

A SEMANTIC TYPOLOGY OF CAUSATIVE ACCOMPLISHMENT  
MOVEMENT VERBS AND THEIR ARGUMENT-ADJUNCTS  
IN ROLE AND REFERENCE GRAMMAR

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This paper accounts for the semantic features of induced motion verbs. Following the approach of Componential Analysis, and inscribed within the framework of Role and Reference Grammar, these verbs are arranged into two groups, according to a number of semantic variables related to their argument structures and to the types of locative arguments they govern. New logical structures that account for this distinction are proposed. This typology is in line with a functional view of language, and it highlights the fact that meaning is reflected on the grammatical structure of clauses.

KEY WORDS: active, accomplishment, motion, predicate, argument, argument-adjunct, adjunct, goal, source, path.

## 1. Introduction

Verbs of movement constitute an interesting source of semantic analysis, since they are attached to the spatial dimension, which is, together with the temporal dimension, the basis of cognition.<sup>1</sup> One important kind is those of induced movement. In this work, a typology is proposed in terms of their semantic structure and of the types of locative expressions they take. This work is inscribed within the framework of functional grammars, more specifically within Role and Reference Grammar—hereafter RRG—(Jolly 1991; Van Valin 1993; Van Valin and LaPolla 1997) and Functional Grammar (Hengeveld 1992, 1997; Dik 1997a, b; Samueldorff 1998; Mackenzie 2001). The verbs under analysis are classified according to their *Aktionsart*. The notion of *Aktionsart* is adopted from Vendler (1967 [1957]), and it is used as a basic criterion to identify argument structure and predicate relations. Besides, only transitive verbs that imply an induced motion of the UNDERGOER have been included in the corpus of analysis. Thus, verbs such as *push*, which may be transitive or intransitive, have been discarded.

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This study is also based on Componential Analysis (Pinker 1989; Saeed 2003) according to which lexical decomposition is used as a basic device to describe the meaning components of words. Such components allow verbs to be organized in groups and enable their argument structure to be dealt with. Thus, the view is held that the different semantic classes of verbs reflect different syntactic and semantic argument structures. This explains the direct relation of verbal predicates with the kind of prepositional phrases they take. On this point, we refer the reader to Gropen, et al. (1991), Levin (1993), Grimshaw (1994) and Levin and Rappaport (1995), on the interaction between syntax and semantics.

## 2. Review of the literature and research hypothesis

The verbal phrase is a universal category. It is the nucleus of the clause, and the other elements depend on its meaning components and on its syntactic behavior. Thus, a central issue in linguistic research is the linking between semantics and syntax. This can be approached either from a semantic or from a syntactic perspective. The semantic approach defends the view that an analysis of the semantic properties of verbs reflects their grammatical behavior. This is followed by the Lexico-Grammar Model—hereafter LGM—(Faber y Mairal 1999; Mairal 2001; Mairal y Cortés 2000–01), and it is taken as a starting point here. The syntactic approach, on the other hand, assumes that those verbs that share a number of syntactic properties belong to the same lexical class. Thus, lexical classes are grouped according to their syntactic behavior. This idea is followed by Levin (1993), Levin and Rappaport (1995, 1999) and Demonte (2002), among others. Both approaches are inscribed, in a very general way, within the functional paradigm.

Within the cognitive paradigm, Jackendoff (1983, 1990, 1992) has developed what he calls *conceptual semantics*, based on decomposing meaning through the description of mental representations. His attempts at generalization through such semantic decomposition are also taken into account here, especially in relation to his definition of the *localist hypothesis*. Nevertheless, with the exception of Talmy (1975, 1983, 1985), who studies the semantic components of motion verbs at the syntax-semantics interface and analyzes how they affect the other elements in the clause, few studies have been made within the functional paradigm about this topic. Talmy, however, does not pay attention to causative verbs and their correlation with spatial constructions. Accordingly, we analyze this and extract the semantic factors of verbs that exert an influence on locative constructions. For our explanations, we have selected RRG's system of semantic representation, where the logical structure used for induced motion verbs is the following:

