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Laure Sarda

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French motion verbs: insights into the status of locative PPs^{* **}

Laure Sarda

Lattice, CNRS, ENS & Université Paris 3 Sorbonne Nouvelle, PSL & USPC, France

This chapter deals with the syntactic status of locative constituents combining with motion verbs in French. It aims at answering the following questions: are locative PPs arguments or adjuncts? To which extent does the semantic structure of motion verbs determine the obligatory or optional presence of locative constituent?

In the first part of the chapter, I discuss the general assumption that Manner and Path cannot be encoded in the same verb. This restriction intersects with the two-way typological division between Verb framed languages and Satellite framed languages. As an alternative view of motion description, I present the classification criteria, proposed by Aurnague (2011), which provides new tools to rethink motion beyond the classical opposition between Manner and Path. Relying on a corpus study, I systematically apply a series of syntactic tests to the main classes of motion verbs. I show that locative PPs are tied to the verb to several degrees and that the semantic structure of verbs strongly impacts their syntactic properties.

Keywords: motion verbs, argument structure, goal bias, syntax-semantic interface

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This paper focuses on the syntax and semantics of French motion verbs expressing autonomous motion events. It addresses the question of the status (obligatory or optional) of the locative constituent (Ground) and aims at understanding how far lexical semantics constrains the syntax of motion events. More specifically, the question raised is whether the status of a locative constituent is impacted by its own polarity (Source, Path, or Goal) in relation to the polarity of the verb it combines with. Do the locative constituents have the same status when they combine with a verb with congruent polarity (as in *sortir*_(source) *de la boutique*_(source) ‘come out of the shop’) or with a verb with non-congruent polarity as in *sortir*_(source) *dans la rue*_(goal) ‘go out into the street’)?

I will review a full inventory of the factors motivating the presence or the absence of the Ground constituent, from lexico-syntactic to semantic and pragmatic factors.

In section 1, I first recall the structure of a motion event and the typological framework in which it has been described since the well-known description by Talmy (1972, 1985). In section 2, I introduce the semantic classification of French motion verbs by Aurnague (2011)¹. This classification relies on the combination of two criteria: ‘change of placement’ and ‘change of locative relation’. In section 3, I present three classes of French motion verbs, and discuss the Manner/Path complementarity, i.e., the claim that only one component can be lexicalized in the same verb, not both (cf. Rappaport Hovav and Levin 2010; Levin and Rappaport Hovav 2013; Levin and Rappaport Hovav 2019; Beavers et al. 2010). Against this claim, I suggest in section 3.4 that Manner and Path must be conceived of as sets of properties potentially included in the semantics of a verb rather than labels to identify exclusive classes of verbs.

¹ See also Aurnague’s contribution in this volume.

In section 4, I then propose a series with syntactic tests to evaluate the obligatoriness of the Ground constituent. In section 5, I present the methodology of a corpus study designed to provide usage-based answers to questions that are difficult to resolve by intuition alone concerning constraints on the presence, the form and the position of the PPs combining with different classes of verbs.

In sections 6 and 7, I investigate whether these specific constraints are driven by the semantic properties of verbs. I then provide an objective account of preferred combinations between verbs and prepositions, which highlights the respective contribution of each constituent to the global meaning of a motion event.

1. Motion Event

1.1. Path verbs vs. Manner of motion verbs

It is usually assumed that there are two main classes of motion verbs: Path verbs (*partir* ‘leave’, *aller* ‘go’, *entrer* ‘enter’) and Manner of motion verbs (*marcher* ‘walk’, *courir* ‘run’, *voler* ‘fly’). These verbs are generally distinguished on the basis of two sets of closely intertwined properties:

Path verbs are associated with the notion of boundary-crossing (Aske 1989; Slobin and Hoiting 1994; Slobin 1996), of telicity (Dowty 1991; Tenny 1995; Krifka 1995), and of unaccusativity (Levin and Rappaport 1996; Legendre and Sorace 2003). They are conjugated in French with the *be* auxiliary (1a). On the other hand, Manner of motion verbs are associated with translocational motion (Zlatev et al. 2010), or translational motion (Talmy 2000b: 35), with non boundary-crossing and atelicity. They are unergative and are consequently conjugated with the *have* auxiliary in French (1b):

(1) a. *Jean est parti.*

John *be*.AUX.PRS.3.SG leave.PTCP

‘John left’

b. John *a* *marché* / *couru* *sur la plage*.

John *have*.AUX.PRS.3SG walk.PTCP / run.PTCP on the beach

‘John walked/ ran *on the beach*’

However, some verbs do not fit into one or the other cluster of properties associated with each class of verbs. For instance, a verb such as *sauter* ‘jump’, expresses manner, is unergative, but describes a punctual event. I present in section 2.2 and 3.1 a refined verb classification (by Aurnague 2011), which avoids treating such verbs as exceptions.

1.2. *Semantic components of a motion event*

Talmy (1985, 2000b) proposed that a motion event encompasses four semantic components, and two major co-events² (Talmy, 2000b: 25-26). These components are: (i) The *Figure* (defined as “a moving or conceptually movable object whose path or site is at issue”.); (ii) the *Ground* (defined as a reference frame, or a reference object that is stationary within a reference frame, with respect to which the Figure's path or site is characterized); (iii) the *Path* (defined as the path followed or site occupied by the Figure object with respect to the Ground)³; (iv) the *Motion* (refers to the presence *per se* of motion (translational motion) or locatedness in the event). The two co-events are: the *Manner* (the manner in which the motion is performed), and the *Cause* (what initiates the motion itself). They are illustrated in (2):

(2) The toy that the boy pushed slid down the hill.

² “In addition to these internal components, a Motion event can be associated with an external Co-event that most often bears the relation of Manner or of Cause to it.” (Talmy 2000b: 26).

³ Path is itself divided into Vector (source, path and goal), Conformation (shape of the Path), and Deixis (motion towards/away from) (Talmy 2000b: 53-57)

<i>Figure</i>		<i>Motion</i>	<i>Path</i>	<i>Ground</i>
	<i>Cause</i>	<i>Manner</i>		

1.3. *Satellite-framed vs. Verb-framed languages*

For more than thirty years⁴, motion verbs have been studied from the perspective of the typological distinction made between V(erb)-framed languages and S(atellite)-framed languages (cf. Talmy 1985, 2000a, 2000b). In this line of research, French, as a Romance language, belongs to the group of V-framed languages: it typically expresses Path and Motion in the main verb, leaving the expression of Manner optional and peripheral. As a consequence of the Path being expressed in the verb, prepositions heading the nominal Ground constituent are usually static. In *il va à la mer* ‘he is going to the beach’, the preposition *à* ‘at’ is used whereas the directional preposition *to* is used in English. On the other hand, S-framed languages express Path in a satellite⁵ as in (3), offering the structural possibility of expressing the Manner component in the main verb as in (4).

(3) John came *out* of his office.

(4) John *ran* out of his office.

Languages of the world are supposed to prefer one or the other of these two patterns, depending on which semantic component is encoded in which syntactic constituent, as illustrated in table 1⁶.

⁴ Older works already mention this binary opposition. See for instance Bally (1932/1965), Bergh (1948), Vinay and Darbelnet (1958), Tesnière (1959).

⁵ A satellite is “the grammatical category of any constituent other than a nominal complement that is in a sister relation to the verb root” (Talmy 1991: 486).

⁶ For a recent perspective on Motion event description, see also Ibarretxe-Antuñano and Hijazo-Gascón (2015).

Table 1. Patterns of lexicalization in V-framed and S-framed languages

Verb framed languages				Satellite framed languages			
Figure	Path	Ground	(Manner)	Figure	Manner	Path	Ground
Subject	Verb	PP	Gerund	Subject	Verb	Satellite	PP/NP

This two-fold division has led to focus on the opposition, at the lexical level, between Manner of motion verbs and Path verbs. It has also raised questions about the definition of what exactly a Satellite is, how distinct it is from a preposition, and what relationship it has with the verb (Croft et al. 2010; Beliën 2008). It has been widely assumed that these two components, Manner and Path, cannot be lexicalized in the same verb, leading to exclusive patterns of lexicalization (Beavers et al. 2010). This claim is part of the more general manner/result complementarity (Rappaport Hovav and Levin 2010: 22), which holds that “manner and result meaning components are in complementary distribution: a verb lexicalizes only one”.

We will revisit this claim in sections 3.4 and 3.5, in the light of the classification of French motion verbs introduced in sections 3.1-3.

2. Spatial criteria for motion event classification

2.1. *The relational nature of space in motion events*

Motion has long been described in terms of boundary-crossing (Aske 1989; Slobin and Hoiting 1994; Slobin 1996) or change of location (Laur 1991). Both of these criteria imply that the description of motion is based on referential attributes of the Ground entity, and on our capacity to conceptualize them as boundaries delimiting one location from another.

By contrast, in the present paper, motion is conceptualized as a *change of locative relation* (Boons 1987; Sarda 1999, 2001; Aurnague 2011): each motion event profiles a positive item of information. For instance, the event

expressed by *sortir* ‘go out’ involves the locative relation *being in* at time t1 and negation of this positive information at time t2. In other words, the positive item of information first profiled (*be in*) no longer holds at time t2. There is no need to positively characterize each moment/ location of the event. This entails that the aspectuality of the event does not determine the type of verb but rather can be deduced from its spatial properties.

Motion implies moving through space and time. The very nature of motion as a moving event through space and time can be grasped by languages as a relational phenomenon. The nature of space involved in a motion event is no less relational than the nature of time⁷. The moving entity (Figure) is always in a relationship with respect to a frame of reference (Ground). The best characterization of a motion event is therefore to see whether this relationship remains the same or changes at some point.

2.2. Classification of French motion verbs: Aurnague’s (2011) criteria

This section presents the main features of the classification of French motion verbs proposed by Aurnague (2011). This classification is based on the relational nature of space in a motion event. Aurnague suggests combining two criteria: a change of basic locative relation, as mentioned above in 2.1, and a change of placement (whether the Figure moves along or not). For instance, *entrer* ‘enter’ implies that the relation *be in* changes from false to true. The verb semantics contains nothing more than this change of locative relation (*not be in* → *be in*) concomitant with a change of placement (Motion *per se*).

