in between the auxiliary and the main (motion) verb, Dutch Source PPs do not allow for PP incorporation.

(48)a. dat zij de jas over de stoel hebben heen gelegd

that they the coat over the chair have prt put

‘that they laid the coat over the chair’

b. dat dit boek (van) onder het bed is (?*vandaan) gekomen

that this book from under the bed is from come

‘that this book came from under the bed’

3.3.2.5. Adverbial modification

In Chapter One I have briefly introduced one instance in which an adverbial modifier had ambiguous scope giving rise to two readings (see section 1.3.2. on event decomposition). I will now look at how the adverbial modifier ‘again’ interacts with Goal and with Source PPs.

- (49) a. John drove to New York again. – ambiguous
- (i) ‘repetitive’ – the event of John’s driving to New York is repeated;
 - (ii) ‘restitutive’ – the state of John’s being at New York is restituted (it does not imply that John has previously driven to New York).
- b. John drove from New York again. – only ‘repetitive’ reading

The claim (along the lines of Nam (2004)) is that Goal PPs constitute a core event, namely the result state, whereas Source PPs do not.

3.3.2.6. ‘Satellites’ lexicalizing Goal and Source

It is also relevant for the present discussion to point out that departure-indicating satellites (namely the Source satellites) are underrepresented in English (and in the majority of languages, according to Talmy (2000)) among grammatical devices that interact with verbal roots. Contrast examples a. with examples b. in (50-51) below:

- (50) a. John hid *in* the attic. – he went in the attic in order to hide
b. *John hid *out* of the attic. – he came out of the attic where he had been hiding
- (51) a. John hid his rabbit *in* the attic. – he put his rabbit in the attic, in order to hide it
b. *John hid his rabbit *out* of the attic. – he took his rabbit out of the attic, where it has been hiding

In the subsections ranging from 3.3.2.1. to 3.3.2.6. I have provided evidence for the asymmetry between Goal and Source directional prepositions. Next, I will

account for the asymmetry in terms of the positions in which Goal and Source modifiers are generated.

3.3.3. Base positions for Goal and Source PPs

Nam (2004), Markovskaya (2006) have advocated the existence of an asymmetry between Goal and Source prepositional phrases. According to the two studies, Goal PPs are unambiguously arguments, while Source PPs can occur both as arguments and adjuncts in certain syntactic contexts. Markovskaya's claim (based on data from Russian regarding the asymmetric distribution of Goal and Source prefixes and PP remnant fronting facts) is that Source prepositions have lexically specified semantics, which determines the relative structural freedom, whereas Goal prepositions, since they are derived from locative prepositions when the building of the event structure takes place, are bound to be arguments of the verb.

In the previous section I have provided several arguments in favour of the view that Goal PPs and Source PPs have a contrasting syntactic behaviour. Adopting the Hale&Keyserian extended VP structure (as I have done so far), a Goal PP is generated as complement of the innermost VP projection, specifying the final location of the Theme argument complement in its turn of P°. The PP together with the Theme DP realize the Result state, in a structure like the one in (16) in section 3.2.4., first proposed by Pustejovsky (1991), and simplified below:

$$(52) E: Transition = e_1: Process = [verb] + e_2 State = [PP^DP]$$

Following Nam (2004), I adopt the following mapping procedure from semantics to syntax:

- Mapping 1: Goal PPs are generated in the lower VP (corresponding to the Result State).

Source PPs, on the other hand, behave more like adjuncts. Although events modified by Source PPs also have a Transition point (from an initial to some other location, whether or not it is the final location of the Theme), so the Result component is interpretably present in the event, it is clear that these constituents behave more like adjuncts. I depart from Nam (2004) at this point in concluding (based on the evidence provided in the previous section and on my proposal on how the licensing of the PathP in the internal structure of the Source PP takes place) that Source PPs remerge from the complement of the low VP to the modifier of the high VP position, namely to the modifier of *v*P (or Cause Phrase), taking scope over the whole event.

- Mapping 2: Source PPs are generated in the lower VP but remerge in the higher VP (corresponding to the Cause Phrase).

Last but not least, locative or directional prepositional phrases which are clearly adjuncts (on a par with adverbial adjuncts), modifying the whole event (as in 53) below), are merged directly as adjuncts of the *v*P, as advocated by Nam (2004).

(53) John run to the store near the house / yesterday evening.