- (1) [**do'** (x,  $\emptyset$ )] CAUSE [BECOME **be-LOC'** (z, y)]

We have analyzed the semantic components of 6,500 verb samples, extracted from the British National Corpus. According to the results, induced motion verbs are organized in two groups: causative accomplishment movement verbs, such as *place* or *remove*, and causative active accomplishment movement verbs, such as *carry* or *take*. Important differences can be found between both. In this sense, the latter group has been ignored in RRG until now. Therefore, demonstrates that such verbs should be recognized as an independent mode of action (*Aktionsart*), since the logical structure given in (1) qualifies

as insufficient. As a consequence, a different one is proposed in section 4, which serves to distinguish these verbs from the former. The need for two different semantic representations becomes more evident when we focus on *Aktionsart*: active accomplishments are derived from an activity predicate, while non-active accomplishments come from a state predicate. In the following section, we account for (non-active) causative accomplishments, and we establish a typology for them. After that, in section 4 we turn to the analysis of causative active accomplishments. Finally, in section 5 we summarize the data presented and draw some conclusions in the light of the results obtained.

### 3. Causative accomplishment verbs of motion

Causative accomplishment verbs are the result of a process of change. In this case, since we focus on motion verbs, it is a change of location. These verbs are telic, and their basic predicate is a state. This factor determines their logical structure and the kind of locative arguments they take. Thus, they do not admit any other locational argument-adjunct—hereafter AAJ—apart from the GOAL PP. That is, they do not admit PATH PP's. Indeed, Lindstromberg (1997) calls them *endpoint verbs*, in the sense that they invoke the state of affairs at the end. In English, the following verbs respond to such an internal structure:

- (2) a. fit, fix, install, place, space, clap, locate, situate, site, position, station, stick  
 b. remove, wrench, extract, withdraw, eject, bar  
 c. jam, seal, stuff (in the sense of 'put into')  
 d. scatter, sprinkle

They have been organized in lexical subfields, according to their meanings. All these verbs may be polysemous in different degrees, so in this work only the sense that corresponds to the general logical structure presented in (1) is analyzed.

#### 3.1. Verbs of placing

In this subsection we deal with the group of verbs given in (2.a). Their central meaning is "to cause the UNDERGOER/THEME to be at a specific location." The results of the analysis show that the prepositions that function as heads of the PP's occurring with them are *on*, *under*, *over*, *in* and *at*. These prepositions tend to show an up-down orientation, while the prepositions used to form GOAL PP's with active accomplishment verbs tend to show a horizontal orientation, as will be shown. Nonetheless, this is just a tendency, not a clear-cut distinction. GOAL PP's with accomplishment verbs present the action at the end-point location. If that location is specified, the THEME is related to that place either from a vertical or a horizontal perspective. Thus, if the speaker wants to specify where he or she has put a chair, and the reference point is a table, some of the possibilities available are:

- (3) a. I have **placed** the chair *under* the table  
 b. I have **placed** the chair *on/over* the table  
 c. I have **placed** the chair *close to* the table  
 d. I have **placed** the chair *behind* the table

In (3.a) and (3.b) we have an *up-down* relation of the THEME and the location, while in (3.c) and (3.d) we have a *right-left* linking relation. A study has been made of the verb *position*, in order to see the frequency with which the different types of preposition occur as heads of GOAL PP's. A sample of 30 sentences has been analyzed. The results are shown in table 1:

POSITION			
Frequency	Dynamic prepositions	Static prepositions	Frequency
10 %	To	In front of ↔	10 %
		Under ↓	3.30%
		Next to ↔	6.70%
		Over ↓	13.30%
		Around ↔	10%
		In ↓	20%
		On ↓	20%
		Against ↔	6.70%
Total %	10 %	33.40% ↔	56.60%