Combining these two criteria gives rise to four main classes of verbs:

⁷ This relational concept of space has been argued for by Leibniz: “I have said more than once, that I hold space to be something purely relative, as time; an order of coexistences, as time is an order of successions.” (cf. Vailati 2014).

Table 2. Aurnague’s classification of Motion events (2011)

	Change of placement	No change of placement
No change of locative relation	<i>courir</i> ‘run’, <i>avancer</i> ‘move forward’, <i>marcher</i> ‘walk’, <i>voler</i> ‘fly’, <i>nager</i> ‘swim’	<i>s’asseoir</i> ‘sit down’, <i>se lever</i> ‘get up’, <i>se blottir</i> ‘huddle’, <i>tressauter</i> ‘twitch’, <i>sursauter</i> ‘jump, flinch’,
Change of locative relation	<i>aller</i> ‘go’, <i>partir</i> ‘leave’, <i>entrer</i> ‘enter’, <i>sortir</i> ‘go out’	<i>se poser</i> ‘alight, land’, <i>sauter</i> ‘jump’, <i>bondir</i> ‘bounce, spring’, <i>se jeter</i> ‘throw oneself’

Verbs such as *s’asseoir* ‘sit down’ correspond to the class of change of posture verbs (no change of placement, no change of relation⁸). They are not addressed here. In the following section, I focus on the other three classes:

- Change of placement verbs, represented by *courir* ‘run’,
- Change of relation verbs, represented by *sauter* ‘jump’,
- Change of relation and change of placement verbs, represented by *aller* ‘go’.

3. Semantic structure of French Motion verbs

3.1. Change of placement verbs (*courir* ‘run’)

Verbs of this class express a change of placement and no change of relation. They describe a translational motion of the Figure with respect to a frame of reference (by default a terrestrial frame of reference). They combine easily with PPs headed by the preposition *à travers* ‘through’, which serves as a test to show that the motion is necessarily extended over space (5), contrary to posture verbs (no change of placement – no change of relation), which are incompatible with *à travers* ‘through’ heading a NP referring to a terrestrial ground (6).

⁸ For commodity, we will from now on speak about “change of relation” instead of “change of basic locative relation”.

Aurnague and Stosic (2002) and Stosic (2002, 2007, 2009b) have shown that the preposition *à travers* ‘through’ implies that the movement of the Figure is extended with respect to the whole Ground (“constraint of minimal extension/coverage”).

- (5) Je courais *à travers* le parc pour chercher ma femme.
I run.PAST.3SG through the park (to find my wife)
(A. Maurois, *Climats*, 1928, p. 61.)
‘I ran through the park looking for my wife’
- (6) ?/**J’étais* *assis* *à travers* *le parc*.
I be.AUX.PAST.1SG sit.PTCP through the parc
‘I was sitting through the park’

The verbs grouped in this class show some semantic differences, however. They cluster into two subsets, one indicating some Manner, the other indicating some Directionality (moving forward, backwards, upwards, downwards). Below are non-exhaustive lists of verbs of each type:

The subset expressing some properties of manner contains verbs such as *courir* ‘run’, *marcher* ‘walk’, *flotter* ‘float’, *voler* ‘fly’, *nager* ‘swim’, *tituber* ‘stagger’, *boiter* ‘limp’, *glisser* ‘slide’, *se balader* ‘stroll’, *flâner* ‘wander’, *vadrouiller* ‘roam’, *déambuler* ‘amble’, *vagabonder* ‘tramp’, *se promener* ‘stroll’, *errer* ‘wander’/ ‘roam’, *pédaler* ‘cycle’, *rouler* ‘roll’, *ramper* ‘crawl’, *galoper* ‘gallop’, *trotter* ‘trot’, *deriver* ‘drift’.

The subset of verbs indicating directionality contains *se déplacer* ‘travel’, *se mouvoir* ‘move’, *avancer* ‘move forwards’, (s’) *approcher* ‘approach’, *progresser* ‘progress’, *cheminer* ‘to wend one’s way’, *évoluer* ‘evolve’/ ‘move’, *distancer* ‘outrun’, *monter* ‘move up’, *descendre* ‘move down’, *remonter* ‘run up/ follow’, *grimper* ‘climb’, *reculer* ‘move back’/ ‘retreat’, *rétrograder* ‘regress’, *refluer* ‘recede’.

3.2. Class of change of relation only (*sauter* ‘jump’)

Verbs of this class typically express a change of relation which does not last, neither in space (no change of placement), nor in time (except in cases of iterativity). They refer to a sudden event that can be understood as a quick change of relation.

sauter ‘jump’, *bondir* ‘bounce’/ ‘spring’, *rebondir* ‘bounce back’,
jaillir ‘spring’/ ‘gush’, *surgir* ‘pop up’, *s’élever* ‘rise’/ ‘arise’, *s’envoler*
‘fly away’, *gicler* ‘splatter’ / ‘spurt’, *rejaillir* ‘rebound on’, *s’élancer*
‘dash/ hurl o.s.’, *se jeter* ‘throw o.s.’, *se poser* ‘land’, *s’écraser* ‘crash’

These verbs can involve different types of locative relations: contact/ non contact (*sauter* ‘jump’, *bondir* ‘bounce’/ ‘spring’, *rebondir* ‘bounce back’, *s’envoler* ‘fly away’, *se poser* ‘land’). Some of these verbs describe some sort of appearance (not be here/ be here), focusing on the initial phase of appearance: *jaillir* ‘spring’/ ‘gush’, *surgir* ‘pop up’, *s’élever* ‘rise’/ ‘arise’, *gicler* ‘splatter’/ ‘spurt’.

A property shared by these verbs is that they all imply an event of self-dynamicity, involving an internal source of power or energy, a propelling force (or motor pattern, cf. Slobin 2004). This property provides an explanation for their tendency to enter construction (with locative PP) construed as a change of relation and change of placement, as will be shown in 3.4.

3.3. *Class of change of relation and change of placement (aller ‘go’)*

This class contains the largest number of motion verbs. It also shows the greatest variations of different types. Aurnague (2011) defined 8 types, depending on the phases on which the change of relation is centered (on the initial or the final phase), and on information given by the verb semantics about the portion of the event preceding or following this change of relation. I present here six of the eight types, including three types centered on the initial change of relation, and three types centered on the final change of relation:

- i) Independent initial change of relation and change of placement (*partir* ‘leave’)
- ii) Extended initial change of relation and change of placement (*s’échapper*,
s’enfuir ‘escape’)
- iii) Initial inclusion/containment-type change of relation and change of placement
(*sortir* ‘go out’)
- iv) Final change of relation and change of placement with integrated prior motion
(*aller à* ‘go to’, *venir* ‘come’)
- v) Final change of relation and change of placement with presupposed prior
motion (*arriver* ‘arrive’, *parvenir* ‘attain’)
- vi) Final inclusion/containment-type change of relation and change of placement:
(*entrer* ‘come in’)

This terminology is not necessarily easy to handle and may require some explanation, but details can be found in Aurnague (2011 and in this volume). Briefly, there are three types centered on an initial change of relation (*partir* ‘leave’, *s’enfuir* ‘run away’, *sortir* ‘go out’).

Aurnague introduced a distinction between *partir*, whose semantics does not involve the subsequent motion following the change of relation, and *s’enfuir*, which, thanks to special semantic properties (speed, intentionality to avoid proximity with the Source), includes the subsequent motion in its semantics. Aurnague offers a test to differentiate the two types. The test shows that the subsequent motion is harder to negate with *s’enfuir* ‘escape/ run away’, than with *partir* ‘leave’:

(7) *Il est parti au village mais n’est jamais arrivé*
he be.PRS.3SG leave.PTCP at.the village but NEG be.PRS.3SG
never arrive-PTCP
‘he left for the village but never arrived’

(8) # *Il s’est enfui au village mais n’est jamais arrivé*
he REFL be.PRS.3SG escape.PTCP at.the village but NEG
be.PRS.3SG never arrive-PTCP
‘he ran away to the village but never arrived’

It will be shown in section 6 that this discrepancy between verbs that integrate (or not) a subsequent motion following the change of relation might have an impact on the status of the locative PP depending on whether the preposition points towards the same phase as the change of relation (initial: *partir de* ‘leave from’), or towards the opposite one (final: *partir à* ‘leave to’). The question arises whether constituents of opposite polarities (Source and Goal PPs) occupy the same syntactic status with respect to the same verb, or more generally, whether they are equally selected by initial verbs.

As for final verbs, they include three types, represented here by *aller* ‘go’, *arriver* ‘arrive’, and *entrer* ‘enter’. The latter, *entrer*, is centered on the final change of relation, a relation of inclusion/containment. The other two types are different. They describe, according to Aurnague, a change of placement which precedes the final change of relation. Consequently, their semantic structure focuses on a larger span of the event than the final change of relation, integrating (*aller*) or presupposing (*arriver*) the previous change of placement. The difference between the two is brought out by tests using temporal/aspectual adjuncts: *aller* ‘go’ can be modified, as an accomplishment, by a temporal PP headed by *en* ‘in’ (*il est allé à l’université en 1h* ‘he went to the university in one hour’). However, if modified by the temporal adverb headed by *à* ‘at’ (*il est allé à l’université à 8h* / ‘he went to the university at 8’), the resulting interpretation is an underspecified sentence, meaning either that he left at eight or that he arrived at eight. This proves that the event structure of *aller* ‘go’ incorporates the previous motion and that the constraint to conceptualize the event as an achievement triggers the selection of one of its different phases. Similarly, *arriver* can combine with both *en* ‘in’ and *à* ‘at’ adverbial modifiers (*il est arrivé au travail en 1h/ à 8h* ‘he arrived at work in 1 hour/ at 8’). Contrary to *aller* ‘go’, the event is, in both cases, centered on the final change of relation, and the previous change of placement is not profiled.

The above classification suggests that initial and final verbs might have preferred arguments corresponding to the phases of the event included in their internal semantic structure.

3.4. Path defined as a set of independent features

In this section, I claim that Path is a set of features expressed by different verb classes rather than a class of verbs in itself. Whereas Talmy presented the opposition between V-framed and S-framed languages as a typological trend, scholars after him insisted on the fact that the verb cannot lexicalize Path and Manner simultaneously. Our analysis questions the rigidity of the opposition between V-framed and S-framed languages.