- Mapping 3: PPs modifying the whole event are generated adjoined to the higher VP (corresponding to the Cause Phrase).

Further research should concentrate on the interaction between spatial prepositions and adverbials in order to understand more about the mapping of adjunct PPs. Also, I have not dealt with route directionals from this perspective, an issue that I will also leave for further study.

3.4. INTERMEDIARY CONCLUSIONS

The third chapter discussed the licensing, derivation and semantics analysis of source of motion prepositions in Romanian.

I started by putting forth again the event composition and structure that I adopted throughout the paper, namely that of Pustejovsky (1991) and Hale and Keyser (1993, 2002), and proposed the structure of events modified by locative or goal PPs.

In the second section the notion of *path* was attributed a formal description in a simplified version of the Vector Space Semantics framework, which later served in detailing the opposition between goal and source directionality. This opposition is conceptual, and its lexicalization patterns differ substantially from one language to another. In contrast to what is observed in English (section 3.2.4.), Romanian exhibits a neat algorithm in lexicalizing Goal and Source PPs, which I argue to be both derived from locative PPs, given the absolute homophony. The following generalizations hold in Romanian: Goal PPs have the same phonetic realization as locative PPs, and their directional reading is licensed by (certain classes of) verbs of motion. Source PPs have the same phonetic realization as locative PPs plus the ‘functional’ morpheme *de* which is left adjoined to the locative. I argue that whenever a motion verb is modified by a spatial prepositions, it licenses a *path* component in the internal structure of the PP, which is by default goal-oriented, unless *de* imposes source directionality.

The last section dealt with the syntactic asymmetry between goal and source prepositional phrases for which numerous arguments are provided. The asymmetry is based on the different positions in which they are generated into syntax.

CONCLUSIONS

The presents study aimed at constructing a complex picture of Romanian spatial prepositions in their locative or directional dimension. The ultimate goal of the paper was to provide an analysis of the syntax and semantics of prepositional phrases denoting source of motion in Romanian as it could be inferred from their phonological and morphological form.

In doing so, I myself started a journey along a path. The first steps tackled some instrumental notions that are handled in the study of spatial prepositions: *location, direction, place, path, figure, landmark* or *reference object*, concepts which were contextualized and exemplified when possible. In an attempt to provide a complete theoretical background, I realized that there is little agreement in the literature on spatial prepositions as to the labelling of concepts, definitions and classifications, and putting forward both early and more recent views turned out to be absolutely necessary.

Once the theoretical picture appeared complete, I turned to empirical data. Romanian, my target language, was constantly looked at in comparison with English, and eventually several very interesting contrasting points were found. These observations lead me to challenge a pervasive analysis of language types. It appeared to me that neither English nor Romanian perfectly fit in the mould of ‘satellite’ or verb-framed languages, respectively.

While going from morphology to semantics, and from semantics to (internal) syntax of Romanian spatial prepositions, I tried to address the following issues: are all spatial prepositions found in the Lexicon? The negative answer to this question lead to another crucial point in the analysis: how are directional prepositions derived from locatives? And further, what does the perfect correspondence between Goal and

Source preposition imply? And how can we account for the syntactic asymmetry between the two directional prepositional phrases?

Several points in the tentative analysis remained unclear to me still. Some of these unanswered questions are the following: at which level of representation does *de* intervene and block goal directionality? How does scope change when the final remerging of Source PPs takes place? I will leave these questions for further research.

REFERENCES

- *** (2005) – *Gramatica Limbii Române*, Vol. I – *Cuvântul*, Valeria Guțu Romalo (ed.), Ed. Academiei Române, București;
- Baker, M. (2003) – *Lexical Categories. Verbs, Nouns and Adjectives*, Cambridge University Press;
- Campos, H. (1991) – *Preposition Stranding in Spanish?*, in ‘*Linguistic Inquiry*’ 22, 741-750;
- Chomsky, N. (1970) – *Remarks on Nominalization*, in R. Jacobs and P. Rosenbaum (eds.). *Readings in English Transformational Grammar*, Ginn, Waltham, Mass., pp. 184-221.
- Chomsky, N. (1995) – *The Minimalist Program*, MIT Press, Cambridge, MA.;
- Cinque, G. (1999) – *Adverbs and Functional Heads*, Oxford University Press;
- Cornilescu, A. (2002) – *On Aspect and Case: Investigating Romanian Nominalizations*, in J. Guéron and J. Lecarme, ‘*The Syntax of Time*’, pp. 75-114; MIT Press;
- Den Dikken, M. (2003) – *On the Syntax of Locative and Directional Adpositional phrases*. Ms. CUNY. http://web.gc.cuny.edu/dept/lingu/dendikken/syntax_of_pp.pdf;
- Den Dikken, M. (2006) – *On the Functional Structure of Locative and Directional PPs*, paper presented at the Workshop On the Internal Structure of PPs, University of Venice, ms.;
- Dobrovie-Sorin, C. (1994) – *The Syntax of Romanian: Comparative Studies in Romance*, Mouton de Gruyter, Berlin/New York;
- Dowty, D. (1979) – *Word Meaning and Montague Grammar*, Reidel, Dordrecht;
- Emonds, J. (1976) – *A Transformational Approach to English Syntax*, Academic Press, New York;
- Folli, R. (2002) – *Constructing Telicity in English and Italian*, PhD. Dissertation, University of Oxford;