Table 1: Frequency of dynamic and static prepositions with position

As displayed above, prepositions with an *up-down* orientation are more frequent. In terms of raw figures, there have been 10 cases of horizontal occurrences (which correspond to the frequency given of 33.40%), and 17 cases of vertical prepositions (corresponding to the frequency of 56.60%). That is, with the exception of the three occasions in which dynamic GOAL prepositions appeared, all the rest were prepositions which code static end-points when occurring with accomplishment verbs. The least prototypical of the verbs in this group is *space*, due to its core meaning, which entails placing elements in a location at a certain distance from the initial point of location. Thus, such distance is often specified through a modifier of the PP. This modifier usually functions as a quantifier, as illustrated below:

- (4) a. **CCX 1438 Space** the wires *about 230mm (9in) apart*, and either tie the plants directly to these, or tie canes to the wires for additional support.

In (4) above the particle *apart* is modified by a quantifier phrase, *about 230 mm (9in)*, which provides the exact distance at which the element represented by the THEME has to be located. The verbs included here prototypically occur with a THEME containing the feature [+object], although some of them admit the feature [+animate], such as *locate* or *position*. Nevertheless, their unmarked feature is [+object], which is invariable in the case of *install*, *fit* or *fix*.

### 3.2. Verbs of removal

In this subsection the verbs listed in (2.b) are analyzed. All these verbs have a common feature: they represent the process of change of location from the opposite perspective to

the previous ones. That is, their LOCATION AAJ refers to the place from where the undergoer has started its process of movement. Therefore, such AAJ is not a GOAL PP, but a SOURCE PP. These verbs show the following logical structure:

- (5) [do (x, Ø)] CAUSE [BECOME NOT be-LOC' (y, z)]

When dealing with removal verbs in accomplishment situations, Jolly (1991: 124) states that their logical structure “predicts the oblique marking of non-UNDERGOER THEME by a preposition other than *with*.” Some examples are given of *wrench* and of *remove* below:

- (6) a. **HHo 1440** We even **wrench** a poster *off* a tree in our sour tail wind.  
 b. **CB8 2580** **Remove** fruit and 2 tbs of juice *from* the can, then discard the rest.  
 c. **CGX 665** Using a two-prong transfer tool, **remove** the two stitches *on* the left.

Sentences in (6.a) and (6.b) are grammatical, with the prototypical SOURCE prepositions *from* and *off*. In the last clause, *remove* is used with a LOCATIVE PP that does not correspond to its logical structure, *on the left*. This is because such PP is not functioning at the level of the clause but at a phrasal level. It complements the THEME argument, *the two stitches*. The proof is that we can say *The two stitches which are on the left*, but not *\*The fruit which is from a tree*. Thus, in this clause we have no AAJ specified. This, however, does not modify the logical structure of the verb. The difference between placing verbs and removal verbs is that the latter presuppose a source PP, so it need not be specified. The reason is that they lexicalize a higher amount of directional content. Consider the illustrations in (7):

- (7) a. She **placed** the bag ?  
 b. She **placed** the bag *down* [the chair]  
 c. She **removed** the paper [*from* the photocopying machine]

In line with Dik (1997), we prefer to leave an empty slot in the semantic representation of the clause when that SOURCE argument is not overtly expressed, indicating that there may be something there. In fact, Dik (1989: 194), dealing with manner satellites, represents a sentence with *remove* in the following way:

- (8) Peter cautiously **removed** the lid *from* the jar  
 [remove (Peter) (the lid) (the jar)] (x<sub>i</sub>: cautious (x<sub>i</sub>))<sub>Man</sub>

As can be observed, Dik (1989, 1997) also defends that the SOURCE preposition marks an oblique-core argument, that is, an AAJ.