Levin and Rappaport (2019: 24) noted that in English, the S-framed pattern is observed simply when adding a goal PP headed by a goal preposition *to*, to a so-called manner verb. They underscore that there is no French counterpart to the English *to*: *à* is indeed a static preposition, and its exact counterpart is *at*⁹. Levin and Rappaport (2019) conclude that in French “the relevant S-framed construction is precluded”, and that instead, Path verbs are used in a V-framed construction. However, this claim needs to be qualified. There is, in French, the well-known possibility of expressing a change of

⁹ Whether the French preposition *à* ‘at’ has a static or dynamic meaning has been widely discussed. The French modern form *à* comes from the Latin prepositions *ad*, *ab*, *apud* which have had both dynamic and static uses. The three prepositions fused into a unique form *a*, which had undergone a pervasive semantic erosion through the different phases of its evolution. According to Goyens, Lamiroy and Melis (2002: 303), the preposition *à* ‘at’ fundamentally has a static meaning with respect to its spatial uses (see also, Vandeloise 1987).

relation and change of placement event (‘directed motion event’¹⁰) with a change of placement (9) or a change of relation (10) encoded in the main verb:

(9) [*Rentré chez lui, il entendit la même voix qui l’appelait*].

Il courut dehors de nouveau, mais ne trouva personne.

he run.PST.3SG outside of again but NEG find.PST.3SG nobody

(Michel Tournier, *Le roi des aulnes*, 1970, p. 7)

‘When back home, he heard the same voice calling him. He again ran outside, but did not find anybody’

(10) *Puis, sans prévenir, elle sauta sur le marche-pied.*

then without warning she jump.PST.3SG on the running-board

(J. Vautrin, *Billy-Ze-Kick*, 1974, p. 159-160)

‘Then, without warning, she jumped onto the running-board’

This shift in meaning has been fully discussed (Laur 1993; Asher and Sablayrolles 1996; Borillo 1998; Bonami 1999; Fong and Poulain 1998; Kopecka 2009, Aurnague 2016). In (9), the combination *courir dehors* ‘run outside’, must unambiguously be construed as a change of relation and a change of placement, because it presupposes that the Figure was previously *inside*. The sentence describes an event of ‘running from inside to outside’. But the adverb *dehors* ‘outside’ does not in itself convey any Path meaning (as in *they were sitting outside*). Similarly, in (10) the verb *sauter* combines with the preposition *sur* ‘on’, which by itself does not convey any Path meaning either. Yet, this pattern [$V_{\text{non Path}} + \text{Prep} / \text{Adv}_{\text{non Path}}$] can yield a change of relation and change of placement interpretation of the event $[e]_{\text{Path}}$. I suggest calling it a pseudo-S-framed pattern. This pattern is different from the S-framed pattern, because the Path component is not conveyed by a satellite/preposition. The

¹⁰ The label ‘directed motion’ has been used in the literature to denote telic motion events. However, this term is misleading, because a direction does not imply, in itself, any telicity. I use it, in some cases, to help the reader establish the link between this familiar terminology and the one I use in this paper, which is borrowed from Aurnague (2011).

specificity of the French pattern is that this interpretation of the event cannot be attributed to prepositions, which are most often static (*à* ‘at’, *dans* ‘in’, *sur* ‘on’)¹¹. When neither the verb nor the preposition/ adverb convey a Path meaning, the question arises: where does this Path meaning of the event come from ?

Three non-exclusive answers can be suggested: the resulting change of relation might derive from i) some semantic properties of the verb, ii) the construction itself [V + PP], or iii) the context.

Aurnague (2011) suggested an explanation rooted in the verb semantics. He put forward the notion of a ‘goal oriented trend’ (tendentiality), which is expressed by four properties organized in a family resemblance:

- i. Speed (*courir* ‘run’),
- ii. (Intentional) opposition to a force or resistance against gravity (*ramper* ‘crawl’, *grimper* ‘climb’),
- iii. Directionality (*descendre* ‘go down’; *monter* ‘go up’),
- iv. Motion driven by a force, (*couler* ‘flow’, *glisser* ‘slide’)

These semantic features could be conceived of as Path properties that can be conveyed by change of placement verbs (*courir* ‘run’) or by change of relation verbs (*sauter* ‘jump’). When present, these features seem to strongly impact the capacity of a verb to express, in a certain construction, a change of relation associated with a change a placement. For instance, (11) contrasts with (12):

- (11) *il a couru à la plage.*
he have.AUX.PRS.3SG run.PTCP at the beach
‘He ran on/ to the beach’

¹¹ Besides static prepositions, the directional preposition *vers* ‘towards’ can be used, but it does not trigger a change of locative relation. The specific preposition *jusque* ‘up to / as far as’ can also be used, but this does not prove the possibility of an S-framed pattern in French as *jusque* can combine with any type of verb. The preposition *jusque* is special because it indicates a measurement rather than a direction.

- (12) *il a marché à la plage.*
he have.AUX.PRS.3SG walk.PTCP at the beach
'he walked (on/??to) the beach'

In (11), *courir* 'run' easily prompts a change of relation and change of placement thanks to the fact that it expresses speed. However, example (11) is ambiguous: two interpretations (*on* vs. *to*) sound equally good, and in this case the context of use indicates one of them. Conversely, *marcher* does not convey any of the four properties. In (12), *marcher à* does not lead to a change of relation and change of placement interpretation: (12) is unambiguously understood as a change of placement only (he was on the beach and walked there).

The organization of the four properties in a family resemblance means that a predicate can incorporate one or more of these properties. The verb *grimper* 'climb' contains the features 'opposition to a force' and 'directionality'; it means, in French, moving upwards against some difficulties, using one's feet and hands. Verbs such as *débouler* 'belt out', *dégringoler* 'tumble down', *dévaler* 'hurtle down' combine directionality and speed (and driven by a force). The more a verb incorporates such properties, the more it can express a change of relation associated with a change of placement ('directed motion' event) when combining with PPs headed by static prepositions.

This analysis challenges the rigidity with which the opposition between V-framed and S-framed languages has been dealt with after Talmy, who himself only presented it as a typological trend. In French, the construction [change of placement verb + locative preposition] can lead to the change of relation and change of placement. While this construction is constrained, it is far from being infrequent. Kopecka (2009) showed that 37% of change of placement verbs are associated with a change of relation, and 43% when they combine with the preposition *sur* (cf. Kopecka 2009: 60).

3.5 Manner defined as a set of independent features

The last issue in this section 3 concerns the status of manner. In the field of motion studies, manner has long been confined to a semantic component of verbs that excludes the Path component, leading (as shown in section 1.1) to the opposition between Manner of motion verbs and Directed motion verbs (or Manner verbs vs. Path verbs).

French data suggests, however, that the expression of Manner is distributed across all classes of verbs¹². Stosic (2009a: 111) proposed a cluster of properties characterizing manner in a more precise way. These properties are: speed (*courir* ‘run’), general appearance (*tituber* ‘stagger’), force¹³ (*jailir* ‘spring’), absence of locative goal (*errer* ‘wander’), shape (of the Path) (*zigzaguer* ‘zigzag’), means (*chevaucher* ‘ride’), degree of effort (*gravir* ‘climb up’), environment (*nager* ‘swim’), Path extension (*arpenter* ‘stride along’), and stealth or furtiveness (*se dérober* ‘sneak’) (see also Stosic’s chapter in this volume).

Along with these parameters, it is possible to find a manner corresponding to almost each of the verbal classes introduced previously as illustrated in table 3. Examples in table 3 provide a counter-argument against the principle that the verb lexicalizes either Manner or Path, but not both (Beavers et al. 2010; Levin and Rappaport Hovav forthc.).

¹² Not to mention that Manner can also be distributed around the verb thanks to adverbials that are merged to different degrees with the verb: *aller à pied* ‘go by foot’ is lexicalized, whereas *marcher avec peine* ‘walk with difficulty’, *courir comme un diable* ‘run like a devil’ are non lexicalized associations.

¹³ It is noteworthy that the features ‘speed’ and ‘force’ belong at the same time to the set of Path features and to the set of Manner features. They intrinsically have to do with these two dimensions of Manner and Path.

Table 3. Distribution of manner over different classes of verbs

	- Manner	+ Manner	Manner features
Change of placement	<i>se déplacer</i> ‘move’	<i>courir</i> ‘run’	speed
Change of relation	<i>se poser</i> ‘land’	<i>s’écraser</i> ‘crash’	force
Change of relation	<i>partir</i> ‘leave’	<i>filer</i> ‘steal away’	speed, furtive
and change of	<i>s’enfuir</i> ‘run away’	<i>se barrer</i> ‘clear off’	speed, force
placement	<i>arriver</i> ‘arrive’	<i>débouler</i> ‘belt out’	speed, force, unexpected
	<i>aller</i> ‘go	<i>rappliquer</i> ‘show/ turn up’	unannounced
	<i>entrer</i> ‘enter’	<i>s’infiltrer</i> ‘infiltrate’	shape, furtive

Table 3 clearly shows that manner can be co-lexicalized with the expression of the Path component, for instance with initial or final verbs of change of relation and change of placement such as *filer* ‘steal away’, *se barrer* ‘clear off’, *débouler* ‘belt out’. The English translations may not always express the same nuances as the French verbs. *Filer*, for instance, means leave quietly or surreptitiously, evoking the shape of a *fil* ‘thread’. *Débouler* means roll quickly down a slope (like a ball – a *boule* in French) and acquired the meaning ‘arrive hastily and unexpectedly’¹⁴.

In this section, I presented the semantic classification of French motion verbs based on two criteria: change of placement and change of relation. The analysis borrowed from Aurnague (2011) highlighted subtle nuances between verbs, depending on their semantic content, which can be centered on the change of relation only, or can incorporate some previous or subsequent change of placement. On the basis of these criteria, the so-called Manner verbs are not

¹⁴ It is noteworthy that the verb *débouler* first indicated a source event (centered on the initial change of relation). The TLFi dictionary dates the meaning « partir brutalement, déguerpir » (‘leave hastily, run off’) to 1793. Later, the verb acquired the meaning ‘roll down’, and ‘go down quickly’, and switches to a goal meaning *se précipiter sur* (rush at someone/sth) and finally, in a colloquial register, it now means ‘arrive hastily’. This meaning path diachronically illustrates the influence of goal bias, or how a source verb becomes a goal verb.

all clustered together, allowing to conceive of motion events outside the traditional systematic contrast between Manner and Path verbs. Rather, it has been shown that various features of Manner can be co-lexicalized with some change of relation and change of placement verbs and that some features of Path can be co-lexicalized with some change of placement verbs. The construal of the event relies on the lexical properties encoded by verbs as proved by the contrast between *courir* ‘run’, which is prompt to express a change of relation and change of placement event, and *marcher* ‘walk’ which, on the contrary, remains reluctant to trigger such a shift in meaning.