- Folli, R. & G. Ramchand (2004) – *Prepositions and Results in Italian and English: An Analysis from Event Decomposition*. In van Hout, A., H. de Swart & H.J. Verkuyl (eds.), ‘*Perspectives on Aspect*’, Springer, Dordrecht. <http://www.hum.uit.no/a/ramchand/rdownloads/folliramfin.pdf>;
- Fong, V. (1997) – *The Order of Things: What Directional Locatives Denote*, PhD thesis, Stanford University; http://www.stanford.edu/~vivienne/research/fong_dissertation.pdf;
- Gehrke, B. (2006) – *On Directional Readings of Locative Prepositions*, in Proceedings of ConSOLE XIV 2006;
- Grimshaw (1990) – *Argument Structure*, MIT Press, Cambridge, MA.;
- Hale, K. and S. J. Keyser (1993) – *On Argument Structure and the Lexical Expression of Syntactic Relations*, in K. Hale and S. J. Keyser (eds.) ‘*The View from Building*’ 20, MIT Press, Cambridge, MA.;
- Hale, K. and S. J. Keyser (2002) – *Prolegomenon to a Theory of Argument Structure*, Linguistic Inquiry Monograph 39, MIT Press, Cambridge, MA.;
- Higginbotham, J. (2000) – *Accomplishments*, Proceedings of Glow in Asia II, 72-82;
- Huijbregts, R. & H. van Riemsdijk (2002) – *Location and Locality*. van Oostendorp, M. & E. Anagnostopoulou (eds.), Progress in Grammar: Articles at the 20th anniversary of the Comparison of Grammatical Models Group in Tilburg. Meertens Instituut, Amsterdam, pp. 1-23. <http://www.roquade.nl/meertens/progressingrammar/riemsdijk.pdf>;
- Jackendoff, R. (1983) – *Semantics and Cognition*, MIT Press, Cambridge;
- Jackendoff, R. (1990) – *Semantic Structures*, in Current Studies in Linguistics 18, Cambridge, Ma.: MIT Press;
- Kolliakou, D. (1999) – *DE-Phrase Extractability and Individual Property Denotation*, in ‘*Natural Language and Linguistic Theory*’ 17: 713-781;
- Koopman, H. (1997) – *Prepositions, Postpositions, Circumpositions and Particles*, ms. UCLA; <http://www.linguistics.ucla.edu/people/koopman/papers/pp.pdf>;
- Kracht, M. (2002) – *On the Semantics of Locatives*, Linguistics and Philosophy, 25: 157-232;