### 3.3. Verbs of closure

We have only three verbs in this group, as presented in (2.c): *jam*, *seal*, and *stuff*. The sense under analysis here is “to put something or someone within a closed location.” Their prototypical logical structure seems to presuppose a two-place abstract predicate with a preposition such as *within* or *in*, which evokes a container-contained schema, so that the entity to which the prepositional complement refers is placed in a closed space. However, this is not always the case. To start with, let us look at the verb *jam*:

- (9) a. **A74 1564** I stick on my coat and **jam** the hat *on* so it won't come off in the wind.  
 b. **ACB 3597** Gazer saw her take one hand off the top of the gates and **jam** it *into* a wide split in the wood. . . .

In (9.a) *jam* occurs with the preposition *on*, which seems to contradict its meaning. Thus, *jam* is more flexible than *seal*, since it can be used in a figurative sense as “to put something somewhere in a close and sticky manner.” That is, it can mean “to close,” but in the sense of locating something in a fixed position, not in a closed place, as happens in (9.a). In (9.b) *jam* apparently contradicts non-active accomplishments, since it can occur with a PP headed by the preposition *into*. This preposition frequently occurs with causative active accomplishment verbs, because it implies dynamism through the *-to* component. In this sense, to test if a causative accomplishment movement verb is active or not we add a PATH PP to the clause. If it is grammatical, the verb is active. This is illustrated below:

- (10) . . . **jam** it *through a narrow opening into* a wide split in the wood. . . .

This example shows that *jam* allows for *Aktionsart* alternations. With respect to *stuff* and *seal*, they also admit a GOAL PP headed by the preposition *into*, so the conclusion can be drawn that this preposition is only used with active accomplishment verbs and never with accomplishment ones, with the exception of verbs of closure, which can behave as active accomplishments. The preposition *into* in such a case entails the placing of a THEME within a closed place, and so it is used to characterize such an action with the same sense as *within*, *inside* or *in*:

- (11) a. **CH1 2616** They **stuff** it *into* their cheeks like hamsters.  
 b. **G23 932** **Stuff** some cotton wool *inside* the chimney, fill up with sweets and put more cotton wool on top to hold the sweets in place.

As can be observed above, *into* in (11.a) is used with the same sense as *inside* in (11.b). As we have just mentioned, *into* carries a [+dynamic] feature. This is an instance of the interrelation of the verbal predicate with the other core elements of the clause, and it proves that GOAL PP's are essential in the logical structure of the verbs analyzed here.

#### 3.4. Two verbs with an atypical meaning

In this last subsection we deal with the verbs *scatter* and *sprinkle*, which imply a special sense of placing the THEME around or over a certain spatial area. This influences the type of GOAL PP's that occur with them. They can occur with any of the prepositions that head GOAL PP's for accomplishment movement verbs—*in*, *on*, *over*, *upon*, *inside*, etc.—but the more frequent occurrences are with *over* and *about*. The fact that such prepositions do not specify a point of location does not imply that the clause as a whole does not do it either. We must not confuse the meaning of the preposition with the referential content of the locative argument. This means that the place to which the LOCATION refers is specific, although the preposition predicates that the relation of the action and the THEME is not. It is the predicate that calls for this type of preposition, due to its semantic content. Some examples of the verbs dealt with in this subsection are:

- (12) a. **C9F 603** Scatter a few chocolate **coins** *around* the base of the cake.  
 b. **C9F 1631** 4 Scatter the diced **pepper** *over* the yellow rice.  
 c. **FRF 874** . . . and *sprinkle it on* the burning logs.

As can be seen in (12.a) and (12.b), *scatter* and *sprinkle* are frequently accompanied by PP's whose prepositions have an up-down orientation, as a result of their (non-active) accomplishment *Aktionsart*.

#### 4. Causative active accomplishment verbs of motion

These verbs are realized by GOAL PP's, but they also admit PATH PP's. If active motion verbs are followed by a GOAL PP, they are called *active accomplishments*. If they are not followed by such a PP type, they are called *activity* verbs. This *Aktionsart* interpretation is not possible for (non-active) causative accomplishment movement verbs, since they do not allow for such alternations, called *activity-active accomplishment alternations*, by means of which an atelic verb becomes telic (Dowty 1979; Levin 1993). The list of causative active accomplishment verbs analyzed has been extracted from the *Lexicon of Contemporary English* (1985), and the subgroups into which these verbs have been divided, according to their semantic components, are provided in (13):

- (13) a. guide, lead, conduct, escort, accompany, show, usher, direct, draw, tow.  
 b. carry, bear, transport, ship, despatch/dispatch  
 c. bring, fetch, deliver, take  
 d. propel  
 e. cast, chuck, toss

In what follows, we develop the main features of each subgroup.