In the following, I focus on the analysis of the syntactic status of locative PPs combining with motion verb classes. In section 4, I present syntactic criteria used to distinguish arguments from adjuncts. Then, I expose the methodology in section 5. And lastly, I show how the afore-mentioned syntactic criteria apply and interact with the semantic structure of the different types of motion verbs. I successively define the interaction between the semantic and syntactic status of the locative PP with motion verbs expressing change of relation and change of placement (section 6) and with motion verbs expressing a change of placement (section 7). This analysis relies on previous work by Carlier (2005), Carlier and Sarda (2010), *forthc.*

4. Argument/ adjunct distinction in French: how locative PPs are special

4.1. Syntactic criteria

In French, the verb generally constrains (i) the presence (ii) the form and (iii) the position of its arguments (cf. Lazard 1994: 70). In (13), the presence of the argument is obligatory. In (14), the form of the argument is constrained: the verb *penser* ‘think’ can combine with a PP headed by *à* ‘at’ but not by *sur* ‘on’. Example (15) shows that the position of argument is constrained. Because it is

VP-internal, the argument cannot be moved to the front position. There is a strong correlation between position and syntactic function.

- (13) a. *Pierre a rencontré Paul.*
 b. **Pierre a rencontré.*
 ‘Peter met (Paul)’
- (14) a. *Pierre pense à quelque chose.*
 b. **Pierre pense sur quelque chose.*
 ‘Peter is thinking about something’ (lit. at vs *on)
- (15) ? *A quelque chose, Pierre pense.*
 ‘About something, Peter is thinking’

However, the status of locative ‘constituents’ in the domain of motion events remains a fuzzy area with respect to the argument/ adjunct distinction. The VP-internal status of locative constituents can be highlighted by an additional test, the ‘VP anaphora’ test (Lakoff and Ross 1976): since *do so* is a VP anaphora, it includes the arguments of the verb. In (16a), *faire de même* ‘do so’ refers to the whole VP ‘goes to the bakery’ and not only to the verb ‘goes’, and for this reason (16b) is ruled out.

- (16) a. *Pierre va à la boulangerie et Marie fait de même.*
 ‘Peter is going to the bakery and so does Mary’.
 b. ?*Pierre va à la boulangerie et Marie fait de même à la pharmacie.*
 ‘Peter is going to the bakery and so does Mary to the drugstore’.

The head-marking vs. dependent-marking distinction (Nichols 1986) provides an additional test for argumenthood, it indicates whether the marking of syntactic function is carried by the verbal head or by the nominal dependents.

Head-marking is possible in French only for arguments (17), not for adjuncts (18).

- (17) *De ce livre, il en parle beaucoup.*
 of this book he.PRO.3.SG.M of.it.PRO speak.PRS.3SG a.lot
 ‘He talks a lot about this book’
- (18) a. **De la fenêtre, il en jette des cailloux.*

from the window he of.it.PRO throw.PRS.3SG DET.PL pebbles
b. *De la fenêtre, il jette des cailloux.*
from the window he throw.PRS.3SG DET.PL pebbles
'From the window, he is throwing pebbles'

A major difficulty arises from the fact that all constituents do not behave the same way with respect to the different criteria presented above. Lazard defined three types of arguments: (i) arguments that are *required and governed*: in this case, the verb constrains both the presence and the form of the complement (e.g. *rencontrer* 'meet'). (ii) arguments that are *only governed*: complements are optional but their form is constrained (*penser* or *penser à* 'think or think about'). (iii) arguments that are *only required*: their presence is obligatory but their form is not constrained. For instance, *habiter* requires the presence of a locative constituent (19b), and this spatial constituent is VP-internal (19c). However, its form is not constrained (19a and 19d). Moreover, several locative constituents can co-occur without coordination or juxtaposition (19e), showing that there is no unique structural position for the locative argument.

- (19) a. *Pierre habite chez sa grand-mère.*
Peter live.PRS.3SG at.home.of her grand-mother
b. **Pierre habite.*
Peter live.PRS.3SG
c. **Chez sa grand-mère Pierre habite.*
at.home.of her grand-mother Peter live.PRS.3SG
d. *Pierre habite à la campagne.*
Peter live.PRS.3SG at the countryside
e. *Pierre habite à la campagne chez sa grand-mère.*
'Peter lives in the countryside at his grand-mother's place
dans une ferme
in a farm'

Lastly, Lazard defines adjuncts as *neither required nor governed* (he gets up *at 6 am*).

4.2. Syntactic tests and pragmatic constraints

The constraint of presence can be in conflict with pragmatic factors (Lazard 1994: 81-82). The obligatory presence of an adjunct can be found as in the passive construction (*This house was built in 1970* (Goldberg and Ackerman 2001)), as well as the absence of a supposedly required argument (*She went closer to the shop and came in*).

The omission of the argument is referred to as null instantiation. Fillmore (1986) and Fillmore and Kay (1995) distinguish two types of null instantiation: definite null instantiation and indefinite null instantiation. Indefinite Null Instantiation refers to an argument that is not expressed and whose referent remains totally unknown, unspecified or irrelevant in the context. Indefinite null instantiation narrows down a class of objects without pointing to a specific one: eatable object of *eat*, breakable objects of *break*, etc. (cf. Lambrecht and Lemoine, 2005). On the contrary, Definite Null Instantiation refers to an argument that can be recovered *via* deixis or anaphora. The omission of a Goal locative argument in (*She went closer to the shop and came in*) corresponds to a case of definite null instantiation. The locative argument is recovered by anaphora, implying that she came into the shop.

5. Methodology

The use of syntactic tests about the presence, form and position of locative PPs in the domain of motion is a difficult task when relying on intuition. In order to overcome this limitation, I conducted a corpus study to evaluate the behavior of locative PPs in a usage-based perspective.

I used the categorized Frantext database (<http://www.frantext.fr/>), in which a set of 323 novels has been selected, from 1920 to 1980, amounting to

25 757 527 words. Occurrences of representative verbs have been extracted. These verbs belong to the following classes: (i) Verbs of final change of relation and change of placement, (*aller* ‘go’, *arriver* ‘arrive’), (ii) Verbs of initial change of relation and change of placement (*partir* ‘leave’, *s’enfuir* ‘run away’), (iii) Verbs of inclusion/containment type of change of relation and change of placement (*sortir* ‘go out’, *entrer* ‘go in’). (iv) Verbs of change of placement (*marcher* ‘walk’, *courir* ‘run’, *voler* ‘fly’).

The occurrences of these verbs have been extracted in three different contexts: first, contexts where the verb is followed by a preposition; second, contexts where the verb is not followed by a preposition; third, contexts where the verb is preceded by a left-detached locative PP. The sub-corpus includes a random selection of a hundred occurrences of each verb with and without a PP. It totalizes 1193 utterances.

6. Argument structure of motion verbs and usage-based exploration of preferred constructions

This section provides a usage-based account of motion constructions in discourse. It gives an account of syntactic constraints on the locative PP combined with (i) final verbs of change of relation and change of placement (or goal-oriented verbs): *aller* ‘go’ and *arriver* ‘arrive’ (section 6.1); (ii) initial verbs of relation and change of placement (or Source-oriented verbs): *partir* ‘leave’ and *s’enfuir* ‘run away’ (§ 6.2); and (iii) verbs *entrer* ‘enter’ and *sortir* ‘exit’ expressing a relation of inclusion/containment. Verbs expressing only change of placement will be considered in section 7.

6.1. Final Change of relation and change of placement verbs

6.1.1 Final change of relation and change of placement verb with integrated prior motion: the case of *aller* ‘go’

Aller ‘go’ is characterized in French grammars as having an argument position for a Goal PP whose presence is assumed to be strictly required. A sentence such as *Pierre va* ‘Peter goes’ (20b) lacks obligatory information. Moreover, the locative constituent is VP-internal: fronting is impossible (20c), and the ‘VP anaphora’ test equally shows that *à la boulangerie* belongs to the VP ((16) repeated in (20d)). On the other hand, the form of *aller*’s complement is not constrained, and its structural position is not unique (20e): the verb can combine with several PPs without any marking of coordination or juxtaposition:

- (20) a. *Pierre va à l’ école.*
Peter go.PRS.3SG to DET.SG school
- b. *?Pierre va.*
Peter go.PRS.3SG
- c. **A l’école, Pierre va.*
to school Peter go.PRS.3SG
- d. *?Pierre va à la boulangerie et Marie fait de même à la pharmacie.*
Peter go.PRS.3SG to the bakery and so does Mary to the drugstore
- e. *Pierre va chez Marie à la campagne*
Peter go.PRS.3SG at-home-of Mary at the countryside
‘Peter is going to Mary’s place in the country’

As for the criterion of head-marking, the locative PP must be cross-referenced by a pronominal affix on the verb (*Au cinéma, Pierre y va souvent* ‘Peter [there] often goes to the cinema’ vs. *?Au cinéma, Pierre va souvent*. ‘To the cinema, Peter often goes’). This necessity provides evidence of its argumenthood¹⁵. In

¹⁵ This criterion is however not fully reliable with the locative pronoun *y*, which can refer to an argument as well as to an adjunct as in *Pierre y a rencontré Mary, à ma fête* ‘Peter [there]_i met Mary [at my party]_i’.

sum, from a theoretical point of view, the locative constituent combined with *aller* is required, non governed and VP-internal. It behaves as an argument.

The corpus study shows that *aller* ‘go’ combines with 14 different prepositions. The preposition *à* (lit. ‘at’) is however preferred (34%), before *vers* ‘towards’ (16%), *dans* ‘in/into’ (13%), *de-à* ‘from-to’ (10%). The occurrence rate of the other prepositions is below 6%.