- Krifka, M. (1998) – *The Origins of Telicity*, in S. Rothstein (ed.) ‘*Events and Grammar*’, Kluwer, Dordrecht, 197-235;
- Levin, B. (1993) – *Verb Classes and Alternations: A Preliminary Investigation*, The University of Chicago Press, Chicago/London;
- MacDonald, J. E. (2006) – *Null Directional-Prepositions in Romanian and Spanish*; http://www.linguistics.stonybrook.edu/pub/papers/MacDonald_2006.pdf
- Markovskaya, E. (2006) – *Goal-Source Asymmetry and Russian Spatial Prefixes*, in P. Svenonius (ed.) Nordlyd: Tromsø Working Papers in Linguistics, 33.2, special issue on Adpositions, pp. 200-219, CASTL, Tromsø. <http://www.ub.uit.no/munin/nordlyd/>;
- Nam, S. (2000) – *A Typology of Locatives and Event Composition in English*, in ‘*Language Research*’ 36.4, 689-714;
- Nam, S. (2004) – *Goal and Source: Asymmetry in their Syntax and Semantics*. Paper presented at the Workshop on Event Structures in Linguistic Form and Interpretation, Leipzig, March 2004. <http://ling.snu.ac.kr/nam/papers/goal-source-Leipzig.PDF>;
- Noonan, M. (2006) – *À To Zu*, paper presented at the Workshop On the Internal Structure of PPs, University of Venice, ms.;
- Pollock, J.-Y. (1989) – *Verb Movement, Universal Grammar and the Structure of IP*, in ‘*Linguistic Inquiry*’ 20: pp. 365-424;
- Pustejovsky, J. (1991) – *The Syntax of Event Structure*, in ‘*Cognition*’ 41: 47-87;
- Pustejovsky, J. (2000) – *Events and Semantics of Opposition*, in C. Tenny and J. Pustejovsky (eds.), *Events as Grammatical Objects*, Standford, CA, CSLI Publications, 445-482;
- Ramchand, G. (2006) – *Verb meaning and the Lexicon*, Ms., University of Tromsø, <http://ling.auf.net/>;
- Ramchand, G. and P. Svenonius (2002) – *The Lexical Syntax and Lexical Semantics of the Verb-Particle Construction*, WCCFL Proceedings, L. Mikkelsen and C. Potts (eds.), 387-400, Cascadilla Press, Somerville, MA; <http://www.hum.uit.no/a/ramchand/rdownloads/particles.pdf>;
- Stowell, T. (1981) – *Origins of Phrase Structure*, PhD dissertation, MIT;

- Svenonius, P. (2004). *Spatial P in English*. Ms., University of Tromsø. <http://ling.auf.net/lingBuzz/>;
- Talmy, L. (1985) – *Lexicalization Patterns: Semantic Structure in Lexical Forms*. In Timothy Shopen (ed.), ‘*Language Typology and Syntactic Description*’, I: Clause Structure, 57-149, Cambridge: Cambridge University Press.;
- Talmy, L. (2000) – *Toward a Cognitive Semantics*, vol. 1, 2, MIT Press, Cambridge;
- Tenny, C. (1994) – *Aspectual Roles and the Syntax-Semantics Interface*, Kluwer Academic Publishers, Dordrecht;
- Terzi, A. (2006) – *Locative Prepositions and Place*, paper presented at the Workshop On the Internal Structure of PPs, University of Venice, ms.;
- Tortora, C. (2006) – *Aspect inside PLACE PPs*, paper presented at the ‘Syntax and Semantics of Spatial P’ conference, Utrecht, ms. Abstract downloadable at <http://www.let.uu.nl/~Anna.Asbury/personal/Tortora.pdf>;
- Vendler, Z. (1967) – *Linguistics in Philosophy*, Ithaca, Cornell University Press;
- Verkuyl, H. and J. Zwarts (1992) – *Time and Space in Conceptual and Logical Semantics: the Notion of Path*, in ‘*Linguistics*’ 20, pp. 483-511;
- Zegrean, I. (2007) – *Locative and Directional Readings of în PPs in Romanian*, paper presented at the 9th Annual Conference of The English Dpt., University of Bucharest; to appear in ‘*Proceedings to 9th Annual Conference of The English Dpt., University of Bucharest*’;
- Zwarts, J. & Y. Winter (2000) – *Vector Space Semantics: a Modeltheoretic Analysis of Locative Prepositions*. *Journal of Logic, Language and Information* 9:2, pp. 169-211;
- Zwarts, J. (2005) – *Prepositional Aspect and the Algebra of Paths*, Ms. Radboud University Nijmegen. <http://www.let.uu.nl/users/Joost.Zwarts/personal/>;
- Zwarts, J. (2006a) – *Event Shape: Paths in the Semantics of Verbs*, Ms. Radboud University Nijmegen. <http://www.let.uu.nl/users/Joost.Zwarts/personal/>;
- Zwarts, J. (2006b) – *Priorities in the Production of Prepositions*, Ms. Radboud University Nijmegen. <http://www.let.uu.nl/users/Joost.Zwarts/personal/>;
- Zwarts, J. (2006c) – *Aspects of a Typology of Direction*, Ms. Radboud University Nijmegen. <http://www.let.uu.nl/users/Joost.Zwarts/personal/>.