##### 4.1. Verbs of accompaniment

In this subsection, verbs in (13.a) are analyzed. They share a semantic parameter that distinguishes them from the rest: their central meaning is based on the action of accompanying, which implies that both the ACTOR and the UNDERGOER carry out the action of moving from one location to another together, because the ACTOR voluntarily goes with the UNDERGOER. This could be represented as follows:

- (14) [DO (x **go.with** (y) (x))]

Besides, in Dik's (1997) terminology, we find one predicate restriction: the ACTOR and the UNDERGOER have to be animate beings. Evidently, metaphorical senses can be given to any of them, so we can find deviations from the central meaning, as seen in the following example:

- (15) **AMY 30** In the main they *draw attention to the changes of attitude and behaviour over the years.*

*Draw* is widely used in this non-literal sense. Nonetheless, idioms and metaphors possess the same logical structure as literal meanings. Here we only focus on the latter since, as the example shows, figurative uses only affect the semantic restrictions of thematic relations. Consider another example:

(16) **B77 456** Friendly staff **guide** casual visitors *to their first encounter with LOGO*.

This is a prototypical example of causative active accomplishment movement verbs (the concept of prototypicality is based on Taylor 1989). It shows the three maximally possible arguments: AGENT, THEME, and GOAL. Besides, the semantic restrictions of such predicate operate on the thematic roles of the arguments: both the AGENT and the THEME are [+animate]. A logical structure for *guide* is proposed in (17):

(17) DO (x, [**do'** (x, Ø)] CAUSE [**do'** (z, [**go'** (z))] and BECOME **be-at'** (y, z)]

In the first place we have the activity part: DO (x, [**do'** (x, Ø)]). The use of 'DO (x,...)' indicates that the ACTOR is an AGENT. That is, it is used to represent verbs with lexicalized agency, which implies that they can never be used to express an action carried out unintentionally. However, the logical structure as a whole, as presented in (17), is incomplete: the type of action is not specified, so with such logical structure one can not distinguish from any of the verbs in (13). In order to solve this, the following semantic representation may be used:

(18) DO (x, [**do'** (x, [**guide'** (x, z))])

This logical structure is not complete yet, since *guide* is not a primitive verb. Unfortunately, RRG does not provide the lexical decomposition of all verbs, but it constitutes an excellent starting point to develop it. This has been the way followed by the LGM. For the time being, in this study such provisional representation will be used, following Van Valin and LaPolla (1997). The complete logical structure of *guide* is presented in (19):

(19) DO (x, [**do'** (x, [**guide'** (x, z))]) CAUSE [**do'**(z,[**go'**(z))] and BECOME **be-at'** (y, z)]

Let us focus on another example, where we have a PATH PP and the GOAL AAJ is left unspecified:

(20) **ABC 112** Dolphins . . . frequently **guide** boats *through storms or treacherous waters*.

In this example, *Dolphins* is the AGENT and *boats* is the THEME. The absence of a GOAL PP makes these verbs atelic. Thus, *guide* here is not an active accomplishment verb, but just an activity verb.

#### 4.2. Verbs of transporting

In this subsection we deal with verbs illustrated in (13.b). Only the semantically distinctive aspects that distinguish them from the former subgroup will be considered. These verbs

present the same semantic parameter as verbs of accompaniment, according to which the AGENT moves the THEME. However, in this case the second argument of the verbal predicate prototypically refers to inanimate objects. However, it is not ungrammatical to find sentences such as the one below:

(21) **KS8 921** They . . . often **carry** emigrants *deep into the heart of a new country*.