This large choice of prepositions combining with *aller* confirms that the locative constituent is not governed, but highlights a clear preference for PPs headed by the preposition *à*. This preference reveals a semantic affinity between the verb and the preposition. From a semantic point of view, it is noteworthy that the locative constituent headed by *à* (lit. ‘at’) is always construed as a Goal PP (i.e. ‘to’). By contrast, *aller* refuses a Source PP alone (**Il va de l’école* ‘He goes from school’), but accepts a Source PP when combined with a Goal PP (*Il va de l’école au conservatoire* ‘He goes from school to the music academy’).

Corpus data, however, raise the question whether the presence of the Goal PP is always obligatory. A search for the occurrences of the verb *aller* not followed by a PP shows that in 55% of cases, there is indeed a Goal PP pronominalized by *y*, which is an indication of its argument status. However, against all odds, the verb does occur without a Goal PP in 45% of cases, and in 14% of them, there is no other complement (absolute or bare uses). These bare usages mostly correspond to imperative forms (*allons* ‘let’s go’) or to progressive forms as in (21):

- (21) *Et j’ allais, un peu plus content tous les jours (...)*
and I go.PST.1SG a bit more happy all the.PL day.PL
(M. Genevoix, *Raboliot*, 1925, p. 346-347)
‘And I forged on, a bit happier every day,’

In this example (21), the verb is used without complementation (cf. Melis 1983: 25). This construction seems to be licensed by the verb’s semantic structure, and can be considered as a case of indefinite null instantiation (Fillmore and

Kay 1995). The Goal PP is not expressed and remains vague and unspecified (go somewhere). The example in (22) illustrates another use of *aller* ‘go’ in the future tense. The expected pronoun *y* is systematically dropped in the future tense, probably because of the phonetic identity between the locative clitic and the initial vowel of the lexeme (**j’y irai* [ʒiiʁe] ‘I will go’). The locative argument can usually be identified from the context, however. In (22), the speaker will go and see the other character at her place. This is a case of definite null instantiation.

- (22) [*elle n’avait plus rien à me dire ; elle m’en voulait un peu d’être venu*].
J’ irai; [*peut-être qu’elle refusera de me recevoir*].
I go.FUT.1SG
(J-P, Sartre. *La nausée*, 1938, p. 84-85. Translation Hayden Carruth)
‘She had nothing more to tell me; she was even a little irritated that I had come. *I’ll go*; she may refuse to see me’

Lastly, I investigated contexts where the Goal PP appears in left detached position. This configuration is rare, accounting for less than 10 occurrences out of 300 examples analyzed.

- (23) *Et il est allé sur le plateau. Sur le plateau,*
and he be.AUX.PRS.3SG go.PTCP on the platea. on the plateau
on n’ y va pas souvent et
one NEG there.PRO go.PRS3.SG NEG often and
jamais volontiers. (J. Giono, *Regain*, 1930, p. 60-62)
never gladly
‘And he went up to the plateau. To the plateau, we don’t often go, and never gladly’
- (24) *Dans la rue, il allait rasant les boutiques*
in the street he go.PST.3SG shave.GERUND the.PL shops
et fixant d’un regard ébloui les lumières.
and fix.GERUND of a glance bedazzled.ADJ the.PL lights
(F. Carco, *L’homme traqué*, 1922 198-200)

‘In the street, he hugged the shopfronts, staring at the lights in the windows, bedazzled’

In (23), the left-detached argument is cross-referenced by the clitic *y*, which indicates, again, its argument status. Less expected is example (24), where the detached PP is not pronominalized on the verbal head. In this example, the detached locative is a scene-setting frame rather than a Goal. The event is centered not on the final change of relation but on the previous change of placement. The imperfective tense and participial phrases associated with the verb are both converging clues for this interpretation. The locative constituent *dans la rue* thus remains external to the VP. It nevertheless remains distinct from an absolute construction (?? *Dans la rue, il allait*). The combination of *aller* + gerund is a different construction, which has become less frequent than in an earlier state of French¹⁶. These examples show that the verb *aller* can lose its directional argument and be used as a change of placement verb.

In conclusion, syntactic tests show that *aller* ‘go’ has a goal argument, which is required, non governed and VP-internal. However, corpus data have shown that *aller* can also be used without a goal argument. This observation is in line with the semantic analysis of the verb *aller* suggested by Aurnague, who distinguished two phases in its semantic structure: a change of placement and a subsequent final change of relation. When the Goal PP is omitted, only the previous change of placement is focused on. The Goal is left unspecified as in an indefinite null instantiation. In all other cases, except for the future tense, the locative is overtly expressed either as a full NP or as a pronoun.

¹⁶ Here is an illustration of this construction [*aller* + gerund] in poetry:

Et l' âne allait geignant et l' ânier blasphémant
and the donkey go.PST.3SG groan.GERUND and the donkey.driver swear.GERUND
‘the donkey groaned, and the donkey-driver swore, his way along’ (V. Hugo, *La légende des siècles*, Le crapaud, 1859, p. 737).

6.1.2. *Final change of relation and change of placement verb with presupposed prior motion: the case of arriver 'arrive'*

Arriver 'arrive' has been semantically described as different from *aller* 'go' in that the change of placement preceding the change of relation is only presupposed and not integrated into the verb semantics. The event is centered on the final change of relation. These semantic properties are reflected in syntax by the fact that the locative PP can easily be omitted.

- (25) *Un remorqueur arriva.* (M. Duras, *Moderato Cantabile*, 1958, p. 40-42)
a towing-truck arrive.PST.3SG
'A towing truck arrived'

The constraint of presence does not apply to the locative constituent of *arriver*. The verb *arriver* appears in absolute construction in 58% of occurrences, whereas *aller* appears in such a construction in only 14%. The verb *arriver* also appears with a time constituent in 35% of occurrences, and with a manner constituent in 7% of occurrences.

When the locative constituent can be omitted, it thus corresponds to a definite null instantiation of the Goal argument. It is always recoverable from context, by deixis and anaphora. My claim is that the locative can be omitted if it is salient enough to remain unexpressed and is overtly expressed only if it conveys rhematic information in discourse.

This claim is supported by the fact that the pronominalization of the locative is optional, which means that the presence of the pronoun is not dictated by the grammar (as is the case with *aller*) but by the discourse saliency of locatives. In (26) and (27), the goal is evoked in the previous discourse (*Paris* and the *restaurant rue Compans*, respectively), but only in (26) is this goal pronominalized on the verb *arriver*. If, as seems to be the case, the grammar licenses the omission of the pronoun, it could be because the information conveyed is redundant, either because it has already been

mentioned or because it is already encoded in the verb, which has, to some extent, its own semantic autonomy.

- (26) *Albertine, cette fois, rentrait à Paris*
Albertine this time come.back.PST.3SG at Paris
plus tôt que de coutume. D'ordinaire elle n'y
earlier than of custom generally she NEG there.PRO
arrivait qu'au printemps.
arrive.PST.3SG only in springtime
(M. Proust, *La Recherche du temps perdu - Le côté de Guermantes*,
1921, p. 351.)

‘Albertine, this time, came back to Paris earlier than usual. Generally, she [there] arrived only in springtime’

- (27) *[Ils trinquèrent debout, avant de prendre le chemin du restaurant, rue Compans, où ils avaient leurs habitudes.]*
Flippe y était déjà quand ils arrivèrent.
Flippe there.PRO be.PST.3SG already when they arrive.PST.3PL
(F. Carco, *L'équipe : Roman des fortifs*, 1925, p. 152)

‘They had a drink at the bar then walked to the restaurant in rue Compans, where they were regulars. *Flippe was already there when they arrived*’

In (28a), it is impossible that the covert argument of *arriver* refers to a Source constituent. The Source interpretation is triggered only by the presence of the clitic *en* ‘from there’ as in (28b).

- (28) a. *Il était à Lyon, il arrive.*
he be.PST.3SG at Lyon he arrive.PRS.3SG
‘he was in Lyon, (lit. ‘he is arriving’) he is on his way’
b. *Il était à Lyon, il en arrive.*
he be.PST.3SG at Lyon he from.there.PRO arrive.PRS.3SG
‘he was in Lyon, he comes from there’

Let us consider now constraints on the form of overtly expressed locative PPs. *Arriver* does not govern the locative constituent insofar as it does not impose

any formal constraint. Fifteen different prepositions can be used, the most frequent being *à* ‘at’ (34%), followed by *dans* ‘in/ into’ (15%), and *devant* ‘in front of’ (13%). The other twelve prepositions have occurrences below 10%. The locative constituent is clearly not governed. It ensues that the different PPs can be cumulated without any marking of coordination or juxtaposition (29).

- (29) *Les gens arrivaient de partout par les sentiers.*
the people arrive.PST.3PL from everywhere by the.PL trails
(H. Vincenot, *Le pape des escargots*, 1972, p. 199)
‘People were arriving from everywhere through the pathways’

It is noteworthy that, in contrast with *aller*, the combination of Source PP and Goal PP appears to be odd. Example (30) is unnatural and no example of this pattern was found in our corpus.

- (30) **Elle est arrivée de Barcelone à Paris.*
she be.AUX.PRS.3SG arrive.PTCP from Barcelone at Paris
‘She arrived from Barcelona to Paris¹⁷’

The locative constituent corresponding to the Goal has a privileged status with respect to argumenthood. However, other syntactic tests show that locative constituents referring to the Source or the Path are not simply adjuncts. The VP anaphora test shows that they are VP-internal. Not only the goal PP (31), but also path (32) and source (33) are all enclosed in the VP. It is noteworthy, however, that (32) sounds less bad than (31) and (33).

- (31) **Jean est arrivé au marché et Marie aussi à la maison.*
‘John arrived at the market and so did Mary at home’
(32) ?*Jean est arrivé par l’A71 et Marie aussi par l’A6.*
‘John arrived by the M71 and so did Mary by the M6’
(33) **Jean est arrivé de Barcelone et Marie aussi de Budapest.*

¹⁷ A better translation would be ‘She arrived from Barcelona *in* Paris’, which is fine in English but does not account for the French restrictions.

‘John arrived from Barcelona and so did Mary from Budapest’

Moreover, as I mentioned before, the pronominalization of the locative constituent is possible, but not always necessary, depending on the context. The Goal (34) as well as the Source (35) can be pronominalized respectively by *y* and by *en*. There is no clitic referring to path locatives in French¹⁸.