In this sentence, the second argument has the semantic component [+human], although this is not a central feature of such verbs. Thus, the UNDERGOER of the verbs in this group is prototypically [-animate]. In order to prove this, we have studied the frequency with which each type of UNDERGOER occurs in the sentences of our corpus. These are the results:

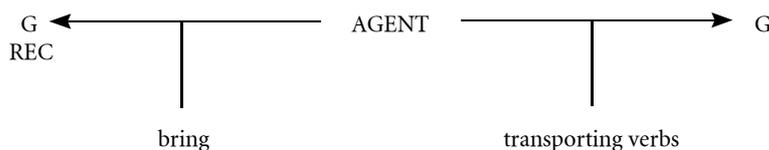
VERB OF TRANSPORTING (CARRY)	animate: 37.5%
	inanimate: 62.5%
VERB OF ACCOMPANIMENT (LEAD)	animate: 80.95%
	inanimate: 19.05%

Table 2: Frequency rates with which carry and lead take animate or inanimate objects

We have analysed 24 causative sentences with the verb *carry* and 21 with the verb *lead*. With respect to the former, there were 15 cases where the second argument was [-animate], which gives a percentage of 62.5%, as shown above. In the case of *lead*, it occurred with 17 animate objects, which results in an even higher percentage of occurrences of this verb with its prototypical argument types (80.95%). Thus, as can be observed, these two types of verbs show clear tendencies of co-occurrence which corroborate our hypothesis.

#### 4.3. Special verbs of transporting

This group is composed of *bring* and *fetch*, *take* and *deliver*. They are different from the rest of transporting verbs for one main reason. To illustrate it, we will first deal with *bring* and *fetch*, where the orientation of the path through which the action is carried out is different: the AGENT goes from the front to the back, where the RECIPIENT is situated. In order to grasp this difference, consider the following representations:



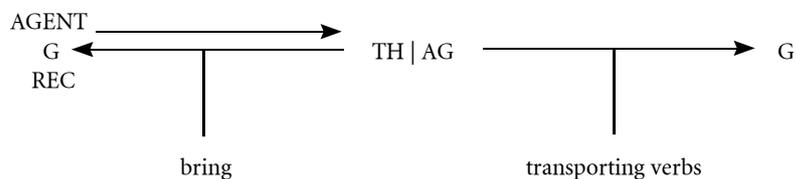


Figure 1: Representation of verbs of transporting

In terms of states of affairs, we see that the unmarked orientation of the action goes from the AGENT to the GOAL. In the case of *bring* and *fetch*, however, this process is differently oriented, as the arrow shows. Another important difference is that the GOAL can also be the RECIPIENT, while this is not possible for the other verbs. Thus, we can say *Bring that book to me*, but not \**Transport these packages to me*. Further evidence is found when we change the order of the UNDERGOER and the GOAL:

- (22) **Bring** me that book  
 \***Transport** me that book

The fact that *bring* and *fetch* have an alternation of the kind recipient/goal argument implies that they allow for two *Aktionsarts*, so they show two different logical structures. Let us see how this alternation works:

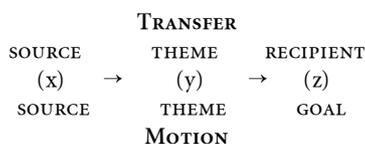


Figure 2: Alternation of verbs like bring

Note first that the SOURCE can coincide with the AGENT, which is the case with *bring*. This can be seen in (23), where an illustration of figure 2 is presented:

- (23) a. **KBW 15163** You **bring** him *to me* and then. . .  
 b. **KBW 18406** and then we'll get on the bus . . . and **bring** him *to your house*.