- (34) *Pour une fois, j’ ai de la chance et quelqu’un*
for one time I have.PRS.1SG some the.F luck and someone
sort de la salle de douche au moment
exit.PRS.3SG from the bathroom at.the moment
où j’ y arrive.
where I there.PRO arrive

(J.-L. Benoziglio, *Cabinet Portrait*, 1980, p. 194)

‘For once I’m in luck and someone comes out of the bathroom just as I get there’

- (35) - *J’ ai été là-bas, tu sais ?*
‘I was overthere, you know’
- *Non ? Quand ça ?*
‘No? When?’
- *J’ en arrive.* (Colette, *Sido*, 1929, p. 145)
I from-there.PRO arrive.PRS.1SG
‘I’m just arriving from there’

Finally, a last argument showing that all locative constituents are VP-internal is that they do not allow fronting. Fronting of the locative PP remains very exceptional with *arriver*: only 4% of detached constituents are locative PPs and among them Source (38), Goal (37) and Path (36) PPs were found. In all these examples, the postverbal position is always filled either by a locative PP with a different polarity as in (36), or by a manner phrase (37) or a predicative

¹⁸ The only device is to use a locative adverb headed by a path preposition (*il est arrivé par là* ‘he arrived through there’). It is in no way a test for argumenthood.

adjective (38). The verb alone is never found, as if the reason for the fronting was to leave the argument slot free in order to host rhematic information in this position.

- (36) *Par un escalier de marbre, ils arrivèrent au premier étage*
by a stairway of marble they arrive.PST.3PL at-the first floor
devant la porte du cabinet de travail présidentiel,
in-front-of the door of-the office of work presidential
gardée par trois géants.
guarded by three giants
(M. Deon, *La carotte et le bâton*. 1960, p. 121-122)
'Up a marble stairway, they arrived on the first floor in front of the door of the president's office, guarded by three giants'
- (37) *Sur ce plateau, le brouillard arrivait par bouffées cardées,*
on this plateau the fog arrive.PST.3SG by gust carded
déchirées, poussées de biais dans une bise qui gelait les
torn pushed of biais in a wind that froze.PST.3SG the.PL
os...
bones
(H. Pourrat, *Le château des sept portes ou les enfances de gaspard*.
1922, p. 132-134)
'On this plateau, the fog arrived in tufts and shreds, driven across by an icy wind that froze you to the bone'
- (38) *De Londres et de Vichy, les nouvelles arrivaient, toujours*
from London and from Vichy the.PL news arrive.PST.3PL always
contradictoires. (B. Clavel, *Le Coeur Des Vivants*. 1964 p. 90-91.)
conflicting
'Conflicting news was coming from London and Vichy'

To sum up, *arriver* includes a Goal argument which does not need to be overtly expressed. In contrast, the Source and Path PPs do not correspond to prominent roles related to the lexical semantics of the verb, and when they are not expressed, they cannot be analyzed as cases of definite null instantiation. I

suggest that these PPs are arguments, not of the lexical verb, but of the construction. The combination observed in discourse results from the interaction between the verb semantics, and the intention of a speaker to profile different phases of the motion event.

6.2. *Independent vs. extended initial change of relation and change of placement verbs: partir ‘leave’ vs. s’enfuir ‘run away’*

The semantic structure of *partir* ‘leave’ and *s’enfuir* ‘run away’ involves a change of relation centered on the initial phase of the event. Whereas for *partir* the focus is exclusively on the initial phase, *s’enfuir* also implies the subsequent motion. In Aurnague’s terminology (2011), this difference corresponds to an *independent* initial change of relation (*partir* ‘leave’) vs. an *extended* initial change of relation (*s’enfuir* ‘run away’).

As for the constraint of presence, neither *partir* ‘leave’ nor *s’enfuir* ‘run away’ strictly require the presence of a locative constituent, as illustrated in examples (39) and (40):

- (39) *nous allons regarder un tableau, un seul, et nous partirons;*
we go.PRS.1PL look.at a picture one only and we leave.FUT.1PL
(J. Chardonne, *L’épithalame*. 1921, p. 89-90)
‘we are going to look at a painting, only one, and we will leave’

- (40) *puis j’ éclatai en sanglots et m’ enfuis.*
then I burst in tears and REFL run.away.PST.1SG
(R. Gary, *La promesse de l’aube*, 1960, p. 20-21)
‘then I burst into tears and ran away’

In the sub-corpus of verbs without PPs, bare constructions are found in 59% of cases for *partir* and 89% for *s’enfuir*. Sentences in (39) and (40) seem to imply a definite null instantiation of a source argument. Again, it seems that this argument is overtly expressed only to add specific information. I thus suggest

that *s'enfuir* and *partir* have an argument which is assigned with the role of Source.

The pronominalization test highlights that the verb *s'enfuir* refuses both Goal and Source pronouns: *s'y enfuir* never occurs in the corpus, and *s'en enfuir* is excluded for morphological reasons¹⁹. As for *partir* 'leave', the pronominalization test shows that a Source PP can be cliticized on the verb (41) - although it is very infrequent - and a goal as well (42):

- (41) *Parfois des étrangers au secteur, (...) s' enquerraient de son*
sometimes DET foreigners at.the zone REFL ask.PST.3PL of his
gîte. Quand ils en partaient, (...), leurs visages (...)
hostel when they from.there.PRO leave.PST.3PL their faces
(R. Giraud, *La coupure*, 1966, p. 77)

'Sometimes foreigners asked about his hostel. When they left, their faces (would light up with the sweet colors of hope)'

- (42) *(...) nous apprîmes qu' Yves était blessé et dans un hôpital à*
we learn.PST.1PL that Yves was injured and in a hospital in
Amiens. Papa, maman et moi y partîmes.
Amiens Dad Mum and I to-there.PRO left.PST.1PL
(Drieu La Rochelle, *Rêveuse bourgeoisie*, 1937, p. 328)

'(One day, in November), we heard that Yves was injured and in a hospital in Amiens. Dad, Mum and I left'

If the covert argument of *partir* 'leave' and *s'enfuir* 'run away' is readily assigned with the role of Source, a Goal locative can occur. But the Source involves a definite null instantiation, whereas the Goal is construed as an indefinite null instantiation.

¹⁹ *S'enfuir* is morphologically composed of the verb *fuir* 'flee' and the prefix *en-*. LITTRÉ criticized the use where the source location could be cliticized by *en*: "d'aucune façon on ne dira « ils s'en sont enfuis »; c'est une grosse faute". 'One cannot say: they from.it-PRO be.PRS.3PL ran-away.PTCP'; this is a big mistake'.

Concerning the constraints on the form, locative constituents combining with *partir* or *s'enfuir* are non governed, since the two verbs occur with about fifteen different prepositions. *S'enfuir* preferentially occurs with *dans* 'in/into' (24%), then with *de* 'from' (22%), *vers* 'towards' (15%), *à* 'at.to' (10%). *Partir* preferentially occurs with *pour* 'for' (30%), then with *à* 'at.to' (18%) and *de* 'from' (13%). Despite the initial change of relation profiled by these verbs, the first preferred preposition is of opposite polarity (goal oriented), in 54% of cases for *s'enfuir*, and in 69% of cases for *partir*. The reason of this preference for Goal is related to the general question of the source/ goal asymmetry (cf. Ikegami 1984; Bourdin 1997; Lakusta and Landau 2005; Regier and Zheng 2007; Kopecka and Ishibashi 2011). When an initial verb combines with a goal PP, the goal constitutes new information that cannot be omitted in the context, and the motivation for mentioning it is higher than the Source that is semantically involved. At the constructional level, this semantic link may reinforce the integration of the Goal PP into the argument structure of the construction.

Concerning the constraint on the position, locative constituents occurring with *partir* and *s'enfuir* can be considered to be VP-internal because they never or rarely appear in fronting position. The VP anaphora also argues in favor of this analysis, as illustrated in (43-46):

- (43) **Pierre est parti de l'école et Marie a fait de même de la maison.*
'Pierre left from school and so did Mary from home'
- (44) **Pierre est parti à la forêt et Marie a fait de même à la piscine.*
'Pierre left for the forest and so did Mary for the pool'
- (45) **Jean s'est enfui de l'école et Marie aussi de la maison.*
'Pierre ran away from school and so did Mary from home'
- (46) **Pierre s'est enfui dans la forêt et Marie a fait de même à la piscine.*
'Pierre ran away into the forest and so did Mary to the pool'

In conclusion, I claim that, *s'enfuir* 'run away' and *partir* 'leave' have a Source locative constituent involved in their argument structure. They also have a

strong semantic affinity with Goal locative constituents which are analysed as arguments of the construction. This semantic affinity is motivated by a more general factor known as the Goal bias.

6.3. *Initial vs. final verbs of inclusion/containment type with change of relation and change of placement: sortir ‘exit’ vs. entrer ‘enter’*

Locative constituents combining with *sortir* ‘exit’ and *entrer* ‘enter’ are not required, not fully governed, and nevertheless VP internal. *Entrer* and *sortir* respectively occur in bare constructions in 53% and 76% of cases. However, the relatively high proportion of pronominalizations (16% for *entrer* and 27% for *sortir*) is evidence for the argumenthood of the Source complement of *sortir* and of the Goal complement of *entrer* as illustrated in (47) and (48):

- (47) [*J’ai peur des villes.*]
Mais il ne faut pas en sortir.
but PRO.IMP.3SG NEG must NEG from-them.PRO exit
(J-P Sartre. *La Nausée*, 1938, p. 196)

‘I am afraid of cities. But we must not leave them’

- (48) [*J’avise une vague lueur dans une ruelle avoisinante.*]
Une sorte d’épicerie. J’y entre.
a sort of grocery-store I in-it.PRO enter.PRS.1SG
(M. Tournier, *Les Météores*. 1975, p. 374-375.)

‘I see a glimmer in a nearby street. A sort of grocery store. I enter it’

The pronoun is, however, not always required, as shown in (49) and (50):

- (49) *Il aperçoit de la lumière derrière les rideaux*
he spot.PRS.3SG some the light behind the.DET.PL curtains
rouges de la maison rouge. Il entre.
red of the house red he enter.PRS.3SG
(R. Vailland, *Drôle de jeu*, 1945, p. 245)

‘He spots some light behind the red curtains of the red house. He enters’

- (50) *Il était moins d’une heure, lorsque Antoine se retrouva*

it be.PST.3SG less of one hour when Antoine REFL found
devant la fondation Thibault. M. Faïsme sortait.
in-front-of the Foundation Thibault Mr Faïsme come-out.PST.3SG
(R. Martin Du Gard, *Les Thibault. Le Cahier Gris*, 1922, p. 701)
'It was before one o'clock when Antoine found himself in front of the
Thibault Foundation. Mr Faïsme was coming out'

In these cases, there is a definite null instantiation: a location can be retrieved from the context (he enters the red house / he came out of the Thibault Foundation). However, the use of the pronoun would have been inappropriate. This shows that the use of the clitics seems to be driven by discourse-pragmatic constraints rather than by syntactico-semantic constraints: to be cliticized on the motion verbs, the previously mentioned location must be the focus. This is the case in (47) and (48), where both locative NPs are indefinite and profiled as rhematic information, but this is not the case in (49-50) where locative NPs are definite. These observations on pronominalization reveal some interesting semantic restrictions. For instance, the pronominalization of a complement of opposite polarity is precluded: no source complement can be cliticized on *entrer* (**en entrer* [from.there.PRO enter]), probably because no Source PP can combine with *entrer* (?? *Il est entré du jardin* 'he entered from the garden'). More surprisingly, no goal complement can be cliticized on *sortir* (**y sortir* [to.there.PRO exit]) even though Goal PPs can combine with *sortir* (*il est sorti dans le jardin* 'he went out into the garden').

As for the constraint on the form, complements of *entrer* and *sortir* are not governed. However, compared to other verbs, they show a very high preference for one preposition: *sortir* selects *de* 'from' in 93% of cases, and *entrer* selects *dans* 'in' in 84% of cases. This indicates the strong affinity between verbs and a complement of congruent polarity and, at the same time, highlights a strong dispreference for a complement of opposite polarity. The combination [*entrer de* 'enter from'] is not acceptable and was not found in the corpus. The strong preference for one particular preposition argues in favor of

argumenthood for the complement with congruent polarity: Source for *sortir* and Goal for *entrer*.

6.4. First conclusion

Whether there is a hierarchy between the used criteria is a moot point. Lazard (1994: 70) suggested that government is a more robust criterion for argumenthood than obligatory presence: governed arguments that are not obligatorily expressed (*il pense* ‘he thinks’) correspond to a unique argument position and cannot be cumulated without coordination or juxtaposition (**Il pense à Jean à Marie* ‘he thinks of John of Mary’), whereas ungoverned arguments that are obligatorily expressed can be cumulated without coordination or juxtaposition (*Il va à Paris, à la bibliothèque de l’ENS* ‘he goes to Paris, to the ENS library’) and are similar in this respect to adjuncts.

Table 4 gives a summary of the tests used in this analysis of change of relation and change of placement verbs.

Table 4. Summary of tests assessing the status of locatives of change of relation and change of placement

	Required	Governed	Pronominalization		VP anaphora includes PP	Argument of the	
			Source (<i>en</i>)	Goal (<i>y</i>)		verb	Constr.
<i>aller</i>	+	-	-	+	+	Goal	Source Path
<i>arriver</i>	(-)	-	+	+	+	Goal	Source Path
<i>partir</i>	(-)	-	+	+	+	Source	Goal Path
<i>s’enfuir</i>	(-)	-	(-)	-	+	Source	Goal Path
<i>entrer</i>	(-)	-(+)	-	+	+	Goal	Path
<i>sortir</i>	(-)	-(+)	+	-	+	Source	Goal Path

Table 4 shows that depending on the syntactic criterion, two levels of argumenthood can be distinguished:

(i) *Argument of the lexical verb*: it is required (*aller*) or latent²⁰, not governed²¹ but VP internal.

A covert argument does not need to be realized, since it can provide a (good enough) default interpretation when it is not overtly expressed. For instance, the utterance *Il entre* ‘He enters _’ is understood without context as ‘he enters some containment space bearing the role of Goal’. Most of the time, the context makes it possible to recover a definite argument: e.g. *Il arrive devant la maison et entre* ‘He arrives in front of the house and enters’ (Goal argument recoverable from context: he enters the house)

(ii) *Arguments of the construction*: it is not required (nor covert), not governed but VP internal (included in the VP anaphora). These complements are selected in discourse according to communicative goals. They bear complementary or alternative roles to the one(s) selected by the verb, and increase the salience of different phases of the motion event (e.g. *Il est parti à Paris* ‘he left for Paris’; *Il s’est enfui par la fenêtre* ‘he escaped through the window’). The Goal PP of *partir* is not involved in its lexical meaning, nor is the Path PP of *s’enfuir*.

It has been shown that *aller* is special with respect to the other change of relation and change of placement verbs. It is semantically weak and needs a Goal complement. The omission of the goal complement does not lead to postulating the existence of a latent goal complement; rather, it leads to a shift in meaning resulting in a change of placement verb (*il va chantant* ‘he goes singing’). Such a shift in meaning never occurs with the other verbs of change of relation and change of placement when the locative PP is omitted.

²⁰ Brackets in the “required” column signal that, although not required, the Locative can be omitted, precisely because it is part of the verb semantics.

²¹ Locative PP dependents of verbs *entrer* and *sortir* are considered to be almost governed because they show a strong preference for one preposition over the others. This is signalled by brackets in the “Governed” column.

I also showed above that there are precluded combinatories. *Aller* ‘go’ or *entrer* ‘enter’, for instance, call for a Goal PP, and preclude the Source (**il va de Paris* ‘he goes from Paris’; **il entre du jardin* ‘he enters from the garden’). The thematic roles associated with a verb can be ranked according to the verb semantics. In this respect, Path locatives are less fully integrated into the verb argument structure than Source and Goal. Besides, there is no syntactic device to pronominalize them. The VP anaphora test shows that they are nevertheless VP internal. For this reason, I consider them not as arguments of the verb but as arguments of the construction.

The analysis of change of relation and change of placement verbs has shown that locatives are to some extent integrated with the verb. Arguments are selected according to their thematic role as Source or Goal to fit into the verb semantics. Adjustments that cannot be made at the lexico-semantic level can however occur in discourse, and are accounted for by the notion of argument of the construction.

7. Change of placement verbs

The class of change of placement verbs is illustrated here by the study of three verbs: *marcher* ‘walk’, *courir* ‘run’, and *voler* ‘fly’.

As for the constraint of presence, the three verbs appear without a prepositional phrase in 56% of cases. When not followed by a PP, they are distributed between two main constructions. They mainly appear without any complementation (*courir* 63% and *voler* 74%), or with a manner modifier (*marcher* 52%)²².

Concerning the constraint of position, Locative PPs in fronting position are not very frequent: there are 5% with *courir* ‘run’, 22% with *marcher* ‘walk’

²² For a fine-grained analysis of the verb *marcher* see Moline and Stosic (2016: 150).

and none with *voler* ‘fly’. Fronting locatives occurring with *courir* map with Scene-setting (51)²³, Location²⁴ (52) or Source roles (53), but never with Goal.

- (51) *A la maison, Berthe courut dans sa chambre.*
at the home Berthe run.PST.3SG in her room
(J. Chardonne, *L'épithalame*, 1921, p. 37-38.)
‘Once home [lit. at home], Berthe ran to her room’
- (52) *Sur le pavé sombre, une forme courait légèrement.*
on the cobbles dark a shape run.PST.3SG lightly
(A. Camus, *La Peste*, 1947, p. 1441-1443)
‘On the dark cobbles, a shape flitted past [lit. ran lightly]’
- (53) *De l'hôpital, j'avais couru à la prévôté*
from the hospital I have.AUX.PST.1SG run.PTCP to the constabulary
stimuler le zèle des gendarmes.
spur.INF the zeal of-the police
(R. Verceel, *Capitaine Conan*, 1934, p. 111)
‘From the hospital I had run to the constabulary to spur the police into action’

Fronting locatives occurring with *marcher* map with Scene-setting²⁵ in (54), Location in (55) but never with Goal nor Source.

- (54) *Dans le chemin, elle marchait plus vite.*
in the path she walk.PST.3SG more fast
(H. Pourrat, *Les Vaillantes. Tour Du Levant*, 1931, p. 21-22)
‘On the path, she walked faster’
- (55) *Dans le champ derrière nous, des hommes marchent.*

²³ These locative frames easily take on a temporal meaning, as in (51) *once home* (cf. Huumo 2014).

²⁴ The Location is the role associated with the whole reference frame where the motion event takes place.

²⁵ As in (51), it could be interpreted with a temporal meaning ‘once on the path, she walked faster’.

in the field behind us some men walk.PRS.3PL

(M. Genevoix.M, *Ceux de 14*, 1950, p. 98-99)

‘In the field behind us, some men are walking’

VP anaphora does not seem to exclude the locative PP from the VP, which is thus considered VP internal:

(56) **Pierre a marché dans la forêt et Marie aussi dans la ville.*

‘Peter walked in the forest and so did Mary in town’

(57) * *Pierre a couru dans la forêt et Marie aussi dans le parc.*

‘Peter ran in the forest and so did Mary in the park’

(58) * *Pierre a volé au dessus de l’océan et Marie aussi au dessus des Alpes*

‘Peter flew above the ocean and so did Mary above the Alps’

Locative pronouns occurring with *marcher* mostly correspond to a Location (59). With *courir*, the pronoun *y* mostly refers to a Goal as in (60), and only occasionally (7%) refers to a Location as in (61). *Voler* is never found with a locative clitic.

(59) *il y aurait un grand jardin, tout autour,*

it.IMP.PRO PROFORM have.COND.3SG a big garden all around

et nous pourrions y marcher jusqu’au matin,(...)

and we could there.PRO walk.INF until at-the morning

(J.M.G , *Le procès-verbal*, 1963, p. 296)

‘there would be a big garden all around, and we could [there.pro] walk until the morning, (in the night)’

(60) *Un indic m’ a appris son apparition à Locarno.*

a snitch to.me tell his apparition at Locarno

J’ y courus. Trop tard !

I there.PRO run.PST.1SG too late

(G. Perec, *La disparition*, 1969, p. 191).