In (23.a), *bring* is used as a transfer verb. Therefore, *me* is the RECIPIENT, which stands for an animate being that receives something or someone. In (23.b), on the other hand, *bring* is used as a motion verb. As a result, *your house* functions as the GOAL argument, which is similar to the RECIPIENT, but it contains the [- animate] feature. Thus, in these verbs, as well as in the following two, there is an alternation which depends on the feature [+/- animate] of the third participant role. This variation affects the verbal logical structure, as shown in (24):

- (24) a. Logical structure for (23.a): [**do'** (you, Ø)] CAUSE [BECOME **have'** (me, him)]  
 b. Logical structure for (23.b): [**do'** (we, Ø)] CAUSE [BECOME **be-at'** (our house, him)]

With respect to *fetch*, it implies a double way orientation, so that the AGENT starts the action of movement in the same position as the RECIPIENT/GOAL, goes along the path until it arrives at the THEME, and then comes back to the RECIPIENT/GOAL. The RECIPIENT can coincide with the AGENT, as in (25.a), or be expressed by a different argument, as in (25.b):

- (25) a. A74 178 She looks a bit cold, so I go and **fetch** the blanket *off* my bed and wrap it round her shoulders  
 b. Go and **fetch** *me* a candle/Go and **fetch** a candle *to/for me*

In (25.b) the second argument is the recipient,<sup>2</sup> and the location does not need to be specified. In this case, the logical structure for *fetch* is the same as the one given for *bring* in (24.a) above. We can even combine all the types of participant roles in one sentence, as seen below:

- (26) [You] go and **fetch** *me* a candle *from the kitchen*

In this case, none of the participants—the RECIPIENT *me* and the SOURCE *from the kitchen*—seem to be essential for the correct understanding of the clause. However, if the logical structure in (27.a) below is applied, then *me* is predicative and therefore peripheral. On the other hand, if the logical structure in (27.b) is used, then *from the kitchen* is the peripheral element:

- (27) a. [**do'** (you, Ø) CAUSE [BECOME NOT **be-at'** (kitchen, candle)]]  
 b. [**do'** (you, Ø) CAUSE [BECOME **have'** (me, candle)]]

These two logical structures can also be applied to *bring*, *take* and *deliver*. The question is which logical structure represents any of these verbs when both the SOURCE and the RECIPIENT roles occur within the same clause. In this case, there is not a semantic explanation, due to the impossibility of stating why one of these roles is more essential to the clause than the other. Consequently, a pragmatic approach may be adopted. From this view, the closer the argument is to the verbal predicate the more important it is for the clause. Thus, if the pronoun *me* appears before the PP *from the kitchen*, it is given primacy, and the logical structure in (27.b) is adequate. In the same way, if the PP *from the kitchen* goes before the PP *to me*—as it is known, the RECIPIENT takes oblique case when it is located far from the verb—the logical structure in (27.a) will be accurate:

- (28) a. Logical structure in (27.a): You **fetch** the candle *from the kitchen* *to/for me*  
 b. Logical structure in (27.b): You **fetch** *me* the candle *from the kitchen*

*Take*, *deliver*, *bring* and *fetch* have been included within this group in their sense of “transporting,” but they also have the opposite meaning of “extracting.” Therefore, they

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2. This role could also be analyzed as BENEFICIARY, in the cases where the oblique case is expressed with the preposition *for* instead of *to*. This would not alter the semantic argument structure of the verb *fetch*. In this paper, nonetheless, we invariably analyze this argument position as RECIPIENT in order to keep the systematicity for all the verbs in this group.

should also be included within the group of verbs with this central meaning, which are non-active accomplishment verbs of removal. Let us see an illustration:

- (29) a. **ARK 2070** “Now, **take** me *to* the office,” Horowitz ordered the guard  
 b. Mary **took** the book *from* Peter

The question remains of what happens if a SOURCE PP is added to the clause in (29. a), or even if such a SOURCE PP is added and the GOAL PP is omitted. In that case, we would deal with sentences like these:

- (30) a. Now, **take** me *from* the station *to* the office  
 b. Now, **take** me *from* the station

The fact is that the SOURCE PP has a different role in (30.a) than in (30.b). In (30.a) it is just a modifier, as is the case of any PP that does not function as a GOAL PP with active accomplishment verbs. The reason is that the GOAL PP is more central in the sentence than the SOURCE PP, which cannot function as an AAJ unless it comes with the verbal predicate alone. If this is the case, as in (30.b), *take* changes its meaning and *Aktionsart*, and it behaves as a (non-active) accomplishment verb of removal. Thus, only one PP, either SOURCE or GOAL, can work as an AAJ.

#### 4.4. Verbs of pushing

In this subgroup we have just one verb, *propel*. Its most important feature is that it has lexicalized some directional content, which is normally expressed through an AAJ. Thus, we can decompose it into “to push forward,” where *forward* represents any directional AAJ. Nonetheless, it can take a directional AAJ or different ADJ’s, as seen in the examples below:

- (31) a. **B72 1127** They **propel** the vessel *through* the water...  
 b. **CJT 2403** ... where the young people gathered to watch the first of the winter’s athletes **propel** themselves *into* the dizzy air flows

In (31.a) the only directional ADJ complementing the verb is a PATH PP, so *propel* acts as an activity verb. In (31.b), by contrast, *propel* works as an active accomplishment, since a goal PP is specified.

#### 4.5. Verbs of throwing

This last subsection is devoted to three verbs, *chuck*, *cast* and *toss*. Independently of the specialized uses they have acquired (*toss* is usually used for cooking recipes and *cast* is usually employed in a figurative sense), they have the central meaning of “throwing an element somewhere.” Let us see some examples below:

- (32) a. **APU 1619** She saw Harry [...] **toss** the last four inches of his Romeo y Julieta *into* the hedge  
 b. ... **tossed** the pieces of crust *over the fence into* the garden

These verbs are active accomplishments because they admit a *PATH PP*, as seen in (32.b). Besides, they tend to occur with the preposition *into*, proper of active accomplishments, though they also admit other prepositional types, such as *close to*, *against* or *far from*, which function as *GOAL* prepositions with both predicate types, active and non-active accomplishments.

## 5. Final remarks

As has been shown in the course of this paper, the *GOAL* thematic relation is expressed differently in causative *active* accomplishment movement verbs than in causative accomplishment movement verbs. The former have a [+dynamic] feature which is not present in the latter. This feature influences the predicate logical structure as a whole. The preposition *to* (and related ones: *into*, *onto*...), used to express the *GOAL* of active accomplishment verbs shows that there is a path to undergo first, which may be explicitly expressed—through the *PATH ROLE*—in the clause or not. All this should be reflected in the semantic representation, although RRG does not yet account for this distinction. As a result, we have made a proposal in section 4.

The prepositions *in* and *on* (and related ones: *at*, *over*, *under*, etc.) are also used with dynamic verbs, despite being prototypically attached to the [+static] feature of non-active accomplishments. However, in this case they do not express a *GOAL*, but are the heads of *PP*'s that function as modifiers—*ADJ*'s—of the clause. In our opinion, this is due to the fact that active accomplishments need to have a terminal point specified in the clause, and this telicity is expressed by *to*. On the other hand, in the case of (non-active) accomplishments, since they lack dynamicity, just one possible type of location can be expressed, the one that subsumes the telicity feature. This reasoning also explains why active accomplishments admit multiple directional or locational *PP*'s, while accomplishments only admit one, which can either be a source or a goal *PP*. The *PATH* cannot work as an *AAJ* because it does not carry the telicity feature needed to comply with the logical structure of causative accomplishments.

To sum up, we have established a typology of causative accomplishment verbs of movement by taking into account a number of semantic criteria related to their argument structure and, more specifically, the kind of locative *AAJ*'s they take. This typology highlights the fact that locative expressions are an essential part of language. In this sense, a further study of verbs related to temporal locative expressions would help to advance in this important area of linguistic theory. Finally, due to the limitations of this piece of research the logical structures of the verbs presented are not yet fully decomposed, so further research will be devoted to this question.<sup>3</sup>

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