‘A snitch told me he turned up in Locarno. I ran at. Too late’

(61) *Le terrain vague a été coupé en trois pour*

the wasteland have.AUX.PST.3SG be.PTCP split.PTCP in three to

faire trois tennis, des gens en blanc y
make three tennis-courts some people in white there.PRO
courent, (...). (L. Aragon, *Les beaux quartiers*, 1936, p. 331)
run.PRS.3PL
'The wasteland had been split into three three parts to make three tennis
courts, some people in white [there.pro] run, (...)'

The pronominalization test highlights a difference between *marcher* and *courir*, to which I will return after having examined the behavior of verbs with respect to the last constraint of form.

Locative PPs of change of placement verbs are not governed. In the corpus, 27 different prepositions were found. *Courir* 'run' preferentially occurs with *à* 'at' (29%), followed by *sur* 'on' (17%) and *vers* 'towards' (14%). *Marcher* 'walk' preferentially occurs with *dans* 'in' (27%), then *vers* 'towards' (21%) and *sur* 'on' (13%). Lastly, *voler* 'fly' preferentially occurs with *dans* 'in' (22%), then *à* 'at' (18%), and *sur* 'on' (18%). Locative constituents combining with change of placement verbs mostly refer to Location rather than to motion roles (Source, Path or Goal). However, the resulting motion event also describes a change of relation and change of placement(cf. 3.4).²⁶ While *marcher* almost never yields a change of relation (except when combining with *jusque*), *courir* and *voler* lead to change of relation in 37% and 22% of cases, respectively.

This interpretation is associated with a pattern which does not perfectly correspond to the S-framed pattern, since the change of relation (i.e. Path component) is not brought about by the preposition, which is static, nor by the

²⁶ We set aside cases where verbs combine with the preposition *jusque* 'up to/ as far as', which does not act as a goal preposition but systematically establishes a boundary to the event by measuring the distance between the Figure and the Ground. Whatever the verb, *jusque* always leads to a bounded interpretation: *elle a chanté jusqu'à la plage*, 'she sang all the way to the beach/ until she reached the beach' (cf. note 11).

change of placement verb alone. I therefore suggest in 3.4 calling this pattern a *pseudo S-framed pattern*.

Several factors play a role in this change of relation construal. (i) Verbs must lexically convey at least one of the properties of the “goal oriented trend” family resemblance. However, this condition is not sufficient, since these verbs can simply describe a change of placement. (ii) The perfective aspect marked by tenses seems to be one of the factors impacting the resulting construal as a change of relation. The French *passé simple* (aoristic past) is widely associated with this reading. (iii) A parallelism might exist between constructions of change of placement verbs and constructions of change of relation verbs: both combine with the same set of prepositions. It is likely, therefore, that the conventionalization of the association *aller à* ‘go to’ has extended to *courir à* ‘run to’, or *se précipiter sur* ‘rush onto’ has extended to *voler sur* ‘fly onto’ etc., but this is not a sufficient condition since *marcher à* does not admit a change of relation construal. Finally, (iv) there are pragmatic factors, including the animacy of the Figure, its intentionality and purposeful reasons for moving, and the nature of the Ground, i.e. to what extent it can be construed as a goal to be reached. In this respect, *courir à la plage* ‘run to the beach’ is more ambiguous than *courir à la boulangerie* ‘run to the bakery’. The beach is a location where it is possible to run without any other purpose than taking exercise, whereas jogging in the bakery is much less expected. In contrast, going to the bakery to buy some bread before it closes might be a good motivation for running to it. In (62) the motivation of *courir à la cuisine* ‘running [lit. at] to the kitchen’ might be for instance to have coffee after a bad night. And the bird, in (63), flies into the cherry tree ([lit. on] *sur le cerisier*) with the intention of eating cherries. In example (64), the Figures denote non-animate, non-intentional entities such as pieces of furniture. The change of relation arises from the construal of the Ground as a Path ‘through the windows’. As an entity without spatial extent, the window triggers the

construal as a change of relation (from inside to outside). This forms part of the whole scenario of a removal event.

- (62) *Le lendemain, Juju qui avait mal dormi courut à la cuisine.*
the day after Juju who have.PST.3SG badly sleep.PTCP
run.PST.3SG at the kitchen
(R. Fallet, *La Grande Ceinture*, 1956, p. 55-56)
'The day after, Juju who had had a bad night ran to the kitchen'
- (63) *Le loriot éclatant vole sur le cerisier.*
the oriole golden fly.PRS3.SG on the cherry-tree
(M. Genevoix, *Rrou*, 1931, p. 98-99)
'The golden oriole flies [*lit. on*] into the cherry tree'
- (64) *[On déménage en bas. (...) puis [ils] commencèrent à descendre par l'escalier de fer le mobilier maigre, mais la besogne les ennuya vite :] tables, chaises, et même une petite armoire de sapin volèrent à travers les fenêtres par-dessus le barbelé.*
fly.PST.3PL through the windows over the barbed-wire
(J. Gracq, *Un Balcon En Forêt*, 1958, p. 202)
'They removed the downstairs furniture first. (...) then they began to carry the meager furniture down the iron staircase but quickly tired of the task: tables, chairs, and even a little pinewood cupboard flew through the windows over the barbed wire'

When the change of relation arises from the combination of a change of placement verb with a static preposition, the locative PP is VP internal, it cannot occur in the left-detached position.

- (65) **A la cuisine, Juju qui avait mal dormi courut.*
'To the kitchen, Juju who had had a bad night ran'
- (66) **Sur le cerisier, le loriot éclatant vole.*
'Into the cherry tree, the golden oriole flies'

- (67) **A travers les fenêtres par-dessus le barbelé, tables, chaises, et même une petite armoire de sapin volèrent.*

‘Through the windows over the barbed wire, tables, chairs and a little pinewood cupboard flew’

I demonstrated in this section that locative constituents combining with change of placement verbs are not required by the verb itself, and that if they are omitted, the change of relation meaning cannot arise. I thus argue that they are arguments of the construction. It is only in the compounding process that the change of relation construal emerges.

Some interesting cases observed in the corpus corroborate this analysis. Certain change of placement verbs (*courir* ‘run’, *grimper* ‘climb’, *dégringoler* ‘tumble down’, *monter* ‘go up’, *descender* ‘go down’) and also *sauter* ‘jump’ (a change of relation verb) were found with the ‘be’ auxiliary (*être*), whereas they are in general conjugated with *avoir* (have). The contexts in which they were found with *être* ‘be’, instead of *avoir* ‘have’ always describe a change of relation and change of placement event. The split auxiliary is rather infrequent in Contemporary French. It overtly reveals the shift from a change of placement to a change of relation as can be seen in the following examples:

- (68) *Il est grimpé sur le sommet !*
he be.PRS.3SG climb.PTCP on the summit
(L-F. Celine, *Mort A Credit*, 1936, p. 537)
‘He climbed onto the summit’

- (69) *Georges est sauté au bas du cabriolet*
Georges be.PRS.3SG jump.PTCP at-the bottom of-the gig
pour s’ évader.
for REFL escape.INF
(C. Mauriac, *La Marquise sortit à cinq heures*, 1961, p. 243)
‘George jumped out of the gig to escape’

- (70) *Grimpée dans un mûrier pour en déguster les fruits,*
climbed in a mulberry-tree to of.it.PRO taste.INF the fruit
elle en était dégringolée.

she from.it.PRO be.PST.3SG plummet.PTCP

(R. Grenier, *Andrélie*, 2005, p. 159)

‘Having climbed into a mulberry tree to eat the fruit, she then fell out of it’

Conclusion

In the first part of this paper (sections 1 to 3), I mainly discussed the general assumption that Manner and Path cannot be encoded in the same verb. This restriction in the domain of motion corresponds to a more general claim that Manner and Result cannot be encoded in the same grammatical constituent. It intersects with the two-way typological division between Verb framed languages and Satellite framed languages. As an alternative view of motion description, I presented the classification criteria proposed by Aurnague (2011): the combination of the notion of “change of placement” and of “change of relation”. These criteria act as tools to precisely define classes of verbs that do not have to fit into one or the other class of manner verbs and path verbs (cf. 3.3). I underscored the fact that on the basis of these criteria, there is no need to systematically consider Manner and Path as mutually exclusive, and I demonstrated that part of the lexicon in French encodes both. For instance, verbs such as *filer* or *débouler* express both the manner and a change of relation and change of placement. They respectively mean ‘leave’ with the manner of being discreet, and ‘arrive’ with the manner of being uninvited, unannounced, intrusive and possibly noisy. Conversely, I also showed that some properties associated with change of relation or path can be conveyed to some extent by change of placement verbs. These properties, described by Aurnague 2011 as a “goal oriented trend”, are speed, directionality, being constrained by a force or being moved by a force. They are conceptualized as a family resemblance. The more a verb cumulates these properties, the more it will express a change

of relation. This first part of the paper thus offers new tools to rethink motion beyond the classical opposition between manner and path. It allows a fine-grained analysis of the lexicon, besides general typological trends.

In the last section, I investigated the relation between motion verbs and locative constituents. My aim was to determine how far the semantic content of verbs determines their argument structure and argument realization. I showed, through a series of syntactic tests (constraints on the presence, the form and the position), that locative constituents can alternatively be argument of the verb or of the verbal construction.

First, I assumed that it is the semantic structure of verbs, as defined in Aurnague (2011) and presented in section 3, that governs the choice of arguments with specific thematic roles. A verb can establish a hierarchy between its arguments. If the verb describes a change of placement, it selects by default a Location PP (frame of reference). If it describes a final change of relation, it selects a Goal. In this case, the prior motion (change of placement) can be integrated into its semantics; it can thus also select a locative PP referring to this prior phase of the event.

Second, I assumed that some resulting meanings cannot totally derive from the semantics of verbs or prepositions but are instead built at the level of the construction. I claim, however, that this resulting meaning, realized at the constructional level, nonetheless arises from the presence in the verb semantics of some properties or features able to trigger a shift in the verb behavior. For instance, I have shown that a change of placement verb such as *courir* ‘run’ can lead to a change of relation and change of placement because it conveys the property of speed. And, conversely, *aller* can behave as a change of placement verb (*aller chantant*) when its goal argument is omitted. This is made possible because this verb involves a change of placement preceding the final change of relation. Previous work has abundantly discussed these types of shift in meaning in aspectual terms. Here, I have provided a tentative explanation in spatial terms.

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